

Institute of Security and Global Affairs

Leiden University – Faculty Governance and Global Affairs

MSc Thesis

Resilience and Social Capital in The Hague

A study assessing social capital at the neighbourhood level in The Hague



Student:	Dyonne Niehof
Student number:	S1900021
Date:	08/06/2017
Word count:	23,994 words (ex. references & footnotes)
Thesis supervisor:	Dr. Sanneke Kuipers
Second reader:	Dr. Bibi van den Berg

DECLARATION BY CANDIDATE

I hereby declare that this master thesis, “Resilience and Social Capital in The Hague” is my own work and my own effort and that it has not been accepted anywhere else for the award of any other degree or diploma. Where sources of information have been used, they have been acknowledged.

Name: Dyonne Niehof

A handwritten signature in black ink, appearing to read 'Dyonne Niehof', written in a cursive style.

08-06-2017

The Hague, The Netherlands

Preface

In February 2017, I started this thesis project. I was determined to write a thesis that would reflect my personal interests, as well as provide me with a stepping stone on my way to the labour market. Around the same time, I started a volunteering position at D66, a social-liberal Dutch political party. I was appointed neighbourhood-coordinator of my own neighbourhood, 'Bezuidenhout'. In principle, I function as an extension of the D66 party in the city council. I represent the party at local community meetings, and I inform them of issues that arise or problems that need to be solved in the neighbourhood. However, since I only recently started living there, I needed to gather more information on the neighbourhood and its residents, and that is when I found an enormous amount of data on all residents and all neighbourhoods of The Hague. Information was gathered using surveys, asking locals whether they were satisfied with their social life, knew their neighbour's names, or felt at home in their neighbourhood. When my thesis supervisor introduced me to the work of Daniel Aldrich, on social capital and resilience, I realised I could use all this information on the residents of The Hague for my thesis.

This thesis turned out to be a unique opportunity for me to get to know the city where I live and hope to find employment after graduation. Also, I wanted to use all this knowledge and create something that could be used by the municipality to make The Hague a safer, better and more social city.

I am very proud of the final product, and believe my master thesis is a good reflection of what I set out to learn at the beginning of my MSc Crisis and Security Management.

I would like to take this opportunity to thank my parents, Herman and Mariël Niehof, for supporting me unconditionally and making me believe I can achieve anything I want. Also, I want to thank my thesis supervisor, Dr. Sanneke Kuipers, for her supervision of this thesis project. I am very grateful for her elaborate feedback, and the time she took to assist me in writing this thesis. I hope you are as proud of the final product as I am.

Dyonne Niehof

08/06/2017, The Hague, The Netherlands

“Beter een goede buur dan een verre vriend”

“A good neighbour is better than a brother far off”

Table of Contents

I – Introduction.....	8
Societal & Academic Relevance	9
Thesis Outline	10
II – Theoretical Framework.....	11
Crisis or Disaster?	11
Likelihood of a Disaster in The Hague	12
Recovery	16
Recovery and Repopulation	17
Factors Influencing Post-Disaster Recovery	18
Recovery, Resilience, and Social Capital	22
Resilience	22
Post-Disaster Resilience.....	24
Social Capital	25
A Critical Role for Social Capital	25
Main Contributions of Daniel Aldrich	29
Criticism to Aldrich	30
Conclusion	33
III – 100 Resilient Cities Network	34
100RC Network – The Hague.....	34
Definition.....	35
Shocks and Stresses	35
Relevance to this thesis	36
Three types of social capital.....	40
Measurement and Proxies of Social Capital	43
IV - Resilience Score Card.....	45
How to Use the Resilience Score Card	46
Developing Indicators to Measure Social Capital.....	49
Bonding Social Capital	49

Bridging Social Capital	52
Linking Social Capital	56
The Resilience Score Card	59
Limitations of this study.....	61
V – Resilience Score of Neighbourhoods in The Hague.....	62
Data	62
The Hague.....	63
Neighbourhoods.....	64
Resilience Score of The Hague	65
Resilience.....	75
VI – Implications and Policy Recommendations	90
Dark Sides of Social Capital	90
Increasing Social Capital Pre-Disaster	91
Protecting Social Capital During the Disaster.....	92
Protecting and Enhancing Social Capital Post-Disaster	93
Increasing Social Capital in The Hague.....	93
The Hague.....	94
Six Profiles.....	95
VII – Conclusion	100
Bibliography.....	102
Annex 1 – Overview Districts & Neighbourhoods The Hague.....	111

I – Introduction

Two years after Hurricane Katrina destroyed large parts of New Orleans, in most areas, less than half of the population returned to their homes. These areas still looked like the day after the water flooded the district in 2005 and were far from a full recovery from the disaster. However, some parts of New Orleans managed to recover, including some of the most heavily damaged neighbourhoods. In these neighbourhoods, over 90 percent of residents returned to their homes, and more than 90 percent of businesses re-opened within two years after the disaster struck (Faciane, 2007).

A similar situation occurred in the southern district Tamil Nadu in India, where a tsunami devastated hundreds of homes and killed thousands of people. While some communities were quickly on their road to recovery, other communities struggled for years to put people back to work and rebuild their houses and infrastructure (Aldrich, 2012a).

There seems to be an enormous discrepancy between communities that bounce back to normality, and communities that struggle to even acquire basic needs. How can this variation in post-disaster recovery be explained? Why do some cities turn into deserted ghost towns while others return to normalcy? The aim of this thesis is to answer these questions by discussing social capital and resilience. According to Daniel Aldrich (Aldrich, 2012a), the difference between a city turning into a deserted ghost town or returning to a stable state post-disaster is caused by the presence or absence of social capital at the community level. This thesis uses his analysis on recovery, resilience and social capital as the starting point of the theoretical framework. Insights from the existing body of literature on social capital and resilience will be used to create a Resilience Score Card, which will then be applied to different neighbourhoods in The Hague. Based on data which indicate the presence or absence of social capital, the resilience of a community is assessed.

Thus, this thesis will not focus on the likelihood of a specific crisis or disaster, nor will it empirically assess differences in recovery among communities in The Hague. Rather, it offers an operationalization of Aldrich for city neighbourhoods, by assessing the presence or absence of social capital and what that means for the resilience of specific communities, in this case neighbourhoods of The Hague. Would these neighbourhoods be confronted with a disaster,

what is to be expected to happen within these communities based on their assessment on social capital and resilience? This thesis aims to answer this question. In addition, this thesis examines to what extent the municipality of The Hague is incorporating notions on social capital and resilience to prepare for or anticipate crises. After the examination, the thesis will include concrete policy recommendations for the municipality of The Hague aimed at increasing resilience at the community level, for the entire city, as well as specific recommendations for each neighbourhood.

The objective of the thesis is to answer the following research question:

How resilient are the neighbourhoods of The Hague, according to a Resilience Score Card based on Daniel Aldrich's research on recovery, resilience, and social capital?

Societal & Academic Relevance

The aim of this thesis is to contribute to the understanding of resilience and social capital, and operationalise these concepts into a Resilience Score Card, which can be used to measure social capital at the neighbourhood level of analysis.

The research is academically relevant since it aims to apply Aldrich's (Aldrich, 2012a) theory on social capital and resilience to different neighbourhoods in the municipality of The Hague. This thesis will contribute to the understanding of resilience and to what extent the theory can be used as a framework to make neighbourhood communities stronger. A new addition to the existing body of knowledge is the operationalization of Aldrich's (Aldrich, 2012a) contributions into a Resilience Score Card, which can be used to assess the level of social capital at the community/neighbourhood level of analysis.

