

Influence of institutional trust on the involvement in the decision-making process in coordination between the Chilean Red Cross and the Office of National Emergencies (ONEMI) in the 2010 Chile earthquake disaster relief

A single-case qualitative analysis of NGO – Public relations in disaster



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1. Introduction

1.1 Topic

When disasters occur, the effectiveness of the first response is of extreme importance. Identifying which factors contribute to a quick and effective crisis response is key in developing new models for disaster management. Increasingly, the incorporation of NGO's is deemed to be one of these contributing factors, and is increasingly acknowledged as the foremost priority in ensuring affected areas can cope with the effects of a disaster by leading global organisations (The Global Network of Civil Society Organisations for Disaster Reduction [GNDR], 2007). Closer examination of individual countries all over the world show that NGO's are increasing coordination with local communities in and government institutions in developing initiatives to prepare for crises (Osa, 2017).

1.2 Problem statement

This increased coordination is not achieved easily, and brings with it a new problem: how do you make two different types of organisations mutually adjust their work processes to achieve close coordination in an emergent network? In recent years, several disasters have occurred, partly exacerbated due to poor communication between NGO's and public organisations. Sometimes the initial partnerships created at the start of the crisis were not relied upon or even discontinued. For example, in the Chile 2010 earthquake, the Chilean Red Cross (CRC) ceased coordination with the Chilean government because they were "not getting useful information" (Hinrichs, Jones, Stanley, & Kleiner, 2011, p. 19). There is no clear indication of what the reasons for the lacking communication and faltering cooperation were, and there is only very limited research that investigates similar cooperation between NGO's and public organisations. The results from a study on the Katrina hurricane disaster indicate that lacking institutional integration does not necessarily equate a negative outcome; it does however support that a long-term cooperative relationship is very difficult to maintain if only reliant on the informal personal relationships relied on in the crisis period (Abou-bakr, 2013). Another study on these emergent informal networks focused on the 9/11 attacks in the U.S indicates that key factors for a good Public NGO partnership (PNP) include previous exchanged

information, existent lines of communication, and information resources and social networks, along with trust between people communicating with each other (Kapucu, 2003; Kapucu, 2006a). Specifically, Kapucu highlights that “trust is crucial in the uncertain situation caused by an extreme event” (Kapucu, 2006a, p. 209). The volatile nature of an extreme event further demands that “The building of trust among public and non-profit institutions can best be done before the occurring of an extreme event” (Kapucu, 2006a, p. 209). While Kapucu focuses his research on Public Non-profit partnerships, his results remain limited. Kapucu mentions that the earlier bombing in 1993 helped to build communication channels which were utilised in the 9/11 attacks, and “ongoing collaboration raises trust” (Kapucu, 2006a, p. 218). The reason for why and how this process unfolds is not elaborated upon.

Several researchers have made forays into the research into disaster relief PPP’s and PNP’s. Abou-bakr’s research is more focused on Public-Private Partnerships (PPP’s), but highlights a few valuable insights into the important factors of building trust in a partnership. She finds that trust lies partly in common purpose, and that it is difficult to build trust if “partners have real and economic differences” (Abou-bakr, 2013, p.75). This is highlighted through the examples of the Federal Reserve (FED) and the War Industry Board (WIB). The establishment of the FED was accompanied by strict formalization of its institutions, whereas the WIB only relied on personal relations to keep its partnership intact. Where personal relations offer flexibility, the rules of a formalized institutional framework offer more longevity. As a result the FED is still present today to maintain stability in the U.S. financial system and the WIB dissolved after World War I (Abou-bakr, 2013, pp. 75-76, pp. 183-185). This long-term stability of a formalized institutional framework creates both internal and external trust. Abou-bakr argues that a similar formalization of coordination should occur in the U.S. disaster relief network.

There are also arguments for the creation of an informal network in disaster relief. Stephenson (2005) posits that the humanitarian relief network could be framed as a social network, in which *informal trust* is the basis for coordination rather than a top-down authoritarian approach. The building of a “shared culture” between the organisations should be taken as the goal on which coordination hinges (Stephenson, 2005, p. 339). From a further study with interviews, they determined that while “Trust may be vital to decisions to coordinate actions across organizational boundaries, but it is hardly autonomously determined and by itself is unlikely to prove sufficient to secure coordination.” (Stephenson & Schitzner, 2006, p. 230).

Opmerking [JW1]: Swift trust might also be a relevant concept for you: see the work of Beck and Plowman on the Columbia shuttle crash and the work of Majchrzak on Hurricane Katrina.

Beck, T. E., & Plowman, D. A. (2013). Temporary, emergent interorganizational collaboration in unexpected circumstances: A study of the Columbia space shuttle response effort. *Organization Science*, 25(4), 1234-1252.

Majchrzak, A., Jarvenpaa, S. L., & Hollingshead, A. B. (2007). Coordinating expertise among emergent groups responding to disasters. *Organization science*, 18(1), 147-161.

While the importance of trust is clearly highlighted as an important factor in partnerships in disaster management, and a significant difference between the possible implementation of this trust in PPP's can be distinguished, relevant studies into PNP's, such as done by Kapucu (2003, 2006a, 2006b) have not investigated rigorously enough what forms trust takes and how it can affect coordination in the case of PNP's in disaster management. A recent study by Balcik, Beamon, Krejci, Muramatsu, & Ramirez (2009) describe several factors relevant in the organizational context of disaster relief, but only provides a very limited account of the importance of NGO-Public coordination, grouping government together with local NGO's or military actors, and failing to deliver substantial analysis of NGO- Public partnerships.

The examples of Abou-bakr (2013) and Stephenson and Schitzner (2006) suggest vastly different approaches to the problem of coordination in disaster relief, ~~and~~ but neither thus ~~offer~~ offers a comprehensive approach to the issues, by focusing on arguing for one form of coordination over the other, rather than attempting to create an integrated approach.

While the examples are two extremes from a much wider field of theory, they serve to illustrate the lack of consensus on how trust influences coordination. The problem statement in this MA thesis is thus focused on this subject, and will be as follows:

NGO-Public coordination in disaster relief is underdeveloped because the ~~effects-influence~~ of different trust factors that impact coordination in NGO-Public partnerships in disaster relief have not been researched thoroughly ~~have not been integrated into a comprehensive process~~

1.3 Research question

Trust as a concept has experienced a great increase in attention since the 1990's, as the globalising world called for more fragmented organization (Cook, 2001), and as a result a greater dependency on the partnerships between organisations (Bijlsma-Frankema & Costa, 2005; Hustad & Bechina, 2012).

A comprehensive framework for investigating the factors influencing trust between the individuals in organisations has been laid out by Oomsels and Bouckaert (2014, p. 3). They define 'trust' as "*the intentional and behavioural suspension of vulnerability by a trustor on the basis of positive expectations of a trustee*".

Opmerking [JW2]: The assumption seems to be that integration into a comprehensive process is possible, but I would sincerely question whether this is possible (see for instance wolbers et al 2018). When disaster strikes organizations are sometimes forced to work together while they did not expect this. So they rely on other sources of trust (swift trust) in order to structure their operation

Wolbers, J., Boersma, K., & Groenewegen, P. (2018). Introducing a fragmentation perspective on coordination in crisis management. *Organization Studies*, 39(11), 1521-1546.

Oomsels and Bouckaert argue that in inter-organizational partnerships, administrative trust (as they name the trust between individuals in public administration) occurs on three levels; the Macro level which encompasses organisational culture, rules, social norms and formal routines, the Meso level, which deals with interpersonal relationships where reputation, competence and reciprocity between individuals determine trust, and lastly the Micro level, which refers to an individual's disposition to trust others.

This thesis will focus on the effects that the different forms of Macro level of trust have on the coordination between Public and NGO organisations. While acknowledging that trust occurs on the individual level, meaning between individuals, this thesis focuses on the decision of an organisation to trust another organisation. ~~decision by an organisation to engage in coordination with another organisation is still made by the individuals that make up the organisation.~~ However, there There is basis to the idea that organizations can establish trust in partnerships between them through institutional mechanisms that establish it (Sabel, 1991; Zucker, 1986). Then, by investigating what form of institution-based trust is present between organisations, it can be determined how the presence of ~~these forms~~this form of trust can influence the coordination between organisations.

The concept of trust that is under investigation in this thesis is thus not the wider concept of 'administrative trust' as Oomsels and Bouckaert describe it, but only the Macro level of trust. This level of trust is defined by them as "institution-based trust", and this definition will be used and further elucidated upon in this thesis. This thesis does not include in its scope the individual decisions to trust another boundary spanner, only the collective decision of the organisation to engage in coordination.

This focus has been chosen, due the case study under investigation being more receptive to this approach and the necessity to achieve a valid study is conflicting with a wider scope of the concept of trust. To investigate the effect through which personal trust inhibits or promotes coordination between organisations would require the participation of individuals that held the positions of 'boundary spanner', from both the involved organisations during the events of the chosen timeline. After thorough investigation into the possibilities to establish participation of these individuals, it was concluded that there is not enough willingness/availability by participants to establish results that validate any remarks made on the effect of the personal trust on coordination. Thus the research will be limited to the institutional level of trust.

Opmerking [JW3]: Since you claim that trust is an outcome of all three levels, you cannot claim that only the macro level influences coordination. The analysis needs more granularity, especially since in crisis and disasters settings a lot of the work is done on the ground. This can contradict the macro level trust. This would be an interesting dynamic to elaborate on.

The research question in this MA thesis will be:

What is the How -institution does institution-based trust influence on the the involvement in the decision-making process density of coordination between the Chilean Red Cross and the Office of National Emergencies [ONEMI] of the Republic of Chile in the 2010 Chile earthquake disaster relief?

1.3 Societal and academic relevance

1.3.1 Societal relevance

In the event of a disaster, local communities are in immediate need of relief. The reliance on each other in the first hours of a crisis is ubiquitous in every crisis, until outside help arrives. NGO's are in a unique position to provide immediate help on a local level due to their proximity to the communities they have established themselves in. Not only are they imperative in relief effort, they can also serve a preventative function, providing education and training to the people in their neighbourhoods. The work that NGO's perform occasionally conflicts or overlaps with programs performed by governments. Determining how to organize and streamline the cooperation between NGO's and government aids society by providing more efficient and standardized relief efforts and preventative measures.

It is imperative that research is conducted on the specific role that these NGO's play in the building of community resilience and the relations with the national government they operate with, and what factors contribute most to the success of these partnerships. It has been highlighted by researchers that more investigation in NGO-Government relations must be conducted (Acosta, Chandra, Sleeper, & Springgate, 2011, p. 30).

1.3.2 Academic relevance

In public management, Public-Private Partnership (PPP) has been the main form of cooperation between government and private organizations since the rise of New Public Management. In crisis management, the interest in researching PPP's has also been present (Abou-bakr, 2013; Chatterjee & Shaw, 2015). Some steps have been taken in investigating what factors are involved in coordination between organisations and the structure this should be given (Yang & Maxwell, 2011). Institution-based trust was pointed out to affect trustworthiness of an organisation based on several factors, including organizational

Opmerking [JW4]: You need to explain this abbreviation, I cannot find it in the previous section. Also I question whether you can actually find an effect, because you claim earlier that it is the interplay between levels, and but you only look at only one. Methodologically that is problematic, since you might miss out other important effects. I would opt for a slightly different question: How does institution-based trust influence the density of coordination between ...

Then still density is also a concept that you have not yet defined clearly. Do you mean density in social network analysis terms (see Kapucu) which you can measure? Or do you have a more holistic idea of density. In the latter case, I would opt for nature of coordination. In other words, if you want to measure more precisely use terms like effect and density, if you cannot do that use a more holistic approach.

structures, societal norms, organizational cultures and legal systems (Black, Cresswell, Luna, Pardo, Martinez, Thompson, Cook, 2003; Luna-Reyes, Gil-Garcia, & Cruz, 2007; Rousseau, Sitkin, Burt, & Camerer, 1998).

Oomsels and Bouckaert (2014) make the distinction in institution-based trust between formal institutions and informal institutions. To investigate what form of institution based trust affect NGO-Public partnerships in an applicable case is sure to provide further insight on what factors are of import in the forming of these partnerships. This will create more clarity of what the concept of trust entails and how it expresses itself.

1.4 Reading guide

Firstly, the theoretical framework will be discussed which will elaborate on the conceptualization of the main themes in the research. Next, the methodology section will offer the reader an overview of the research methods used in this MA thesis, and the argumentation why these methods were chosen. The section will also include an explanation of how the data gathered through these methods is to be analysed. The next section will provide an operationalization of the concepts used in the research, and the application of the research methods to this operationalization. The section will include a data table that links the concepts in the study to the indicators used to link them to the data gathered. The presentation of the data will ultimately be structured along the structure of the aforementioned data table, hereby creating an overview for the reader while all concepts are being discussed.

2. Theoretical framework

The theoretical framework will first sketch the context of the concept of disaster relief, within which this thesis' research will be conducted. As this is a distinct concept with its own attributes that define the form that cooperation takes, it needs to be distinguished from other contexts within which NGO can provide relief. Secondly, an overview will be provided how PPP's and PNP's were first theorized and implemented in business, and later in disaster relief.

2.1 Disaster relief and Humanitarian relief

The concepts of Humanitarian relief and Disaster relief have been distinguished from each other in varying degrees. Osa (2013) posits that the activities and organisations of both disaster relief and humanitarian relief are similar enough to describe them as one set of activities. She takes as an example that humanitarian relief and disaster relief have both been performed in war-torn societies (Osa, 2013, p. 69). However, this generalization overlooks how drastically civil strife and war change relief operations. Kehler (2004) argues that the difference between disaster relief and humanitarian relief lies in the direct responsibility that the INGO's have for the affected population in humanitarian relief. The neutrality that INGO's must exhibit in relation to the potential 'sides' in a civil war means that it is difficult to keep humanitarian relief from becoming political, as either side may interpret it as "helping the enemy". This is a so called 'complex emergency' (Kehler, 2004, p.7) which is an "emergency situation affecting large civilian populations, which is further aggravated by intense political and /or military interference" (Gunn, 2003, p. 36).

