

MASTER THESIS / FINAL RES. PROJ. IMP

How interpersonal communication leads to the development of trust between state leaders and public officials

A case study of Brazil and Argentina

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SUMMARY

This thesis aims to explain how interpersonal communication develops trust between state leaders and public officials. The role of interpersonal dynamics in international relations is increasingly recognised. This thesis contributes to this recognition. In nuclear cooperation where there is information uncertainty and a risk of exploitation, trust is essential in facilitating cooperation. Literature from various fields of knowledge is used to form hypotheses about possible interpersonal communication factors involved. To answer the research question, a case study is done on Argentina and Brazil. They went from nuclear distrust in 1960 to a fully integrated nuclear system in 1991. Documents of direct and indirect communications are analysed. The results show that careful claims can be made about the role of mutual moral force, expressed considerations, the amount of interaction and transparency. Threat regulation and limited self-righteousness facilitated the development of trust as well. Correlated factors were shared values and identities and the expression of positive emotions. Some other variables are connected to the previous variables but had insufficient data points to be confirmed or contradicted on themselves. This research recommends ministries to critically assess public officials' social-emotional skills in case situations require improved trust, like in the current bilateral nuclear relation between Russia and the USA. Another recommendation is to train public officials in these skills. To improve the external validity, more case studies can be done. Another recommendation is to integrate knowledge from various fields, so a comprehensive image of human behaviour is used to analyse international situations.

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This is the final assessment for the master International Public Management and Policy. I have written this thesis out of a personal interest in how our behaviour and words impact our relations with others. While in the field of International Relations, there is often spoken about interests and not emotions, I wanted to focus more on the human factor, inspired by an article from Nicholas J. Wheeler (2012) about trust-building in International Relations. From self-reflection and my previous master where I learned about human behaviour, I realised how thinking patterns can change and how our evaluations of options change under the influence of different emotions. We have rationality, but we are subject to change, and our ratio influences and is influenced by emotion. How we as humans work, how objectivity and subjectivity are connected, and how we cooperate or conflict interests me and motivated me to write this thesis.

The process has been interesting as well as challenging. My interest in the topic was my driving force, but along the way, I realised the obstacles of gathering valid and reliable data to confirm or disconfirm my hypotheses. Especially the incongruence between words and what is going on in the mind plays a role in this, but also that we are often not even conscious about what makes us trust or distrust another. The Critical Oral History of Mallea, Spektor and Wheeler (2012) and the recommendations by Carlo Patti have been very helpful, so for this, I am grateful. Personally, it was a challenging but educational process. I learned more about doing research but also about trust in itself.

I did not write this thesis solely by myself. Thus, I would like to thank the people who contributed to the completion of this thesis. First, I would like to thank professor Onderco, my supervisor, for being critical and supportive. From the first moment I introduced my ideas, I felt encouraged. I would also like to thank the other professors of the master's program, as their teachings provided me with the skills and knowledge to write this thesis. Next, I would like to thank the students of my thesis circle: Aart Christianen, Edoardo Bellasai and Jimmy Farrell. Thank you for reading parts of my thesis and providing me with support and feedback. Other students that I would explicitly like to thank for their support are Sabrina Couvin Rodriguez and Varsha Goyal. I would also like to thank the Coffee Company for their excellent coffee and all the hours I could spend there studying. Many thanks to my family, especially my mum Gerda, dad Ben, brother Stefan and his girlfriend Ivanna, who made me believe I could finish this master successfully, who encouraged me and were patient during the moments I was too busy to meet them regularly. Finally, I thank my friends and roommates for their interest and their calm, kind and encouraging words.

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1. INTRODUCTION

Paraphrasing Brazilian foreign minister Ramiro Elísio Saraiva Guerreiro (1979-1985): the worst problems are not those objectively defined but those based on subjective attitudes as they solely exist in people's minds (Camargo, Pinheira & Seabra, 1985). Trust is one of these subjective attitudes, an informal psychological mechanism that influences decisions and formal agreements (Wheeler, 2010). Even though trust is a subjective attitude, it does lead to real decisions and consequences (Fiske & Taylor, 2017). Formal agreements do not come into existence without them having been present in the human mind (Wheeler, 2010). Especially in agreements where the consequences of exploitation are severe, like in nuclear cooperation or non-proliferation agreements, trust is essential. When we trust, we believe the other has benevolent intentions towards us and will take our interests, welfare and view into account (Simpson, 2007; Fulmer & Gelfand, 2012; Booth & Wheeler, 2008). Trust always implies a degree of uncertainty, a risk of being exploited, as in situations of certainty, trust will not be needed (Hoffman, 2002). The presence of trust increases the chances for cooperation (Loomis, 1959) and for reaching a mutually beneficial agreement (Yu et al., 2021). Wheeler (2009) emphasises the role of trust in a nuclear world. Especially in nuclear cooperation, the consequences of being cheated on and exploited by the other can be severe. Wheeler (2009) argues that fear of mutual destruction is not enough to maintain the international nuclear order, but instead, trust is needed. The nuclear relationship between Argentina and Brazil from 1960 until 1990 is an example of how the development of trust enabled nuclear cooperation (Mallea, n.d.-a). Traditionally outcomes of international cooperation were solely attributed to structural factors like bargaining power and strategic interests (Holmes & Yarhi-Milo, 2017). However, recently the role of personal relations in developing trust and, thus, facilitating cooperation has been increasingly recognised (Holmes & Wheeler, 2020). In the case of Argentina and Brazil, the human factor was seen as a crucial factor (Wheeler, 2009).

The question is what precisely in the human factor it was that led to the development of trust. Even though trust is a subjective attitude, this thesis suggests that there are types of behaviours that facilitate the development of trust. This thesis focusses on the interpersonal communication between the countries, thus which verbal and non-verbal messages are sent and received that fostered the development of trust. The following research question is central to this thesis: "What factors in interpersonal communication facilitate the development of trust between state leaders and public officials?" The case of Argentina and Brazil is selected to answer this question. They went from a situation of nuclear distrust in 1960 to the creation of a common system for accounting and controlling all their nuclear activities (ABACC) in 1991 (Mallea, n.d.-a). This case study aims to determine which factors in their interpersonal communication played a role in developing trust.

This topic does not solely touch on the traditional fields of international politics like International Relations and conflict resolution. Knowledge from other fields like psychology, neuroscience, sociology and communication is required to research where trust comes from. In this research, knowledge from various fields is used to create hypotheses about facilitating and obstructing factors in building trust through interpersonal communication. Scientifically, it is relevant because the thesis combines knowledge from multiple fields to create a more humane perspective on relations between countries. Traditionally the field of International Relations has been dominated by structural theories in which trust is a strategic choice (Holmes, 2019). Even though the separation between structural and human factors is slightly artificial, the role of the human factor in international politics is now increasingly recognised (Holmes & Wheeler, 2020). This thesis contributes to the current knowledge by clarifying the human factor and how it contributes to trust between states. The topic is relevant for policymakers as it would serve as insight into how current levels of trust between countries came into existence. Secondly, the results could serve as a behavioural/diplomatic guide whenever current levels of distrust with other countries are desired to be transformed.

After this introduction, the thesis continues with a literature review on trust and where it comes from to then explore the current knowledge about interpersonal communication. The section aims to clarify both concepts. The third section makes the connection between interpersonal communication and trust. Using existing knowledge from various fields, hypotheses are formed that analyse the relationship between interpersonal communication and trust. The fourth section elaborates on the methodology of the case study. The section describes how the variables are operationalised and how the data is collected and analysed. The section ends with a reflection on the reliability and validity. The fifth section starts with a general overview of case-related important events between 1960 and 1991. The second part of the fifth section presents the results per hypothesis, contrasts and aligns data and explains why some hypotheses are merged. In the next section, the discussion, the results are connected to the literature and the theory of sections two and three. The research question will be answered in the section thereafter, the conclusion. This section also contains a reflection on the limitations of the research and presents some scientific and policy recommendations. In the end, the list of references can be found, followed by the appendices.

2. LITERATURE REVIEW

This literature review explores the current knowledge about trust and interpersonal communication and clarifies these variables. For the literature review and theory, literature from psychology, neuroscience, sociology, communication, conflict resolution, and International Relations will be used to get an idea of all possible factors involved.

2.1 Trust

2.1.1 Function of trust

In cooperation, trust often plays a vital role in reaching outcomes that leave all sides better off (Rathbun, 2009). Hence, trust increases the chances of reaching a mutually beneficial agreement (Yu et al., 2021) and increases the chance for cooperation (Loomis, 1959). The ability to trust is beneficial in a society where survival and prosperity depend on the capacity to engage in exchanges with others (Corgnet et al., 2016). The security paradox is a typical example of the risk of non-cooperation due to a lack of trust. In this situation, actors on both sides only aim to increase their own security for defensive reasons. However, by doing so (for example, through investments in defence) they feed the fear of the other actor, which then mimics the behaviour of the first actor, eventually resulting in a mutual feeling of less security (Booth & Wheeler, 2008). To exit this spiral of increasing insecurity and fear, it is necessary to foster conditions that make states cooperate. Trust is one of the conditions that benefits cooperation and plays an essential role in the choice for cooperation in a security dilemma (Kydd, 2018).

Distrust can, of course, be completely justified and more in line with the actual intentions of the other actor than trusting expectations (Larson, 2002). This can be the case when conflicting objectives, values and interests exist. Not all conflicts are based on misunderstanding (Booth & Wheeler, 2008). Nevertheless, due to the ambiguity of interpretation, incorrect negative interpretations may lead to negatively anticipated behaviour, resulting in a less beneficial situation than might have been necessary (Larson, 2002). Trust will thus not solve all the problems in the world, however, trust is essential when hostilities are desired to be decreased (Hoffman, 2002). Focussing on the normatively desirable outcomes of trust-building, this thesis may suffer from a positivity bias (Holmes & Wheeler, 2020).

2.1.2 Elements of trust

Trust is defined in multiple ways in the literature. This literature review aims to create a comprehensive definition of trust. Simpson (2007) mentions that trust involves three components: I trust you to do X. The characteristics of the trustor, the attributes of the trustee (the one who is

trusted), and the context influence trust. This thesis talks about X, the behaviour, and aims to clarify types of behaviour that lead to trust.

Simpson (2007) defines X as a behavioural expectation in a specific context that can be more broadly or narrowly defined. Hoffman (2002) and Holmes and Rempel (1989 in Simpson, 2007) argue that trust is more than just a risk calculation about possible behaviours; it also involves a belief about the other's intentions. Trust is thus considered a mix of feeling and rational thinking (Booth & Wheeler, 2008). Emotions and rationality, however, are tied to one another (Holmes & Wheeler, 2020). Emotions precede, influence and follow choice. They are an important part of decision-making. Intuitions play an important role in producing behaviours and may conflict with one's rational beliefs (Holmes, 2015). Decisions to trust can go together with bodily relaxation and tension loss (Hoffman, 2002).

A belief implies a degree of uncertainty; if there is no threat of betrayal, there is no need for trust (Hoffman, 2002). Trust is thus relevant in an incomplete information setting (Kydd, 2018). The uncertainty about the other's intentions and actions creates vulnerability which means that the trustee can take advantage of the trustor (Simpson, 2007). In trust, the trustor assumes that the trustee will not behave opportunistically and exploit the trustor, but will take the trustor's welfare, view and interests into account (Simpson, 2007; Fulmer & Gelfand, 2012; Booth & Wheeler, 2008; Wheeler, 2012). There is a willingness of the trustor to place one's interest under the trustee's control based on the belief that the trustee will not use this discretion in a harmful manner (Hoffman, 2002). A choice is made to accept the vulnerability and dependability that comes with trust (Oortmerssen & Woerkum & Aarts, 2014; Booth & Wheeler, 2008). Trustors thus feel they can rely on the other (Barbalet, 2011). Hoffman (2002) adds that in trust, trustors believe that trustees will abide by the trust placed in them even if the trustee needs to sacrifice some of their own benefits.

Besides beliefs and expectations about the other's intentions/benevolence, trust can also be about trust in the trustee's ability and integrity (Fulmer & Gelfand, 2012). Trust in the trustee's ability has to do with the expectation of whether the trustee is competent enough to be considerate about the trustor's interest and has the capacity to deliver on her/his promises (Wheeler, Baker & Considine, 2016). Trust in the trustee's ability depends on the context/situation (Ruzicka & Wheeler, 2010). Thus, trust is placed in the trustee in a particular issue. Integrity relates to whether one will uphold commitments (Fulmer & Gelfand, 2012). It also refers to word-deed consistency in which promises are kept, and expressed values are lived by. Rathbun (2009) and Bicchieri, Xiao and Muldoon (2011) argue that trust is also about the belief that others have the norm to reciprocate.

Trust can differ in its intensity and scope (Hoffman, 2002). Intensity refers to the strength of the perceived trustworthiness and relates to the amount of discretion granted to the trustees. Booth and Wheeler (2008) argue that trust at its minimum includes not harming the trustor's interests and values. At its maximum, the trustor's interests and values are promoted. The scope can be broader or narrower (Hoffman, 2002). Hardin (1998 in Hoffman, 2002) argues that trust is never unconditional, even though the limits might not always be obvious. However, others suggest that trust can be general. A trust-changing event must be perceived for a change in trust to occur (McKnight, Liu & Pentland, 2012). This event must be consciously perceived, mismatch the current level of trust and meet the threshold for revising the level of trust. The information processing model indicates that trust levels are sticky. However, changes do occur, and sometimes trust levels can make sudden swings.

2.1.3 Types of trust

Trust in this thesis is more than just self-interested risk calculations. This aligns with the concept of moralistic trust, in which there is a belief in the integrity of the other and the non-harming intentions of the other (Rathbun, 2009). This is different from strategic trust, which is based on self-interested calculations. Neoliberal institutionalism of Keohane emphasises strategic trust. Moralistic trust especially matters in situations with highly conflictual interests (Balliet & Van Lange, 2013). When interests are aligned, strategic trust will be sufficient. Strategic and moralistic trust can be seen as two points on a continuum (Holmes & Rempel, 1989 in Simpson, 2007).

Another distinction can be made between generalised and particularised trust (Bicchieri, Xiao & Muldoon, 2011). Some believe that others are generally trustworthy, some believe that others are generally untrustworthy, and some make case-by-case decisions. For example, Waltz, a realist, generally distrusts others, arguing that opportunism and uncertainty in international relations will result in the maximisation of relative power leading to a security dilemma and inevitably war. Wendt, a constructivist, aligns more with the notion of particularised trust and argues that interaction can create a collective identity resulting in more trust. Linking social orientations and the three IR paradigms Rathbun (2009) suggests that a macro-logic might actually be a micro-logic. The notion of generalised trust is also closely related to the attachment theory (Fulmer & Gelfand, 2012).