The research is societal relevant due to its potential to increase safety in the municipality of The Hague. Understanding social capital is essential in today's world, since disasters are happening more often and the types of disasters are rapidly evolving, making anticipation and preparation more difficult. This research shows how communities can prepare for a variety of disasters, and how policy makers and politicians can assist in this process. The final chapter will include concrete policy recommendations for public administrators to increase resilience at a communal level.

The link with public administration is evident since the research will provide understanding on how policy makers can increase community resilience, social capital, and strengthen social

infrastructure at the communal level. The link with Crisis and Security Management is evident due to the focus on resilience of neighbourhoods in The Hague at the communal level, and the analysis on the kind of reaction that is to be expected from these neighbourhoods in times of disaster.

Thesis Outline

The theoretical framework of this thesis is discussed in part II. As previously mentioned, the starting point of the theoretical framework is Daniel Aldrich's (Aldrich, 2012a) research on recovery, resilience, and social capital.

Since this thesis discusses social capital in The Hague, part III provides a short summary of the work the municipality has undertaken on resilience, within the framework of the 100 Resilient Cities network. I explain how this master thesis relates to the current efforts of the municipality, and how my findings can be used to further develop the understanding of social capital and resilience.

In part IV, the findings from the discussion on the theoretical framework from part II are operationalised into a Resilience Score Card. Several approaches on how to measure social capital are discussed, and the indicators used to measure social capital at the neighbourhood level are introduced and explained. The result of this part of the thesis, a Resilience Score Card, is my main contribution to the existing body of knowledge on recovery, resilience, and social capital.

In part V, the forty-four neighbourhoods of The Hague, divided among eight city districts, are put in the Resilience Score Card to assess their level of social capital at the neighbourhood level of analysis. Provisional conclusions are drawn on the level of social capital in the neighbourhoods.

In Part VI, the outcomes of the Resilience Score Cards of the different neighbourhoods are discussed. All forty-four neighbourhoods are distributed among six profiles. Based on these six profiles, implications and policy recommendations are discussed.

In the conclusion, in part VII, the research question will be answered.

II – Theoretical Framework

The theoretical framework of this thesis uses Daniel Aldrich's theory on the importance of resilience and social capital in post-disaster recovery as a starting point. The following part is outlined as follows. Firstly, a distinction is made between crisis and disasters. Secondly, different perceptions on recovery are discussed. Thirdly, the concept resilience is introduced and explained. Fourthly, social capital is elaborately discussed.

In short, after a disaster, a community starts recovering. The recovery is the outcome of a process, and resilience is an explanation for the success or failure of recovery. A critical component of resilience is social capital. All these concepts are thoroughly explained and discussed in this section of the thesis.

The next part will use the causation that Aldrich has established between social capital and resilience, to formulate a Resilience Score Card. This card is based on indicators mentioned in Aldrich's research. The card will be applied to different neighbourhoods in The Hague, to assess their social capital and to predict how they would respond to disaster.

Crisis or Disaster?

An emergency situation is not by definition a crisis, even though it may put traditional structures under pressure or exhaust operational response capacity. Emergencies are unforeseen events, but since they are predictable, emergency services can prepare for them. Examples include fires, small floods, traffic incidents or other accidents. Emergencies may have far-reaching consequences for people involved, but are often small incidents which can be contained rapidly (Perry & Lindell, 2006).

Crises are threatening fundamental pillars of society, challenge the pre-existing socio-political order, and create a sense of urgency in which direct action is demanded ('t Hart, 1993). Often, crises are surrounded by a deep uncertainty with regard to specific cause, consequences and possible interventions. Crises are more than emergencies, since they are not only affecting those directly involved, but can also pose political and strategic challenges to private and public parties (Rosenthal, Boin, & Comfort). However, a crisis does not necessarily have to be

materialised. The Cuba Missile crisis of 1962 was never materialised and did not cause casualties, but the near-outburst of the Cold War, caused by a conflict between Cuba, the Soviet Union and the United States is referred to as a crisis (Boin & McConnell, 2007).

A distinction in different types of crises can be based on the source of the threat, which can be external – for example caused by natural disasters or terror attacks – or internal – which are man-made disasters. Examples of man-made disasters are factory explosions, riots, traffic disasters or infrastructures that collapse. However, sometimes natural disasters can have more dramatic consequences due to inadequate human preparation or handling during the crisis. Therefore, the distinction between natural and man-made crisis is not always 100% clear.

A disaster can be described as a ‘crisis with a bad ending’ (A. Boin, 't Hart, Stern, & Sundelius, 2005). A disaster is an extreme situation which causes loss of life, and long term damage to property and infrastructure (Healy, 2001; McConnell, 2003). A disaster is always a crisis, but a crisis is not always a disaster.

However, despite the abovementioned enumeration, whether an event is characterised as a crisis, disaster or catastrophe highly depends on the social structure and the interpretation of the event by politicians, media, corporations, social organizations, scientists and certain social groups. What is perceived as a crisis in one country at any time in history, may be just a small emergency in another country or during another time period.

Since the purpose of this thesis is to examine the differences in response to unforeseen events in several neighbourhoods, the definition of what constitutes a crisis or disaster per se is not crucial. However, for purposes of clarity, this thesis will, from now on, use the term ‘disaster’ as a way to refer to unforeseen negative events that require a response by public authorities, and take place in the public domain.

As previously mentioned, this thesis does not aim to prevent a specific type of disaster, but rather examines to what extent different neighbourhoods are capable of responding to unsettling events and under which conditions these neighbourhoods instead thrive and manage to (fully) recover.

Likelihood of a Disaster in The Hague

The likelihood of disasters occurring in the Netherlands is low, but not nihil. The past years, the Netherlands has witnessed several crises, ranging from small with limited impact to large crises with casualties and a lot of material damage. Some examples of large disasters include

the fireworks disaster in Enschede in 2000¹, a fire at New Year's Eve 2001 in Volendam², the monster truck accident at a local rally in Haaksbergen in 2014³, and an accident with two cranes who fell on and collapsed a few residents' houses in Alphen aan den Rijn in 2015.⁴ The EMDAT database, which collects information on international disasters, shows the occurrence of 58 disasters⁵ in The Netherlands since 1917, the deadliest being a flood in 1953 which affected 300.000 citizens and costs the lives of more than 2000 people.⁶ Fortunately, this is an exception, and overall, the chance of a deadly disaster occurring in the Netherlands is small. However, the Netherlands is ranked relatively high on the Global Vulnerability Index, mainly because approximately one quarter of the country lies below sea level. Solely based on its vulnerability to water and/or the failure of dams, the country should be ranked one of the most vulnerable countries in the world. However, the Netherlands is also one of the few countries in the world with a very high economic, social and governmental readiness to respond to disasters.⁷ All in all, the Netherlands ranks at place 18 of the Global Vulnerability Index, and it has managed to keep a steady position over the past decades.⁸

Disasters or crises will always have an unexpected element, and no amount of investments or preparations will fully allow to eliminate all vulnerability. As the 1953 flood proves, a disaster like that has immense consequences for hundreds of thousands of people. Even though modern societies have managed to eliminate disasters that used to be common, such as large fires, infrastructure collapse, or the outbreak of diseases, it is impossible to prevent all extreme threats (Wildavsky, 1988).

¹ Overheid.nl. Vuurwerkcramp Enschede. <https://zoek.officielebekendmakingen.nl/dossier/27157/kst-27157-20?resultIndex=85&sorttype=1&sortorder=4>.