This has been observed in the extreme in the Kosovo 1999 crisis where "the parties to the conflict regarded the humanitarian players as protagonists in the political process" (Young, 2001, p. 788). The case of Kosovo was one without a central government to coordinate or dictate the rules of humanitarian relief (Kehler, 2004, p.7). Here, the affected population was directly placed under the responsibility of the intervening INGO's because there were multiple military actors which affected humanitarian relief to the population, and no local government to coordinate the efforts (Stephenson & Schitzer, 2006, p. 216). The relief effort was instead coordinated through the UNHCR and the ICRC, whose cooperation quickly diluted separate competences and aggravated the already complex nature of the situation due

to the military intervention by the UN and the antagonists' response to it creating safety hazards for the relief efforts personnel (Young, 2001).

A crisis response where there is no human conflict, but “a sudden upheaval of nature” creates a very different situation (Gunn, 2003, p.36). When a natural disaster occurs in a country with a stable government, the crisis response is usually coordinated by this central government, and the relation the responding INGO's have with the host government is a factor in how that relief is given (Kehler, 2004, p.7). The shape the cooperation and coordination between INGO's and host governments takes is thus of immense importance in disaster relief and this thesis is focused on explaining the intricacies of how these relationships can be formed. This thesis thus focuses on the topic of disaster relief, where there is a centralised government with which a partnership is potentially formed.

2.2 Public Private Partnerships & Public NGO partnerships in disaster relief

Cooperation between Governments and private organizations has been introduced as part of the movement of New Public Management (Hood, 1991). The first use of this form of organization was introduced in the United Kingdom in the 1990's. PPP's have been steadily introduced in many governments around the world since the 1990's (Steijn, Klijjn, & Edelenbos, 2011). Researchers have shown that PPP's offer greater value than separate operations, and have also laid out several factors to be fulfilled to ensure their success (McQuaid, 2000). Additionally, PPP's offer a more efficient way of operating compared to individual operating (McQuaid, 2000; Savas, 2000). The implementation of PPP's in disaster relief has greatly increased in recent years. One of the first events that instigated the relevance of PPP's in disaster relief was the coordination established during the 9/11 WTC attacks. In his analysis of the emergent network of organisations that responded to the attacks, Naim Kapucu (2006a) concludes that non-profit organizations “play an important role in bridging the gap in critical service delivery” (Kapucu, 2006a, p. 217). Abou-bakr (2013) further describes that whereas the 9/11 attacks were an example of the effectiveness of the capability of private organizations during a terrorist attack, private organizations were also just as effective during the natural disaster of the Hurricane Katrina. During the disaster response, it became clear that government could not provide the private sector with information on how to aid in the crisis response, and failed to adequately provide aid for the wider Gold Coast region

(Waugh & Streib, 2006). Moreover, the disaster planning done by private sector actors exceeded capabilities by government institutions (Sobel & Leeson, 2006). The preparedness and response shown by companies such as Walmart in comparison to FEMA showed that the private sector could be much more than just a guardian of critical infrastructure. The experience with Katrina showed that the establishment of a disaster relief network focused on coordination and partnership between public, private and non-profit organizations was desirable.

The international community recognized this need for partnerships in the drafting of its framework for disaster reduction. The Hyogo Framework for Action 2005-2015 (United Nations International Strategy for Disaster Reduction [UNISDR], 2009) named as its first key point that disaster reduction should be tackled by creating a multi-sectorial approach. In this approach, “Civil society, including volunteers and community-based organizations, the scientific community and the private sector are vital stakeholders in supporting the implementation of disaster risk reduction at all levels.” (UNISDR, 2009, p. 13). As a response to the development of this document, many national governments adopted their own strategies for building disaster risk reduction and resilience (Australian Government, 2010; COAG, 2011; FEMA, 2011; NDMA, 2009). Many of these highlighted the need to incorporate all sectors of society in mitigating disaster impact (COAG, 2011, pp. 2-3; FEMA, 2011, p.10, p. 18; NDMA, 2009, pp. 20-21). While all governments highlight the need for a ‘paradigm shift’ to the inclusion of all layers and sectors of society in disaster reduction, a concrete framework for the establishment of these partnerships is missing from all of them.

One of the first who have attempted to classify the range of partnerships existent between public, private and non-profit partners in disaster reduction are Bajracharya and Hastings (2015), who analysed the different partnerships in disaster resilience present during the Queensland 2010-2011 floods in Australia. While not a comprehensive framework, their findings highlight the diversity of partnerships, and imply that there is no “clear cut” way that disaster management partnerships are organized (Bajracharya & Hastings, 2015, p. 35). On all levels, both strategic and responsive partnerships were found to be implemented during the disaster, with a notable exception of a higher level of responsive partnerships reported on the local level (West End Community House, 2011). Notably, the partnerships between NGO’s, community and business parties involved in response activities were all either informal, based on MOU’s or non-contractual agreements, lacking adherence to formalized institutions, as similarly observed by Abou-bakr (2013) in the U.S. Unsurprisingly then, the authors warn

that there are still significant challenges to be found in addressing the organisation of disaster management partnerships. These are related to the consequences of diverging interests, boundary spanning problems, effects of perceived roles and outcomes, information sharing, establishing trust, certainty in service delivery and challenges in maintaining active partnerships. These issues have been highlighted in the earlier research of several case studies (Chen, Hsuan Yun Chen, Vertinsky, Yumagulova, & Park, 2013). Similar issues have been brought forward by Kapucu (2006a, 2006b), Abou-bakr (2013) and Stephenson (2005).

2.3 Trust in partnerships

Of these concepts highlighted, trust is singled out by one the most prominent researchers into PNP's as being crucial to in uncertain emergency situations (Kapucu, 2006a, p. 209). The examples of Abou-bakr (2013) and Stephenson and Schitzner (2006) offer only limited analysis of the concepts involved in the wider application of trust to disaster relief partnerships, as argued earlier. To form an accurate image of the role of trust in partnerships, we must start our analysis outside of the context of disaster relief.

The effect trust has on the formalization of coordination is one of the most contested subjects in the research into inter-organizational partnerships. The concept of trust is linked to the concepts of control and coordination, with trust being hypothesised differently by several scholars. Some argue that trust has a positive relationship with coordination while others argue trust has a negative relationship with coordination. Multiple interpretations of the relationship that trust has with the formalization of control and coordination have formed in recent years. There are scholars who believe that trust and legal contracts are substitutes for each other (Gulati, 1995; Inkpen & Currall, 2004; Macaulay, 1963). Others believe that they are complementary to each other (Mayer & Argyres, 2004; Poppo & Zenger, 2002; Zucker, 1985). What is notable is that this discussion on the presence of contracts between inter-organizational partnerships and regular Public Private Partnerships inhabits a vastly different context than the context of Public Private Partnerships and especially, Public-NGO partnerships in disaster management.

Within disaster management, there often are no legal contracts which establish obligations or accountability between NGO's and public agencies (Bajracharya & Hastings, 2015, p. 35). The degree of formalization that is established between NGO's and Public agencies that

coordinate within disaster management is regularly limited to memorandums of understanding or declarations of intent. The concept of control that is so heavily debated within the literature of inter-organizational partnerships is thus hardly present between these organisations within disaster management, at least in the form of formalized hierarchical control. The hypothesised effect that trust has on the level of control established through legal contracts is thus almost entirely absent as well. Moreover, Chen et al. (2013) argue that a reliance on these formal mechanisms such as heavily moderated legal contracts in anticipation of disaster is expected to net negative results when unanticipated circumstances arise (Chen et al., 2013, p. 140). Therefore, to move towards formalization of coordination in disaster management through detailed contractual obligations would only result in non-functional agreements, at best, and complete chaos and confusion as to what action to take due to the discrepancy between formalized expectation and reality.

What is the main driver in establishing coordination in disaster management then? Chen et al., (2013, p. 140) posit that the presence of “social capital” between individuals, which consists of trust, reciprocity and commitment to the collective, is a more significant factor in establishing PPP’s in disaster management, as the informal networks between individuals are more flexible and allow more responsive partnership that lend themselves better to crisis situations. Chen et al. (2013) argue further that the institutionalization of initial behaviour and interaction between partners into informal routines defined as “established patterns of behaviour and interaction” (Chen et al., 2013, p. 140) can result in a socialization of society in which role fulfilment and behaviour become expected by government functionaries and community leaders, as well as the population at large. Chen et al. (2013) additionally ~~mention~~ that mention that in the context of NGO- government partnerships, this flexible partnership further provides a means for governments to act through their partner when they are bound by inflexible regulation. This creates a form of coordination based not within formalized coordination, but reliant on trust. While the lack of legal contracts to establish control in disaster management partnerships is understandable through the argument that the disruptive effect a disaster has on pre-conceived plans and minute details, the exact process of how the establishment of trust can affect coordination between NGO’s and government without this high level of formalized contracts establishing accountability is still unclear.

A different study that sheds some light on this initial formation of trust was conducted on emergent inter-organizational collaboration in disaster response, taking the network of responder agencies on the Columbia Space Shuttle disaster response as their case (Beck,

Plowman, 2014). While not focused on the specific context of natural disasters in which a larger variety of organisations such as NGO's and citizen initiatives are present, it nevertheless offers a very relevant thesis on the development of trust in emerging inter-organizational networks. Beck & Plowman suggest a connection between the concepts of "swift trust" and "relationship-based conventional trust", where "swift trust" is distinctive in temporary relationships where "participants had little choice but to rely on one another" (Beck & Plowman, 2014. p. 1243) due to the nature of the situation, which in the Colombia Shuttle Case was very similar to emergency or disaster management contexts. Through simply "acting" to achieve a set goal (Beck & Plowman, 2014. p. 1248) in this setting without an established plan or central authority, trust and a collective identity and personal links between individuals in the organisations were shown to be able to form. Beck & Plowman (2014) posit that "early formation of *swift trust* enabled the subsequent formation of *relationship-based conventional trust*" (Beck & Plowman, 2014, p. 1248) in which the personal links established during the phase of swift trust are maintained and support an enduring way of doing things. This observation is similar to the observation made by Chen et al. (2013) where it is posited that the initial behaviour and interaction between individuals is maintained and established in informal routines, which ultimately become expected of individuals and organisations within this "collective identity" (Beck & Plowman, 2014, p. 1243)

It is clear that there are different forms of trust involved in the formation of PPP's and PNP's. Additionally, different forms of trust seem to influence separate stages of a partnership differently. The framework adopted in this thesis focuses on these divisions in an attempt to more clearly pinpoint what forms of trust affect both the short term and long term coordination in disaster management.

2.4 Dimensions of Inter-organizational trust

Opmerking [JW5]: I definitely miss the concept of swift trust here, since it is so important for disaster response.

Met opmaak: Standaard, Regelaafstand: enkel

To accurately portray what effect trust has on coordination in the casus of this thesis, a framework will be used that describes these factors more accurately than contemporary disaster management researchers have done up to now.

The framework used will be divided in two parts. The first part, which is focused on the definition of inter-organizational trust, will be drawn from Oomsels and Bouckaert (2014). As shown earlier in this text, they propose that interpersonal trust exists on three levels; The Macro level, where *institution based trust* flows from internal organizing principles and practices; the Meso level, where *personal trust* is based on familiarity, information, personal characteristics and dynamics, and the micro level, where the *dispositional trust* is based on the individuals trusting disposition (Oomsels & Bouckaert, 2014). This framework will be the lens through which the concept of trust is analysed.

In this thesis, the focus will lie with the effect of *institution based trust* on the involvement in the decision-making process (DMP) density of coordination. The hypotheses are limited to the formal and informal mechanisms on the institutional level, as it has proven too difficult to reach a pool of respondents large enough to ensure that the research done on the personal level is valid. This will limit the causal inferences that can be drawn from the results of this thesis, but will offer a handhold for further research to be conducted on the topic.

Met opmaak: Lettertype: Niet Vet, Niet Cursief, Tekstkleur: Auto

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2.4.1 Trust

Institution-based trust

Institutions are perhaps the greatest affecter of human behaviour. According to Bachmann and Inkpen (2011) institutions are relatively stable bundles of commonly accepted explicit or implicit rules of behaviour to which most people orient their behaviour. Lacking familiarity between actors, established institutions affect individuals' subjective evaluations of trustworthiness most. When considering a partnership between organisations, it is important to assess what institutions are adhered to and how heavily this is done. The environment of the relationship needs to be analysed by the involved parties to establish the degree of trust they are willing to place in the other party. One of the most recent definitions of this process is given by Bachmann and Inkpen (2011, p. 284):

Institutional-based trust is a form of individual or collective action that is constitutively embedded in the institutional environment in which a relationship is placed, building on favourable assumptions about the trustee's future behaviour vis-à-vis such conditions.
(Bachmann & Inkpen, 2011)

As institutions prescribe behaviour to the individuals adhering to them, large differences between the embeddedness of social interaction in institutions could drastically affect the expected behaviour and the establishment of institution-based trust between parties in the relationship (Granovetter, 2002). Organisations entering into partnerships should have enough 'cultural fit' to be able to harmonise their operations between them (Herzlinger, 2001). The establishment of the degree to which 'everything seems in proper order', in a manner not unlike the wider concept of 'system-based' trust (Lewis & Weigert, 1985, p. 974), determines how much institution-based trust will be present between organisations. Individuals create trust between them when the institutions involved in the inter-organizational relationship inspire this trust. These institutions create a 'world in common' between the trustor and trustee, and act in a similar fashion as any 'third person guarantor' would, which effectively reduces the (perceived) risk that the individuals take (Bachmann & Inkpen, 2011, p. 285). In the context of this thesis, the act of one organisation to trust another thus also rests on both organisations' adherence to a shared institution.