2.1.4 Development of generalised trust

Attachment theory argues that early childhood experiences influence the ability or tendency of a person to trust others in adult life (Simmons et al., 2009). The experiences with the primary caregiver form cognitive working models shaping one's future expectations about relationships. Securely

attached people were comforted in times of distress and have more positive models of themselves and others, therefore reporting more (dyadic) trust than those who are avoidant or anxiously attached (Simpson, 2007). Securely attached people have more accessible memories of trust-validating experiences, have more confidence in others' good intentions and attribute trust violations to situations and not to structural dispositions of the partner. They thus have more generalised trust. More insecure attached people have less trust and have more negative trust-related memories in their consciousness. Judgements about others can work as a self-fulfilling prophecy in which, for example, those viewed as more threatening will behave more threatening (Holmes, 2016).

Rathbun (2009) finds that competitors who focus on maximising relative gains and see the environment as dangerous are the worst judges of actual intentions in experimental settings and have the most difficulty building trust through communication. Co-operators (generalised trusters) are more receptive to signalled intentions and are the best predictors of others' intentions. Previous research has shown some evidence that generalised trust positively correlates with intelligence (Corgnet et al., 2016). Ridinger and McBride (2016) find in their study that those who have a better ability to assess other people's intentions, emotions and beliefs accurately (Theory of Mind, ToM) believe more in cooperation and will cooperate more often in sequential Prisoners' dilemma games than individuals with a low ToM. Cross-cultural research shows that cultures can vary in their beliefs about others being generally trustworthy or not (Balliet & Van Lange, 2013).

In this thesis, trust can have various intensities, and the scope is limited to the purpose of the analysed dialogues. Trust in this thesis is the belief that the trustee has benevolent intentions towards the trustor in the specific situation that is analysed in which the trustor is dependent on and vulnerable to the consequences of the trustee's actions.

2.2 Interpersonal communication

2.2.1 Definition interpersonal communication

Burleson (2010) defines interpersonal communication as "...a complex, situated and social process in which people who have established a communicative relationship exchange messages in an effort to generate shared meanings and accomplish social goals." (Burleson, 2010, pg. 151). The social goals in the definition of Burleson (2010) can vary in their degree of harmfulness or benevolence. According to this definition, interpersonal communication implies mutual intentions to send messages and these intentions are mutually recognised. In interpersonal communication, messages are produced and interpreted, and the interaction is coordinated. The meaning produced (the intention) by the source and the meaning interpreted by the receiver can differ to a greater or lesser extent, impacting the

degree of shared meaning or misinterpretation. Interaction coordination means that actors attempt to align the meaning sent and the meaning received.

2.2.2 Message production and interpretation

Communication is all about producing and interpreting messages. Trust occurs when the trustor perceives the trustee to have benevolent intentions. This perception is based on subjective estimates of probabilities that some behaviours will occur (Hoffman, 2002). These estimates and thus perceptions are subject to a host of calculative errors, misperceptions and manipulations. While actors send messages, there will always be some ambiguity and uncertainty in the interpretation of the (meaning behind the) messages, thus, the dilemma of interpretation can never entirely be escaped (Booth & Wheeler, 2008). To gain a better insight into how interpretation works, psychological factors that play a role are discussed.

2.2.2.1 Subconsciousness

Fiske and Taylor (2017) mention that the human inferential process (the process of making sense of sensory information, thus interpretation) is not typically conscious, rational, logical and accurate. Large amounts of data must be processed quickly, and the short-term memory capacity is limited. Political science refers to this limited information processing capacity as bounded rationality (Jones, 1999). The production and interpretation of the messages are thus primarily automatic (Burlison, 2010).

2.2.2.2 Cognitive structures and selectivity

The long-term memory has more capacity than the short-term memory and is structured by prior information and beliefs (Fiske & Taylor, 2017). The selection of relevant information is based on so-called prior cognitive structures, so one does not have to start from scratch each time. These can be thought of as habits of (subconscious) thinking. These structures help one to make sense of oneself, others and the world (Hicks, 2001). The structures are a simplified version of the complex reality (Hicks, 2001), are needed to find a sense of inner stability and needed to make judgments in a complex and rapidly changing environment (Fiske & Taylor, 2017). Memory is not a representation but construction of reality. No memories of the same event are precisely the same, and, as mentioned before, almost all operations of our memory do not enter our consciousness. Remembering is selective by necessity. Our memory is not an objective recording but instead selects what it finds important (Esposito, 2008). However, this tendency to process information efficiently and not necessarily thoroughly may prevent alternative information from entering (Fiske & Taylor, 2017). Building on insights from psychology, Yarhi-Milo (2014) adds that our selective attention is influenced

by the vividness of the information and our subjective assessment of the information's credibility. The risk of being unaware of this selective information processing feature is that the sample of information drawn is overgeneralised.

Hicks (2001) argues, based on Piaget's theory of knowledge, that our cognitive structures are adapted and made more complex throughout life by implementing new information into a new coherent structure. The more complexity is integrated into cognitive structures, the more one realises the limits of one's capacity to be right and the less egocentric one's views become.

2.2.2.3 Identity, cultural and contextual cognitive structures

Identity is a cognitive structure which influences what is forgotten (Fiske & Taylor, 2017). Individual, social and cultural identities are shaped by memories and kept alive by communication and socialisation (Assmann, 2008). Irrelevant events are forgotten. Cultural memory can, for example, be stored in narratives, songs, dances, rituals, masks and symbols. Individuals possess various identities across various groups they belong to.

The meaning attached to certain ways of communicating is often shaped by culture (Burlison, 2010; Yu et al., 2021). Already at a very young age, communication patterns are internalised, resulting in people being generally unaware of their communication patterns. For example, cultures with high context communication focus on the context, meaning and tone, while cultures with low context communication focus on the literal words. Messages are interpreted according to conventional interpretations of the community of which the actor is a part, but the interpretation is also adapted to the specific context in which the messages are sent (Burlison, 2010). The context powerfully influences a person's role, how one talks and what type of relationships can be formed (Stamp, 1999). Context influences the direction and range of attention, the memories activated and inferences made (Fiske & Taylor, 2007 in Burlison, 2010). It affects recipients' possible and appropriate responses (Burlison, 2010). This applies to verbal as well as to nonverbal communication.

Groupthink is another psychological mechanism that influences interpretation. It is the tendency in a group to agree with one another without critically assessing the interpretation and considering alternative interpretations (Janis, 1991). This research focuses on dyadic interpersonal communications, the direct influence of group-think might be less applicable, even though more structural group thoughts stabilised in cognitive structures do play a role.

The limited processing capacity, selection bias and cognitive structure dependent interpretations exclude the option of just using historical records to eliminate the dilemma of

interpretation. Besides this, historians often do not agree with one another (Booth & Wheeler, 2008). All this again emphasises the role of belief and thus trust in cooperation.

2.2.3 Type of encounters

Face-to-face interactions are important to build empathy and intention understanding, which are necessary to build trust (Holmes & Wheeler, 2020). Empathy and intention understanding are developed by mimicking facial expressions and bodily positions, resulting in the nervous systems becoming mutually attuned so brains can better simulate the other's mental state (Holmes & Wheeler, 2020). Behaviourists criticised this mechanism of shared neural connection, arguing there is no direct connection between observable behaviour and mental states (Holmes, 2013). A more experimental counterargument to this, based on quantum theory, is that the separation of human beings and their minds can be questioned because of the mechanism of entanglement (Holmes, 2019). A mechanism not yet fully appreciated.

This research analyses face-to-face encounters and other influential direct (e.g. letters) and indirect interpersonal communications (communications directed to a third party that strongly influenced the trust between the analysed actors). There is, however, an emphasis on direct communications, like face-to-face encounters, as this type of interaction facilitates a maximum exchange of verbal and non-verbal messages.

In conclusion, trust is the belief that the trustee has benevolent intentions towards the trustor. Trust is necessary in decisions in which the trustor is vulnerable to and dependent on the actions of the trustee, implying a degree of uncertainty and risk of exploitation. It thus goes beyond risk calculations. People differ in their tendency to trust others partly because of their attachment styles. Trust can be signalled or perceived by interpersonal communication. However, the meaning of the messages sent and the meaning of the messages received might not always align. In face-to-face meetings, the exchange of verbal and non-verbal messages is maximised. The meaning given to messages is influenced by our limited (conscious) information processing ability and our current cognitive structures. There is thus always some ambiguity in the interpretation of messages.

3. THEORETICAL FRAMEWORK

This section starts by clarifying the difference and relation between structural and individual influences on the development of trust between public officials. The second part describes the general relation between interpersonal communication and trust. In the third part, concrete hypotheses are formulated using existing literature.

3.1 Structural vs individual influences on trust

In the field of International Relations, the role of personal relations, the so-called human factor, in fostering trust is increasingly recognised (Holmes & Wheeler, 2020). Rathbun (2009) emphasises that theories built on an individual unit of analysis might not apply to the foreign policy decision-making environment. Structural theories have historically dominated the study of diplomatic encounters (Holmes, 2019). Structural constraints, like bargaining power and strategic interests, play a role in creating outcomes (Holmes & Yarhi-Milo, 2017). However, Kydd (2018) argues that trust enables the possibility of cooperation even when there are unfavourable structural conditions. An obstacle to the micro-level approach of this research is that divergent interests may prevent interaction from happening, or actors might not want to reassure and be reassured, which would make it difficult to form a trusting social bond (Holmes & Wheeler, 2020). Diplomatic encounters occur in a context where history, culture and prior behaviours affect the interaction itself. Knowledge about reputations and qualifications can influence the establishment of trust (Barbalet, 2011; Fulmer & Gelfand, 2012). The higher or lower expectations, created by this prior information or experience, can affect how the other is perceived (Holmes, 2016), as explained in the previous section about message production and interpretation. From this review, it becomes clear that the separation between structural and individual factors is slightly artificial, as one cannot turn off one's cognitive structures based on prior experiences when interacting.

Not denying the artificiality of the separation and the role of structural factors, the more direct human factor is essential because relations between political units occur through human actors. The (structural) context can influence human interaction. However, communication can also modify or transform the contexts in which the communication occurs, for example, by changing the relation between the actors involved (Burlinson, 2010). One's reaction in the interaction impacts the entire process (Stamp, 1999). Thus, the element of individual human interaction complements the other relevant structural factors in the development of trust.

3.2 Interpersonal communication and trust

Van Oostmerssen, Van Woerkum and Aarts (2014) find in their study that interaction and trust are self-reinforcing, which can either be in a positive or negative direction. A change in one leads to a change in the other. The degree of trust matters for the interpretations made of the other's behaviour (Söderström, Akebo & Jarstad, 2020). A study by Lev-on, Chavez and Bicchieri (2010) shows that communication, compared to non-communication, increases trust and the willingness to cooperate. Dyadic communication has a stronger effect than group communication on trust and reciprocation. Interpersonal contact increases trust accuracy through other-focused perspective taking (Schilke & Huang, 2018). Cohen, Wildschut and Insko (2009) add that interpersonal communication can activate moral norms, like fairness, honesty, trust and reciprocity. Reciprocity would be helpful when one decides to trust the other by making oneself vulnerable to exploitation to signal trustworthiness (Booth & Wheeler, 2008). Reciprocity norms activated by interpersonal communication may then lead to reciprocated trust.

The three (artificial) dimensions, created by Oortmerssen, Woerkum and Aarts (2014), will be used to analyse the relevant factors in interpersonal communication that may develop trust. The content dimension refers to the objective verbal and non-verbal messages sent and received. The second dimension, the affective dimension, is more intangible. It relates to what one feels. Finally, the process dimension is about the structure. Even though the separation of the dimensions is slightly artificial and the dimensions are connected, they are used to create structure in the analyses of interpersonal communication.

3.3 Hypotheses

3.3.1 Content dimension

The content dimension refers to the tangible verbal and nonverbal behaviours (Stamp, 1999). Seventy per cent of our communication is nonverbal (Čulo & Skendrović, 2012). This can be facial expressions, body movements and eye contact. Speech also has nonverbal elements (paralanguage), like the dynamic of the voice (hardness, softness and interplay between these, for example, by stressing words), the intonation (higher or lower sound), the speed (higher or lower) and the rhythm. Other nonverbal behaviours are the degree of body control and social/cultural rituals and manners like shaking hands (Čulo & Skendrović, 2012). Finally, the content dimension refers to content that can be concealed, which can make communication very complex. Verbal behaviour will be researched using notes from or about direct and indirect communications. The appropriateness of non-verbal behaviour can be discovered through reflections of those involved in the interaction.

Basic human needs recognition

Trust is the belief that the trustee has benevolent intentions and thus is considerate about the trustor's needs and interests. Galtung (1978) defines four classes of basic human needs: security (material), freedom to choose (non-material), welfare (material) and identity (non-material). Neufeld Redekop (2002) mentions that some interpretations of acts that threaten one of these needs can result in anger, sadness, depression, fear and shame. As the next part dives deeper into the mechanisms of identity, the following hypothesis focuses on the first three basic needs.

H1: Verbally expressed consideration about the other's security, freedom to choose and welfare increases trust.

Acknowledgement of current cognitive structures

One of the four basic human needs (Galtung, 1978) is identity which is related to the need for closeness, recognition and meaning. Especially in situations where trust needs to be re-established, identity acknowledgement and restoration are essential (Schnabel & Ullrich, 2016; Hicks, 2001). Two dimensions of identity need to be considered: the agency dimension (often threatened in low power groups) and the moral dimension (often threatened in high power groups). A group's identity is very much related to what events are remembered and kept alive (Lederach, 2005). People remember a particular point in history in a specific way. Chosen traumas and chosen glories become a part of the unconscious psyche of the group identity. Identity is thus a cognitive structure. Cognitive structures create an inner sense of stability (Hicks, 2001). Changes often occur while maintaining this sense of stability. However, too much change, triggered by an information overload that conflicts with one's current cognitive patterns, can lead to psychological disintegration (fear, rage, anxiety). To protect oneself from too much instability, one's view of oneself, others, and the world freezes. Beliefs become rigid, complexity is lost, and no new information is allowed in. This shutdown also means that no new information is allowed in to challenge one's enemy images. This is all done in the service of self-protection. These cognitive threats challenge one's beliefs and evaluation of what is right and therefore threaten one's integrity. This happens, for example, when individuals are confronted with information that exposes the (unrealised and perhaps unintended) harm they have done to another.

A breakdown in trust, therefore, knows a history of trauma (extreme cognitive instability) and humiliation (breakdown of one's integrity) (Hicks, 2001). To build trust, one must create conditions under which others can take in new information. Exposure to alternative interpretations of events should therefore be slow. One should feel safe enough to adapt one's cognitive structures and explore the darker sides of one's identity without feeling humiliated or dominated. This facilitates the creation

of new cognitive structures like mutual understandings of events or recognition of mutual interests. To build trust, actors should thus acknowledge each other's current cognitive structures (Clark, 2002). These can be their identities and their individual and collective memories of history with their chosen traumas and glories. Recognising the other's experiences is essential in building empathy and trust (Hicks, 2001). However, it can also feel threatening as it can bring into question one's interpretation of the situation and the responsibility one has assigned to oneself and the other until now.

H2: Expressed acknowledgement of current cognitive structures (like identities, chosen glories and traumas) facilitates the development of trust.