² Nationaal Brandweer Documentatie Centrum. Cafébrand Nieuwjaarsnacht Volendam. <http://nationaalbrandweerdokumentatiecentrum.nl/wp-content/uploads/2015/01/Publieksversie.pdf>

³ Onderzoeksraad voor Veiligheid. Monstertruck Ongeval Haaksbergen: <https://www.onderzoeksraad.nl/uploads/phase-docs/924/3a77eabfefe5publieksversie-monstertruck-haaksbergen-nl.pdf>

⁴ Onderzoeksraad voor Veiligheid. Hijsongeval Alphen aan den Rijn. <https://www.onderzoeksraad.nl/uploads/phase-docs/1271/e93bcf356218interactief-hijsongeval-alphen-aan-den-rijn-nl.pdf>

⁵ "EM-DAT includes all disasters from 1900 until the present, conforming to at least one of the following criteria: (1) 10 or more people dead; (2) 100 or more people affected; (3) The declaration of a state of emergency; (4) A call for international assistance." Source: <http://emdat.be/frequently-asked-questions>.

⁶ EMDAT Database: http://www.emdat.be/advanced_search/index.html.

⁷ "Readiness measures a country's ability to leverage investments and convert them to adaptation actions. ND-GAIN measures overall readiness by considering three components – economic readiness, governance readiness and social readiness." Source: <http://index.gain.org/country/netherlands>.

⁸ Notre Dame Global Adaptation Index: <http://index.gain.org/country/netherlands>.

Therefore, it is important to look at what might happen in case a disaster will strike the Netherlands, and how – in this case – citizens of The Hague and their respective neighbourhoods are expected to respond.

The Hague has a disaster plan, which outlines seventeen types of disasters the city is preparing for. These disaster include a nuclear disaster; an aviation- or space accident; an accident at sea; a flood; an accident with toxic or biological waste; contamination of drinking water; a food poisoning epidemic; an accident with flammable or explosive substances; a fire in urban areas; a forest fire; the collapsing of a large building; the breakout of panic in large crowds; a transport accident; extreme weather conditions such as storms, hailstorms, heavy snow and ice; other weather circumstances; a loss of infrastructure; and earthquakes.⁹ While this list is very extensive, it is not exhaustive. Other types of crises can be added, as well as a combination of different types of crises. In the disaster plan, the municipality has formulated procedures which have to be followed in case of an emergency, and outlines how emergency services should communicate during a disaster. Also, it clearly outlines the priorities of different emergency services in an effort to ensure a smooth operation. The municipality is prepared for these crises, but the disaster plan lacks concrete information on how these types of disasters can be averted, or how the city can better prepare itself for unforeseen negative effects. The disaster plan is not so much a guide for preparing the city for disaster, but rather a manual used by emergency services in case disaster strikes, so the different emergency services know how to respond and what to expect from their colleagues.

Following the attacks on 9/11 and the assassination of Dutch film producer Theo van Gogh, the National Coordinator for Security and Counterterrorism was established in 2005, as an answer to the possibility of a terror attack happening in The Netherlands.¹⁰ In 2016, a series of Jihadist attacks took place in Europe. Berlin, Paris, Brussels, Nice, Charleroi and London were among the cities where jihadist fighters carried out attacks in the name of Islamic State of Iraq Levant (ISIL). The threat level of the Netherlands has been upgraded to scale 4 (out of 5), which means that the possibility of a terror attack is a reality, but there are no concrete indicators to when, where, or how something could happen.¹¹ Occasionally, weapons and/or munition are

⁹ Rampenplan Gemeente Den Haag (2000). Crisisplan voor de Gemeentelijke Organisatie en Rampenplan in de Zin van de Wet Rampen en Zware Ongevallen.

<https://denhaag.raadsinformatie.nl/document/3334126/1/RIS080392a>.

¹⁰ Nationaal Coördinator Terrorismebestrijding en Veiligheid: https://www.nctv.nl/onderwerpen_a_z/werkstuk-informatie/index.aspx.

¹¹ Nationaal Coördinator Terrorismebestrijding en Veiligheid: https://www.nctv.nl/organisatie/ct/dtn/aanslagdreiging_in_Nederland.aspx.

confiscated, and the National Coordinator for Security and Counterterrorism is working closely with other governmental agencies to monitor citizens who sympathize with ISIL, or (attempt to) travel to the Caliphate.¹²

Another recent addition to the abovementioned list of threats is cyber security. Over the past years, organised cybercrime, executed by highly skilled professionals, have proven to increasingly threaten national security. Professional criminals are capable of executing prolonged, high quality and advanced operations.¹³ A global attack in May 2017 showed how skilled professionals have the potential of frustrating digital infrastructure of businesses and governmental organisations, with all due consequences.¹⁴ The Dutch parliament has also been victim of cyberattacks, compromising their servers and stealing information.¹⁵ The national government, as well as local governments, are increasingly aware of the dangers of the online world and starting to fight these types of threats. In an effort to make The Netherlands and the European continent better equipped to deal with cyberattacks, The Hague launched The Hague Security Delta in 2012. It specialises in cyber security and connects The Hague, Twente and Brabant to encourage businesses, government, and knowledge institutions to cooperate in the field of national and urban security, protection of critical infrastructure, forensics, and cyber security.¹⁶

As previously mentioned, all crises and disasters have an unexpected element to them and no amount of investments or preparations will fully eliminate the possibility of them occurring. Therefore, it is of the utmost importance that more insight is gained on what is to expect from Dutch society, and in this case the city of The Hague in particular, during and after a disaster. This thesis will examine the concepts of recovery, resilience and social capital, and explain the relationship between them. Then, based on a resilience-score card, an assessment will be made about the way different neighbourhoods in The Hague are expected to respond during times of crisis.

¹² Nationaal Coordinator Terrorismebestrijding en Veiligheid:
https://www.nctv.nl/organisatie/ct/dtn/uitreizigers_terugkeerders.aspx.

¹³ Nationaal Cyber Security Centrum:
<https://www.ncsc.nl/actueel/Cybersecuritybeeld+Nederland/cybersecuritybeeld-nederland-2016.html>.

¹⁴ NRC. "Het Ergste Lijkt Voorbij Met Deze Cyberaanval." Source: <https://www.nrc.nl/nieuws/2017/05/15/het-ergste-lijkt-voorbij-met-deze-cyberaanval-9094070-a1558745>.

¹⁵ NUMRUSH. "Ransomware Tweede Kamer Plat." Source: <http://numrush.nl/2017/03/28/ransomware-tweede-kamer-plat/>.

¹⁶ The Hague Security Delta: <https://www.thehaguesecuritydelta.com/about>.

Recovery

There is no universally agreed definition of (full) recovery, nor on the conditions that must be fulfilled by a community to have achieved (full) recovery. Instead, there are multiple definitions of recovery, as well as how post-disaster recovery can be measured.

The ability to measure post-disaster recovery allows researchers to compare differences in post-disaster recovery and to draw conclusions on effective post-disaster mechanisms (Chang & Miles, 2004; French, Feser, & Peacock, 2008). However, the lack of consensus on the concept of recovery, as well as measurable and validated indicators of recovery, makes drawing comparisons difficult. This is unfortunate, since measurable and validated indicators are necessary to track post-disaster recovery of communities, and evaluate policies across events and over time (Smith & Wenger, 2007).

The most simplistic explanation of recovery refers to a situation where a community recovers to such a remarkable extent that the community goes back to the exact same state as it was in prior to the disaster (Albala-Bertrand, 1993, p. 173). However, this is highly unlikely to occur since disasters often have both short- and long-term consequences for communities.

McCreight (2010) further develops the different dimensions of post-disaster recovery. According to him, a community is recovering when the following five dimensions are taken into account; “1) personal and familial socio-psychological well-being; 2) organizational and institutional restoration; 3) economic and commercial resumption of services and productivity; 4) restoring infrastructural systems integrity; and 5) operational regularity of public safety and government” (McCreight, 2010, pp. 4-5). Thus, recovery ranges from individual recovery to national and economic recovery, and a full return to the pre-disaster state is not a pre-requisite for recovery.