Oomsels and Bouckaert (2014) divide institution-based trust in two forms; formal and informal. Formal mechanisms of institutional based trust constitute rules, standards and role definitions, where these mechanisms are formally laid down and can be accessed and referred to when needed. Alternatively, the informal mechanisms are the social norms and values that individuals within the organisational context adhere to and organizational routines prevalent in its day to day business. This division is illustrated in table 1.

Rules ensure that all parties involved are aware of accepted behaviour and are socialized into a system where high trust flows from the adherence to these rules by all individuals, whereas role definitions ensure trust in an individual's competence without knowledge of the person itself, as their appointment to the role has specific requirements (Kramer, 1999). The level of rule and role equivalence between organisations is thus a formal mechanism with which adherence to the institution is demonstrated.

Organisational routines are informal institutions that create trust through a dependency on these interactions between organisations remaining continuous and unchanged. Additionally,

norms derived from peers or organisational leadership could lead to the establishment of an informal (inter-) organisational normative framework which promotes a culture of trustfulness, and affects an individual's perception of others within this framework (Sztompka, 1998). The adherence of an organisation to an established set of norms and values between organisations is thus how adherence to an institution is measured and institution-based trust is inspired.

Table 1

Institution-based trust	
Formal mechanisms	Informal mechanisms
<ul style="list-style-type: none"> • Rules • Standards • Role definitions 	<ul style="list-style-type: none"> • Norms and values • Shared culture • Organisational routines

Personal trust

While both personal trust and dispositional trust are not under investigation in this thesis, for the sake of integrity, and the possibility of further research by others, the further factors that affect boundary spanning behaviour on the personal level are laid out.

On the personal level, the trust that is generated flows from face to face interaction and the knowledge of the other which is acquired through this interaction. Personal trust is most often divided into two categories; calculative trust and relational trust (Lewis & Weigert, 1985; Oomsels & Bouckaert, 2014). This division is illustrated in table 2.

Calculative trust incorporate 'proof sources' that signal whether a trustee is worthy of trust. This can be done through the subjective evaluation of others through reputation (Larson, 1992), or through the authority of a well credited diploma, performance reports or other documentation (Rousseau et al., 1998). Key in calculative trust is that the trustee must present some utility to the trustor which they are willing to acquire, given the level of credible proof sources the trustee can provide. While the information garnered through such a way is often

incomplete, asymmetrical, the trustor weighs this off against the utility the trustee can provide (Oomsels & Bouckaert, 2014).

Relational trust is also thought to be of an effect on the willingness of an individual to trust another. The presence of previous interactions has shown to be an important factor in the willingness to trust another (Larson, 1992). Reliability and dependence demonstrated earlier in the relationship are a large affecter of trusting behaviour further down the road (Rousseau, et al. 1998).

Trust is also argued by some to have a large degree of emotional attachment to it, especially in interpersonal relationships (Lewis & Weigert, 1985). When trust is betrayed an individual will feel angered at this betrayal of their affection. However, for this affection attachment to form, one must first have established the relational signals of dependability and reliability (McAllister, 1995). The process of establishing a partnership has been described as incremental, where small steps are taken, each improving trust between involved partners and the intensity of the relationship (Larson, 1992, p. 88). The start of a partnership is initially based on trust garnered from aforementioned sources, and the building of a dyadic partnership that relies on personal exchanges of information and action that benefit the other during the trial period. This 'quid pro quo' arrangement ultimately results in a cycle of reciprocity, where both partners respond to the other's need based on the trust that the other will respond in kind to them.

Table 2

Personal trust	
Calculative trust	Relational trust
<ul style="list-style-type: none"> • Reputation • Accreditation 	<ul style="list-style-type: none"> • Reliability • Reciprocity

Dispositional trust

Oomsels and Bouckaert (2014) also argue that an individual's trusting disposition affects an individual's judgment. This is argued by several scholars and defined differently in several papers. "Individual trustfulness" (Sztompka, 1998), "individual propensity to trust" (Mayer et al., 1995) and "dispositional trust" (McKnight, Cummings & Chervany, 1998) are several examples of how an individual's trust has been defined.

The effect that dispositional trust has on the willingness to trust is difficult to measure, as it is a subjective experience. Individuals will be unlikely to admit that they are inclined to be distrustful of others, and are likely to be more prone to socially desirable answers when interviewed by researchers than when acting in normal social interactions.

2.4.2 Coordination

The second part of this framework is focused on the definition of coordination. In this thesis, coordination will entail the development of coordination between two organisations, rather than the coordination that can occur between individual boundary spanners. This is to ensure that the results from the thesis are focused on the parameters of its case. The working definition of coordination is drawn from several sources.

Coordination as a concept is deeply under investigation in its relation with the organisation of humanitarian networks. A recent definition offers that coordination is linked with increasing interdependence between the involved organizations:

'the integration of organizational work under conditions of task interdependence and uncertainty' (Okhuysen & Bechky, 2009, p. 469).

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From this definition it can be drawn that the more two organisations coordinate, the more interdependent they must be. Epecially the component of 'uncertainty' is highly applicable to the circumstances of disaster management, where every crisis holds its own unique circumstances and thus uncertainties on how to handle it. When searching disaster management literature, there are some indications that coordination is a multi-levelled concept, where the higher the level of coordination is the more interdependency is present and group decision making is necessary.

Kehler (2004, p. 31) notes that a low level of coordination is 'information sharing'. Here the coordination only entails the sharing of information that is in both partners' mutual benefit,

without any adaptation or interdependence of tasks. Vlaar, van den Bosch, and Volberda (2007) highlight an important element of deeper coordination as being to “pursue the alignment of activities” (p. 411). A further essence of coordination according to them is to “to decompose tasks and to establish and communicate activities. This is particularly significant for inter-organizational relationships in which tasks have to be continuously geared to each other and in which joint decision making between partners is required.” (Vlaar et al., 2007, p. 411). They describe a deepening of the relationship being accompanied with a division of tasks that creates interdependency, and neither organization being in full control of all activities. To ensure that all activities and tasks that are to be performed are executed properly, decisions that concern these activities must be taken jointly.

It is this “joint decision-making” or “group-decision making” that is at the basis of most coordination processes, as argued by Malone and Crowston (1990, p. 9). They argue that group decisions are at the basis for all further development of implementation or execution of coordination activity.

However, as the degree to which organisations are interdependent on each other can differ, so too can the level on which coordination occurs. Mathieu, Verhoest, & Matthys, (2017) developed an ‘actor involvement’ model to measure the degree to which an actor is involved in the decision-making process of decisions made in their respective field. The values from these levels range from ‘no involvement’ as 0 to ‘main decision-maker’ as 1. The model presupposes that the field in question holds a main decision-maker who wields the authority to fully make decisions by itself when not in coordination with any other actor. This context lends itself well to the context of the case in this thesis, as the central government in disaster relief can be equated with the ‘main decision-maker’. From this quantitative model, the different qualitative levels used to code the weight of actor involvement will be used to differentiate between the different levels of involvement in the DMP -densities-of coordination in the analysis of this thesis. Table 3 shows an overview of this model.

Table 3

Weight	Coding	Description
0	Not involved	The actor is not involved in the decision
0.2	Informed	The actor is informed about the planned content of the decision
0.4	Consulted	The actor is consulted or gives non-binding advice
0.6	Binding position	The actor makes a binding opinion or initiates the decision proposal
0.8	Co-decision maker	The actor is a co-decision maker
1	Main-decision maker	The actor is the main –decision maker

Source: Mathieu et al., (2017)

Malone and Crowston (1990) identify the increasingly deepening underlying processes that constitute coordination, and posit that the process of group decision-making is at the root of almost every form of coordination. The degrees of ‘actor involvement’ in the decision-making process (DMP) established above neatly illustrate the different levels ‘actor involvement’ can take. However, as this study is focused on illustrating the findings in a qualitative manner, only the wording of the coding will be used to illustrate the differences in density-levels of involvement in the DMP of coordination. When no coordination occurs, it can be said that an actor is not involved in the DMP. The example of Kehler (2004), who posits that ‘information sharing’ is a low level of coordination can be transposed on the ‘informed’ level of actor involvement, where the inclusion of an organisation in the DMP extends to the knowledge of what decisions are made in the DMP and of their consequences. However, the actor is not actually part of the ‘group-decision-making process’ as described by Malone and Crowston (1990, p.9).

Opmerking [JW6]: So this would imply trust on the meso level, not the institutional level. This is rather problematic since you chose to focus on one level higher earlier.

This crucial difference highlights the difference between this level and the following level. Increasing the level of actor involvement again brings the observation by Vlaar et al. (2007) into view, where the ‘consulted’ level of actor involvement corresponds with inclusion in the ‘group decision-making process’ of the DMP of the main decision-maker. The input by the actor is considered and valued, but ultimately non-binding for the main decision-maker. There are no examples here of denser-closer involvement in coordination in regards to binding powers by others than the main decision-maker, as the literature of disaster management and

other case studies on partnerships in disaster relief do not show any situations in which ‘involved actors’ hold such power over the main decision-maker. Non-binding involvement is seen to be the most common form of coordination in disaster management. However, legal contracts can be considered to represent the establishment of either binding powers or veto powers over the DMP, as legal contracts establish binding agreements and accountability. If an actor establishes legal obligations with the main decision-maker with the purpose of holding them accountable when a predetermined agreement is not upheld, a higher involvement in the DMP density of coordination is considered to be present. It is unlikely though that these ~~densities~~ levels of involvement in the DMP of coordination are present in the case under investigation, as such agreements are deemed undesirable in disaster relief, especially between agencies and NGO’s.

Measuring the level of involvement in the DMP density of coordination is thus argued to be measured through the degree to which actors are involved in the group decision making process concerning their respective field. The more included in the DMP of the main decision-maker concerning their respective field, the more coordination is considered to be present. To measure the processes of coordination which Malone and Crowston (1990) illustrate is beyond the scope of this thesis, as the goal is find the effect of trust on the ~~density~~ level of involvement in the DMP of coordination, not the processes that constitute coordination itself. Coordination will accordingly be measured at a specific level in set points in time, and through applying a qualitative description of ‘level’ of ~~actor~~ involvement in the DMP’ at that time. ~~To take the level of involvement in the DMP as the distinguishable factor thus creates a definition of density of coordination that is measurable.~~

The working definition of ‘level of involvement in the DMP’ density of coordination used in this thesis will be:

The level to which an actor is involved in the decision-making process in their respective field in relation to the main-decision-maker.

The operationalization of how the application of the model by Mathieu et al. (2017) will be applied to the data will be illustrated in the operationalization of concepts section.

Opmerking [JW7]: So this is not density of coordination but amount of involvement. In network terms you would call this closeness centrality

2.5 Hypotheses

2.5.1 Institution-based trust

Institution-based trust has been identified to be a large factor in coordination through developing shared organisational culture, social norms and legal systems that mitigate risk and support trust on inter-organizational trust (Black et al, 2003). A case study of bio-tech companies showed that the ‘shared scientific culture’ that was pervasive in all partners, and the ‘community of intent’ that is aimed at a long-term commitment and were integral parts of the inter-organizational trust were key to the sharing of information and knowledge (Dodgson, 1993). A study by Stephenson and Schitzner (2006) showed that the development of shared standards has the potential to generate trust between individuals. A strong case for increased legislation as made by Abou-bakr (2013) to increase trust between organisations involved in disaster relief. This division of institution based trust in informal mechanisms and formal mechanisms was shown in the theoretical framework, and will be used in the formation of hypotheses about the effects-influence of institution-based trust on coordination here.

2.5.2 Hypothesis 1

From several examples it becomes clear that informal mechanisms of trust have an effect influence on the density-coordination of coordination between different organizations. Moreover, the willingness of organisations to increase the density-of-coordination level of involvement in the DMP between them seems to correlate with the presence of informal mechanisms between them. The more informal mechanisms between them, or the stronger the values present in an informal mechanism, the denser-coordination closer the involvement seems to be, and vice versa. Several examples will be highlighted here to illustrate this point.

Hurricane Katrina

Chen et al. (2013, p. 134) highlight that despite the implementation of institutionalized coordination in the aftermath of the Katrina Hurricane a lack of informal mechanisms may still result in a lack of denser-coordination of coordination between private and public partners. Even though Wal-Mart was sharing information with federal agencies on a daily basis, the distrust in ‘big government’ and the difference between corporate and public expenditure culture was found to play a large role in private company’s unwillingness to engage in closer involvement increase the density of coordination through legal contracts, as it could create

business risks, or even through consulting with FEMA through a liaison (Chen et al., 2013, p.136). The case of Wal-Mart's performance during the Hurricane Katrina disaster relief shows that Wal-Mart chose not ~~to engage in closer involvement in the DMP to increase the density of coordination~~ with FEMA due to their differences in organisational structure and culture. Information sharing between the organisations was occurring because both organisations were adhering to the value of 'shared responsibility' as previously described by Kapucu (2006a, p. 213). This shared responsibility is the result of the presence of a crisis, and if a crisis would not have occurred it is doubtful that Wal-Mart and FEMA formed this informal mechanism of 'shared responsibility' and initiated coordination on disaster relief at all. It is often a crisis that initiates the dialogue concerning coordination between organisations. The observation here though is that organisations do need to share a similar organisational structure and value system for informal mechanisms that can generate a further ~~level of involvement in the DMP increase in density~~ of coordination to form. With organisations focused on disaster relief, such as the Red Cross, the differences observed between Wal-Mart and FEMA are likely to be less pervasive, as the Red Cross is not profit-oriented like private companies are and shares similar organisational practices with the national government disaster agencies such as the stockpiling of large amount of supplies and employing volunteers. It is possible that the Red Cross is more likely to engage in ~~denser closer involvement coordination of coordination~~ with their public counterpart than Wal-Mart was. However, the example of Wal-Mart highlights that the strong differences in organisational norms and values can impede the establishment of ~~a closer involvement in denser~~ coordination because no further informal mechanisms of trust can be established between organisations.