H3: Slowly exposed alternative interpretations of events facilitate the development of trust.

Expressed limitations of self-righteousness

Hicks (2001) argues that the more complex one's understanding of the self, others, and the world becomes, the more one realises one's limited capacity to be right. This allows for a more flexible approach towards information and a lesser chance for psychological disintegration. In line with this, Holmes and Wheeler (2020) argue that peaceful and defensive self-images can fuel a dichotomy between the good 'us' and the evil 'them', not realising oneself might be perceived as offensive and not just defensive. Thus, it is important to limit ideological fundamentalism (Booth & Wheeler, 2008). De-ideologizing the conversation by reducing crusading, black boxing and stereotyping can mitigate the spiral of distrust. For example, Gorbachev, in summits with Reagan to end the Cold War, rejected the ideological assumption that capitalist countries were aggressive in their nature (Wheeler, Baker & Considine, 2016). Ideological fundamentalism can fuel security competition and thus fear (Holmes & Wheeler, 2020). As it is impossible to look into people's minds to check whether there is an actual realisation of limited self-righteousness, the hypothesis depends on verbal expressions of limited self-righteousness.

H4: Expressed realisations of limited self-righteousness contribute to the development of trust.

Similarities

Fisher and Ury (1991) argue that focussing on interests instead of positions allows for better communication, as under opposing positions may lie shared interests. One can discover the other's interests by asking why or why not. Shared interests and values foster trust (Fulmer & Gelfand, 2012). Social identity theory argues that finding similarities and common identities facilitates the development of trust. A created common identity, however, may foster trust towards the in-group but can also foster distrust towards the outgroup (Booth & Wheeler, 2008). Having similar positions

is more related to strategic trust. Nevertheless, similar interests, values and identities are here considered to be more related to moralistic trust, the type of trust relevant in this research.

H5: Expressed similar interests, values, and identities lead to the development of trust.

Appropriate non-verbal rituals

Non-verbal communication is essential in successful negotiations, a form of interpersonal communication (Čulo & Skendrović, 2012). The appropriate non-verbal behaviour depends on the context. Therefore, we hypothesise that appropriate non-verbal communication, like rituals, plays a role in establishing trust through interpersonal communication.

H6: Perceived appropriate non-verbal rituals lead to the development of trust.

3.3.2 Affective dimension

The affective elements can be expressed in the content, however, they are considered affective because they refer to what one feels and experiences in the interaction rather than to tangible verbal and non-verbal behaviours. The dimension relates to our internal state (Stamp, 1999). Not all emotions and feelings are, however, experienced consciously (Barbalet, 2011).

Positive emotions

People who display positive emotions like happiness are more likely to increase interpersonal trust (Côté, Van Kleef & Sy, 2013; Fulmer & Gelfand, 2012). Positive expressed emotions make it easier to form collective affect (Lawler, Thye & Yoon, 2014). Basic emotions are expressed through particular muscle movements and specific vocal expressions, however, among cultures, these expressions of emotions can have a particular cultural dialect (Fulmer & Gelfand, 2012), so the interpretation problem might apply again. Another risk is that incidentally expressed emotions, unrelated to the current situation, can be misinterpreted and affect interpersonal trust. Emotions can also be contagious when there is mutual attention (Collins, 2014).

H7: Positive expressed emotions increase trust.

Transparency

Booth and Wheeler (2008) describe the importance of transparent defensiveness in mitigating the fear in a security dilemma. Studying the connection between interaction and trust in a Dutch collaborative governance board in professional education, Oortmerssen, Woerkum and Aarts (2014) find evidence that increased openness in the interaction and trust reinforce one another. Zand (1972, in Oortmerssen, Woerkum and Aarts, 2014) finds the same and argues that open and honest

conversations and trust are mutually reinforcing. Transparent conversations help people understand each other's perspectives and thus build trust (Čulo & Skendrović, 2012). Williams (2007) finds that trust facilitates richer-freer information. Others (Fulmer & Gelfand, 2012; Yu et al., 2021) also find that open and transparent communication increases trust.

Transparency can be linked to the importance of sincerity: the belief that the expressions of the other are sincere and not strategically regulated. In building trust, it is essential to be sincere and seen as sincere (Wheeler, 2009). For example, spontaneously expressed guilt after trust violations can mitigate the negative effect of trust violations (Shore & Parkinson, 2018). Strategically calculated guilt has a smaller effect. Research among American and Chinese employees showed that greater trust in leaders is felt when they believed the leaders' emotions were sincere (Caza, Zhang, Wang & Bai, 2015). However, apologies in situations with low levels of trust may be interpreted more quickly as insincere and manipulative (Schnabel & Ullrich, 2016). Fulmer and Gelfand (2012) add that timely and sincere apologies help rebuilding trust after trust violations, although this is easier after competence violations than after integrity violations.

Even though transparency is about concealing or revealing content, the element is placed under the affective dimension because it is mainly about whether transparency and sincerity are experienced and felt.

H8: Experienced transparent communication of the other increases trust.

Empathy leading to threat regulation

For good communication to happen, one must recognise and understand one's own and the other's emotions (Fisher & Ury, 1991). The application of empathy is essential in overcoming biases and long-held enmities (Holmes & Yarhi-Milo, 2017). It is a necessary but not a sufficient element to develop trust. Through a triangulation of words, expressions, behaviours, and actions, one can gain insight into the minds of others. When human bodies are close enough, they perceive micro-signals about the other's emotions (Collins, 2014). Empathy can mitigate conflicts when misunderstandings arise (Yu et al., 2021). Empathy can, however, be selective (Hamburger, Hancheva & Volkan, 2021). Social barriers of class, religion, ethnicity, gender and sexual orientation can hinder the imagination and thus hamper the emotion. Empathy can only be activated when the other is considered significant.

Holmes and Wheeler (2020) argue that self-reflection and empathic ability have a significant impact on social interactions and explain the concept of security dilemma sensibility (SDS): "Security dilemma sensibility is an actor's intention and capacity to perceive the motives behind, and to show responsiveness towards, the potential complexity of the military intentions of others. In particular, it

refers to the ability to understand the role that fear might play in their attitudes and behaviour, including, crucially, the role that one's own actions may play in provoking that fear." (Booth & Wheeler, 2008, pg. 7). The empathy to understand how one's own actions may provoke fear in others is necessary for trust to evolve (Holmes & Wheeler, 2020).

As empathy is hard to measure, threat regulation is the mechanism used to make empathy visible. Williams (2007) describes threat regulation as engaging in activities to minimise the feeling of threat in the other. Perspective-taking, thus imagining others' thoughts and feelings from their point of view, facilitates this responsive interpersonal act. The ability to self-reflect is critical in successful dialogues (Holmes & Wheeler, 2020) as it helps individuals assess and correct their behaviour when threat reduction does not occur (Bandura, 1986 in Williams, 2007). Threat regulation builds and maintains trust by influencing emotion, signalling trustworthiness, demonstrating interpersonal understanding (social competence) and making social investments that foster trustworthy behaviour. One takes steps to avoid threatening the goals, aspirations, values and identity concerns of the other, thereby showing goodwill. Feeling seen, felt and known can also influence perceived threat regulation as this attentive engagement increases the likelihood of considerate behaviour (Williams, 2007).

H9: Perceived threat regulation in interactions increases the likelihood of trust to evolve.

Emotional self-regulation

It is better not to react to emotional outbursts (Fisher & Ury, 1991). To build trust, one must regulate strong emotions even in anxiety-provoking situations (Fox, 2007). The experience of internal emotional security in anxiety-arousing interpersonal situations is important in trust-building. Righetti and Finkenauer (2011) find that when another person is perceived as being self-controlled, the likelihood of trust increases. Those with high self-control have more behavioural flexibility and thus can better select and act upon a behavioural option. Besides this, self-control is often developed because of the desire to be liked by others. Self-control is essential when one needs to overcome one's direct self-interest. However, when one intends to do harm, high-self-control may lead to greater distrust.

H10: Perceived emotional self-regulation during the interaction increases trust.

Moral force

To sustain cooperation in uncertain circumstances, a moral force to build trust and maintain cooperation is important (Booth & Wheeler, 2008). Rational egoism or strategic trust alone cannot sustain cooperation. For security dilemma sensibility to have positive results, actual genuine care for others is needed. Cohen, Wildschut and Insko (2009) found that interpersonal task-related

communication activates moral norms like reciprocity by which others feel more compelled than before not to exploit the other. The reluctance to exploit the other's trust became stronger than the desire to exploit the other for one's own immediate interest. Those high in trust feel a moral obligation to act upon the trust placed in them even though others might do something else or expect them to do something differently (Hoffman, 2002).

H11: Perceived moral force in the other increases trust.

3.3.3 Process dimension

The process dimension is about the structure of the interaction. Appropriateness of processes can differ per culture, like whether one should be strict or flexible in time, how one should organise the space of the interaction or how one should dress (Čulo & Skendrović, 2012).

Responsiveness

Increased trust has a strong relationship with responsiveness (Van Oostmerssen, Van Woerkum & Aarts, 2014; Butler & Cantrell, 1994). Timely and substantial responses facilitate trust. Especially in the long term, responsiveness and predictable communication contribute to the creation of trust. This research was done in a virtual setting, however, the mechanisms involved might not be so different (Van Oostmerssen, Van Woerkum & Aarts, 2014). The importance of responsiveness is also present in the attachment theory, which argues that sensitive responsiveness of care-takers helps to regulate feelings of anxiety and arousal in infants (Fox, 2007; Simpson, 2007).

H12: Responsive communication increases trust.

Attentive listening

One who masters attentive listening has an advantage in promoting cooperation and understanding the other's behaviour (Čulo & Skendrović, 2012). Mutual focus of attention means that actors become mutually aware of each other's focus of attention (Holmes & Wheeler, 2020). Mutual attention facilitates shared emotional experiences and vice versa. Both are essential for successful interaction rituals (Collins, 2014). Active listening increases the likelihood of understanding and of being understood (Fisher & Ury, 1991). Mutual understanding is essential in creating trust (Fox, 2007). Attentive listening and repeating what the other says in a positive way may help to foster good dynamics in the conversation (Fisher & Ury, 1991). Referring back to others' points in previous conversations can also positively affect interpersonal trust (Fulmer & Gelfand, 2012).

H13: Experiences of others listening attentively increase trust.

Frequency

Research finds a positive correlation between the frequency of communication and perceived trustworthiness (Van Oostmerssen, Van Woerkum & Aarts, 2014). The more interaction experiences, the more predictable and understandable people become to one another. Loomis (1959) indicates that the more communication has occurred, the more likely trust is to be present. According to Durkheim (1912 in Holmes & Wheeler, 2020), repeated interactions or rituals are vital to creating a social bond, which is essential for trust. The importance of iteration aligns with the iterative character of diplomatic encounters (Holmes & Wheeler, 2020). A higher frequency of interactions allows for more direct verbal and nonverbal messages to be exchanged and thus makes one's estimates of others' intentions and behaviours more accurate (Hoffman, 2002).

H14: The more interactions take place, the more trust will develop.

In summary, the theory predicts trust is influenced by interpersonal communication. Regarding the content of this communication, trust may be affected by the recognition of basic human needs, acknowledgement of cognitive structures, slowly exposed alternative interpretations, limited self-righteousness, similarities and appropriate non-verbal rituals. In the affective dimension, trust may change when positive emotions, transparency, threat regulation, self-regulation and moral force are perceived. Finally, responsive communication, attentive listening and the amount of interaction may also impact levels of trust.

4. METHODOLOGY

This methodology describes the research procedure used to find a reliable and valid answer to the research question: ‘What factors in interpersonal communication facilitate the development of trust between state leaders and public officials?’.

4.1 Research strategy and methodology

The research question is answered using an instrumental case study, a qualitative method (Creswell & Poth, 2018). It is instrumental because the selected case is used in a first attempt to draw conclusions about relevant factors in interpersonal communication for the development of trust. The case study has a deductive, congruence analysis approach (Blatter & Haverland, 2014). Complementary theories described in the theory section have been used to derive hypotheses from. These hypotheses are compared with empirical observations. After this comparison, conclusions are drawn about which hypotheses match the observations the most.

4.2 Data collection and analysis

Various types of data were collected: journal articles, think tank papers, interviews and governmental documents. Articles and papers were found via Web of Science, Erasmus Scopus and Google Scholar. Governmental papers and interviews were retrieved from the FGV archive and the Wilson Center Digital Archive. First, the data is used to create a chronological overview of crucial events, important direct and indirect interpersonal communications between Argentina and Brazil from 1960 to 1991 that played a role in developing (dis)trust. The scope of the chronological overview, from 1960 to 1991, is based on the relevant period described by the literature for the selected case (Mallea, n.d.-a).

Kept into consideration is the bias with which the documents may have been written, especially the government publications and historical documents may have a strategic bias. Therefore think tank papers and journal articles are used to bring in alternative perspectives from experts. Some documents contain literal discourse data from interpersonal communications, other documents are secondary interpretations of the communication. Both are considered relevant because of the same argument made above: literal data might conceal information from the public that secondary interpretations may reveal. The data was collected and analysed in Atlas.ti.

The data of the crucial interpersonal communications was coded by colour marking the information related to one of the hypotheses. Each hypothesis had a different colour. Before the start of the analysis, Table 4.1 was made with significant sentences and words (derived from the theory) per core concept of the hypothesis. During the analysis, other relevant words/synonyms have been

added. The quotations were also marked with a period/year and the public officials they related to. In the results section, summaries of the relevant data points per hypothesis are made. In these summaries, it is clarified whether the quotations support or contradict the hypothesis. Some hypotheses are taken together as they contained similar data points and were theoretically related. The discussion connects the results with the explored literature and theory. Finally, in the conclusion, the research question will be answered, followed by a reflection on the study's limitations, policy implications and recommendations for future research.

4.3 Operationalisation variables

With the help of the literature review, interpersonal trust in this research is defined as the belief of the trustor that a trustee has benevolent intentions towards the trustor in the specific situation that is analysed (Simpson, 2007; Fulmer & Gelfand, 2012; Booth & Wheeler, 2008; Wheeler, 2012; Hoffman, 2002). Trust is operationalised as a decision to make oneself dependent on and vulnerable to the exploitation of the other (Ruzicka & Wheeler, 2010). In the selected case, this is done by signing a bilateral nuclear agreement and eventually integrating the two countries' nuclear sectors.

Interpersonal communication is defined as "...a complex, situated and social process in which people who have established a communicative relationship exchange messages in an effort to generate shared meanings and accomplish social goals." (Burlinson, 2010, pg. 151). The dimensions of interpersonal communication are laid out in the theory section. In Table 4.1, the hypotheses are lined up together with significant words that could be related to a confirmation or contradiction of the hypothesis. The words are synonyms of words in the core concept, derived from the theory or explored during the data analysis.