Even though these five dimensions provide a rather broad scope of what might constitute recovery, not all dimensions are always equally important, nor are these five exhaustive. Recovery is a dynamic process, in constant motion and adapting to changing circumstances. Many factors influence what a community demands post-disaster, and when it can be considered recovered (Aldrich, 2012a). For example, areas whose local economy depends heavily on tourism, must focus on post-disaster recovery activities aimed at restoring infrastructure and rebranding their tourism sites in a response to negative media coverage (Robinson & Jarvie, 2008). On the other hand, areas whose economy is largely build on

enterprises and businesses may focus more on economic recovery (DeMel, McKenzie, & Woodruff, 2011).

Post-disaster recovery can also be defined as “the process of restoring, rebuilding, and reshaping the physical, social, economic, and natural environment through pre-event planning and post-event actions” (Smith & Wenger, 2007, p. 237). This definition explicitly includes pre-disaster planning as part of a post-disaster recovery process. Several scholars argue that successful and sustainable post-disaster recovery must start pre-disaster (Olshansky & Johnson, 2010; Berke, Cooper, Aminto, Grabich, & Horney, 2014).

Pre-disaster planning can prevent disaster managers from focussing solely on short-term relief, thereby forgetting long-term solutions that increase resilience to future disasters (Berke, Kartez, & Wenger, 1993). During disasters, a sense of urgency may draw the attention away from long-term goals and reallocate government resources to focus on short-term solutions only (Comfort, Birkland, Cigler, & Nance, 2010). For example, in case of a flood in a flood-prone area, sustainable recovery would include a discussion on whether a community should relocate to higher grounds. Instead, driven by the sense of urgency that is created by disasters, governments often choose to provide short-term relief – in this case the re-building of (temporary) houses in the same flood-prone area – rather than investigating long-term solutions that make the area less vulnerable (Beatley, 1994; Mileti, 1999; Bean, 2002; Smith & Wenger, 2007).

A well thought out long-term recovery plan can significantly improve resilience and safety of an area, and reduce vulnerability to disasters. This plan should be thought out well before disaster strikes, and consist of flexible policies that anticipate disasters and can adapt to rapidly changing circumstances (Olshansky & Johnson, 2010; Berke, Cooper, Aminto, Grabich, & Horney, 2014).

Recovery and Repopulation

Daniel Aldrich defines recovery as “the process of repopulation by survivors – who may have fled or been evacuated – and new residents along with the gradual resumption of normal daily routines for those occupants,” (Aldrich, 2012a, p. 5). Aldrich measures this recovery by looking at the construction and occupation of temporary housing, population change, immigration and growth (Aldrich, 2012a). His focus heavily lies on repopulation, and more scholars agree repopulation and post-disaster housing recovery to be two of the main indicators of recovery (Ganapati, 2013; Chamlee-Wright & Storr, 2009; Vale & Campanella, 2005). A city that has

suffered tremendous loss of life and massive damage to infrastructure, can be seen as recovering when the city returns to a state of habitation (Vale & Campanella, 2005) (Chang, 2010). Whether residents and newcomers return, determines whether a city turns into a ghost town suffering from looting and rioting, or will recover (Finch, Emrich, & Cutter, 2010; Vale & Campanella, 2005).

In addition, a lack of return may indicate a very low level of commitment of the residents to their cities or neighbourhoods. One example is the 1972 earthquake in Nicaragua, which forced thousands of residents to flee. After the earthquake, many decided to stay in the neighbouring countries who were not as much characterised by corruption and unpunished criminality (Garvin, 2010). In this case, a very low level of commitment became evident in the lack of returners, which seriously hampered the recovery of several parts of Nicaragua.

As discussed in this part of the thesis, multiple definitions can be used to describe recovery, and several indicators can be used to assess whether a community is recovering. However, the purpose of this thesis is not to discuss different meanings of recovery, but rather to discuss resilience and social capital as explanations for differences in recovery-paces. In line with Aldrich (2012a), I argue that recovery can be measured by looking at repopulation, since the same mechanisms that cause repopulation are also influencing other forms of recovery – for example economic recovery or the recovery of the tourism sector.

Therefore, recovery is defined as “the process of repopulation by survivors – who may have fled or been evacuated – and new residents along with the gradual resumption of normal daily routines for occupants” (Aldrich, 2012a, p. 5), while the process of repopulation is measured through “yearly measures of population change, household and village access to and receipt of aid packages, and the construction and occupation of temporary housing” (Aldrich, 2012a, p. 6).

The next paragraph will discuss which factors are most commonly believed to influence post-disaster recovery. However, it will show these factors are not capable of providing a satisfactory explanation of why some communities thrive during times of crisis while others collapse.

Factors Influencing Post-Disaster Recovery

Post-disaster recovery literature has mostly concentrated on three external and two internal factors, namely; (1) the quality of government; (2) the amount of aid received; (3) the magnitude of the damage caused by the disaster; (4) socio-economic and demographic conditions of the

affected area; and (5) population density (Aldrich, 2012a). The last two factors are pre-disaster indicators, while the others are post-disaster indicators.

Despite the fact that most post-disaster literature looked to the abovementioned five factors as explanations for differences in recovery paces, the next paragraphs will show how external factors have a very limited effect on recovery, and while internal factors have proven to be of more significance to post-disaster recovery, they still do not provide a satisfying explanation for differences in recovery paces.

The first factor considered is the quality of government. In this discussion, the quality of government is a post-disaster indicator. The quality of government and its readiness to respond to the disaster is perceived as a crucial factor in the failure or success of post-disaster recovery. Citizens affected by the disaster will look to their (local) government for immediate assistance and the provision of primary needs. Bureaucrats, low-level personnel, police, mayors or a president's administration receive a tremendous amount of attention post-disaster, and often a lot of blame. These political blame games often cause government officials to pay a high price; a loss of popularity (and thus perhaps a loss in the next elections), or even a forced resignation. Politicians may be blamed for their lack of preparation and anticipation pre-disaster, an inadequate immediate response during the disaster, or an insufficient post-disaster programme aimed at recovery (Boin, 't Hart, & McConnell, 2009).

However, while it is easy to blame governments for insufficient or ineffective responses, empirical data debunk this myth. Neighbourhoods that have experienced the same level of quality of governance, have responded differently in the post-disaster period, especially in the medium to long term. If recovery would solely – or for a large part – rely on the adequate response of a mayor or other government official, all neighbourhoods under its rule should respond in the same way. Even though an insufficient and ineffective government may delay the arrival of several basic needs such as water, food and medical supplies, other factors have proven to be much more decisive (Aldrich, 2012a).

The second indicator is also a post-disaster indicator, and based on the assumption that the more money an affected area receives, the better and more swiftly its recovery will be, is flawed. A 'folk wisdom' sentiment postulates that a rapid flow of money creates confidence among residents of the affected area, and encourages them to stay or return to the area and assist in rebuilding infrastructure and re-opening shops and other facilities (Guo, 2012). This sentiment is fuelled by (local) politicians and humanitarian aid organisations that open hotlines and bank accounts shortly after the crisis and call upon the public to donate and help those in

need (Vale & Campanella, 2005). However, no evidence can be found in empirical research that a large output of cash is a determining factor in post-disaster recovery. On the contrary, substantial amounts of money flowing into relatively poor countries may encourage massive corruption and trigger revolutions (Aldrich, 2012a). Several researchers have not found any significant direct correlations between the amount of money an affected area received and the speed of its recovery (Kage, 2011). Rather, receiving large amounts of money has proven to be counterproductive, since the flow of money undermines local economies and social structures (Alexander, 2013).