Kosovo Humanitarian Crisis

The development of a shared culture dependent on the organisational environment was put forward by Stephenson (2006) as a possible solution to the fragmented coordination of humanitarian relief. Any 'world in common' created by a shared culture or normative framework is hypothesised to have an effect on the trust between boundary spanners and the information sharing that results from this. As Stephenson and Schitzner (2006) found in later research, the shared idea between all involved NGO's in the Kosovo crisis was the 'shared responsibility' that all organisations were there to contribute to, and an expression of the norms and values that they all adhered to. One NGO employee mentions that "I go to an intervention like Kosovo help the community overcome the situation they are facing, and the

trust I will put in other organizations would be their capacity in country to support that mission with their own intervention” (Stephenson & Schitzner, 2006, p. 218).

The presence of a shared mission to which both organisations can contribute is thus an informal mechanism that inspires trust and subsequently elicits coordination.

“Complementary competencies” (Stephenson & Schitzner, 2006, p. 218) are further mentioned as a significant factor in extending trust, where the knowledge of the competencies and the reliance on them being unchanging since the last observation of them was made is the source of the extension of trust:

I would say it’s around clarity, in terms of different roles and responsibilities. It’s respect for each other’s particular competencies, and it’s a confidence in each other that we will act consistently in the best interest of those who we seek to help (p. 218).

It is this knowledge of organisational routines that may establish informal mechanisms as well. Organisational routines are defined by Feldman (2000), who studied change in organizational routines as: “repeated patterns of behaviour that are bound by rules and customs and that do not change very much from one iteration to another” (Feldman, 2000, p. 612). The presence of a “culture of trust” as described by Sztompka (1998, p. 21) can indicate that there are shared organisational routines to which both organisations have become accustomed to and expect others within the culture to adhere to, regardless of what the values that bind them are. This is due to the “stability of the social order” between them (Sztompka, 1998, p. 23). If both organisations had similar routines before coordination was initiated, this would likely have been an informal mechanism that evoked trust between them.

From the examples it is clear that there are several sources that can establish informal mechanism of trust. While the Hurricane Katrina example accurately highlights the hesitance of dissimilar organisations to engage in coordination, the Kosovo example shows how knowledge of and reliance on another’s organisational routines are shown to have an effect on the formation of informal mechanisms of trust. The presence of multiple of these ‘worlds in common’ will then ~~likely increase the density~~ make a closer involvement in the DMPy of coordination more likely, more so than the presence of only a single informal mechanism, as in the Hurricane Katrina example.

However, as there has been no previous research into the presence and effects-influence of informal mechanisms in disaster relief, the analysis in this thesis will focus on the main question that flows from the observations made in the examples. This focus will lie with the

question whether the presence of informal mechanisms provide a closer involvement in the DMP of n increase in the density of coordination at all. The first hypothesis of this thesis will be:

H1: The ~~density of~~level of involvement in the DMP of coordination with a main-decision maker is increased through the establishment of institution-based trust between the organisations involved by the presence of informal mechanisms

2.5.3 Hypothesis 2

The establishment of formal institutions is expected to have an effect-influence on the density involvement in the DMP of coordination as well. Different forms of formal institutions can be identified in the literature. Stephenson and Schitzner offer the foremost factor in their study of NGO's in the Kosovo Crisis:

One promising alternative is the establishment of norms and standards, such as those developed by Sphere and the Good Donorship Initiative, in networks that include major INGOs and donors. These standards condition the behavior of numerous organizations in an effort to secure coordination through self-regulation. (p. 229)

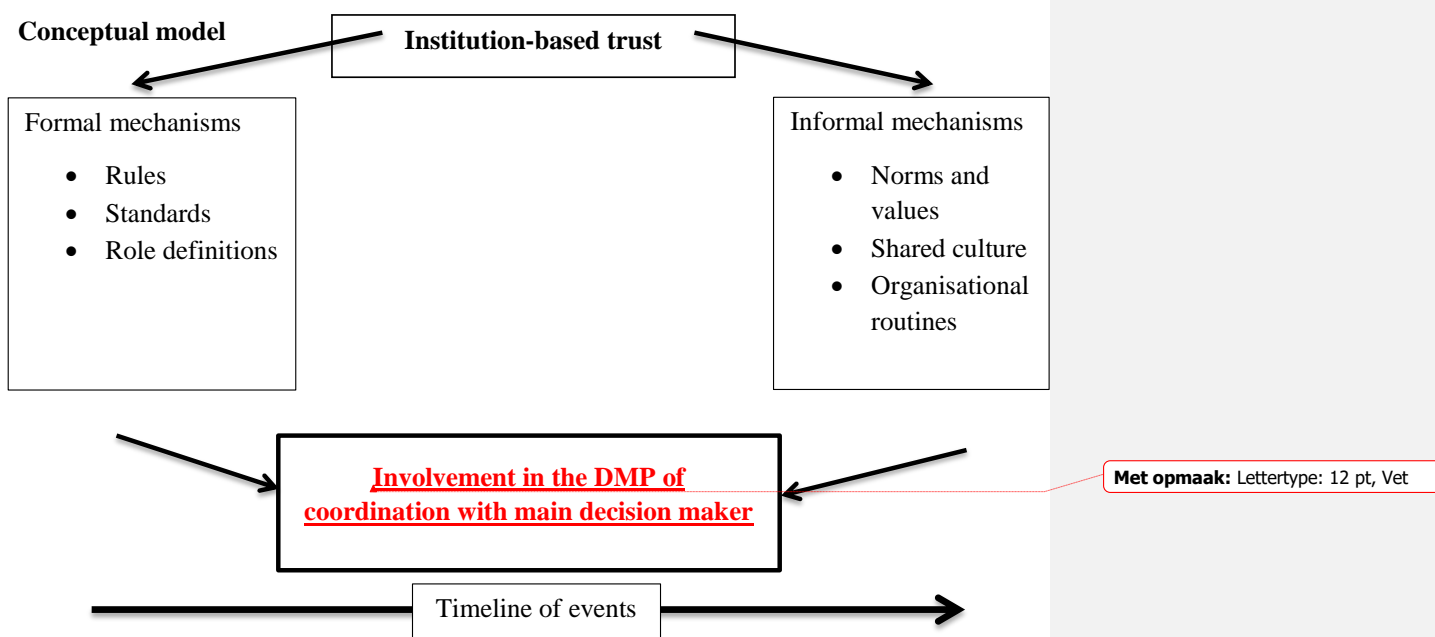
The argument here is built along the premise that the social environment that generates the creation of these standards through coercive isomorphism will further bolster the institutionalization between all involved organizations through these formalized standards, increasing trust between individuals within this context (Dimaggio & Powell, 1983; Vlaar, et al., 2007). Chen et al. (2013) offer similar argumentation, stating that the creation of formalized rules and role divisions between organizations may be used to channel informal institutions along the lines of these formalized lines of communication. Thus, the creation of formal institutions bolsters the trust between individuals from the involved organizations. These formal institutions thus become a formal mechanism that inspires trust and this trust bolsters the willingness to coordinate. Abou-bakr goes even further and suggests that strict legislation could structure disaster management coordination and increase trust (Abou-bakr, 2013).

The hypothesis that flows from the mentioned forms of formal institutions is as follows:

H2: The level of involvement in the DMP of coordination with a main decision-maker is increased through the establishment of institution-based trust between the involved organisations through the presence of formal mechanisms

Some caution needs to be incorporated in these hypotheses, as the research conducted in this context was not conducted in the context of NGO-Public partnerships, but between Public-Private partners' context and exclusive NGO partners' context. The research into NGO-Public is limited, prohibiting a basis of hypotheses on direct material. As shown in the problem statement, the nature of NGO-Public coordination in disaster relief remains understudied, and substantially affects potential plausibility of this hypothesis.

3. Methodology



3.1 Research form & method

This thesis will apply a content analysis on a single-case study to test its hypotheses. A case-study form of research was chosen due to the limited presence of in-depth studies that consider Public-NGO partnerships in disaster relief. The aim in this study is to provide some initial insight into the factors that affect these partnerships by providing an in-depth overview

of events in this single case, and testing the hypotheses by identifying concepts and linking them to the progression of events. By observing operationalized concepts, supporting these observations with quotations and context, and structuring the analysis along the lines of an established timeline, the effects that the concepts under investigation have on each other can be measured. The benefit of constructing a timeline of events is also the external validity that flows from the results. The more similar case studies are conducted through content analysis with a timeline of events, the more comparisons between chronological events can be made, and the more can be determined if causal inferences between concepts can be proven.

3.2 Case under investigation

3.2.1 Reason for choosing the case

To ensure that the results from this study are most likely to be valid the case study chosen will be that of the disaster relief partnership between the Chilean Red Cross and the Chilean Government agency of ONEMI, which was the disaster and emergency agency responsible for the government response in 2010. This case of Chile was chosen for several reasons. The first is that Chile has a high level of disaster preparedness ingrained in their culture. This is due to Chile's proximity to "the ring of fire", a procession of fault lines which evoke a high level of tectonic activity. Chile's position along the fault line between the Nazca plate and the South American plate is highly precarious. The plates are slowly grinding towards one another, stressing the earth's crust along the entire landmass of Chile. This evokes earthquakes of differing strength on a semi-regular basis. Every Chilean is aware that at some point in their life they will experience an earthquake to its full effect. Due to this omnipresent danger, a 'culture of preparedness' has developed in the country that ensures that every Chilean is aware of what actions need to be taken in order to survive an earthquake and subsequent tsunami (Chen et al., 2013). Due to this presence of 'earthquake culture', Chilean society is exemplary of what actions and behaviours are considered good practice during earthquake response.

Another consequence from the presence of earthquakes in Chile, along with Chile's development of a stable and rule-of-law adhering state, is the establishment of stringent building codes to ensure the damage to buildings is limited when an earthquake strikes. Several severe earthquakes made it apparent to the Chilean government that this was a

necessary precaution, and the measures have now been developed to the point that developers who do not adhere to the building codes are held liable for any damages that result from the violation, material or otherwise.

The last reason is the clear discrepancy in policy attitude that was observed in the ‘pre-earthquake’ and ‘post-earthquake’ periods. The occurrence of the 2010 earthquake shook the nation not only literally, but also figuratively, as it made everyone realize that drastic changes in disaster relief had to be made (Amcham Chile, 2017).

These three examples highlight that Chile takes their preparedness to the disaster from an earthquake seriously, and makes them thus much more likely to either have developed, or much more prone to developing good practices in the future when dealing with earthquake disaster relief, as the danger of earthquakes to the country will never subside.

3.2.2 Timeline in case

The timeline that will be used in the content analysis to provide context for the concepts under investigation will cover the disaster response during the 8.8 earthquake that occurred in Chile in 2010. This earthquake was one of the most severe earthquakes ever recorded in Chile, and by extension, the world. It was also the most intense earthquake to strike Chile since the world’s strongest earthquake hit the country, the 1960 9.6 Valdivia earthquake, which underlined Chile’s need to incorporate earthquake preparedness as a core tenet in its legislation. The events during the 2010 earthquake in Chile are most appropriate, as they happened in a country that is liable to be struck again, has a history of addressing the issue in both government and society, and has the economic capacity to fund the solutions to the problem.

The investigation will focus on the level of coordination between the Chilean Red Cross and the Chilean government agency of ONEMI. The International Federation of Red Cross and Red Crescent (IFRC) was chosen as the NGO under investigation as it is a highly reputable organization that has chapters in countries all over the world. The relationship between the Chilean Red Cross and the Chilean government is even more suitable for investigation, as there was no relationship in disaster relief between the Chilean Red Cross and the Chilean government prior to the occurrence of the earthquake. This makes it possible to investigate fully what form the coordination between the two organisations took, and how it developed chronologically from its inception

The timeline will start at the point before the earthquake struck on the 27th of February. The status of coordination between the two organisations will be established to highlight the start of the timeline. From that point on the timeline will highlight any events that relate to the effects that the concepts under investigation will have on each other. How this is done will be discussed in the next section.

3.3 Data Gathering

The data sources will consist of two different mediums; a media analysis that will provide an overview of journalistic and reporting media commentary that relates to the relationship between ONEMI and the wider government and the Chilean Red Cross. The second part consists of specific and detailed reports and books written on the earthquake response in which the relationship between the Chilean Red Cross and ONEMI is discussed more in depth. The main database used is Factiva, which provides an excellent source of media sources and transcribed interviews. Other sources include reports and books written after the earthquake occurred and which gathered stories, statistics and experiences from interviewees.

When applying a content analysis to a chronological timeline, the event must be viewed through both the perspective of the individuals who were chronicling the events as they unfolded, and those who review the events that have transpired after the fact in order to learn from them. By combining and comparing these viewpoints can a timeline be constructed of which it can be said that it accurately portrays events as they occurred. The individuals who are living through the events are not likely to have a deep understanding of the events they find themselves in, while those who are gathering information from others about the events in the case are in danger of missing or acquiring wrong information due to the potential of wrongful recollection of those interviewed. This is the reason why both these media are included in the establishment of the timeline.

3.4 Data Analysis

The basis of the analysis will consist of the description of several points in time where the coordination between the Chilean Red Cross and ONEMI and the wider Chilean government changed. A further explanation at each of these points will highlight which mechanism invoked this change, where this inference is supported by the media analysis and report sources. From these different changes, a causal inference can be made about the impact of either trust mechanisms on the level of coordination between the organizations.