	Hypotheses	Significant words related to the core concept of the hypothesis	
	CONTENT DIMENSION	<u>Confirming</u>	<u>Contrasting</u>
H1	<i>Verbally expressed consideration about the other's security, freedom to choose and welfare increases trust.</i>	Care, concern for safety, autonomy, well-being, support, concessions, rapport, sympathy, solidarity, empathy	Indifference to others' interests, envy, competitive win-lose approach

H2	<i>Expressed acknowledgement of current cognitive structures</i> (like identities, chosen glories and traumas) facilitates the development of trust.	Acceptance, recognition, respect, tolerance, allowance for culture/diversity/identity /experiences, psychological respect/safety	
H3	<i>Slowly exposed alternative interpretations of events</i> facilitate the development of trust.	Gentleness, calmness, soft-tempered, moderate, relaxed	Offensiveness, toughness
H4	<i>Expressed realisations of limited self-righteousness</i> contribute to the development of trust.	Moderation, receptiveness to others' ideas	Peaceful self-image, defensive self-image, ideological fundamentalism, crusading, black boxing, convincing
H5	<i>Expressed similar interests, values, and identities</i> lead to the development of trust.	Why (questions), positive identification with the other, self-other identities, commonalities, shared, mutuality	
H6	<i>Perceived appropriate non-verbal rituals</i> lead to the development of trust.	Gestures, customs, non-verbal greetings, non-verbal closures, physical distance, codes, etiquette, formalities, manners, protocol, social conduct	
	AFFECTIVE DIMENSION		
H7	<i>Positive expressed emotions</i> increase trust.	Happiness, positive affect, joy, cheerfulness, satisfaction, cordiality, gratitude, enthusiasm, optimism	Negativity, anger, unhappiness, suspicion, coldness/coolness, blame

H8	<i>Experienced transparent communication</i> of the other increases trust.	Transparent defensiveness, openness, honesty, rich-free information, sincerity, clarity, clearness	Opacity, concealing, lies, camouflage, cover-up, obscure, hide, secret, keep dark, suspicion
H9	<i>Perceived threat regulation in interactions</i> increases the likelihood of trust to evolve.	Empathy, activities to minimise fear/threat, perspective taking, self-reflect, self-correction, threat-reducing, interpersonal understanding, social investments, feeling seen, felt and heard, consideration	Self-centred, fear-provoking, anger-provoking, fierce confrontation
H10	<i>Perceived emotional self-regulation</i> during the interaction increases trust.	Internal emotional security, self-control	Emotional outbursts, rage, strong emotion, arousal
H11	<i>Perceived moral force</i> in the other increases trust.	Will to sustain cooperation, genuine care, reluctance to exploit, moral obligation, reciprocity, integrity, morals, conscience, principles, gestures/signalling motivation, symbolic acts, spirit of cooperation	Immorality, lawlessness, misconduct, corruption, evil, villainy, violation, sin
	PROCESS DIMENSION		
H12	<i>Responsive communication</i> increases trust.	Responses, alertness, feeling heard and seen, active, perceptive, respondent, speed of communication	Ignorant, passive, unaware, unresponsive, unsusceptible, indifferent

H13	<i>Experiences of others listening attentively</i> increase trust	Aware(ness), attention, concentration, referring back to other's points, repeating what the other says, prudently, thoroughly, thoughtfully, concernedly, deliberative, showing interest	Uncarefully, distracted, indifferent, neglect, ignorance, disregard
H14	The <i>more interactions</i> take place, the more trust will develop.	This hypothesis will be operationalised by gathering the dates of the encounters in chronological order.	

Table 4.1 Hypotheses with core concepts (in *Italic*) and significant words related to core concepts of hypotheses

4.4 Case selection

To prove or disprove the hypotheses, a crucial case needs to be selected (Blatter & Haverland, 2014). Using Creswell & Poth's (2018) typology of sampling strategies, a purposive sample is drawn in which case selection is theory-driven. One case is selected because of its relevance and the accessibility of information about the case. The relevance of the case is determined by the importance of trust in facilitating the cooperation and the role interpersonal communication played in developing trust. As described in the operationalisation of the variables, trust is observed by making a decision (e.g. an agreement) that puts one in a situation of vulnerability with the risk of exploitation by the other (Ruzicka & Wheeler, 2010). In these situations, one has to trust the other for having benevolent intentions. The case knows varying degrees of trust during the selected timeframe. Crucial meetings are selected, of which some resulted in trust and others in distrust.

The case selected is the case of Argentina and Brazil. These states knew a period of nuclear distrust since the 1960s (Mallea, n.d.-a). This security dilemma was resolved in 1991 when both signed an agreement that contemplated the creation of a shared agency which would contain a system of reciprocal inspections. In this way, they became mutually dependent and vulnerable to one another (Ruzicka & Wheeler, 2010). The period between the start of nuclear distrust and the signing of the agreement in 1991 knew various interpersonal communications between both countries' state officials (Mallea, n.d.-a). The amount of trust varied between 1960 and 1991, and the importance of trust is expressed in dialogues about the meetings (Mallea, Spektor & Wheeler, 2012). Thus, this case is considered relevant because state officials expressed the role of trust and nuclear cooperation implies a decision which makes one vulnerable to exploitation by the other. Besides this, the human factor was seen as a crucial factor in the development of trust between the countries (Wheeler, 2009).

The interpersonal communications of the main state officials will be analysed. Logically, these state officials changed during the selected timeframe. However, this is not an obstacle for this research, as the hypotheses are more about behavioural expressions than a person's structural factors/personality. Nevertheless, of course, this is a slightly artificial distinction as some types of behaviour may be more conditioned in one person than in the other and can therefore be seen as more structural and thus as a part of one's personality.

4.5 Reliability

Reliability is about the quality of the measurement method (Babbie, 2020). A reliable research methodology will give similar results when reproduced by another scientist. With a clear operationalisation in Table 4.1 and a thoroughly described method of data analysis, the reliability is increased. However, subjectivity remains an issue as the researcher will interpret the data. The reliability of the research is increased by it being non-obtrusive. Thus, the researcher cannot influence the content of the data like an interviewer can in an interview.

4.6 Validity

Kellstedt and Whitten (2018) describe four hurdles that must be overcome to establish a valid causal relation. The first hurdle of establishing a believable relation between two variables is overcome by formulating a theoretical relation in the theory section. The second hurdle is more difficult to overcome, we cannot determine whether Y might cause X. The theory section already points out that trust and some interpersonal communication factors may reinforce one another, so it is hard to determine what comes first. The research, however, can prove a possible correlation between X and Y and make theoretical/educated guesses about causality. Addressing the third and fourth hurdle, the theory already touches upon the presence of third variables causing Y. There is a realisation that structural factors and past events, and not just the interaction itself, can influence the amount of trust developed. By addressing alternative explanations in the discussion, the results are brought into perspective. The influence of third variables cannot be taken out of the data as the data is taken from real-life complex social interactions where multiple factors influence the amount of interpersonal trust. The limited sample of one case makes it hard to generalise the findings to similar cases (Blatter & Haverland, 2012). Thus, the external validity is limited. However, this case study can be a first step towards finding relevant variables for quantitative research with a bigger sample. Small N-research allows the researcher to gather broad and diverse data per case (Blatter & Haverland, 2014).

The qualitative nature of the research and the small sample increase the concept validity of the study as it allows for the variables to be operationalised in a complex and multidimensional way

(Blatter & Haverland, 2012). The various hypotheses are intended to cover as much as possible the range of meanings implied in the concept of interpersonal communication. This increases the content validity (Babbie, 2020). Some significant words in Table 4.1 are taken at face validity because they are synonyms of core concepts in the hypotheses.

Creswell & Poth (2018) mention three strategies for a researcher to increase the validity. The first one is triangulation. In this research, this is done by using different data sources as described in the paragraph about data collection. The second strategy, clarifying researcher bias, is considered in the reflections in the discussion section. The bias comes from the researcher interpreting the results, however, the bias is as much as possible prevented by a clear operationalisation of the variables and a clear description of the research procedure. A third strategy is discovering a negative. Within the case there are personal communications that led to trust and others that led to distrust. This thus allows disconfirming evidence to be discovered.

5. RESULTS

This section will provide information from the analysed documents about the interpersonal communication between public officials from Argentina and Brazil between 1960 and 1991. An overview of the presidents, mentioned public officials in this section, and regime types of the countries can be found in Appendix A. The section will start with a summary of important events between Brazil and Argentina. Next, the dynamics and contents of interpersonal communications will be elaborated on per hypothesis.

5.1 Overview Argentina and Brazil from 1960 to 1991

The historical relationship between Brazil and Argentina was one of conflict and tension, even though, in later years, there was no serious confrontation (Mallea, Spektor & Wheeler, 2012). Both countries' international observers and intelligence communities saw a spiralling security dilemma between the nations as a real possibility. The chance for an armed conflict was low despite the rivalries (Rosenbaum, 1973). From 1966 to 1969, Brazil often blocked Argentine resolutions in international or inter-American meetings (Mallea, Spektor & Wheeler, 2012). The countries did, however, already share a seat in the board of the International Atomic Energy Agency (IAEA) (Argentinian Ministry of Foreign Relations, 1968). In 1967, the nuclear question became a high priority for the Brazilian government as it wanted a nuclear cooperation with Argentina to improve its geopolitical position and for technological reasons (Mallea, n.d.-b). Argentina blocked this proposal due to the lack of trust between policymakers (Mallea, Spektor & Wheeler, 2012). In 1976, Argentina showed interest in cooperation, but this time Brazil blocked concrete initiatives (Dunlap, 2021).

The Itaipu dispute was an important topic of tension (Gardini, 2006). Brazil wanted to construct a huge dam at Itaipú on the Paraná River, on the border of Argentina and Brazil (Rosenbaum, 1973). Argentina complained that Brazil made a unilateral decision which violated their agreement. The project would also interfere with Argentina's own plans for a power project, and the Itaipú Dam would threaten navigation on a vital waterway. Brazil replied they did not have to consult with Argentina according to the agreement but only let their intentions known and argued that the Itaipú Dam would prevent flooding in Argentine territory while Argentina's project would flood Brazilian and Paraguayan land. As the dam would be constructed on the border with Paraguay and Paraguay would receive half of the energy, Argentina feared it would lead Paraguay to fully commit to Brazil. Argentine ambassador Oscar Camilión, civil servant in the Brazilian Foreign Ministry Luiz Felipe Lampreia and Brazilian Foreign Ministry Deputy Chief Luiz Augusto de Castro Neves mention the importance of solving the Itaipu dispute to enable nuclear cooperation (Mallea, Spektor & Wheeler, 2012).

In October 1979, while Jorge Videla was the Argentine president and João Baptista de Oliveira Figueiredo had just become the Brazilian president, the Itaipu dispute was resolved (Mallea, Spektor & Wheeler, 2012). Cooperation increased under their presidencies. Ambassador Camillión (ARG) stated that interpersonal trust was an essential facilitating aspect in resolving the Itaipu dispute. The resolve was followed by the first bilateral agreement on nuclear cooperation in 1980 (Dunlap, 2021). Other important events in the bilateral relationship were the Falkland war in 1982, in which Argentina went to war with the United Kingdom, claiming the islands historically belonged to Argentina (Patti, 2021) and Argentina developing the capacity for uranium enrichment in 1983 (Figueiredo, 1983) which is a critical technology for civil purposes as well as for nuclear weapons.

In 1985, Argentina proposed a system of mutual inspections, but Brazil replied that the issue was sensitive and needed to be further internally discussed (Mallea, Spektor & Wheeler, 2012). In 1985, there were two episodes of concern (Mallea, n.d.-a), although the degree of concern differed per government department (Mallea, Spektor & Wheeler, 2012). The first episode was caused by the expression of the Brazilian army minister to favour bomb technology development (Mallea, n.d.-a). However, Brazilian president José Sarney de Araújo Costa responded that the nuclear program only had peaceful intentions (Mallea, Spektor & Wheeler, 2012). Later in 1985, a Brazilian Air Force aeroplane flew twice over the Argentine uranium enrichment plant located at Pilcaniyeu. This plant caused international concern after Argentina announced they mastered the enrichment capacity in 1983 (Mallea, n.d.-a).

In November 1985, a historic meeting happened in which Brazilian president Sarney and Argentine president Raul Alfonsín met for the first time (Mallea, Spektor & Wheeler, 2012). They jointly declared the peaceful purposes of their nuclear programs, signed a joint declaration on nuclear policy and decided to set up an ad-hoc joint working group. Alfonsín marked the meeting as a new phase in which suspicions now belonged to the past. The meeting was seen as the start of cooperative initiatives. In August 1986, there was some unsettlement after the discovery of two holes in Serra do Cachimbo (Brazil), which were assumed to be dug for Brazilian nuclear tests (Mallea, n.d.-a). However, nuclear technicians knew the holes were not suitable for this, so the suspicion raised by this discovery varied per person (Mallea, Spektor & Wheeler, 2012). The discovery did not lead Argentina to put a block on the cooperation. Another important event was Brazil achieving nuclear enrichment capacity in 1987 (Ricupero, 1987).

In April 1988, president Alfonsín (ARG) visited nuclear facilities in Brazil and signed a declaration with president Sarney (BRA) to make the ir working group a permanent committee (Mallea, Spektor & Wheeler, 2012). In 1990, when opposition parties came to power in both countries, there

was a fear this would be the end of nuclear cooperation between the countries (Mallea, n.d. -a), however, this was not the case. Brazilian president Fernando Affonso Collor de Mello adopted three essential measures to improve the cooperation. In another historic meeting in November 1990, Brazilian president Collor and Argentine president Carlos Saúl Menem met, signed a Joint Declaration on Common Nuclear Policy and established a common system for accounting and controlling all nuclear activities. In July 1991, they set up the Brazilian Argentine Agency for Accounting and Control of Nuclear Materials (ABACC), which resolved the security dilemma that was present since the 1960s as there was now full integration. Between 1990 and 1994, the trust and cooperation between the countries reached a level like never before (Mallea, Spektor & Wheeler, 2012).

5.2 Hypotheses

The amount of quotations differs per hypothesis. It must be emphasised that many quotations from different documents refer to the same events, however, the amount of codes does indicate what part of the interpersonal communication is more often talked/written about. Most often, there is spoken about a perceived moral force (a will to engage) (hypothesis 11). Reflecting on the difference between trust defined in this thesis (a belief in the other's benevolent intentions) and strategic trust, it must be mentioned that these two cannot be fully separated in practice. Strategic trust is related to the second most often quoted topic: similar interests, values and identities (hypothesis 5). Other highly cited topics are threat regulation (hypothesis 9), positive expressed emotions (hypothesis 7), transparency (hypothesis 8), consideration (hypothesis 1) and the amount of interactions (hypothesis 14). On the next page in Figure 5.2, there is a complete overview.