The third assumption that will be debunked is also a post-disaster indicator, and related to the magnitude of the damage. Even though, when casualties are higher, infrastructure is more heavily damaged and the immediate need for basic needs is much higher when the disaster has caused a tremendous amount of damage (Yasui, 2007), this does not necessarily influence the post-disaster recovery, especially not in the medium to long run. On the contrary, plenty of researchers have proven the opposite: the more damage, the swifter the recovery (Takeda, Tamura, & Tatsuki, 2003). Often quoted examples are Japan, Greece and Taiwan, countries who suffered major damage during the Second World War but managed to recover faster than other countries affected by the war (Kage, 2011). A definite explanation for this phenomenon is lacking, but some researchers point out that due to heavy damage, communities are capable of redesigning and rebuilding large parts of their neighbourhoods. This allows them to skip a few steps in the 'normal' evolution phase, and to use the newest equipment and technology to make this swift change possible (Kage, 2011; Takeda, Tamura, & Tatsuki, 2003). Communities that experiences less damage may still need to take those smaller steps since redesigning the entire neighbourhood is unnecessary.

The fourth assumption is a pre-disaster indicator, since pre-disaster socio-economic and demographic conditions of an affected area are believed to have an effect on post-disaster recovery. However, even though many studies have found a correlation between the relative wealth of a community and its ability to recover from disaster, a lack of consensus exists on the amount of influence these internal factors really have (Chamlee-Wright & Storr, 2009; Eoh, 2005). In general, neighbourhoods with wealthy residents benefit from the ability to access their personal financial savings which may be a (temporary) solution to problems caused by the disaster. In addition, neighbourhoods where residents without insurance or financial savings are in the majority, may fall victim to crime and drug abuse, which hampers the ability to mobilise and attract resources for rebuilding (Ahmed, Seedat, van Niekerk, & Bulbulia, 2004).

Often closely related to socio-economic status is the ethnic diversity of a neighbourhood. Some studies have proven that black workers had much more difficulty regaining employment post-disaster, and that minorities were more often forced to move in the years after the disaster before settling down (Cutter, et al., 2006; Elliott & Pais, 2006; Bullard & Wright, 2009). However, other studies have shown the level of ethnic diversity is not a predictor for differences in post-disaster recovery since neighbourhoods that were highly diverse, managed to recover faster than their ‘collar-white’ counterparts (Aldrich, 2012a; Nakagawa & Shaw, 2004).

All in all, it is safe to say there is a correlation between the socio-economic and demographic status of a neighbourhood and its pace of recovery, but this correlation is very limited and only significant in the short term (Ahern & Galea, 2006; Bolin & Bolton, 1986). The ability to respond quickly to challenges in the short-term, mainly made possible because of access to financial savings, does not guarantee a swift recovery in the medium- to long-term (Chamlee-Wright & Storr, 2009). Less wealthy neighbourhoods have proven to recover just as quick, or even quicker, than neighbourhoods who were relatively wealthy (Eoh, 2005). In conclusion, even though a correlation between the socio-economic and demographic conditions and the recovery pace has been found, it does not provide a satisfying explanation for differences in recovery paces.

The last factor is also a pre-disaster indicator, since it takes the pre-disaster population density of an affected area into account. High population density leads to more casualties, more destroyed homes, and a high need for accommodation in temporary and permanent housing situations. The difficulty of this situation is believed to hamper the recovery process (Donner & Rodríguez, 2008). However, plenty of research has shown that high population density does not automatically cause a slower recovery (Nossiter & Eaton, 2007). In situations where recovery is slow, the explanation can be found in other factors. One study showed how slums recovery slower than other areas, even when confronted with a similar disaster. However, this was not due to high population density, since other areas with similar population densities were recovering much quicker. Other factors, in this case the specific characteristics of slums filled with unregistered and poor people, and the fact that these areas prove difficult policy areas for authorities, proved to be an explanation for slow recovery (Garvin, 2010; Aldrich, 2012a).

In sum, the abovementioned factors – governance, aid, damage, socio-economic factors and population density – influence post-disaster recovery to a limited extent. At best, they influence

recovery in the short term, but these factors cannot explain why some communities thrive after crisis while others remain in a state of disarray.

Recovery, Resilience, and Social Capital

The relationship between recovery and resilience is not universally agreed upon (Aldrich, 2012a; Chamlee-Wright & Storr, 2009). In fact, the two terms are often used as synonyms, also in Aldrich's work.

However, in this thesis, I choose to make a very clear distinction between the two concepts. The purpose of this thesis is to examine the role of resilience in post-disaster recovery at the communal level. Recovery is the outcome of a certain process, and resilience is an explanation for this process, in terms of both success and length. A quick recovery indicates high resilience, and a slow recovery implies a community has low resilience.

Resilience

In uncertain times, the way a community responds to a crisis can be decisive for the future of that community. Following the recent terror attacks in Europe, including suicide bombings, gun mass shootings and truck rammings, many citizens have called upon their governments to increase levels of security through mandated bag checks, more (heavily armed) police officers, an increase in security personnel in public places and the introduction of metal detectors and body scans (Aldrich, 2017). These responses are based on a vulnerability-led approach, which can be decisive in how much effect a terror attack – or any other threat – has on a society. The sense of vulnerability installed by a terror attack can do more harm to the norms and values of a society than the attack itself (Furedi, 2008).

However, there is an alternative to hardening societies. The past years have seen an increasing interest in 'resilience'. Resilience is a concept in a search of meaning, and mostly defined by the absence of a clear definition (Furedi, 2008). Resilience is derived from the Latin word *resilire*, meaning "to jump back" or "to recoil" (F. H. Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum, 2008, p. 127). Resilience does not equal resistance. A highly resilient community is still as vulnerable to threats as a community that is hardly resilient. However, the resilient community is better capable of adapting to unforeseen circumstances, and will return more swiftly to a state of normal functioning (F. H. Norris et al., 2008).

Even though resilience is the new ‘buzz-word’ in social studies, and in particular in security studies, there is no consensus on what it entails, or on its definition. The increasing use of the term and the rapid establishment of several governmental organisations in charge of ‘increasing resilience’, are making the absence of a universally agreed on definition more problematic (Furedi, 2008).

Resilience can refer to a process, an outcome, a characteristic, a norm, or effective emergency planning (Denney, 2008). Resilience can also be a metaphor, as it is often used in the studies of physics and mathematics, to describe a material that does not break when under pressure, but rather bends and bounces back (Bodin & Wiman, 2004). The same metaphor can be applied to describe adaptive capabilities of individuals or groups (Bonanno, 2004; Butler, Morland, & Leskin, 2007; Rutter, 1993). Resilience can also be interpreted as a set of capacities (F. H. Norris et al., 2008). Community capacities are more than just resources available to a community. They are characteristics that allow a community to identify and anticipate disasters, as well as allowing for rapid action in times of disaster (Goodman, et al., 1998).

Resilience can be applied to different levels of analysis, including the physical level (Bodin & Nohrstedt, 2016), ecological system level (Waller, 2001; Klein, Nicholls, & Thomalla, 2003), social level (Adger, 2000), organisational level (Denney, 2008), city level (Godschalk, 2003), community level (Ahmed, Seedat, van Niekerk, & Bulbulia, 2004; Pfefferbaum, Reissman, Pfefferbaum, Klomp, & Gurwitch, 2005; Butler, Morland, & Leskin, 2007), and the individual, regional and national level (Bhamra, Dani, & Burnard, 2011).