Each concept will be operationalized through several indicators that have been highlighted. This definition will then be used to highlight the concept being used in media and reports, demonstrating their presence in the context of the partnership between the Chilean Red Cross and ONEMI. From all these coded observations, a chronological analysis of the observations for each involved concept can be made. This will show their presence (or absence) from the context of the case.

From these findings an analysis can be drawn which will show if proposed theories are present in the case of Chile's 2010 earthquake disaster relief partnerships. Conclusions can then be drawn on the relevance of the theories, or on what factors are found to weigh more heavily than the theoretical framework proposed.

3.5 Operationalization of concepts

3.5.1 Institution based trust

One of the two main concepts under investigation in this thesis is institution based trust. From the theoretical framework, it has been shown that this form of trust can be divided into two forms; formal and informal. The mechanisms that determine how the trust expresses itself will be described below.

Formal mechanisms

In previous research, the institutions of standards, rules and agreements between organisations are highlighted to be indicators of formal mechanisms that govern trust (Oomsels & Bouckaert, 2011; Stephenson & Schitzer, 2006). Furthermore, the level of role equivalence and subsequent similar divisions of tasks is an indicator of a formal mechanism that evokes

institution based trust (Oomsels & Bouckaert, 2011, p. 20; Stephenson & Schitzner, 2006, p. 220). The centralization of coordination in a formal institution and accompanying legislation were also marked as formal mechanisms that evoke trust (Abou-bakr, 2013). These indicators will be used in this research as well. The sources will be analysed for the presence of these formal mechanisms, how much their presence or absence affected coordination, and how important they were perceived to be by both ONEMI and the CRC.

Informal Mechanisms

The indicators for the presence of informal mechanisms are shared values and norms and the presence of similar organizational routines (Oomsels & Bouckaert, 2011, p. 20). The presence of 'shared responsibility' as described by Kapucu (2006a, p. 213) in the 9/11 attacks or the Wal-Mart response to hurricane Katrina as described by Chen et al. (2013) are examples of such shared values. Similar indicators of the expression of shared norms and values will be highlighted in the data.

The presence of similar organisational routines is another possible source for the establishment of an informal mechanism. The sources will be searched for comments or statements which describe the amount of similarity between the two organisations "repeated patterns of behaviour" as described by Feldman (2000, p. 612) and will result in a conclusion of whether this resulted in the establishment of an informal mechanism.

Involvement in the DMP Density of Coordination

The model that establishes the concept of Actor involvement in regulation decisions by Mathieu et al. (2017) is taken as a blueprint to measure the involvement in the DMP density of coordination between ONEMI and the CRC. The different levels of involvement in the DMP of disaster management in Chile will be established through the recognition of these different levels in the texts analysed in the content analysis. Quotations from these texts will be used to highlight the adherence of the context to the argument made in the analysis. The basis for the use of this model lies with observations made about the nature of the concept of coordination, and the use of group-decisions as the basis for all further coordination in a partnership. Table 4 shows how the different levels of coordination will be distinguished. The different levels of involvement in the DMP of coordination will be analysed through increasingly denser-closer descriptions of coordination involvement, and the adherence of the context of the case to these descriptions will be supported by quotations placed directly in the analysis.

The possibility of the CRC being the “main decision-maker” is unlikely due to the standpoint by the CRC (and IFRC) that the central government of a country will always have the lead in the coordination of a disaster response (IFRC, 2018). It is included however, to offer a full model that can be applied to any NGO-Public relation who could be free from the attitude the IFRC has towards the division of authority.

Table 4

Involvement in the DMP	Description
No involvement	There is no involvement of the actor in the DMP's of the main decision-maker
Information sharing	Information is shared between the actor and the main decision-maker
Consulted	The actor is consulted in their opinion in the context of disaster relief by the main decision-maker
Binding position	The actor makes a binding opinion or creates a proposal themselves aimed at the main decision-maker
Co-decision maker	The actor is co-decision maker, with veto power over the process jointly conducted with the main decision-maker
Main Decision maker	The actor is the main decision maker

The resulting levels of involvement in the DMP ~~densities of coordination~~ are measured through application of the descriptions. When several levels forms of involvement ~~coordination~~ are present, the ~~densest closest involvement form of coordination~~ will take precedence in describing the relationship between the two organisations. The sharing of information is likely to occur more frequently than actual consultation and “group decision-making” on topics, but the relevance of the position to be consulted in a relationship holds more value than the frequency of a lower level of ~~coordination~~ involvement, and was pointed

Opmerking [JW8]: I would say this operationalisation does not say anything about density but about the involvement in the decision making process. It goes from not involved to completely involved. It might be wise to change this throughout the thesis. So trust follows from closer involvement in the decision making process is the hypothesis. This also lies closer to the findings from disaster literature.

out earlier as a crucial difference in the relationship two organisations have with each other. Therefore, much 'information-sharing' coordination is likely to be present in the context of a description of 'consulted' coordination in the context referred to through a direct quotation. Furthermore, any presence of legal contracts which creates binding agreements between the actor and the main decision-maker will consider the density-level of involvement in the DMP of coordination to be elevated to the level of the actor having a 'binding position', as they can hold the main decision maker accountable if predetermined agreements are not upheld, or to co-decision maker if they have the power to partly determine government policy on disaster relief. ~~These densities-is~~ closeness of involvement in the DMP of coordination ~~is are~~ unlikely to occur however, as it has been shown that in practice that the disruptive environment of disaster relief operations does not lend itself well to pre-determined agreements in which detailed requirements and procedures are laid down and where involved organisations are held accountable to specifically executing these pre-determined procedures. (Chen et al. 2013) In the description of the density-involvement in the DMP of coordination in the analysis of these particular situations, a more elaborate description of the context will provide support for these observations.

3.5.2 Operational Table

Table 5 shows an overview of the concepts under study and the indicators used to code them in the data. For each concept a colour is assigned with which it can be identified in the data. The coding works through application on both positive and negative changes. The coded passage itself is regarded as providing enough context to the reader to indicate which it is, supplemented by the mention of the passage and its context in the analysis.

Table 5

Concepts	Sub-Concepts	Indicators
Institution based trust	Formal mechanisms	Shared standards, rules and agreements, addressing role divisions and shared standards, legislative acts
	Informal mechanisms	Shared values or organisational routines between partners, as part of a 'shared culture'
Density of Coordination <u>Involvement in decision-making process (DMP)</u>		Different levels of coordination present <u>involvement in the DMP</u> as described in table 4.

3.5.3 Validity/reliability

One of the potential issues with the sources is observer bias. Much of the documented content was sourced from an American Red Cross team, who travelled to Chile to conduct research on the conduct of the CRC, the government and its partners. Although the report seems very thorough, many of its claims are difficult to verify.

Another lack of reliability is the fact that there is a lack of insider government sources on many events. There is only limited publicised documentation from the government that directly deals with the events that transpired in 2010. Much of the government's actions and intentions were only recorded in the media, through outside investigators such as the American Red Cross team, and a sporadic independent author with only limited analysis of initial disaster response.

4. Analysis

4.1 Introduction

To accurately describe what effect formal and informal institutional mechanisms had on the level of coordination in disaster relief between ONEMI and the CRC these factors will be handled individually to make it clear which changes belong to which factor. In the analysis that follows hereafter, the manner in which they affected each other will be shown, establishing the links which can be interpreted into the conclusion that closes the analysis.

To provide a relevant introduction of the case the competences of both organizations involved will be laid out. Each source will be referenced and any passage which exhibits any of the operationalized comments will be provided with direct quotation and an extensive elaboration to provide the context for the argumentation. All provided quotations used in the argumentation is referenced in chapter 6.

4.1.1 Red Cross competences

The Chilean Red Cross was a large organization at the time of the earthquake in 2010, integrated well in Chilean society. With well over 2000 volunteers in the affected regions in normal times, its presence in Chilean society is evident (IFRC, 2010). However, the organization was mainly focused on providing medical emergency response, and was not focused on providing relief for disaster response. Their role in disaster response had been increasing since 2006 though, according to interviews with employees of the CRC by the American Red Cross (Hinrichs et al., 2011). They consider themselves an auxiliary organization to the national government in any aid work they provide (IFRC, 2018).

4.1.2 ONEMI competences

ONEMI is the primary agency responsible for disaster response in Chile, both for natural and man-made disasters. They are responsible for earthquake and tsunami-monitoring, and for coordinating between local, regional and national disaster response committees, as well as coordination with public and private sector organizations and NGO's (Hinrichs et al. 2011). However, due to budget cuts and the lack of any devastating earthquakes since the 1960's 9.6

earthquake which killed over 1600 people, the agency lacked capital and influence in keeping earthquake readiness at an acceptable level.

4.2 Coordination

4.2.1 Initial relationship status

Prior to the earthquake, there was little to no coordination between the CRC and ONEMI. The American Red Cross Team that was sent to investigate the earthquake response observed this in meetings with the CRC and government officials:

From our discussions with officials at the national level down to local government and individual responder agencies, there was little to suggest that the various organizations had worked closely with each other during planning and preparedness activities within recent times (Oral communication, ONEMI, Chilean Red Cross, Regional and Local Government Officials, July 2010) (Hinrichs et al., 2011, p. 50).

This was not due to a lack of trying by the CRC however:

In 2006, the Board of Governors of the Chilean Red Cross strengthened the disaster charge of the national society, but progress has since been slow in co-opting national and regional government to reconsider this broader role (Oral communication, Chilean Red Cross officials, July 2010) (Hinrichs et al., 2011, p. 50).

Furthermore, there seemed to be no awareness by the interviewees from the organizations investigated of the competences or organizational routines of other organizations but their own:

A pattern that emerged from our various meetings was that each organization with whom we met seemed quite clear about their own role and responsibilities for preparedness, response and recovery activities, while their understanding and expectations of different levels of government or outside organizations starkly differed (Hinrichs et al., 2011, p.50).

The general consensus among government officials was that the CRC was not capable enough to contribute much to disaster relief efforts: “While everyone with whom we spoke saw the Red Cross in a positive light, there were in many cases very low expectations about the ability

of the Red Cross to play a significant role in disaster services” (Hinrichs et al., 2011, p. 50). The lack of trust in the CRC’s abilities in disaster relief meant that there had been little coordination with national or regional government on this topic. For all intents and purposes, the CRC and ONEMI were working separately from each other, right up until the earthquake.

Through our operationalized concepts this situation will be labeled as “no involvement” in regards to the “involvement in the DMP”.

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4.2.2 Day 1 – 3 (27 February - 1st of March)

When the earthquake occurred, the CRC was invited to “senior level meetings with the government within three hours” (Hinrichs et al., 2011, p.19). For three full days the CRC participated in the impromptu emergency response committee of the Bachelet Government.

This situation is labeled as “information sharing” in regards to “involvement in the DMP”.

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At this point, many areas were still cut off from national aid response, and had only limited capabilities and supplies to respond to the disaster. Many people instead relied on their communities to provide them with basic needs. This first response from local sources is critical in the successful disaster relief during the first days after the earthquake, and proved to be so in Chile as well:

The meetings and visits with government, Chilean Red Cross, fire department, and individuals allowed the Emergency Management Team to come away with a strong feeling that the efforts of individuals and the community was a major contributing factor in the successful emergency response (Hinrichs, et al., 2011, p. 23).

This initial response quickly seemed indispensable, as the national government initial response faltered: “The initial response of the central government was problematic. Delayed decisions, miscommunication, communication failures all contributed to a serious impact on the success of the initial response.” (Hinrichs et al., 2011, p. 23). A severe mistake was made by the NAVY and ONEMI by issuing an inaccurate tsunami warning (Harrel, 2010). In the destruction caused by the earthquake and this following tsunami, there was an extreme failure in communication lines. Due to these failures and the lack of redundant communication lines, it became near impossible to establish the gravity of the situation in the first days. Emergency plans written for disaster response failed as they did not factor in downed communications and the severity of the disaster. President Bachelet mentions the difficulty in gathering information about the situation in her press briefings, albeit in a softening frame:

Areas in the country, where obviously communications are not too normalized, there's three teams that are leaving Santiago and going to the seventh, eighth and ninth region with special equipment. So where communications have been effected, they can restore them (Nguyen, Marciano, Schneider, Levs, & Romo, 2010).

The lack of information created a difficult situation for President Bachelet, as it was impossible to determine how severe the situation was for each area and how to respond to the destruction effectively. Decisions were delayed because of this lack of information, and President Bachelet held off the call for international aid during the first few days of the disaster response. This resulted in her being criticized for her response, with many people feeling that she “failed to grasp the scale of the devastation” (Hough, 2010) Additionally, due to the delayed deployment of the army, public order deteriorated to the point that outright looting occurred in the city of Concepcion and other southern regions (Llana & Witte, 2010).

The lacking capability of ONEMI to communicate with its regions resulted in a deficit of information, and they admitted this to the American Red Cross team when interviewed concerning this issue later:

ONEMI acknowledged that the communications systems and plans that existed at the time of the event clearly failed, meaning they did not perform as expected, leaving the agency initially unable to communicate with the impacted areas. ONEMI indicated that the absence of any major disasters in Chile for over 20 years and the resulting reduction in their profiled funding were contributing factors to this failure (Hinrichs et al., p. 17)

The CRC ended the coordination with ONEMI due to them “not getting useful information”, which was likely the results of ONEMI’s lack of capability in acquiring this information (Hinrichs et al., 2011, p. 19). The difficulties ONEMI experienced with the communication systems were disastrous for their capability to contribute to the shared value of disaster relief and it took the CRC three days to realize that ONEMI was incapable of acting as the central coordinator that IFRC chapters expect the national government to be (IFRC, 2018). After these three days the CRC ended their coordination with the national government because “this collaboration limited their capacity to respond effectively with the resources that were becoming available to them.” (Hinrichs, et al., 2011, p. 19). This effectively moved the situation to the original status between the organizations from before the earthquake struck. This situation is labeled as “no involvement” in regards to the “involvement in the DMP”.