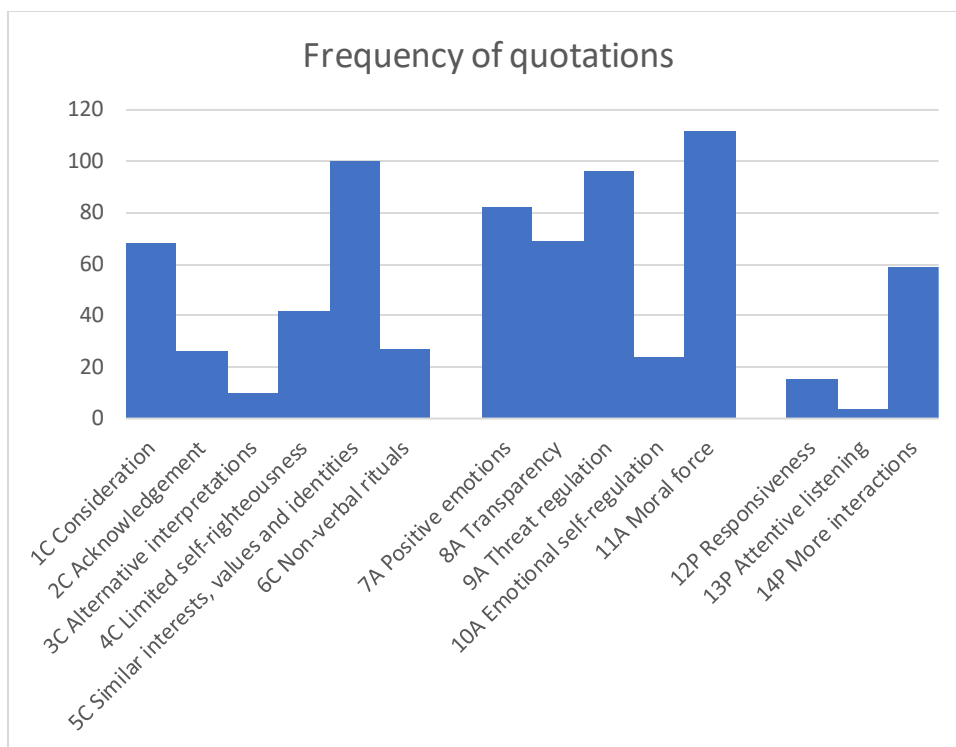


Figure 5.1 Frequency of quotations per hypothesis

The hypotheses with very few quotations must be considered to have a less reliable and valid analysis. The few quotations do not imply the absence or unimportance of the factor, rather, it means there is little documentation about this factor which can also point to unawareness of the possible role of this factor. Information about the perceptions of the people involved comes from the Critical Oral History (Mallea, Spektor & Wheeler, 2012), other interviews and notes from meetings. As it is difficult to only get resources that directly document the perceptions of the people involved, I have chosen in this research to also observe indirect interpersonal communications (e.g. announcements and executed acts by the governments) that relate to the hypotheses. This implies that I do not solely rely on literal statements but have interpreted texts and acts, which may decrease the reliability. It may increase the validity as texts and acts are considered within their context. In the interpretative process, some hypotheses turned out to be confirmed and contrasted by the same events and thus, some hypotheses are brought together (H2, H3; H9, H10, H12, H13; H11, H6). An explanation of the linkage between the hypotheses can be found in first paragraph of the results of the hypotheses.

5.2.1 Content dimension

Hypothesis 1: Verbally expressed consideration about the other's security, freedom to choose and welfare increases trust.

Expressed considerations about the other's security, freedom to choose and welfare were rare in the '60s and '70s. In 1968, the Argentine Ministry of Foreign Relations (1968) stated that Brazil adopted a

policy in the IAEA to achieve maximum benefit for itself without considering Argentina's aspirations. This despite their agreement about shared permanent representation on the board. In 1973, there was still a fear of Brazil wanting to exercise hegemony over Argentina, thus, there was no trust in Brazil for being considerate about Argentina (Rosenbaum, 1973). Some competitions over natural resources (fish, meat, gas, iron) fuelled the suspicion in each other's countries that the other was trying to take away resources to delay economic growth. Brazilian foreign minister Azaredo da Silveira under president Ernesto Geisel's administration (1974-1979) saw Argentina's prior consultation demand during the Itaipu dispute as a manoeuvre to hinder Brazilian development.

Ambassador Camilión (ARG) in 1976 emphasised the importance of friendship between Brazil and Argentina and expressed sympathy and solidarity to Brazil's needs (Darnton, 2020; Andrade Abreu, 1977). This despite the difficult relation with chancellor Silveira (BRA) (Dunlap, 2021). In 1977, Argentina showed solidarity with Brazil when the USA tried to downgrade the nuclear plans of Brazil (Patti, 2021). Nevertheless, president Geisel (BRA) still characterised the Argentine posture towards Brazilian development as negative and cautious (Costa Silva, 2020). President Videla (ARG) tried to improve relations with Brazil since the beginning of his administration in 1976. This would only take effect once Geisel (BRA) left and Figueiredo (BRA) became the new president in 1979 (Dunlap, 2021). President Figueiredo (BRA) and his foreign minister Guerreiro had an innate sympathy for Argentina (Camargo, Pinheira & Seabra, 1985; Coutto, 2014; Patti, 2021).

The relation between captain Castro Madero (head of Argentine Nuclear Commission, CNEA, 1976-1983) and ambassador Paulo Nogueira Batista (head of Brazil Nuclear Companies, Nuclebrás, 1975-1982) was excellent (Mallea, Spektor & Wheeler, 2012). In their conversations, the Brazilian nuclear program was evaluated while considering the Argentine point of view.

An act of consideration in 1982 was Brazil's official support for Argentina's historical claims during the Falkland war (Patti, 2021; Costa Silva, 2020). Brazil provided Argentina with diplomatic support in international institutions (Coutto, 2014) and material support (Gardini, 2006; Patti, 2021; Costa Silva, 2020), which increased trust (Coutto, 2014). It must be mentioned that in these acts of consideration, motivations for Brazil's national interest also played a role (Gardini, 2006). When in 1983, President Reynaldo Bignone (ARG) informed President Figueiredo (BRA) about their achievement of nuclear enrichment technology, he literally assured him of the high consideration he had for Brazil (Bignone, 1983). In response, Figueiredo reciprocates the assurances of his highest consideration for Argentina (Figueiredo, 1983).

In 1985, foreign minister Olavo Setúbal (BRA) showed sincere consideration for Argentina's welfare when taking direct action after being informed about Argentina's recurrent deficits (Gardini,

2005). President Sarney (BRA) was known for his solidarity with president Alfonsín (ARG) and was ready to agree on economic concessions (Gardini, 2005). The common problems both presidents faced made them empathetic to the other's concerns and interests (Mallea, Spektor & Wheeler, 2012). Another act of consideration was the direct help that Argentina offered Brazil during the Goiânia radiological accident in 1987, in which a nuclear device was mishandled (Patti, 2021). The relation between President Collor (BRA) and President Menem (ARG) was less personal than the one between Alfonsín (ARG) and Sarney (BRA) (Mallea, Spektor & Wheeler, 2012). Their consideration about one another seemed to have been more strategic.

Hypothesis 2: Expressed acknowledgement of current cognitive structures (like identities, chosen glories and traumas) facilitates the development of trust.

Hypothesis 3: Slowly exposed alternative interpretations of events facilitate the development of trust.

These hypotheses are merged as an acknowledgement of cognitive structures goes together with slowly exposed alternative interpretations.

Silveira (BRA) was outraged after Argentine foreign minister Luis de Pablo Pardon (1970-1972) condemned the, in his view, Brazilian imperialism and leadership attempts (Costa Silva, 2020). Silveira described Pardon's proposals as offensive. In 1972, President Alejandro A. Lanusse (ARG) attacked Brazil in his speech in a highly aggressive tone which was personally insulting (Darnton, 2012). These extreme expressions point to a lack of acknowledgement of the other's cognitive structures. In 1976, when negotiating the Itaipu dispute, both countries exaggerated their positions and hardened in their negotiations (Mallea, Spektor & Wheeler, 2012). The emotional obstacles to cooperation point to diverging interpretations of situations which are not genuinely communicated. The tough stances changed when Silveira (BRA) got replaced by Guerreiro (BRA). Guerreiro saw toughness as an obstacle to cooperation and justification for Argentina's fears (Costa Silva, 2020). He thus acknowledged Argentina's cognitive structures.

During the Falkland war in 1982, Brazil acknowledged Argentina's cognitive structure of nationalism (Patti, 2021). An acknowledged glory was the appreciation of Brazil for Argentina in 1983 when they achieved control of the nuclear enrichment capability (Figueiredo, 1983). In 1984, when Brazil still had a military regime and Argentina had just transformed into a democratic regime, the countries intentionally pursued a careful non-aggressive and low-risk policy towards one another with discrete and subtle actions (Gardini, 2005). This points to a conscious choice to respect the other's cognitive structures about how countries should be run. In 1987, President Alfonsín (ARG) and

undersecretary for external relations Jorge F. Sábato reciprocated the acknowledgement of glory with warm and enthusiastic congratulations towards Brazil when Brazil achieved control of the nuclear enrichment capability as well (Patti, 2021).

Hypothesis 4: Expressed realisations of limited self-righteousness contribute to the development of trust.

The past of distrust and rivalry between the countries has been generally non-ideological (Redick, 1995). From 1964-1967 the Brazilian regime was led by the moderate general Humberto de Alencar Castello Branco, but afterwards it passed on to hard-liners like Artur da Costa e Silva (1967-69) and Emílio Garrastazú Médici (1969-74) (Patti, 2021). Both Costa e Silva and Médici executed a fierce anti-communist crusade. The extent to which this impacted trust between the countries is debatable, as the expression is not in opposition to the ideology of Argentina of that moment.

The offences Lanusse (ARG) expressed in his speech in 1972 (Darnton, 2014) can be considered expressions of extreme self-righteousness that could impact the bilateral trust. In 1973, both countries suspected each other of crusading one's own ideas and black boxing the other. Brazil was concerned that Argentina would create anti-Brazilian sentiment in South American countries out of jealousy of Brazil's recent economic development (Rosenbaum, 1973). Argentina feared Brazil's exercise of hegemony over the continent and wanted to ally with other South American countries in defence, which could be interpreted as an Argentine crusade in itself. The Geisel administration (BRA) (1974-1979) adopted a hard stance towards Argentina (Gardini, 2006). Silveira (BRA) was known for pushing his views and little receptiveness to new ideas (Costa Silva, 2020; Darnton, 2020). He saw concessions as a sign of weakness. His extreme positions and the extreme ideological positions of others involved in the Itaipu negotiations fuelled a deadlock (Costa Silva, 2020; Mallea, Spektor & Wheeler, 2012). Even though president Videla (ARG) expressed an ideological stance in favour of Western civilisation in 1976 (Dunlap, 2021), this expression did not hinder the resolve of the Itaipu dispute under his administration. Perhaps because the ideology did not oppose the one of Brazil, just like in the case of Costa e Silva and Médici. Camillión (ARG), who was involved in resolving the Itaipu dispute, was seen as a moderate voice (Dunlap, 2021). He saw putting aside extreme positions as necessary to enable cooperation (Mallea, Spektor & Wheeler, 2012). Limited self-righteousness was also expressed by Guerreiro (BRA), who expressed that during Figueiredo's administration (1979-1985), they never tried to underestimate others' intelligence (Camargo, Pinheira & Seabra, 1985).

The diplomatic carefulness in 1984 during regime asymmetry can also be seen as an expression of limited self-righteousness (Gardini, 2005). Argentina had to put conscious effort into

convincing Brazil that it did not seek to export democracy to Brazil. President Sarney (BRA), at the start of his presidency in 1985, also engaged in action to show his non-expansionist intentions.

Hypothesis 5: Expressed similar interests, values and identities lead to the development of trust.

In the late 1950s and early 1960s, the countries had many common interests and compatible foreign policies (Darnton, 2014). With the selection of president Arturo Umberto Illia (ARG) in 1963, the countries more often took common positions (Mallea, Spektor & Wheeler, 2012). In 1966, when military regimes ran both countries, they held similar beliefs about global affairs (Rosenbaum, 1973). Positions also converged during the Treaty of Tlatelolco in 1967, where both countries did not accept any limitations to their nuclear technological development (Soares, Januário & Valdivieso, 2020; Redick, 1995).

At the beginning of the 1970s, there were a lot of similarities: cooperation was encouraged by their ally, the USA, both countries faced similar threats from leftist groups (Darnton, 2012), cooperation could be mutually technically beneficial (Quihillalt & Alegría, 1967), they shared international threat for their nuclear autonomy and shared regime type (Darnton, 2014). The lack of cooperation in 1972 is thus a mystery (Darnton, 2012). Darnton (2014) argues mutual suspicion played a role which could have been caused by state agencies (mainly the militaries and foreign ministries), who benefited from a continuing conflictual situation. However, the countries' interests kept aligning, for example, when both countries resisted the US Nuclear Non-Proliferation Act of 1978, which limited nuclear technology transfers to non-NPT countries (Mallea, Spektor & Wheeler, 2012).

Besides these common interests, the Itaipu dispute and the diverging positions in these negotiations remained an obstacle to cooperation (Subiza, 1979). Camillión (ARG) saw no contradiction between the essential national objectives of Brazil and Argentina (Darnton, 2020), but the Argentine foreign ministry did. After resolving the Itaipu dispute in 1979, there was an increasing motivation to solve controversies between the countries (Coutto, 2014). The motivation of the foreign ministries to collaborate grew as they became increasingly aware of the international costs, technical and political, of independent nuclear programs (Carasales, 1995).

After president Figueiredo's (BRA) visit to Buenos Aires in 1980, president Videla (ARG) expressed the shared interests and identity of the countries (Coutto, 2014). Guerreiro (BRA) and Figueiredo knew that cooperation could improve the bargaining power of both countries in global negotiations (Costa Silva, 2020; Mallea, Spektor & Wheeler, 2012). Despite their shared interests, there were still mutual suspicions in 1980 (Coutto, 2014). The Falkland war in 1982, already described above, however, paved the way for mutual trust (Patti, 2021). With the establishment of the joint

working group in 1985, effort was made to create common positions in all international fora (Mallea, Spektor & Wheeler, 2012).

The symmetry of regimes and thus the shared democratic values that returned in 1985 fostered integration talks (Gardini, 2005). Setúbal (BRA) was though still cautious about the Argentine proposal for mutual inspections in 1985 (Patti, 2021). This lack of cooperation might be attributed to resistance from the Brazilian military and not to a lack of trust between the governments (Abdenur, 1985).

President Sarney (BRA) and president Alfonsín (ARG) expressed the notion of the common identity of Latin America (Gardini, 2005; Ricupero, 1987). They identified with one another because they faced the same problems (Mallea, Spektor & Wheeler, 2012). In their first meeting in November 1985, the common situation and common identity as neighbours were emphasised (Gardini, 2005). Sarney (BRA) saw the Argentine problems also partly as the problems of Brazil (Mallea, Spektor & Wheeler, 2012). In 1987, both presidents continued to oppose the international global order, which they considered unfair (Patti, 2021). In April 1988, the presidents met and expressed full convergence of their positions on global nuclear issues (Patti, 2021). President Collor (BRA) and president Menem (ARG) also shared interests as they saw them as beneficial for the region and the countries (Mallea, Spektor and Wheeler, 2012).