However, across all these definitions, most scholars seem to agree on two points. Firstly, resilience is mostly referred to as a process or a (set of) characteristic(s), rather than an outcome (Borwn & Kulig, 1996/97; Pfefferbaum, Reissman, Pfefferbaum, Klomp, & Gurwitch, 2005). Secondly, resilience is understood as something that is in constant motion and adapting to new circumstances, rather than a fixed destination (Handmer & Dovers, 1996; Waller, 2001). In fact, a community which is in a fixed state, may lack resilience since it is not adapting to new situations (Adger, 2000; Klein, Nicholls, & Thomalla, 2003).

For purposes of clarity for this thesis, some choices regarding resilience must be made.

Firstly, resilience will be studied at the community level of analysis. Thus, resilience refers to a characteristic of a community, rather than of individuals (Aldrich, 2012a). To be more specific, this thesis studies resilience and social capital at the neighbourhood level. Therefore, in line with Aldrich, community resilience is defined as “a neighbourhood’s capacity to weather

crises such as disasters and engage in effective and efficient recovery through coordinated efforts and cooperative activities” (Aldrich, 2012a, p. 7).

Secondly, resilience is not perceived as a norm or outcome, but rather, in line with Norris et al (2008), as a set of capacities. The presence or absence of certain capacities allow neighbourhoods to anticipate, identify, and rapidly adapt to unforeseen events.

as a set of capacities. In this thesis, the capacities of neighbourhoods

Thirdly, in this thesis I argue that the main capacity capable of explaining differences in recovery paces is social capital. I will elaborate on social capital and its importance to resilience and recovery in the next section of this thesis.

Post-Disaster Resilience

A crisis can transform regular citizens in activists, who organise themselves in formal and informal organizations, clubs, and networks. Civil society, the sector between the government and the market, can play a decisive role in the ability of a community to bounce back after a disaster (Aldrich, 2013). When government nor the market can provide essential services needed post-disaster, a strong civil society may prove to be crucial for survival of individuals and their community.

In line with Aldrich, I perceive resilience as the most important mechanism to explain differences in recovery paces. I am aware that there are plenty different definitions of resilience, and a lack of consensus on what it entails. In addition, the terms resilience and recovery are often used as synonyms. However, as previously mentioned in this thesis, I make a clear distinction between the two concepts. I define recovery as the ability of a community to return to a state of normalcy after a disaster. Resilience is the explanation for differences in recovery paces.

A critical component of resilience is social capital. Roughly speaking, social capital refers to the social relationships between individuals and, in the context of post-disaster research, their ability to materialise these relationships into resources that contribute to their recovery.

Social Capital

Social capital is not a new term. A century ago, Louis Hanifan (1916) referred to social capital as “the good will, fellowship, mutual sympathy, and social intercourse among a group of individuals and families who make up a social unit” (Hanifan, 1916, p. 130). Portes (1987) showed how this social intercourse has (positive) consequences for individuals who are active in their community. Putman (1995; 2000) expanded on this argument by arguing these benefits go beyond individuals and involvement and participation at the communal level is beneficial to the entire community.

According to Bourdieu (1985), social capital alone is not a sufficient explanation for social life trajectories. Rather, social capital is the aggregate behind three other forms of capital, namely economic, cultural and symbolic capital, and it links these resources to a functional and durable network. This network can be based on formally institutionalised or informal relationships, or a combination of the two (Bourdieu, 1985). Coleman (1988) added that social capital does not only explain social interactions between individuals, but also argued that these relations can be actualized into resources. These resources can be used by individuals to help them reach their goal. Lin (2001) added that social capital is not the equivalent of an individual’s social network, but rather the resources that can be mobilized through this network. Individuals invest in their relationships so they can gain returns when needed (Lin, 2001).

The importance of social capital in a community has been proven by a substantial amount of research, in which researchers have shown a strong correlation between high levels of trust among citizens, and better economic and government performance at local, regional and national levels (Coffe & Geys, 2005; Knack, 2002). Daniel Aldrich has taken the next step, and shown in numerous contributions how these strong ties are crucial in post-disaster recovery.

A Critical Role for Social Capital

Aldrich attributes a critical role to social capital in post-disaster recovery. According to him, the variation in post-disaster responses can be explained not by looking at the amount of damage, aid received, or the relative wealth of resident, but by looking at another commodity, namely social capital. Social capital, as defined by Aldrich, are “the resources available through [...] social networks along with the norms and information transmitted through these connections” (Aldrich, 2012a, p. 33).

Social Capital Pre-Disaster: An Alternative Approach

In the contemporary world, citizens are increasingly feeling threatened. Through social media, every horrifying image of terror attacks or other disasters is widely available. People can access these images at any time, and their presence in their daily lives leaves many citizens to demand action from their government to make communities better prepared for these disasters. Often, a demand is heard for ‘hardening’ society, meaning the overall presence of police officers, army personnel, bag checks and metal detectors in public places is increased. However, as also mentioned in this thesis, no amount of investments or preparations can fully prevent a disaster from happening. Millions of people use public transport, go to festivals, and spend time in public space on a daily basis all around the world. All these locations cannot be fully protected at all times (Aldrich, 2017), and thus, hardening societies is not a reasonable solution to prepare contemporary societies for disasters.

Therefore, rather than hardening contemporary society, Aldrich advocates the deepening and broadening of social ties between citizens. During and after disaster, communities with an extensive social infrastructure are more resilient, and thus, better capable of adapting to unforeseen negative events (Aldrich, 2012a). The importance of personal contacts and networks are evident to many in their personal and professional life, but often is overlooked how important these social ties are in post-disaster recovery and how these ties lay the foundation for resilience (Aldrich, 2012a).

One recent example of social capital in practice is the aftermath of the Manchester attack on May 24, 2017. Soon after a young man committed a suicide attack in the middle of an Ariana Grande concert hall which was mostly attended by young girls, the effects of social capital became visible. Driven by feelings of connection and decency, citizens offered free food and a place to stay for those who were stranded; taxi drivers drove people away from the concert hall without charging them; and blood banks soon received so many donations they had to start turning people away. In addition, social media played a large role in sharing information on missing loved ones, using the #missinginManchester on Twitter, and to offer a place to stay using the #roomformanchester. These actions are not coordinated by government authorities, but emerged from feelings of belonging and a willingness to help others. Other European cities that suffered from terror attacks, such as London, Berlin and Paris, experienced the same phenomenon of collective citizen action (Aldrich, 2017).

Social Capital during Disaster: A Potential Lifesaver

During the disaster, high levels of social capital can be lifesaving, since neighbours check on each other or are more willing to put themselves in a vulnerable position to save others. Contrary to popular belief, the vast majority of lives saved after a disaster is not because of firefighters or trained professionals. Rather, neighbours, friends and family rescue each other and provide first-aid in the first hours after an earthquake, flood or fire (Dynes, 2005; Dynes, 2006; Aldrich & Meyer, 2015). A study on the Chicago heat wave in 1995 showed how elderly without any social ties were more likely to die, and often not found for days. The neighbourhoods in which most elderly deceased were neighbourhoods which had little to no public space and where social networks were non-existent. Other neighbourhoods with more social ties clearly saw less deaths (Klinenberg, 2003). In conclusion, knowing your neighbour's name could save your life.

Social Capital Post-Disaster: Information, Trust, and Commitment

High social capital creates three mechanisms which speed up post-disaster recovery.

Firstly, the presence of high social capital means there are many social ties between residents. These ties allow for the rapid dissemination of *information*, and provide those who want to assist with information on what happened, what needs must be addressed, how many victims need help, and what services must be provided. In addition, victims know who they can ask for financial or administrative support (Hurlbert, Haines, & Beggs, 2000). This flow of (informal) information is of high value and cannot easily be 'implemented' through government procedures (Aldrich, 2012b).