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4.2.3 Day 4-10 (2nd – 8th of March)

After it became apparent to the CRC that there was no value in coordinating with ONEMI at the national level, they focused themselves on the local and regional levels where they had presence (Hinrichs et al., 2011, p. 19).

After several days during which communications were restored due the deployment of the army and an overview of the damages could be constructed, President Bachelet finally started calling for international aid to assist in providing disaster relief. The aid that was requested was very specific, according to UN officials, and consisted of “mobile bridges, field hospitals, satellite phones, electric generators, salt water purification systems, field camps, autonomous dialysis centers, field kitchens and restaurants” as mentioned by Alicia Barcena, who was a top U.N. official in Chile at the time (Federal Information & News Dispatch, Inc., 2010). The request for aid also reached the CRC. They were conducting assessments of the damages together with the local governments and responding to the call of the Chilean government for tents, water and electricity: “Their immediate priorities were focused on assessing impact, helping people, and providing temporary housing. They distributed coats, tents, food, and water and helped with basic recovery services (Hinrichs, et al., 2011, p. 19). This effort was also recorded by the media at the time: “The Chilean Government, they are trying to organise for distribution. What the Chilean Red Cross is trying to do is the Government has expressed for tents, for water and sanitation, electricity.” (Dingle, 2010). This shows that the CRC was still contributing effectively towards the goal of disaster relief, while not ~~being involved in the DMP of coordination by ONEMI. directly coordinating with ONEMI.~~

4.2.4 Day 10 and further

On the 11th of March, the new national administration headed by President Sebastián Piñera took office. Since the earthquake, his cabinet had worked tirelessly to establish the scope of the devastation and prepare an assessment of the requirements to rebuild. “We have to work with urgency because in ten days we will be in charge!” he told his cabinet, when describing the changed circumstances surrounding the new government’s policies (Useem, Kunreuther & Erwann, 2015, p. 63). President Piñera listed three points in his agenda for the recovery process: emergency needs would be provided first, then the establishment of public order, followed by the long term reconstruction. The establishment of the Emergency Committee

was aimed to be the center of the coordination of these points into an effective disaster response: “The committee brought together government officials with the goal of overseeing the response and recovery. In the committee’s plan, the military played a key role in this response strategy.” (Hinrichs et al., 2011, p. 21). While the government officials prepared recovery plans, the military continued to act as the emergency communications network until the public systems were restored:

The Army deployed and operated in cooperation with other ministries and organizations. They report to the Commander-in-Chief of the Army, who is located in Santiago. The Army also provided communications for the emergency response effort until public utilities could be restored (Hinrichs et al., 2011, p. 21).

The president was formulating plans and securing funding for them swiftly, but was also confronted with the need to install new government officials in his agencies due to the change in government (Useem et al. 2015, p. 67). One of the agencies concerned was ONEMI. President Piñera was aware of the limited capability of the agency, as many observers had pointed out, but refrained from abolishing the agency due to the urgency of the disaster response (Useem et al. 2015, p. 69). He also asked the heavily criticized director of ONEMI to remain in his administration, to conserve the current working conditions (Useem et al. 2015, p. 65; EFE News Service, 2010). In his efforts to build the crisis response he reached out to private companies as well: “We put the whole country to work.” (Useem et al., 2015, p. 69). Piñera’s Emergency Committee seemed to aim to include all capable organizations, putting necessity above politics.

Over the course of the first 10 days of the disaster response, the CRC proved itself much more capable in disaster relief than many initially deemed possible. The local disaster response by the CRC was also noticed by the new administration. This positive performance led ONEMI and the new administration under President Piñera to include the CRC in the newly formed Emergency Committee, because they wanted “to engage the Red Cross in more meaningful and proactive ways.” (Hinrichs et al., 2011, p. 49). After this inclusion, the CRC felt that ONEMI was “finally listening to them” (Hinrichs et al., 2011, p. 23). Where the earlier coordination between ONEMI and the CRC was aimed at ‘information sharing’ to address the lack of situational awareness in the immediate disaster response, the coordination between ONEMI and the CRC that was initiated in the Emergency Committee is clearly focused on a more lasting partnership. This later inclusion in the Emergency Committee by President Piñera is thus classified as ‘consulting’ as ONEMI is now “listening” to the CRC. This

constitutes an increase in the density-involvement in the DMP of coordination in comparison to the earlier density-of-involvement in the DMP of coordination during the first three days of coordination after the occurrence of the earthquake. The level of involvement is now regarded to be 'consulted' in regards to the 'involvement in the DMP'.

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4.3 Formal mechanisms

4.3.1 Day 1 – 3 (27 February - 1st of March)

The CRC's general integration into the government structure is limited in disaster relief, as was observed by the American Red Cross team: "The CRC has a very limited role within the government structure at this time. In the past, the non-profit organization's role has been limited to health and safety education and did not include disaster response." (Hinrichs et al., 2011, pp. 43-44). In 2006, there was an initiative by the CRC to enlarge the role of local Red Cross charters in coordinating with local governments:

In 2006, the Board of Governors of the Chilean Red Cross strengthened the disaster charge of the national society, but progress has since been slow in co-opting national and regional government to reconsider this broader role (Oral communication, Chilean Red Cross officials, July 2010)" (Hinrichs et al., 2011, p. 50).

The lack of any formal mechanisms before the occurrence of the crisis is thus apparent.

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4.3.2 Day 4-10 (2nd – 8th of March)

Despite the lack of formal mechanisms between the two organizations it seemed that ONEMI was keen to coordinate with the CRC in the disaster response from the onset of the disaster: "When the earthquake occurred, National Chilean Red Cross in Santiago was invited to participate at senior level meetings with the National government within three hours." (Hinrichs et al., 2011, p.19). Contrary to their long standing willingness to coordinate, coordination at the national level was discontinued by the CRC after three days. There were several reasons for this discontinuation. The CRC's opinion was that "they were not getting useful information" and that "this collaboration limited their ability to respond effectively with the resources that were becoming available to them." (Hinrichs et al., 2011, p.19). The CRC had realized after three days that "this disaster surpassed their response capacity. (Oral

Communication by Nelson Hernandez, CRC director of Disaster Management, 2010)” (Hinrichs et al., 2011, p. 23). It is apparent from the CRC’s own observations that despite a willingness to coordinate with ONEMI, due the lack of previous experience in doing so, and the absence of formal agreements to guide this coordination, they were limited in their ability to coordinate in the disruptive environment of a crisis response.

Because of these limitations, the CRC ended the coordination with ONEMI and “decided to focus instead on local and regional activities.” (Hinrichs et al., 2011, p.19). But on these lower levels there was not much difference with the national level: “The Chilean Red Cross focus on response at the local level initially occurred without any coordination with the national government. Chilean Red Cross reported that very little information came from the government in the first few days.” (Hinrichs et al., 2011, p.19). Additionally, these efforts on the local level also resulted in some problems due to the lack of formal mechanisms of trust:

There was some evidence of friction and potential duplication of response/recovery efforts between the Chilean Red Cross and local government. The friction was evident in the provision of disaster services by the Chilean Red Cross and local government in the areas of field hospital setup and staffing, small grants to disaster survivors and disaster supply provision. The problems were attributed to the lack of experience in working together and the lack of clear guidelines regarding Chilean Red Cross and local government functions in a disaster (Hinrichs et al., 2011, p. 25).

Despite these occurrences, local partnerships were often portrayed as being much more prevalent and effective:

All of the responders in these areas cited their personal resourcefulness and local partnerships (for example, between the firefighters, police, emergency management, and the Red Cross) as critical in their ability to help their communities in the difficult first few days (Hinrichs et al., 2011, p. 55).

The American Red Cross team found similar opinions in their own investigation of Red Cross local coordination:

It is vital to ensure Red Cross representation and active participation in disaster policy, planning, response, and recovery activities at all levels appropriate to the specific setting. It was no surprise to learn that the areas in Chile that made the most effective use of the Red Cross and its resources were the very areas where some level of

interaction had been on-going before the earthquake struck.” (Hinrichs et al., 2011, p. 52).

These areas, where already some coordination was present, showed the potential of wider coordination between ONEMI and the CRC. Even though, or perhaps, because of the lack of official national partnerships between the CRC and ONEMI, some local governments had established interaction nonetheless, and made a positive impact on disaster response in their communities.

4.3.3 Day 10 and further

It was only after the installation of a new administration that coordination on the national level between the CRC and ONEMI continued. The president of the new administration, Mr. Sebastián Piñera, established two new committees that would tackle disaster response and reconstruction, respectively. The Emergency Committee was to focus on immediate disaster response while the Reconstruction Committee would focus on the long-term rebuilding of the country. The CRC was asked to participate in the Emergency committee to coordinate with the new administration’s disaster response. This was due to the unexpected capability that the Red Cross had shown in disaster response: “Both agreed that the positive public perception of the Red Cross had contributed to the government’s early efforts to engage the Red Cross in more meaningful and proactive ways, including participation on the President’s Emergency Committee.” (Hinrichs, et. al. 2011, p. 49). This statement marks the start of the implementations of *formal mechanisms* between the CRC and ONEMI.

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4.3.4 After the crisis

In the years that followed the immediate crisis response, coordination continued unabated between the CRC and ONEMI after the inclusion in the new committee. Exercises conducted together established competences and role divisions, and divided tasks between partners (IFRC, 2010a). The first national training exercises conducted jointly in 2012 are a primary example of the subsequent establishment of role division and interdependency of tasks. Preparations for exercises were handled jointly by the two organizations:

More than thirty volunteers of the Chilean Red Cross together with the regional office of ONEMI in the Maule Region, made an informative leaflet this weekend in

preparation for the 9 October drill that will be held in the province of Cauquenes (Cruz Roja Chilena, 2011c).

The exercises were also jointly executed with the explicit mention that ONEMI is heading the operation, and the CRC is a participant of this national exercise: “The activity was carried out simultaneously in the cities of Arica in Chile and Tacna del Peru, on Tuesday October 23 and had the active participation of volunteers from the Chilean Red Cross.” (IFRC, 2010b). “The simulation, organized by the regional ONEMI, began at 11.09 am and the police and security forces of the police and PDI, as well as firefighters and the civil protection system for cooperation work, also participated.” (IFRC, 2010b).

The obvious increase in dedicated resources allocated towards coordination between all involved organizations signifies a major shift in the attitude towards coordination between disaster response organizations by the government. New formal mechanisms between the organizations were established to signify the long-term nature of their partnerships:

This is reflected in the development of a protocol for emergencies by the Chilean Humanitarian Aid Network (RACH, in its Spanish acronym) and the National Office of Emergency of the Interior Ministry (ONEMI, in its Spanish acronym). Trainings, workshops, meetings and some emergency simulation exercises have managed to strengthen ties with the government, consolidating the presence of the Chilean Red Cross among national actors in the field of risk reduction. Proof of this was the signing of a Memorandum of Understanding on the use of radio frequencies and the actions of volunteers (IFRC, 2013, p. 11).

Several other examples highlight the establishment of formal mechanisms between the two organizations (Cruz Roja Chilena, 2010a; Cruz Roja Chilena, 2010b; Cruz Roja Chilena, 2011a; Cruz Roja Chilena, 2011c; IFRC, 2010c; IFRC, 2010d.). The resulting formal agreements formed a disaster response network which placed ONEMI as the central coordinator between all participating NGO’s.

Even later, after heavy discussion in the Chilean parliament, laws were adopted where the inclusion in the Emergency committee by private organizations and NGO’ was mandated, at the discretion of the head of ONEMI:

Notwithstanding the foregoing, the Minister of the Interior may call to the "National Committee" other authorities, as well as representatives of public or private

institutions, according to the nature of the disaster or catastrophe. Such power may be delegated to the National Director of the National Emergency Office (Ministerio Del Interior Y Seguridad Pública: Subsecretaría Del Interior, 2011)

This power laid down with the Director of ONEMI is still incorporated in the National Policy on Disaster and Emergencies of 2017:

The supreme decree N ° 38/2011, of the Ministry of the Interior and Public Security, determines the constitution of the Committees of Emergency Operations (COE), establishing a National Committee of Emergency Operations (National Committee) and their respective members. (Ministerio Del Interior Y Seguridad Pública, 2017)

From all aforementioned sources, it becomes clear that in the aftermath of the earthquake and subsequent disaster response, a large number of *formal mechanisms* were implemented to solidify the strategic partnership between the CRC and ONEMI.

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4.4 Informal mechanisms

4.4.1 Before the Crisis

The initial lack of coordination between ONEMI and the CRC was attributed in earlier paragraphs to the lack of trust that ONEMI officials had in the CRC's capability in disaster relief. When analyzed through the concept of informal mechanisms, ONEMI's perceived observation of the CRC's lack of capability to contribute to the shared value of disaster relief prohibited the establishment of an informal mechanism that established trust between the two organizations, and that in turn prohibited establishment of coordination. This was observed by the American Red Cross Team in their interviews with government officials: "While everyone with whom we spoke saw the Red Cross in a positive light, there were in many cases very low expectations about the ability of the Red Cross to play a significant role

in disaster services." (Hinrichs et al., 2011, p. 50). This resulted in a lack of *informal mechanisms* before the earthquake struck, and as a result of that, a lack of 'involvement in the DMP'.

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4.4.2 Day 1 – 3 (27 February - 1st of March)

Despite the lack of trust in the CRC's capabilities in disaster response, still the choice was made to include the CRC in the National Emergency Committee by ONEMI. This extension of trust by the establishment of coordination between the CRC and ONEMI within three hours can be established on two separate but interconnected reasons. The first is the severity of the situation exerting pressure on every organization capable of providing some form of relief to participate in the crisis response, while the second is the government's actual willingness to engage with everyone in this effort, as shown by President Bachelet's call for everyone to do so:

We are making a call not only to the public sector to move quickly, to regional sectors in the provinces, but we are asking all the professionals of the public sector, we are calling in everyone of the public and private sector and all the different areas so they can contribute and support so that we can face what's happening in this catastrophe (Sesay, I.M., 2010).