5.2.2 Affective dimension

Hypothesis 7: Positive expressed emotions increase trust.

During the Argentine military regime before 1963, there was suspicion towards President João Belchior Marques Goulart (BRA) and the relation was cool (Rosenbaum, 1973). Meetings between the military government of the countries were often very formal, not necessarily hostile, but definitely not cordial (Mallea, Spektor & Wheeler, 2012). Contact between nuclear personnel was more cordial (Da Costa Ribeiro, 1967). Brazil generally showed a positive attitude towards cooperation (Argentinian Ministry of Foreign Relations, 1968), but Pardon (1970-72)(ARG) had an anti-Brazil stance. President Lanusse (ARG) also showed a negative attitude in his speech in 1972 (Darnton, 2014). Lanusse was disliked and distrusted by Brazil (Darnton, 2012). Camillón (ARG), from 1976 onwards, sought to improve the climate with a positive attitude (Darnton, 2020). However, Silveira (BRA) was sceptical and suspicious of Argentine intentions during the Itaipu negotiations (Costa Silva, 2020). Darnton (2020) mentioned Geisel promoted a climate of cordiality, but Gardini (2006) mentioned Geisel still adopted a hard posture.

In 1977, Silveira (BRA) was irritated by the proposals Camillión (ARG) made during negotiations (Camargo, Pinheira & Seabra, 1985). Silveira blamed Argentina in 1978 for the lack of negotiation, which displeased the Argentine Foreign ministry (Darnton, 2020). He also responded rudely to foreign minister Carlos Washington Pastor (ARG), when Pastor claimed the Itaipu had a domestic emotional appeal (Costa Silva, 2020). Guerreiro (BRA) and Pastor (ARG), however, developed a sort of implicit trust (Coutto, 2014). Guerreiro had a more optimistic image of Argentina which made him more flexible in the negotiations (Costa Silva, 2020). Differences in the atmosphere were noticeable when Brazilian presidency changed as Geisel was a more distant man and Figueiredo a warm man with personal sentiment for Argentina, because he lived there (Mallea, Spektor & Wheeler, 2012; Camargo, Pinheira & Seabra, 1985). Figueiredo's government had an open and friendly approach to its neighbours (Camargo, Pinheira & Seabra, 1985). The resolve of the Itaipu dispute in 1979 brought enthusiasm that paved the way for more agreements (Mallea, Spektor & Wheeler, 2012). The visit of Castro Madero (CNEA) to Brazil in 1980 was cordial and frank (Brasília Foreign Affairs, 1980). During visits in 1980, Argentina showed interest to become familiar with Brazilian nuclear events (Batista, 1980).

The positive attitude of Brazil towards Argentina during the Falkland conflict in 1982 created more trust (Patti, 2021). Positive emotions, like sincere wishes for happiness and appreciation, were expressed when the countries achieved nuclear enrichment technology in 1983 (Argentina) (Figueiredo, 1983) and 1987 (Brazil) (Ricupero, 1987). From the first visit onwards in 1985, the meetings between Alfonsín and Sarney knew a cordial and pleasant atmosphere (Mallea, Spektor & Wheeler, 2012). The joint working group, established in 1985, worked in great harmony and with enthusiasm. The relation between Collor (BRA) and Menem (ARG) was less personal and did not go a lot further than pure and cold protocol, however, cooperation continued out of conviction it was beneficial (Mallea, Spektor & Wheeler, 2012).

Hypothesis 8: Experienced transparent communication of the other increases trust.

In 1967, president Costa e Silva (BRA) showed diplomatic openness to meet president Juan Carlos Onganía (ARG) (Coutto, 2014). Argentina was not so receptive to Costa e Silva's attempt for a nuclear agreement as it did not trust Brazil to be transparent about its intentions. With Silveira as chancellor from 1969 onwards, suspicion increased (Coutto, 2014). Camillión (ARG) came to Brazil in 1976 with the attitude to keep secrets and not talk about issues (Mallea, Spektor & Wheeler, 2012). Camillión's juggling with words, which can be seen as a lack of transparent communication, annoyed Silveira (BRA). Spektor (2015) claims that, despite the suspicions, cooperation and transparency increased during these military regimes in the 1970s and 1980s. After counsellor Raul Estrada (ARG) did not find

hidden messages in Brazil's published ideas in 1979, he was motivated to explore further possibilities of nuclear cooperation (Castro Neves, 1979). Guerreiro (BRA) states that distrust ended with the Figueiredo government as they never tried to deceive anyone and strived to be transparent in their attitudes and positions (Camargo, Pinheira & Seabra, 1985). He claims this was recognised by their neighbours and created an open climate of dialogue.

The resolve of the Itaipu dispute in 1979 was the beginning of an open relation with confidence between the countries (Camargo, Pinheira & Seabra, 1985). Coutto (2014) mentions that there were still mutual suspicions since the governments had little information about each other's real motivations and the militaries were still resisting bilateral cooperation. Mallea (n.d.-c), however, writes that the dialogue on nuclear questions that started in 1980 kept both sides informed of each other's intentions. A deal in 1980 between Figueiredo (BRA) and Videla (ARG) failed though, due to a lack of honesty on both sides about the technical benefits (Mallea, Spektor & Wheeler, 2012).

In 1982, Argentina did not inform Brazil about its intention to invade the Falkland Islands, which was considered non-transparent by Brazil (Gardini, 2006). Nevertheless, it did not lead to the breaking of trust. The prior briefings of the governments about their achievement of nuclear enrichment capacity in 1983 and 1987 (Mallea, Spektor & Wheeler, 2012) can be seen as an act of transparent communication. However, secrecy around the nuclear programmes still contributed to mistrust (Coutto, 2014). Higher levels of transparency through meetings between nuclear technicians, starting with the Alfonsín government, helped to get more information about the other's real intentions (Mallea, Spektor & Wheeler, 2012). Wheeler (2009) mentioned it did not take out all uncertainties.

The mutual visits of Sarney (BRA) and Alfonsín (ARG) to secret sensitive nuclear plants (Caracales, 1995) were acts to increase transparency. The Pilcaniyeu visit in July 1987 was a fundamental step towards trust-building as it was the first time a foreign delegation had full access to this secret nuclear plant (Patti, 2021). Also, during the visits in 1988 to nuclear centres Aramar (Brazil) and Azeiza (Argentina), both sides showed everything they had (Mallea, Spektor & Wheeler, 2012). Secrecy disappeared when Brazil opened all their facilities to Argentine visits starting with the first round in 1987 (Patti, 2021). Transparency peaked when in July 1991, the Brazilian Argentine Agency for Accounting and Control of Nuclear Materials (ABACC) was created (Mallea, n.d.-a).

Hypothesis 9: Perceived threat regulation in interactions increases the likelihood of trust to evolve.

Hypothesis 10: Perceived emotional self-regulation during the interaction increases trust

Hypothesis 12: Responsive communication increases trust.

Hypothesis 13: Experiences of others listening attentively increase trust

Acts of transparency can, in specific occasions, be seen as acts to regulate threats. Therefore, acts of transparency will not be mentioned again. Self-regulation is merged with threat regulation as to regulate threats, one has to regulate one's own fear in threat provoking situations. Hypothesis 12 and 13 are added as threat regulation is in itself a response to minimise the feeling of fear in the other and requires attentive engagement (Williams, 2007).

The empathy developed around the 1970s among the personnel of both countries' nuclear sectors reduced threat perception (Spektor, 2015). The tough strategy of Silveira (Costa Silva, 2020) could be seen as threat-provoking communication. Guerreiro (BRA), however, engaged in threat regulation by taking Argentina's perspective and engaging in accommodation to reduce Argentina's fears of Brazilian expansionism (Costa Silva, 2020). The leaking of a document by Brazil in 1977 without the approval of the Argentine foreign ministry (Darnton, 2020) provoked a threat, but Argentina's choice to carefully analyse the act to prevent mal-intentioned interpretation regulated the threat. Figueiredo's commitment to informal dialogues over the phone with other countries increased the speed and efficiency of the communication, which could have fostered threat regulation (Camargo, Pinheira & Seabra, 1985).

Threat regulation occurred when the Special National Intelligence Estimate (1982)(ARG) in 1982 mentioned in a report that to avoid a nuclear arms race with Brazil, it would be better not to test nuclear devices that could serve as a weapon. In 1985, Brazilian ambassador Abdenur (1985) made a similar statement. Threat-provoking language of the Brazilian navy during the Falkland war could have been a way of the armed forces to justify their existence and obtain resources (Mallea, Spektor & Wheeler, 2012), but as mentioned before, the Falkland war strengthened the bilateral relation.

In September 1985, a Brazilian Minister of Army provoked fear by declaring in the media he would be in favour of developing the technology needed for a bomb (Mallea, n.d. -a). On another occasion, a general from the army science and technology stated that Brazil did not intend to build a bomb but might do so if necessary (Patti, 2021). The Brazilian government regulated these threats and responded immediately with a denial of the statements. Brazilian responsiveness also regulated the threats in October 1985 when Brazilian aeroplanes flew over Pilcaniyeu (Mallea, Spektor & Wheeler, 2012). Argentina engaged in threat regulation by informing Figueiredo (BRA) before the media knew

about the event. By engaging in perspective-taking, Argentina realised the possible internal divergences in the Brazilian government. In June 1986, the media reported the presence of holes in Serro do Cachimbo (BRA), which could be used for testing nuclear bombs (Patti, 2021). Sarney (BRA), in response, regulated the fear and reassured Argentina that Brazil did not aim to build an atomic bomb. The face-to-face meetings since 1985 between Sarney (BRA) and Alfonsín (ARG) helped to correct misunderstandings (Mallea, Spektor & Wheeler, 2012).

In 1990, when Brazil had the capacity to build an atomic bomb but chose not to, the Argentine doubts about the peaceful intentions of Brazil disappeared (Patti, 2021). A (symbolic) act of threat regulation was president Mello, who in 1990 closed one of the Cachimbo holes that caused concern in earlier years (Mallea, n.d. -a).

Hypothesis 11: Perceived moral force in the other increases trust.

Hypothesis 6: Perceived appropriate non-verbal rituals lead to the development of trust.

Moral force can be perceived by mitigating threats, which makes this hypothesis touch the hypothesis of threat regulation. However, moral force can also be shown without a threat being present. It can, for example, be perceived by symbolic acts. Therefore perceived moral force is analysed together with perceived appropriate non-verbal rituals which can express itself in symbolic acts/gestures.

In the beginning of the 1960s, there was a spirit of cooperation by President Arturo Frondizi (ARG), President Jânio da Silva Quadros (BRA) and President Goulart (BRA) (Rosenbaum, 1973). This spirit broke once Frondizi got removed as president in 1962. In 1967, Costa e Silva (BRA) approved to start conversations with Argentina to explore possibilities for nuclear cooperation (Mallea, n.d. -b), but Argentina was sceptical based on the past negative experiences with Brazil on talks about cooperation (Argentinian Ministry of Foreign Relations, 1968). Argentine nuclear authorities did show interest (Andrade Abreu, 1974). The inappropriateness of president Lanusse's speech in 1972 (ARG) worked against the spirit of cooperation with Brazil (Darnton, 2012), especially because of the Brazilian sensitivity for deviations from the protocol. Some scholars (in Darnton, 2012) claim that if Lanusse stuck to the script the summit could have produced cooperation.

President Geisel (BRA) engaged in a consistent search for cooperation with Argentina (Gardini, 2006). Scientists from both countries and the Brazilian foreign ministry also expressed favourable towards cooperation in 1974 (Andrade Abreu, 1974). Silveira (BRA) though showed no interest in cooperation (Darnton, 2020). His successor Guerreiro showed more moral force to engage in cooperation (Darnton, 2020), but mutual suspicions during Itaipu negotiations kept nuclear cooperation at bay (Coutto, 2014). Camillón (ARG) was an active promoter of rapprochement

(Darnton, 2020), but Brazil did not show interest in Argentina's proposal in 1976 for a joint declaration on nuclear energy (Dunlap, 2021). In 1976, Videla was willing to cooperate with Brazil (Dunlap, 2021) and gave a new impulse to bilateral conversations by telegraphing Geisel (Darnton, 2020). An Argentine representative expressed in his visit to Brazil that Argentina had already shown interest in nuclear cooperation for multiple years, but this was not reciprocated by Brazil (Castro Neves, 1979). Figueiredo (BRA), however, showed a strong will to create a good relation with Argentina and was willing to make concessions in the Itaipu dispute to achieve this (Camargo, Pinheira & Seabra, 1985; Mallea, Spektor & Wheeler, 2012; Costa Silva, 2020). Strategic interests (together they would be stronger in the international field) also played a role in his motivation. Figueiredo and Videla met in 1980, which was the beginning of many formal and informal meetings, despite the sceptical military (Coutto, 2014). Notwithstanding suspicions, the presidents of the Argentine and Brazilian nuclear organisations also met several times since the beginning of the 1980s, and continued to make effort to establish a collaboration (Patti, 2021).

In 1981, there was some political unrest in Argentina when presidency changed from Videla to Viola, but this did not disturb Argentina's will to invest in the relation with Brazil (Coutto, 2014). A gesture was made in the beginning of the '80s when President Leopoldo Galtieri (ARG) offered president Figueiredo (BRA) an ancient fusta (work of art) which had emotional value to Figueiredo (Camargo, Pinheira & Seabra, 1985). Guerreiro expressed that during the Falkland war in 1982 Brazil made intensive effort to keep the relationship with Argentina well. The motivation of Figueiredo (BRA) for continuous rapprochement expressed itself in Brazil inviting all Argentine presidential candidates in 1983 for a lunch or dinner (Camargo, Pinheira & Seabra, 1985). Candidate Alfonsín made a big deal out of this by inviting the media and in this way showed his motivation for rapprochement. The first bilateral agreement on nuclear cooperation in 1980 can be attributed to the political will of the presidents (Dunlap, 2021) and the determination of the foreign ministries (Carasales, 1995). The latter interests were partly strategic, as cooperation would reduce (international) political and technical costs. Alfonsín and the new Brazilian president Sarney shared motivation to create a climate of mutual trust (Patti, 2021; Mallea, Spektor & Wheeler, 2012). Building trust was a conscious decision of the presidents. They knew they were engaging in a confidence building process and named it that. The visits to sensitive unsafeguarded nuclear plants showed that the cooperative force of the presidents was stronger than the opposing force of some of the military (Redick, 1995). The moral force for integration was also present in foreign ministers Setúbal (BRA) and Dante Caputo (ARG), who met in 1985 (Gardini, 2005). Scientists of both countries also pushed for cooperation since Alfonsín's selection (Patti, 2021).

During their first presidential meeting in July 1990, Menem (ARG) and Collor committed to strengthening the relation between their atomic sectors (Patti, 2021). However, their motivation might have been more strategic than the one of Alfonsín and Sarney (Mallea, Spektor & Wheeler, 2012). Under their presidencies a remarkable set of agreements was signed (Redick, 1995).