Secondly, neighbourhoods with high social capital are capable of mobilising and demanding support from (local) authorities. Often, these communities have closer connections to government officials since they are more politically active. High *trust* among residents is crucial in mobilising neighbourhoods, since it allows for the free flow of information on government procedures, and for collectively asking for loans, supplies, and other financial resources needed for post-disaster recovery (Nakagawa & Shaw, 2004; Shaw & Goda, 2004). Additionally, these communities are able to collectively monitor public space to prevent looting and dumping. These relationships between residents, based on trust, are crucial in post-disaster recovery to attract resources and share inside information on government procedures and contacts (Aldrich, 2012b).

Thirdly, residents who experience high social capital, have much more to lose in case their neighbourhood does not (fully) recover. They are *committed* to their neighbours and have an intrinsic motivation to actively contribute and overcome obstacles to recovery. Residents will use whatever resource available to them to raise their voice and ask authorities for support, or to strap on some boots and provide assistance on the ground. They are loyal and motivated to work towards a solution (Aldrich, 2012b).

Social Capital Post-Disaster: The Dark Sides

Post-disaster, communities with high dense social networks and tight relations with neighbours, relatives and acquaintances, are better capable of recovering than communities with lower social resources (Aldrich, 2012a).

However, this also works the other way around. The absence of social resources can seriously dampen the recovery of communities and cause negative outcomes, and therefore, social capital may prove to be a double-edged sword. The presence of high social capital in one neighbourhood can cause rapid recovery, but at the expense of another neighbourhood where due to a lack of social resources, the residents are unable to organise themselves and attract necessary resources for their recovery. These neighbourhoods may fall into a vicious circle of looting, garbage dumping and riots (Aldrich & Crook, 2008).

Another dark side of social capital is that it can create an us-versus-them paradigm, whereby a strong civil society protects its own citizens, but simultaneously perceives everyone outside of this social circle as a threat. Being excluded may prove to be fatal. Groups with high social capital may be able to mobilize, attract resources and work toward recovery, but only for those who are part of that community. This strong in-group cohesion can cause serious problems when a majority with strong social ties decides to tighten the inner-circle and exclude certain people from the group. Consequently, those who are excluded may be unable to benefit from medical aid or other basic needs (Aldrich & Crook, 2008).

Lastly, the so-called “paradox of civil society” can become highly problematic in post-disaster recovery. The paradox is based on two functions attributed to social capital. The first function assumes that a strong civil society has a positive effect on recovery due to the ability to mobilize, spread information, and cooperate. However, a strong civil society can also function as a counter-weight to the (local) government. This function is important for the livelihood of

a community, since it enables residents to protest against the building of nuclear power plants, airports, or a dam (Hasegawa, 2004).

However, this function may prove to become problematic in times of disaster, since communities may obstruct the placement of (temporary) housing, or the distribution of food packages in their area. Even though the own residents may be welcomed back with open arms (the first function of social capital), the local community obstructs a wider recovery programme, especially when they do not immediately see the benefits of participating and feel they need to protect their community against this government intervention (the second function of social capital) (Aldrich, 2012a; Aldrich & Crook, 2008). The obstruction that a strong civil society may pose against a city-wide recovery programme may cost a lot of resources which could have been spent on the actual recovery. Therefore, a strong civil community may not necessarily speed up the recovery process, but in fact slow it down. The highest levels of social capital may be met with the highest levels of resistance (Aldrich & Crook, 2008). These dark sides undermine the notion that high levels of social capital have a positive effect on recovery paces. It is crucial for policy makers and post-disaster workers to be aware of these dark sides. The implications of these findings will be discussed in part VII, where policy recommendations to increase resilience at the communal level will be discussed.

Main Contributions of Daniel Aldrich

Aldrich's main contribution to the existing body of knowledge on recovery, resilience, and social capital, is 'Building Resilience: Social Capital in Post-Disaster Recovery' (2012a). In this book, Aldrich shows how high social capital is the main explanation for rapid post-disaster recovery, rather than the internal and external factors addressed previously in this section. Therefore, Aldrich urges policy makers and politicians to aim to at least maintain, but preferably deepen, the social capital in their neighbourhoods to make their residents more resistant to crises and better equipped to deal with the aftermath (Aldrich, 2012b).

Using case studies such as the 1923 Tokyo earthquake, 1995 earthquake in Kobe and the 2005 Hurricane Katrina in New Orleans, Daniel Aldrich (2012a) combined two concepts that have recently gained a lot of traction, namely social capital and resilience. Even though these two concepts seem inevitably related to each other, Aldrich showed how seemingly small differences in the social fabric of communities can have tremendous consequences for how these communities respond to disasters, and how long their recovery period takes (Duit, 2014).

One of the key strengths of his work is the combination of case studies and the use of quantitative data. Specific disasters are used to produce viable proxies for social capital, which can then be assessed based on data and procedures he made publicly available. Aldrich set the first steps in calculating social capital, by looking at large numbers of data to find connections or patterns. He quantified social capital, and used real disasters as inspiration for his indicators. Especially his first steps toward measuring and calculating social capital have inspired many other scholars in their (post-)disaster research (Torgler, 2013).

Lastly, Aldrich translates his research on social capital and resilience into concrete policy measures, improving post-disaster operations carried out on the ground, as well as handing tools to public administrators for improving pre-disaster social capital and resilience as part of pre-disaster planning (Duit, 2014).

Criticism to Aldrich

In general, Aldrich's contributions are highly appraised by his colleagues (Duit, 2014; Okada, 2014; Torgler, 2013). The comparative case studies undertaken to explain how social capital is the main explanation for differences in post-disaster recovery has inspired many others and made an important contribution to the existing body of knowledge on social capital, resilience, and recovery. However, several scholars have reservations about Aldrich's work. Their criticism will be discussed here, and I will explain how I attempted to incorporate their criticism in this thesis.

One objection refers to Aldrich's definition and operationalisation of recovery. In his case studies, population return is the main indicator of recovery, which is measured by looking at the occupation and construction of houses, the distribution of aid packages, and yearly census. However, this focus on repopulation may be too limited, since recovery can take many forms and different communities have different post-disaster priorities and needs (Okada, 2014).

Since the purpose of this thesis is to discuss social capital and resilience at the communal level, rather than recovery itself, this criticism is only of partial importance to this thesis. To some extent, this reasoning is also applicable to Aldrich's research. His research showed how differences in recovery can be explained, not by differences in aid distribution or the magnitude of damage, but rather by the social ties between individuals. Even though his focus on repopulation may leave some readers questioning whether this limited scope is justified, his main contribution can be found in his discussion on social capital and how he proves that

seemingly small differences in social fabric of communities can have profound consequences for how these communities differ in post-disaster responses and recovery.

Another objection concerns the role Aldrich attributes to the state – or any other governmental body. Aldrich argues that governments often fail to respond to unforeseen events, due to inefficiency, slowness, or counter-productiveness, and argues that communities must fend for themselves. Aldrich views the (local) government with distrust, and rather focusses on the abilities of communities to self-organise post-disaster recovery initiatives. However, dismissing the role of (local) government this way may be too simplistic, not in the least since local governments highly differ in their capabilities to respond to disasters. In the context of social capital, one may argue that especially vulnerable people with hardly any social capital are highly depending on a government (Duit, 2014). Ineffective and inefficient neighbourhoods are often relying solely on help from the private or public sector and not capable of mobilising themselves (Chamlee-Wright & Storr, 2009). Even when government intervention is ineffective, slow, and counter-productive, this is better than nothing, and may be the last resort for some during disaster (Duit, 2014). For example, fierce criticism is given by Aldrich to evacuation and re-housing programmes whereby social structures are disrupted. Neglecting social capital may make things worse, instead of improving the situation for those in need. However, one scholar argues these examples are taken out of context, and the evacuation and temporary housing programmes were not ideal according to social capital theory, but were at the time the only thing the authorities could do under time pressure and with limited financial means. The authorities did not ignore, nor disregard, the needs of locals and their social structures, but instead tried to find solutions that were within their capacities (Gill, 2014). Therefore, the role of (local) government during disaster and post-disaster recovery may be more complicated than Aldrich portrays in his discussions.