The earthquake led to the creation of an informal mechanism in which a new shared value was created, which was not present before the earthquake occurred. This 'shared responsibility', as described earlier by Kapucu (2006a, p. 213), now inspired trust in all organizations involved. In the case of ONEMI's trust in the CRC it was likely not to be in the CRC's *capability to contribute* to the shared mission as established earlier, but in their *willingness to contribute* all they could to the shared value of disaster relief as part of this 'shared responsibility'. This form of trust also shares much similarity to the idea of "swift trust" (Beck & Plowman, 2014), where organizations involved in the disaster response have a "monumental task" and have "no choice but to rely on one another" (Beck & Plowman, 2014, p. 1243) which leads to the early formation of trust without the organizations involved having proven themselves to each other that they are capable of effectively contributing to the response.

4.4.3 Day 4-10 (2nd – 8th of March)

The coordination between the CRC and ONEMI lasted for only three days, after which the CRC withdrew its participation. The reason for this withdrawal was due to the CRC feeling they “were not getting useful information”, and that “this collaboration limited their ability to respond effectively with the resources that were becoming available to them” (Hinrichs et al, 2011, p. 19). The withdrawal of the Red Cross from a relationship with the central government signifies a great deal, as the code of conduct of the IFRC dictates that the national government is the central coordinator responsible for disaster response situation and who dictates the conduct during a disaster (IFRC, 2018). Withdrawing from coordination with the central coordinator means that the CRC did not see any value in this coordination, and signifies low trust in ONEMI’s capability to contribute to the shared value of ‘shared responsibility’, resulting the in the breakdown of the previously established *informal mechanism* and the extension of trust.

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After the end of coordination with ONEMI after three days, the focus of the CRC lay with providing disaster response on the local and regional levels. It was in these areas where they expected to be more effective in applying their resources. However, there was still friction with local governments on the local and regional levels:

“The friction was evident in the provision of disaster services by the Chilean Red Cross and local government in the areas of field hospital setup and staffing, small grants to disaster survivors and disaster supply provision. The problems were attributed to the lack of experience in working together and the lack of clear guidelines regarding Chilean Red Cross and local government functions in a disaster.” (Hinrichs et al., 2011, p.25)

This did not only include the friction that arose from the lack of coordination that occurred due to the absence of any formal mechanisms, where this friction is regrettable but not actively propagated. More disturbingly, there were a few cases in which local mayors or officials refused to cooperate with the CRC or distorted the perception of themselves in favor of their own image:

The mayor requested that his office be given the funding so they could distribute the assistance. When told that was not possible and that the Red Cross would need to work directly with the clients, a decision was reached to not provide the Red Cross with the

requested records. Red Cross officials told us the rationale they were given by the Mayor's Office was that it would have been harmful to the public's perception of the government's response if people saw that they were receiving assistance more from the Red Cross than they were from their government (Hinrichs et al., 2011, p.50).

During the American Red Cross team's visit, an event occurred which highlighted that the lack of informal mechanisms on the local level had still lingered for a long time in some places after the initial crisis had abated:

During a visit to one of the tsunami-affected areas in this region, we were pleased to see brand new mattresses being distributed to the housing units in the relief camp there. The local Mayor met with us inside the camp and provided us with his talking points and priorities for what he felt his area needed from their national government. It was only later that we learned from the local Red Cross officials that the mattresses we saw being distributed had been sitting for weeks in a local warehouse, and that it was very likely the presence of the Study Team that finally prompted their distribution during our time in the relief camp (Hinrichs et al., 2011, p. 50).

The unwillingness of even some local governments to provide the Red Cross with the information they need in order to achieve the shared goal shows that despite the call of President Bachelet to all involved organizations to work together and help with the disaster response, not everyone shared the same outlook on how to conduct the response. These examples highlight how the absence of an informal mechanism and subsequently the trust that flows from it can quickly degrade to actively working against another, even though the presence of a wider informal mechanism would evoke coordination at least at an informal level.

4.4.4 Day 10 and further

After the first days of the disaster response passed, the communications system of ONEMI that had so grossly failed was restored to a large extent. The initial destruction of infrastructure and the subsequent failure of all communication systems was the prime indicator of ONEMI's lacking capability in providing value in the disaster response: "The initial response of the central government was problematic. Delayed decisions, miscommunication, communication failures all contributed to a serious impact on the success

of the initial response (Hinrichs, et al., 2011, p. 23). ONEMI officials themselves readily admit this:

...because the country had not suffered a large disaster in many years, this had led to a gradual reduction of planning, exercising, and investment in preparedness infrastructure, thus contributing to the deterioration (and ultimate failure) of their systems and other emergency response and recovery capabilities (Oral communication, Cristóbal Ibáñez, Director, President's Emergency Committee. July 20, 2010) (Hinrichs et al., 2011, p. 49).

All these initial failures prevented the formation of an informal mechanism between the two organizations as the CRC lost the trust it had in ONEMI's capability to provide to the shared value of disaster relief, as previously shown. President Michelle Bachelet was slow to involve the army in the initial response, but when they were deployed they immediately organized emergency communication channels:

The Army deployed and operated in cooperation with other ministries and organizations. They report to the Commander-in-Chief of the Army, who is located in Santiago. The Army also provided communications for the emergency response effort until public utilities could be restored. According to the fire chief of Constitución, the army arrived on day five and their presence had an immediate calming effect on the city (Hinrichs et al., 2011, p. 21).

ONEMI was finally able to fulfill its role as the central coordinator of the disaster response due to the new emergency communication, even more so when the new President, Sebastián Piñera formed the new Emergency Committee: "The perception of local officials was that the National response improved after the initial days of the event, and especially after the installation of the new government." (Hinrichs et al., 2011, p. 21). As it is IFRC policy that Red Cross chapters always adhere to and attempt to engage the central government as their primary coordinator and supplier of information, this meant the CRC was now open to coordination again (IFRC, 2018). The CRC was consequently invited to join the new Emergency Committee, and it was the CRC's now proven capability that had caused this change in attitude: "Both agreed that the positive public perception of the Red Cross had contributed to the government's early efforts to engage the Red Cross in more meaningful and proactive ways, including participation on the President's Emergency Committee." (Hinrichs

et al., 2011, p. 49). From this point on both organizations were willing coordinate their activities. This was stated to the American Red Cross team after in their investigation:

It is the hope and intention of the organization (...The CRC...) to build stronger relationships with government entities in advance of future disasters. ONEMI Director, Vicente Nuñez, recognizes that the CRC has an important part to play in disaster planning. He advised the investigative team that the agency is in the process of reorganizing, and that the CRC will be more involved in future disaster-planning discussions (oral communication, Vicente Nuñez, ONEMI Director, 2010) (Hinrichs, et al., 2011, p. 44).

These examples highlight that an *informal mechanism* of mutual trust in each other's capability was now present.

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4.5 Analysis

4.5.1 Before the crisis

Before the earthquake and subsequent tsunami occurred, the CRC had no "involvement in the DMP" of coordination by ONEMI in the goal of disaster management. It is clear from the sources that ONEMI officials were negatively inclined towards trusting the CRC in this respect. While the willingness of the CRC to engage in disaster relief was not in doubt, ONEMI did not view the CRC as being capable of contributing this this shared value. For ONEMI, this was enough reason not to engage in coordination with the CRC. Even though the CRC was both increasing their own role in disaster relief, and had signaled to local and regional government that they were willing to coordinate on the issue of disaster relief, ONEMI remained unwilling to coordinate as they viewed the CRC's capability in disaster relief to not be sufficient to extend trust. This shows that a lack of informal mechanisms results in a lack of trust. If no other factors affect the level of trust in a partnership, such as the presence of formal mechanisms which could inspire trust which were not present either at the time, no coordination will occur.

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4.5.2 Initial response

When the earthquake occurred, the CRC was invited by ONEMI to participate in high level official meetings aimed at disaster relief, even though there was a previously established unwillingness by ONEMI to coordinate with the CRC in the exact issue now being addressed. The reason for this sudden willingness of ONEMI to engage in coordination is due to the establishment of a ‘shared responsibility’ in handling the earthquake disaster. All organizations capable of contributing to the crisis response were expected to work together. This established a new informal mechanism between the CRC and ONEMI that inspired trust between both organizations that each would aim to contribute as much as they could to the crisis response. It was now not the actual *capability to contribute* that mattered anymore; it was the *willingness to contribute* that counted, as the severity of the situation mandated this shift in attitude. The observation made here is that the severity of the earthquake disaster created the *informal mechanism* of ‘shared responsibility’ and that this is the sole reason that coordination was immediately initiated after the earthquake occurred, as can clearly be seen in the drastic shift in attitude made by ONEMI concerning coordination with the CRC, mere hours after the earthquake occurred.

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From the description by the Red Cross of this initial coordination it is clear that this coordination was limited to the acquirement and provision of situational information, as “they were not getting useful information” (Hinrichs, et al., 2011, p.19). This was of course due to the earthquake severely limiting the accessibility and communications in the country, and meant that both organizations were both struggling to achieve situational awareness: “In general there were a lot of collapses in bridges, roads that lead to some of the affected communities which make difficult the assessment efforts of each the Chilean Red Cross and the local authorities.” (Dingle, 2010). This was especially true at the national level, as it was extremely difficult to acquire information about the local and regional situations without any communication or transportation systems online. The attempt of the CRC and ONEMI to maintain the *involvement of the CRC in the DMP in density of ONEMI of coordination* to the level of *“information-sharing”* with each other thus failed due to these circumstances.

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Where it was first ONEMI who did not trust the CRC’s ability to contribute to the shared goal of disaster response, it was now the CRC who lacked trust in ONEMI’s capability. Any positive value that the partnership might have contained was negated by the lack of “useful information” and the realization by the CRC that “this collaboration limited their ability to

respond effectively with the resources that were becoming available to them.” (Hinrichs et al., 2011, p. 19). This withdrawal signifies the breakdown of the previously established informal mechanism of ‘shared responsibility’, as the CRC now viewed ONEMI as being incapable of playing the role of primary coordinator which it expects the central government to be (IFRC, 2018). The three days of initial coordination had not been enough to create an interdependency of tasks as the focus lay with creating situational awareness first and foremost, and as the *informal mechanism* that brought the two organizations together fell away, the density-involvement of the CRC in the DMP of ONEMI on the level of “information sharing” that was established because of it did as well.

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4.5.3 New government’s approach

When the new government came to power, the formation of an emergency committee signaled a shift in policy from the side of the government. The CRC was invited to participate in this new committee due to the public perception of their response, which starkly differed from the low expectations that ONEMI officials had held before the earthquake (Hinrichs et al., 2011, p. 49). It is this performance that cemented the creation of a lasting informal mechanism between the two organizations. The basis of this new *informal mechanism* was the demonstrated capability of the CRC to contributing to the shared value of disaster relief, resulting in the CRC’s inclusion in the DMP of ONEMI. The level of involvement in the DMP of coordination between the CRC and ONEMI changed from “information-sharing”, as observed in the first three days, to “consulted” after this inclusion in the new Emergency Committee: “The new government has included Chilean Red Cross in strategy discussions, and they now feel that ONEMI is listening to them.” (Hinrichs et al., 2011, p. 23). In addition to this increased disaster relief role and inclusion in the decision making process, the president proposed the incorporation of the role of the CRC in new legislation: “The new president has also proposed legislation giving ONEMI more responsibilities that, for the first time, include the role of Chilean Red Cross.” (Hinrichs et al., 2011, p. 23). These remarks indicate heavily that both ONEMI and the CRC were putting trust in each other’s capabilities as well as intentions towards the goal of disaster relief.

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Both organizations were now extending trust to the other based on a mutual positive perception of their capability to contribute to the shared value of disaster relief, as the CRC had proven themselves capable of doing so through a positive public perception, and ONEMI restored their previously lost ability to do so by establishing communications and writing

recovery plans under guidance of President Piñera. Where the initial increase in ~~density~~ involvement of the CRC in the DMP of coordination in the first three days of the earthquake disaster was based on the *informal mechanism* of 'shared responsibility' which relied not on proven capability but on willingness to contribute, this newer informal mechanism relied on the actual capability demonstrated by the organizations involved. This makes for a much more solid base from upon which to extend trust to the other. Had the CRC not performed well at all, it is likely that the new government had been much less willing to create interdependencies between them.

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4.5.4 Formalization

After this increase in the ~~density~~ involvement of the CRC in the DMP of coordination ~~between the CRC by and~~ ONEMI, declarations of intent were made to strengthen formal ties and include the CRC in formal planning in disaster relief. In the period that followed, meetings were organized to signify the willingness to form and develop concrete measures to create a lasting partnership (Cruz Roja Chilena, 2010a). Continued coordination in the reconstruction was maintained and resulted in a lasting partnership (IFRC, 2010a, pp. 3-5; IFRC, 2010b, pp. 3-4).

Aside from the establishment of formal agreements between the organizations themselves, an extremely thorough investigation of risks in Chile's disaster risk management system was established and subsequently a national policy of disaster relief was implemented (Ministerio Del Interior Y Seguridad Pública: Subsecretaría Del Interior, 2011). This new legislation is still implemented today and had clauses which delegate its authority to the ONEMI national director (Ministerio Del Interior Y Seguridad Pública, 2017). The Chilean Red Cross and the wider IFRC network were incorporated as an integral part of the national disaster risk network (ONEMI, 2015, P. 25). This new disaster risk network between all willing and capable organizations in Chile was the result of the establishment of a wider network of NGO's in coordination with ONEMI and the national government, called the RaCh, of which the CRC was now part of as well (Cruz Roja Chilena, 2011b).