5.2.3 Process dimension

Hypothesis 14: The more interactions take place, the more trust will develop.

As can be seen in Figure 5.2 on the next page, there were few visits between the state officials of Argentina and Brazil in the 1960s and 1970s (Mallea, Spektor & Wheeler, 2012). Mutual educational visits did increase after the successful visit of a delegation of the Brazilian School of War to the Atucha Plant (ARG) in 1974 (Dunlap, 2021). Castro Neves argued that these visits played an important role in building a common vision and solidarity. Patti (2021) mentions that the resolve of the Itaipu dispute in 1979 was a result of years of dialogue between both countries' diplomats and scientists. Figueiredo's (BRA) visit to Videla (ARG) in May 1980 was the beginning of multiple formal and informal talks between technicians and high public officials (Coutto, 2014). Presidential diplomacy became systematic under Figueiredo's administration (Gardini, 2006). In 1983, Argentina agreed to the Brazilian proposal to organise talks in the following years on possible joint renunciation of peaceful nuclear explosions (Mallea, n.d.-c). Nevertheless, the Brazilian transition of the government obstructed these talks (Mallea, n.d.-a).

Date	Public Officials
Feb/67	President Costa e Silva (BRA) visits President Onganía (ARG) before taking office
Dec/67	President CNEN travels to Argentina
Mar/68	<i>CNEA scientists travel to Brazil</i>
Mar/72	President Lanusse (ARG) visits president Médici (BRA)
Jun/74	<i>Director Atucha nuclear plant visits Brazil</i>
Jul/74	<i>Delegation from Brazilian superior School of War visits Atucha Plant in Argentina.</i>
May/76	Ambassador Camilión (ARG) meets regularly with Carvalho (Brazilian Nuclear Commission) and Batista (Nuclébras)
Sep/76	BRA and ARG meet at 21 st IAEA conference in Rio de Janeiro, but talks don't progress
Oct/79	ARG, BRA and PAR sign Itaipu agreement
Jan/80	<i>President CNEA Castro Madero (Argentina) visits Brazil</i>
May/80	President Figueiredo (BRA) visits President Videla (ARG) - first by Brazilian president since 1935
May/81	President Figueiredo (BRA) visits President Viola (ARG)
Jan/83	President Figueiredo (BRA) meets president Bignone (ARG) at Foz de Iguacu in Brazil
Aug/83	<i>Gomes (Nuclebras) and Nazareth (CNEN) visit Argentine nuclear facilities</i>
Dec/83	Foreign minister Guerreiro (BRA) meets with foreign minister Caputo (ARG) for the first time
Jan/85	President Figueiredo meets president Alfonsín
Feb/85	Elected president Neves (BRA) and president Alfonsín (ARG) meet
May/85	Foreign ministers Setúbal (BRA) visits Caputo (ARG)
Nov/85	President Sarney (BRA) and president Alfonsín (ARG) - first meeting
Dec/85	President Alfonsín (ARG) visits Brazil and meets Sarney again (BRA)
Jul/86	President Sarney (BRA) and president Alfonsín (ARG) sign an agreement of cooperation
Dec/86	President Alfonsín (ARG) visits Brazil, President Sarney (BRA)
Jul/87	President Sarney (BRA) visits Pilcaniyeu (ARG)
Sep/87	Ambassador Ricupero (BRA) meets Alfonsín (ARG)
Apr/88	President Alfonsín (ARG) visits Aramar nuclear facilities (BRA). Working group becomes permanent group.
Nov/88	President Sarney (BRA) visits Ezeiza (ARG) and meets Alfonsín (ARG)
Nov/90	Menem (ARG) and Collor (BRA) meet at Foz de Iguacu
Jul/91	Menem (ARG) and Collor (BRA) sign agreement at Guadalajara for creation of ABACC

Figure 5.2 Face-to-face meetings public officials between 1960 and 1991 with decades separated by colour (in *Italic* the most important meetings of nuclear technicians) (Mallea, Spektor & Wheeler, 2012; Darnton, 2012; Coutto, 2014; Gardini, 2005).

With the administration of Sarney (BRA) and Alfonsín (ARG) bilateral talks were given new life with the intention to build trust (Mallea, Spektor & Wheeler, 2012). After the presidents' first meeting in 1985, cooperation intensified (Carasales, 1995). The meetings between both countries' militaries during this summit helped to dissipate the mistrust of those who were the most suspicious (Gardini, 2005). The presidents mainly met in official presidential meetings (Mallea, Spektor & Wheeler, 2012). Despite the sporadic contact, the face-to-face moments functioned as a reassurance of each other's motives and facilitated the development of trust. The working group, established in 1985, continued meeting more or less every four months and was the best way to build confidence between technicians, scientists and diplomats (Patti, 2021). CNEN (Brazilian National Nuclear Energy Commission) and CNEA have had active informal dialogues throughout multiple years already (Mallea, Spektor & Wheeler, 2012). These interactions facilitated the institutionalization of cooperation and

were central to the rapprochement (Redick, 1995). The dialogue between diplomats and technicians of both countries ensured continuation of dialogue even when presidency changed to Menem and Collor (Mallea, Spektor & Wheeler, 2012).

6. DISCUSSION AND REFLECTIONS

This section starts with a discussion of the results linking them to the literature and theory. This is done to indicate whether hypotheses can be proven or not. Thereafter follows a critical reflection on alternative explanations and the limitations of the research.

6.1 Discussion of the results

This thesis aims to investigate what factors in interpersonal communication facilitate the development of trust between state leaders and public officials. The results show that some factors are more referred to by the data than others, therefore, their importance can be considered to be more recognised. Moral force is mostly referred to in the case study of Brazil and Argentina, followed by similarities in interests, values and identities which links partly to strategic interests described in the literature review. The separation this research aims to make between moral trust (a belief in the well-intentioned behaviour of the other) and strategic trust is thus not entirely possible as strategic interests may influence one's perception leading to (strategic) expressions of a belief in the good intentions of the other. Other factors that are often referred to are threat regulation, positive emotions, transparency, considerations and the amount of interactions. The difficulty of the hypotheses in this thesis, is that the hypotheses are different but also connected. Sometimes the same data is appropriate for multiple hypotheses, therefore, some hypotheses are merged, as already explained in the results section. This complexity of the interrelation of the hypotheses goes together with the impossibility to fragment human perception.

From 1960 to 1991, public officials increasingly expressed their consideration (hypothesis 1). During the achievement of nuclear enrichment capacity, they expressed consideration about each other's safety (Bignone, 1983; Figueiredo, 1983), Brazil expressed considerations about Argentina's recurrent deficits (welfare) (Gardini, 2005) and in 1977, Argentina supported Brazil's autonomy to choose the content of their nuclear program (Patti, 2021). Consideration was not only expressed but also acted upon, for example, during the Falkland war in 1982 (Coutto, 2014) and Argentina's recurrent deficits in 1985 (Gardini, 2005). Thus, the data points out a correlation between trust and consideration. Causality is harder to prove, but the data does suggest that acts of consideration in 1982 led to increased trust (Coutto, 2014).

Hypothesis 2 and 3 are taken together. Cognitive structures were less acknowledged in the '70s, as there were more extreme expressions by public officials like chancellor Silveira, foreign minister Pardon and president Lanusse. Hardened positions in negotiations were an obstacle to cooperation in the Itaipu dispute (Mallea, Spektor & Wheeler, 2012). Later public officials were more

moderate and genuine. Moderate expressions during regime asymmetry in 1984 were intended to improve the bilateral relation (Gardini, 2005), just like the moderate approach of ambassador Camillón (Mallea, Spektor & Wheeler, 2012). Minister of external relations Guerreiro, who claims trust improved under the Figueiredo administration, expressed the importance of not underestimating the other (Camargo, Pinheira & Seabra, 1985). This aligns with the theory that to build trust, exposure to new information should be slow and not extreme, so others' cognitive structures are acknowledged (Hicks, 2001). Thus, there is some support for hypotheses 2 and 3, however, the amount of data points is limited, so the robustness of the support is restrained.

In the '60s and '70s, the countries did not show limited self-righteousness (hypothesis 4). There were extreme ideological expressions in the '60s and '70s, however, it is questionable how much these contributed to distrust when the countries' ideologies did not contrast, like in the case of anti-communism (Patti, 2021). At the beginning of the '70s, mutual fears led both countries to suspect the other to crusade one's own ideas (Rosenbaum, 1973). This fear actually led to a type of crusading. President Sarney realised the importance of limited self-righteousness and made a conscious effort to show non-expansionist intentions to build trust (Gardini, 2005). Thus, this research emphasises that extreme positions are less harmful to trust when the positions of the countries align. Limited self-righteousness seems to be most important when ideologies contrast which aligns with the notion of acknowledgement of current cognitive structures.

Regarding hypothesis 5, the notion of similar interests in the data analysis relates closely to similar positions. Brazil and Argentina had many common interests and positions since the beginning of the 1960s (Darnton, 2014), however, this did not lead to cooperation and trust. Perceptions of common interests differed per individual, for example, in 1979 when the perception of ambassador Camillón differed from the foreign ministry (Darnton, 2020). Cooperation increased after resolving the Itaipu dispute and foreign ministries started seeing more similar interests (Carasales, 1995). This change of perception aligns with the literature of Holmes and Wheeler (2020), which explains that emotions influence choice, and with the literature about the selective nature of information processing (Fiske & Taylor, 2017). It also relates to what McKnight, Liu and Pentland (2012) describe. For a change in trust, an event must occur that mismatches the current level of trust. Through events trust levels can make sudden swings. Connecting common interest to the notion of strategic trust (Rathbun, 2009), this research shows that common interests are not sufficient to establish a cooperation in which parties are vulnerable to exploitation by the other. Nevertheless, engaging with theory of Holmes and Yarhi-Milo (2017), they might be a necessary factor. Common values and identities were only expressed since the 1980s, for example, by president Figueiredo (Coutto, 2014), president Sarney and president Alfonsín (Gardini, 2005; Ricupero, 1987). Gardini (2005) mentions that

regime symmetry in 1985 fostered integration. The results thus show that similar interests do not correlate with trust, but similar identities and values do correlate with improved trust.

There are quite some datapoints gathered for hypothesis 7 about expressed positive emotions. In the '60s and the beginning of the '70s the climate of the interpersonal communications was often more formal and not really warm or friendly (Mallea, Spektor & Wheeler, 2012). Public officials like chancellor Silveira, foreign minister Pardon and president Lanusse were known for their suspiciousness and negative attitude (Darnton 2014; Costa Silva, 2020). Other public officials, like ambassador Camilión, minister of external relations Guerreiro, president Figueiredo, president Alfonsín and president Sarney, intentionally had a more positive attitude and/or put effort into creating a positive attitude towards one another (Darnton 2020; Costa Silva, 2020; Mallea, Spektor & Wheeler, 2012). Thus, the data shows a correlation between positive expressed emotions and trust. The theory about emotional contagion (Collins, 2014) suggests they could be mutually reinforcing.

Transparency (hypothesis 8) increased during the whole period. Thus, the data shows that increased transparency correlates with increased trust. This aligns with the theory, which suggests that they mutually enforce one another (Van Oostmerssen, Van Woerkum & Aarts, 2014; Fulmer & Gelfand, 2012; Yu et al., 2021). Higher levels of transparency among nuclear technicians led to more trust (Mallea, Spektor & Wheeler, 2012), but increased trust also facilitated eventual complete transparency when the countries' nuclear programs fully integrated in 1991 (Mallea, n.d.-a). Non-transparent action, like the Argentine invasion of the Falkland Islands, did not directly lead to broken trust (Gardini, 2006). This may point to mitigating factors, like face-to-face meetings to reassure one another of one's motives (Mallea, Spektor & Wheeler, 2012), moral force or threat regulation.

Threat regulation (hypothesis 9) is taken together with hypothesis 10 because it requires self-regulation. Responsive communication (hypothesis 12) and attentive listening (hypothesis 13) are implied in threat regulation and are therefore added as well. The results point out multiple situations in which threats are regulated by taking perspective and by responsiveness. For example, during the Itaipu dispute (Costa Silva, 2020), the leaking of a document (Darnton, 2020), the choice not to engage in peaceful nuclear explosions (Special National Intelligence Estimate, 1982) and the Pilcaniyeu event (Mallea, Spektor & Wheeler, 2012). Data shows increased threat regulating behaviour since the 1970s, indicating the correlation with trust development. Causality is hard to prove, as trust influences the interpretation of others' acts (Söderström, Akebo & Jarstad, 2020). Connecting the theory, it can be argued that self-regulated emotions, even in provoking situations, led to improved trust (Fox, 2007) and that threat regulation at least prevented provoking situations to lead to less trust (Williams, 2007).

There was some moral force (hypothesis 11) during the '60s and '70s for nuclear cooperation, but this did not result in trust or any nuclear agreements. A reason for this were the tensions around the Itaipu dispute (Coutto, 2014). Besides this, the countries did not always show moral force at the same time, nevertheless, nuclear scientists of both countries were positive about cooperation from an early stage onwards (Andrade Abreu, 1974). Their push played a role in the increasing cooperation. The increased nuclear cooperation can also be attributed to the moral force for cooperation by president Videla, president Figueiredo, minister of external relations Guerreiro, president Alfonsín, minister of foreign affairs Setúbal, president Sarney, president Collor and president Menem. The reluctance to exploit the other (Cohen, Wildschut & Insko, 2009) was literally expressed by Guerreiro (Camargo, Pinheira & Seabra, 1985). Instead of focusing on relative gains like chancellor Silveira, the will to cooperate made public officials like Guerreiro, Setúbal and Sarney willing to make concessions (Rathbun, 2009; Costa Silva, 2020; Gardini, 2005). Their motivation was, among other things, shown by non-verbal rituals (hypothesis 6) such as opening up sensitive nuclear plants for visits (Redick, 195). The little datapoints for hypothesis 6 (non-verbal rituals) do not allow for a robust confirmation/contradiction. The data does point out a significant role of moral force in the establishment of trust, and it can be argued that this moral force is what kept the development of trust going despite the events of the Itaipu dispute, Falkland war, Pilcaniyeu, the suspicious military, the Cachimbo holes and other obstacles. Above, it is described that common interests were present from the beginning of the '60s. Therefore, the substantial differences in attitudes between public officials cannot only come from a change in structural factors such as strategic interest. The differences in attitudes could be connected to the notion of generalised trust in which a secure attachment style leads a person to generally trust another (Simmons et al., 2009), which leads them to be more motivated to cooperate.

The amount of interactions (hypothesis 14) between public officials but also nuclear technicians increased significantly in the '80s, as can be seen in Figure 5.2. This increase correlates with the increased trust, as in 1980 the first bilateral nuclear cooperation agreement was signed (Dunlap, 2021), followed by more initiatives. The positive correlation is also established by Van Oostmerssen, Van Woerkum and Aarts (2014). Loomis (1959), Durkheim (1912 in Holmes & Wheeler, 2020) and Hoffman (2002) argue that repeated interactions allow for better estimation of other's intentions and therefore are necessary to build trust. The data also indicates this causality as it is mentioned that meetings facilitated the development of trust (Mallea, Spektor & Wheeler, 2012; Patti, 2021).

6.1.1 Alternative explanations

This case study solely focusses on the interpersonal communication that happened during the years when mistrust was turned into trust. However, what has been done and said in interpersonal communication is also influenced by structural and strategic factors. Examples are the relative stage of the country's nuclear technology, increased legitimacy of presidents due to the change from military to civilian government (Mallea, Spektor & Wheeler, 2012), the increasing international benefits of cooperation (Gardini, 2006), alignment of interest like not wanting to sign the Non-Proliferation Treaty (Mallea, n.d.-c) and distraction or change of incentives by national issues like inflation or political instability (Mallea, Spektor & Wheeler 2012). The facilitating effect of democracy does need to be moderated as cooperation and transparencies already increased during authoritarian regimes (Spektor, 2015; Gardini, 2005). Cooperation was a strategy to resist the pressure from the US to sign the Non-Proliferation Treaty and the pressure from the non-proliferation regime itself (Spektor, 2015; Patti, 2021). The increasing international benefits refer to financial problems and dependency on the global financial system (Spektor, 2015). In the 1980s, internal economic and political problems stagnated cooperation (Wheeler, 2009). This, however, does not mean that trust decreased. Therefore the operationalisation of trust, as nuclear cooperation, in this research is not completely waterproof. Another relevant factor is the decreased influence of the military, which had a more securitization way of thinking (Spektor, 2015). Darnton (2012) adds to this the influence of the bureaucratic interests of the foreign ministries and armed forces who benefited from the rival situation in 1972. Rosenbaum (1973) points out the role of the Argentine and Brazilian media in fostering mutual hostility. Besides this, the changing public perception about the prestige and legitimacy of national nuclear programs played a role (Spektor, 2015).

6.2 Reflections

Reflecting on the methodology, there are two dependencies that limit the availability of comprehensive data. First, there is a dependency on what has been said and done. Some relevant factors might not be spoken about, this can be attributed to multiple reasons: the factor does not play a role, there is awareness of the factor but no one speaks about it or there is no awareness of the factor and therefore it is not spoken about. Reflecting on the role of the subconscious, actors might attribute the development of trust to other causes than actually caused it because they might not be aware of their internal processes that led them to trust. Secondly, there is a dependency on what data has been published. There were, for example, no direct documentations from the meetings highlighted in this thesis. Secondary data, like think tank papers and journal articles, may give an outsider's interpretation of communication which can be useful because broader lines and causalities

might be seen, however interpretation goes together with subjectivity. The interpretation of the data by the researcher, thus, brings the risk of bias. I tried to bring in confirming as well as contrasting evidence, but this does not fully escape the risk of confirmation bias, because I have to select information as the scope of the research is limited. Besides the subjectivity of this selection, the selection of information to discover broader patterns also brings the risk of losing nuance. However, intense focus on details might lead to a loss of sight of the bigger picture.

Despite the obstacles, it is useful to research how trust is developed, as it plays an important role in international cooperation (Booth & Wheeler, 2008). The current explanation in the literature about how trust develops is limited and fragmented over different fields. The literature clearly points out the limitations of human rationality and objectivity. Therefore subjective attitudes which influence decisions with real consequences need to be taken seriously. To improve international trust and enable cooperation in situations where not clear objective factors but subjective perceptions are the obstacles to cooperation, it is necessary to understand how trust is built. This research may give a first insight in this despite the methodological obstacles.

7. CONCLUSION

The data of this research highlights factors in interpersonal communication that play a facilitating role in the development of trust between public officials. To avoid repetition of the discussion, this section mainly focused on answering the research question by summarizing the degree of importance of the factors expressed in the hypotheses.

Mutual moral force is necessary to create trust and in this case, nuclear cooperation. Moral force kept the development of trust going despite fear-provoking events. Especially the mutuality is important as there was moral force since the beginning of the '60s but mutual moral force was only for the first time significantly present while president Videla (ARG) and president Figueiredo (BRA) were presidents, which led cooperation and trust to increase. Expressed considerations, but especially considerate acts like during the Falkland war in 1982 (Coutto, 2014) lead to increased trust as well. This is not surprising as the core of trust is about trusting the other to be considerate about one's interests and needs. Thus a careful causal claim can be made about the factors mutual moral force and consideration. Non-verbal rituals, or gestures like the visits to nuclear facilities, are a way to show moral force, so they might facilitate trust but the necessity of it is debatable.

The results show that similar interests are not a sufficient condition to develop trust, but they might be a necessary one. Shared values and identities are correlated with an increase of trust. As perceptions of similar interests, values and identities can change independent of other structural changes, as seen after the resolve of the Itaipu dispute, it can be questioned to what degree shared values and identities lead to trust and in what degree trust leads to the perception of shared interests, values and identities.

Threat regulation is present in multiple situations in the case study and can therefore also be considered to play a significant role. Responsiveness and attentive listening may have little datapoints, but they are implied in threat regulation. Threat regulation can be connected to moral force, the will to increase cooperation may also lead to the effort to regulate threats. They are still separated though as threat regulation also depends on empathic ability and not only on motivation. Even though the hypothesis about self-regulation has few data points, it is highly connected to threat regulation and can therefore also be considered to play a role. Threat regulation prevented trust from decreasing during fear-provoking events like Pilcaniyeu and the Cachimbo holes. Thus, it can be argued that threat regulation facilitates trust but not necessarily causes it in the first place. Mutual reinforcement may apply to this factor (Söderström, Akebo & Jarstad, 2020).

Transparency was another highly quoted topic. The results suggest that increased transparency played an important role in the development of trust. Therefore a careful causal claim can be made. Nonetheless, non-transparency did not always directly lead to the breaking of trust, thus mitigating factors might apply. Trust and transparency could also be mutually reinforcing.

The expression of positive emotions like warmth, enthusiasm and optimism are correlated with increased trust in this case. Causality is hard to prove, but there are some indications for it. It can be suggested that the optimistic image that minister of external relations Guerreiro had and the warm character of president Figueiredo, president Sarney and president Alfonsín facilitated the development of trust. The necessity can be questioned as the later contact between president Collor and president Menem was colder and more formal, and still many agreements were reached under their presidencies. However, during this time trust levels had already significantly increased compared to the 1960s, thus perhaps to change trust levels, positive emotions are needed but to maintain trust levels they might not.

The amount of interactions clearly increased when trust increased, thus there is a correlation. In the data it is mentioned that increased interactions increased trust (Mallea, Spektor & Wheeler, 2012; Patti, 2021). Thus a careful causal claim can be made.

Regarding the expression of limited self-righteousness, it can be concluded from this case that non-contrasting extreme ideological expressions had little influence on bilateral trust. However, crusading one's own ideas and expansionist intentions towards one another did lead to fear and therefore obstructed the development of trust. Thus, the results implicate that limited self-righteousness facilitates the development of trust and can be considered necessary to a certain degree.

Despite the limited datapoints for the role of acknowledgement of cognitive structures and slowly exposed alternative interpretations the data that is available points at their facilitating role.

In conclusion, careful causal claims can be made about the role of mutual moral force, expressed considerations, the amount of interactions and transparency. Similar interests might be a necessary but are not a sufficient condition for the development of trust. Threat regulation facilitates the development of trust, however, mutual reinforcement might apply here as trust can also reinforce threat regulation. Limited self-righteousness facilitates the development of trust as well. Increased shared values and identities, and positive emotions correlate with increased trust and may facilitate it, but their degree of necessity is not clear. Factors with few datapoints (non-verbal rituals, responsiveness, self-regulation, attentive listening, acknowledgement of cognitive structures and

slowly exposed alternative interpretations) are connected to other factors and can be considered to play a facilitating role, although the robustness of this statement is weak.

7.1 Limitations

The external validity of the research is limited as many contextual factors influenced the degree of trust that has been established. For example, Carasales (1995) points out that Brazil and Argentina were rivals but never enemies. Other structural factors, as described in the alternative explanations (section 6.1.1) also contributed to the specific dynamic of this case which makes it hard to generalise the findings of this case study.

The internal validity of the causal mechanisms and correlations is supported by the extensive collection of data. This allowed for a rich insight into the mechanisms at play in the case. It must, though, be recognised that the data originates in human perception and perceptions can differ even when people find themselves together in one room (e.g. the diverging perceptions of the military and nuclear scientists). Thus, a fully comprehensive view on the mechanisms at play is difficult or even impossible. An extensive data collection, however, is an option that still allows for some mechanisms at play to be discovered.

The interpretation of the data by the researcher decreases the reliability as there might be a confirmation bias and selective perception. The partly overlapping hypotheses make reproduction of the research more difficult. However, through the table in the methodology and a detailed description of the way the data has been collected and analysed I have tried to increase the reliability of the thesis.

8. RECOMMENDATIONS

The results of the research lead to recommendations for policymakers and researchers.

8.1 Policy implications

As the results have shown, moral force, expressed considerations, the amount of interactions and transparency seem to be most strongly connected to the development of trust. Therefore, in situations where a state desires to develop more trust with another state, it is essential to choose public officials that personally believe in the cooperation and are willing to make effort. This is, for example, important to improve the current bilateral nuclear relation between the USA and Russia. Since the invasion of Russia in Ukraine in February 2022, the bilateral nuclear relation between the USA and Russia is in a negative place (Pomper et al., 2022). However, sooner or later the countries have to meet each other again at the negotiation table, especially because their New Strategic Arms Reduction Treaty (New START) expires in 2026. The biggest obstacle for new negotiations is the distrust, caused by Russia's violations of arms control obligations, violations of other treaties and its use of force. To rebuild trust and enable new negotiations, it is recommended from this thesis for public officials to express their consideration for the other's needs and be ready to act upon these considerations to show the sincerity of their expressions. They should be able and willing to face-to-face interact with one another. Public officials involved should be able to communicate transparently, be able to engage in threat regulation, express a degree of limited self-righteousness and be open to the other person's perspective. Due to the opposing ideologies of Russia and the USA, expressing limited self-righteousness could be more important in this case than in the case of Argentina and Brazil. The recommendation to involved ministries is to carefully analyse the social-emotional capacities of individuals when they are selected to engage in international negotiations, especially when trust levels need to be improved like in the case of the USA and Russia. Another recommendation is to provide public officials with training in these social-emotional skills.

8.2 Future research

More cases would need to be studied to test the external validity of the conclusions drawn from this research. It is recommended to take the hypotheses that seem most relevant from this research to do a multiple case study. This would give insight into the more and less context-dependent results of this case. Another recommendation would be to research a counter case in which trust spiralled into distrust. It would be interesting to find out whether the same factors in interpersonal communication that lead to trust, also play a role in the development of distrust. Another option is to find a case where trust has evolved without an increase in interpersonal communication. This would clarify alternative

variables in the development of trust. The final recommendation is to connect knowledge and researcher from various fields to gain more insight in the human mechanisms involved in international relations. Humanity is not turned off in international relations, but is always present. By combining knowledge from various fields the human in its context with its motivations, capabilities and limitations can be better understood.

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APPENDIX A. OVERVIEW PRESIDENTS, REGIME TYPE AND MENTIONED PUBLIC OFFICIALS

PRESIDENTS - REGIME TYPE - PUBLIC OFFICIALS		
BRAZIL	YEARS	ARGENTINA
Juscelino Kubitschek de Oliveira	1960	Arturo Frondizi
Juscelino Kubitschek de Oliveira /Jânio da Silva Quadros /Pascoal Ranieri Mazzilli /João Belchior Marques Goulart	1961	
João Belchior Marques Goulart	1962	Arturo Frondizi/José Maria Guido
João Belchior Marques Goulart	1963	José Maria Guido / Arturo Umberto Illia
João Belchior Marques Goulart /Pascoal Ranieri Mazzilli / Humberto de Alencar Castelo Branco	1964	Arturo Umberto Illia
Humberto de Alencar Castelo Branco	1965	
Humberto de Alencar Castelo Branco /Artur da Costa e Silva	1966	Arturo Umberto Illia / Juan Carlos Onganía
Artur da Costa e Silva	1967	Juan Carlos Onganía
Artur da Costa e Silva /Emílio Garrastazú Médici	1968	
Artur da Costa e Silva /Emílio Garrastazú Médici	1969	Juan Carlos Onganía /Roberto M. Levingston Roberto M. Levingston / Alejandro A. Lanusse Alejandro A. Lanusse - Foreign minister: Luis de Pablo Pardon
Emílio Garrastazú Médici	1970	
	1971	
	1972	
Emílio Garrastazú Médici /Ernesto Geisel	1973	Alejandro A. Lanusse / Juan Domingo Perón
Ernesto Geisel - Chancellor: Azaredo da Silveira - General Secretary of Foreign Relations: Ramiro Elísio Saraiva Guerreiro	1974	Juan Domingo Perón / Isabel Marínez de Péron
	1975	Isabel Marínez de Péron
	1976	Isabel Marínez de Péron / Jorge Videla
	1977	Jorge Videla - Ambassador: Oscar Camilión - Counselor Argentinian embassy in Brasilia: Raul Estrada - Foreign minister: Carlos Washington Pastor
Ernesto Geisel /João Baptista de Oliveira Figueiredo	1978	Jorge Videla / Roberto Eduardo Viola / Horacio Tomás Liendo /Carlos Lacoste / Leopoldo Galtieri Leopoldo Galtieri / Alfredo Saint Jean /Reynaldo Bignone Reynaldo Bignone / Raúl Alfonsín Raúl Alfonsín - Minister of Foreign Affairs: Dante Caputo - Ambassador to Brazil: Rubens Ricupero - Undersecretary for external relations: Jorge F. Sábato
João Baptista de Oliveira Figueiredo - Minister of External Relations: Ramiro Elísio Saraiva Guerreiro - Foreign Ministry Deputy Chief: Luiz Augusto de Castro Neves	1979	
	1980	
	1981	
	1982	
João Baptista de Oliveira Figueiredo /Tancredo de Almeida Neves /José Sarney de Araújo Costa	1983	Reynaldo Bignone / Raúl Alfonsín
José Sarney de Araújo Costa - Special advisor to the president: Rubens Ricupero - Minister of foreign affairs: Olavo Setúbal	1984	Raúl Alfonsín - Minister of Foreign Affairs: Dante Caputo - Ambassador to Brazil: Rubens Ricupero - Undersecretary for external relations: Jorge F. Sábato
	1985	
	1986	
	1987	
José Sarney de Araújo Costa/Fernando Affonso Collor de Mello	1988	Raúl Alfonsín /Carlos Saúl Menem
Fernando Affonso Collor de Mello	1989	
José Sarney de Araújo Costa/Fernando Affonso Collor de Mello	1990	Carlos Saúl Menem
Fernando Affonso Collor de Mello	1991	

Table A.1 Overview of Brazilian presidents, Argentine presidents and mentioned public officials in section 5 results plus regime type with military regime in grey (Britannica, n.d.; Napolitano, 2018; Codato, 2006).