What is notable in the formalization of this network and national legislation is that ONEMI does not impose top-down, authoritarian rules on NGO behavior, but chooses to coordinate with the NGO's through non-binding agreements. The CRC considers ONEMI the central

coordinator in disaster relief, as is common in wider IFRC policy, and accepts the authority of ONEMI to dictate a national response plan through which the CRC has to coordinate their actions (IFRC, 2010c). This results in the CRC retaining a great deal of independence, but lacking control over the DMP. This is reflected in the legislation that governs the establishment of the Emergency Committee during a crisis. During a crisis, the minister of the interior can decide which organisations are allowed to join the Emergency Committee, or they could delegate this power to the director of ONEMI, as previously mentioned. The CRC's specific participation in the Emergency Committee is thus not laid down in law, but on the table as a possible option at the discretion of government officials.

While a great amount of formalization of coordination has occurred between the CRC and ONEMI since the Chile 2010 earthquake and ONEMI is now quoted to be "listening" to the CRC, they have no means to control national response policy through binding powers as established by this legislation. The establishment of several agreements and even new legislation to formalize coordination between ONEMI and the CRC has not resulted in any change in the density-level of "involvement in the DMP" of coordination between the two organizations since their renewed coordination after the initial establishment of the Emergency Committee by President Piñera. The CRC still only occupies a "consulted" position in the DMP on disaster management of ONEMI despite formal mechanisms being implemented.-

The organization of coordination is clearly focused on achieving coordination without implementation of legal contracts. All the formal mechanisms are memorandums of understanding which do not delegate accountability, but only establish common routines and coordination of interdependent tasks. The result is thus an absence of hierarchical control, and a form of coordination based on mutual interdependence and interaction. The resulting 'culture of trustfulness' between individuals that was argued to be present by Chen et al. (2013) is likely to flow from this coordination, because of the similarities to the described context.

Additionally, the formalization of coordination formal mechanisms laid down between Public agencies and NGO's in the Chilean law on disaster relief are left explicitly vague. Some semblance can be seen with the tactics used in the establishment of the FED, highlighted by Abou-bakr (2013), where intentional vagueness in formalization offered room to adapt and respond to changing societal circumstances. The National government thus fulfills the role of the central coordinator but can still adapt its policies concerning disaster relief easily, as the

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working relations and interdependencies are not laid down in legal documents and provide no direct accountability towards one another. The establishment of an even closer level of involvement of the CRC in the DMP of denser coordination by between the CRC and ONEMI, where the CRC would be given veto powers, or could propose official legislation which must be examined by the government is likely not to occur, as the CRC holds the IFRC position that the national government dictates national policy (IFRC, 2018).

The level of involvement of the CRC in the DMP of coordination density of coordination present in the case of Chile thus seems to have reached its maximum level possible at “consulted”. This is due to for disaster relief the context of the CRC’s own policies, because closer involvement would require the CRC to break their own policy of letting national government always dictate coordination policy. (IFRC, 2018); Nevertheless, a stable and long-term relationship inas coordination between the Public sector and NGO’s has been laid down both in formal agreements between the organizations and the law governing them. The establishment of a strong informal mechanism that inspired trust through both organizations’ capability to contribute to the ‘shared value’ of disaster relief and the quick formalization of coordination after the crisis through several formal mechanisms that provide guidance but deliberately lack rigid structure led to the creation of a strategic partnership between the CRC and ONEMI that has lasted until today.

Opmerking [JW9]: I would like to see more labels of the different levels in the operationalisation throughout the analysis. It is quite difficult to discern these from the text.

Opmerking [JW10]: According to your own operationalisation this means that they are now the formal decision maker, or are they the co-decision-making, which would not be the maximum level then

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4.6 Conclusion

The conclusion will return to the proposed hypotheses from the methodology.

4.6.1 Conclusion hypothesis 1

H1: The level of involvement in the DMP of coordination with a main decision-maker is increased through the establishment of institution-based trust between the organisations involved by the presence of informal mechanisms

When the earthquake struck, the urgency of the disaster created a ‘world in common’ in which ‘shared responsibility’ for the disaster response was the common value. This led to a new willingness of ONEMI to coordinate with the CRC, as the severity of the disaster necessitated every organization remotely capable of aiding the disaster response to lend assistance. This assistance, in turn, had to be coordinated to a degree. Thus, the creation of this informal mechanism due to an adherence to shared value leads to an increased involvement in the DMP of coordination. As shown earlier, this involvement was limited to “information-sharing”, as the main goal of this initial coordination was to create situational awareness.

Following this, when the new government came to power, the performance of the CRC in disaster response had created a much more substantiated claim to capability in disaster relief. Where ONEMI officials previously did not trust the CRC with any role in disaster relief, their performance in an actual disaster response proved these officials wrong. This led to the realization by ONEMI that the CRC was capable of contributing to the shared goal of disaster relief. With their capability now proven, the additional informal mechanism based on proven capability that was formed between the CRC and ONEMI generated a higher level of trust than the informal mechanism initially established at the start of the crisis, which was only based on the urgency of the disaster. The proven capability of the CRC contributed to a stronger informal mechanism and led to a higher level of involvement of the CRC in the DMP of coordination by ONEMI. From the perspective of the CRC, who had ended coordination with ONEMI after three days due to a lack of useful information, ONEMI was able to take up its role as central coordinator again after the restoration of communication systems and the establishment of recovery plans and coordination through President Piñera’s Emergency Committee. This restructuring and rebuilding restored the trust the CRC had in ONEMI’s

capability to contribute to the shared goal of disaster relief. Both organizations ultimately acquired trust in the other, and as a result both were willing to engage in the closer level involvement in the DMP of coordination in which the CRC was now 'consulted'. Hypothesis 1 is regarded to be present in this case.

4.6.2 Conclusion hypothesis 2

H2: The involvement in the DMP of coordination with a main decision-maker is increased through the establishment of institution-based trust between the organisations involved through the presence of formal mechanisms

The willingness to coordinate is increased through the establishment of institution-based trust through formal mechanisms

As mentioned before, there were no formal mechanisms present between the CRC and ONEMI at the start of the crisis. As such, it cannot be tested that formal mechanism generated trust to influence coordination in the initial phase of the partnership. However, the steps taken by President Piñera and both the CRC and ONEMI to formalize coordination through legislation and formal agreements show that there was trust in the establishment of these formal mechanisms and the effect they will have on the coordination between the organisations. The establishment of these formal mechanisms have undoubtedly contributed to the strategic partnership between the CRC and ONEMI, as other similar partnerships broke down where this formalization specifically did not take place, and the partnership between the CRC and ONEMI is still in place today. To test this specific hypothesis then, another disaster would have to occur in Chile so an analysis can be done of the effect these new agreements and formalizations have on the level of involvement in the DMP of coordination. Hypothesis 2 cannot be proven to be present in this case.

Opmerking [JW11]: I find this hypothesis still a bit difficult because it now is not really willingness but a formal requirement. You could challenge this a bit by using a bureau-political perspective:

Rosenthal, U., Hart, P. T., & Kouzmin, A. (1991). The bureau-politics of crisis management. *Public Administration*, 69(2), 211-233.

4.6.3 Discussion

Informal mechanism importance

The starting point of the Chile case is quite unique in the world. Chile was one of the few countries in the world which had not integrated the IFRC and their local Red Cross chapter in disaster relief before earthquake occurred. Through this case, it has been possible to analyze the creation of a new partnership from scratch. From the results an argument can be made that the establishment of an informal mechanism of trust is a key building-block of any partnership. Without a mutual adherence to the shared value through the recognition of capability to contribute to it, a partnership is not likely to form, as either side will not be willing to waste resources on coordinating with a partner they do not see as capable. Even though a formal mechanism that increases the level of involvement in the DMP of coordination beyond a consulting position for an actor might be able to uphold coordination and interdependency through the establishment of procedures and rules, if the adherence to the informal mechanism of a shared value that inspires trust in an involved actor disappears, it will be difficult to convince those involved in the partnership of its credibility. Further research could focus on investigating the facilitating effect of informal mechanism on coordination in other cases.

Formal/informal dichotomy

Abou-Bakr (2013) and Stephenson & Schitzner (2006) highlighted the dichotomy between informal trust and formal trust in their research on social networks and formalized coordination in general. Further research focused on the initial establishment of trust and defined it as “swift trust” and established models to explain this formation and its movement to a more lasting form of trust, defined as “relationship-based conventional trust”. (Beck & Plowman, 2014) Additionally, the formation of a “shared identity” helped bridge differences in organizational cultures and procedures. (Beck & Plowman, 2014) Chen et al. (2013) also found these initial forms of trust to be present and highlighted their “institutionalization” in “established patterns of behavior and interaction” (Chen et al, 2013, p. 140) as being imperative for a successful partnership, similar to Beck & Plowman’s “relationship-based conventional trust”. Additionally, Chen et al. (2013) identify the concept of trust being part of the wider idea of “social capital” and include “commitment to the collective” as another part

Opmerking [JW12]: I would like to see a much more elaborate discussion of the findings and a reflection on the limitation of the work. And possible avenues for future research.

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of this concept. (Chen et al., 2013, p. 140) where this 'commitment to the collective' has similarities to the idea of a "shared identity" as put forward by Beck & Plowman (2014) and Stephenson & Schitzner 's "shared organizational norms" (2006, p. 228) In this thesis it was attempted to group these similar definitions in a group as informal mechanisms. Other researchers performed research on what processes and factors constitute the formation of lasting trust between partners in disaster management (Chen et al., 2013; Kapucu, 2006a, 2006b; Bajracharya & Hastings, 2015) and found that formalization of partnerships through contracts and formally binding agreements is rare in disaster management, defined as formal mechanisms. This formalization of the partnership was especially rare in the case of PNP's (Bajracharya & Hastings, 2015) Further research could investigate if this clear dichotomy is a sensible division to make after further observations are made.

Model used

This thesis attempted to highlight the influence that institutional trust has on the involvement in the decision-making process of a main decision-maker in the specific context of a PNP. However, institutional trust is only the macro part of the framework proposed by Oomsels & Bouckaert (2014) that encompasses a much wider range of ideas and research. The dichotomy laid down in this thesis was pulled from this much more widely applicable model, used in the wider field of public administration. A clear limitation of the research performed in this thesis thus lies with the limited application of the model to the context of its case. The disparity between the actions visible on the institutional level as clear decisions whereas the decisions made on the meso and micro levels may have been much more fragmented. For example, the CRC decided to initiate coordination with ONEMI again after 10 days since the earthquake struck, because ONEMI was perceived as being able to fulfill their role as central coordinator again. However, it could have been entirely possible that there were multiple individual officers within the CRC who were opposed or uninvolved in this decision-making process, who could have weighed in with their personal expertise or attitudes in this decision. When taking the meso and micro level into account, it is clear that this thesis only focuses on the surface-level of how this coordination came about. Especially in a field where much of the coordination and decision-making is performed on the meso level, between individuals, this is a limiting factor in the external validity of this thesis. The group-decision making process and communication during coordination operations is often much more fragmented than any organization-wide decision on the institutional level makes it out to be. (Wolbers &

Groenewegen, 2018) Further research could focus on incorporating the meso and micro levels in the analysis of how trust influences the coordination in PNP's, if the proposed framework for analyzing the link between trust and coordination in this thesis is maintained.

Limited formalization

The lack of implementation of formal contracts or binding agreements concurs with the research done by Abou-Bakr (2013) and Bajracharya & Hastings (2016). The relations between ONEMI and CRC have been formalized to the point where mutual agreements have been made, but there is no accountability or clear cut processes laid down in any of the agreements and neither is ONEMI obligated to include the CRC in their deliberations. Organizing coordination in this particular manner means that there is enough room to adapt to changing circumstances, and it fits neatly with the definition provided by Okhuysen & Bechky (2009):

'the integration of organizational work under conditions of task interdependence and uncertainty' (Okhuysen & Bechky, 2009, p. 469).

It is this element of uncertainty and the 'room to adapt to changing circumstances' that is especially vital to the context of disaster management. Whereas in "normal" PPP's and PNP's, necessary operational change might be implemented in a longer time frame of months or years, PPP's and PNP's in disaster management do not have that luxury. It is in these moments of crisis where the first hours are crucial and lives depend on "acting" (Beck & Plowman, 2014, p. 1248) that procedures are rewritten to fit the context of the crisis at hand and change happens in hours. It pays to have coordination based on loose agreements instead of rigid structures of operations in those times of crisis. As Chen et al. (2013) argued, to lay down procedures in formalized contracts and agreements is to create risk where these formalized mechanisms "may fail to respond to changing unanticipated conditions;" (Chen et al., 2013, p. 140) It is therefore prudent to rely on formal agreements with low levels of accountability and limited rigid procedures. The case of Chile showed that the "colocation of the strategic headquarters" as observed in the Columbia Space Shuttle disaster response (Beck & Plowman, 2014) is key in facilitating quick and responsive action, even though there were no further formalized procedures on how to conduct the communication between all agencies involved. In Chile the formation of the President's Emergency Committee fulfilled the same

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role as the strategic headquarters did in the Columbia space shuttle case, facilitating inter-organizational communication channels even though the earlier establishment of a similar committee was hampered by failing communication infrastructure. Later formalization of procedures reflects the boon of organizing coordination through one centralizing node, but leaves enough room for ONEMI to decide which actors should be included and to what degree of involvement in the DMP. Additionally, the Chile case shows several implementations of formal mechanisms, such as an agreement on shared radio frequencies, but both organisations refrained from formalizing further procedures together, opting instead to hold periodical drills to maintain expertise and coordination practice between all involved organisations. Herein lies the lesson that can be learned from the observations in this thesis. The uncertainty that is inherent in a crisis must be embraced in order to properly manage the risks taken when engaging in coordination with other parties. There is risk both in over-formalization of disaster management, as well as in under-formalization. Further research could focus on investigating cases to find how this delicate balance is achieved.

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