The role of (local) governments during- and post-disaster is difficult to measure. Not in the least, since local authorities highly differ in their capabilities of responding to unforeseen events. In addition, there are differences in the effect government intervention has during-, and post-disaster, and how these effects differ in the short- and long-term. Aldrich explains how an effective government response can make a real difference in short-term recovery, but is not a satisfying explanation for recovery in the medium- to long-term. Using examples from the existing body of knowledge on government intervention in post-disaster recovery, he justifies his decision to dismiss the government as primary actor in post-disaster recovery, and instead focuses on social capital and individuals that make up communities.

However, this thesis does take the role of the local government into account. Since it focuses on social capital in neighbourhoods in The Hague, data on the municipality has been incorporated in the Resilience Score Card. A substantial part of the Resilience Score Card is devoted to linking social capital – a type of social capital that refers to the ability of residents to mobilise their (informal) relationships with their (local) government. However, keeping Aldrich’s criticism of (local) government in mind, the data chosen in this research does not contain information on the number or effectiveness of government-initiated programmes, or the financial resources attributed to these programmes. Rather, the data used is based on the perspective the residents of The Hague have of their local municipality and elected politicians. In line with criticism to Aldrich, I chose to attribute more importance to the role of local government, but in line with Aldrich, I chose to use the citizen’s perspective to assess this specific type of social capital.

Another objection refers to Aldrich’s perspective that social capital can be managed, and strengthened through top-down programmes initiated by government agencies community organisers, aid workers, and experts. However, one of the main arguments of Aldrich to attribute such importance to social capital, is because it is crucial in post-disaster recovery when official institutions and formal structures are failing. One may wonder why Aldrich trusts these same organisations in managing building social capital, while he does not trust them in post-disaster recovery processes (Duit, 2014).

Taking both this criticism and Aldrich’s research into account, I have attempted to propose policy recommendations that require a limited role for the (local) authorities. Rather, the recommendations emphasise how the municipality could encourage grass-root initiatives aimed at increasing social capital.

The last criticism discussed here is not directly directed at Daniel Aldrich, but rather at the notion that societies must prepare themselves for disaster. The increasing use of resilience in disaster planning is facing harsh criticism. Paradoxically, focussing on resilience – the need of a society to be able to withstand unforeseen negative events – also underscores the vulnerability of societies. In other words, a society not confronted by threats is also not in need of proper protection to these responses, so the discussion on protection implies there are security threats a society should prepare itself for. This so-called vulnerability-led approach may increase levels of insecurity, even though its purpose is to make the community more resilient and stronger. In addition, the ‘what if’ thinking encourages speculation and draws attention away from realistic questions and their possible answers (Furedi, 2008).

However, I disagree with this point of view in the context of social capital, resilience, and post-disaster recovery. A community that is highly resilient, due to high social capital, is not only well equipped to adapt rapidly to unforeseen negative effects, but is also a more social neighbourhood. Therefore, I do not agree with the point of view that these perspectives only draw attention to the vulnerabilities of contemporary societies, but rather argue the focus on social capital emphasises the strengths of local communities and the individuals that comprise them.

Conclusion

Recovery is the outcome of a certain process, and resilience is an explanation for this process, in terms of both success and length. A quick recovery indicates high resilience, and a slow recovery implies a community has low resilience.

One of the main explanations for why a community is resilient, is the amount of social capital it possesses. The main focus of this thesis lies on social capital, and the research will discuss different types of social capital, explain how it can be strengthened and protected, and what proxies can be used to measure the level of social capital within a community.

This thesis is a theoretical exercise, since it discusses the concepts resilience and social capital as conceptualised in literature. Despite criticism to Aldrich's work, his theory on social capital and resilience is most suited to assess social capital at the neighbourhood level in The Hague. I will use the insights of this part of the thesis to operationalize these concepts by assessing social capital in different neighbourhoods in The Hague. I add to the existing body of knowledge by creating a Resilience Score Card, which is based on indicators and proxies, and can measure social capital in different neighbourhoods in The Hague. I will show how different neighbourhoods score on these indicators, and explain how the municipality can use this information to increase social capital and resilience at the community level.

Since this thesis assesses social capital in neighbourhoods in The Hague, the next part of this research provides a short summary of the current efforts of the municipality related to resilience. I will explain how my thesis relates to the understanding of resilience at the municipality of The Hague, and how my analysis and policy recommendations can complement the current efforts related to resilience.

III – 100 Resilient Cities Network

The aim of this master thesis is to assess levels of social capital in neighbourhoods in The Hague, and based on this assessment, to draw conclusions on resilience in these neighbourhoods and what to expect in case a disaster would strike.

As discussed in the previous part – the theoretical framework – the concept of resilience is not new. Over the past years, The Hague has drawn more attention to resilience and how this concept can be incorporated in its policies.

The Hague joined the 100 Resilient Cities (100RC) Network in November 2016. The 100 RC Network, pioneered and largely financed by The Rockefeller Foundation, aims to make cities all around the world more resilient to physical, social and economic challenges. 100RC is a peer-to-peer network, currently comprised of 67 cities across 14 time zones. The Network meets regularly, and keeps in contact through an online community to enhance collaboration. The Network functions as force for collective resilience advocacy, leadership, and mobilization, across 100 member cities.¹⁷

This part of the thesis provides a short summary of the Agenda-Setting Meeting, held on December 1, 2016, The Hague. A diverse group of stakeholders discussed resilience and set out priorities for the city. After this short summary, I explain how my master thesis is related to the efforts of the municipality regarding resilience, and how my research can supplement these efforts, and/or provide a new perspective on the importance of resilience and how the concept can be incorporated in policy making.

100RC Network – The Hague

On December 1, 2016, The Hague hosted its Agenda-Setting Workshop, which was attended by a diverse group of stakeholders and city leaders to discuss resilience and formulate the

¹⁷ More information on the 100RC Network can be found on their website:
<http://www.100resilientcities.org/about-us>.

priorities of The Hague. This meeting marked the beginning of The Hague's contribution to the 100RC Network. A full report of the workshop's activities was published in February 2017.¹⁸

Definition

The following definition of resilience can be found on the website of the 100 RC Network. "100 Resilient Cities defines resilience as the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow, no matter what kinds of chronic stresses and acute shocks they experience. Shocks are typically considered single event disasters, such as fires, earthquakes, and floods. Stresses are factors that pressure a city on a daily or reoccurring basis, such as chronic food and water shortages, an overtaxed transportation system, endemic violence or high unemployment. City resilience is about making a city better, in both good times and bad, for the benefit of all its citizens, particularly the poor and vulnerable."¹⁹

Shocks and Stresses

During the agenda setting meeting, several shocks and stresses were formulated that are most applicable to The Hague. *Shocks* are sharp incidents which have an unexpected element to them and pose a threat to the city. The most important shocks for The Hague are (1) terror attacks; (2) failing infrastructure, including but not limited to water, energy, roads and public transport; (3) cyber-attacks; (4) riots; (5) and pandemic disease outbreak. Stresses are processes which develop slowly, and the immediate effect are not always visible. However, when ignored, these stresses may weaken the fabric of city on a day to day or cyclical basis. The four most important stresses for The Hague are (1) climate change; (2) societal instability; (3) inequality; (4) aging infrastructure.²⁰ Sudden shocks or stresses can cause social breakdown, economic decline, or physical collapse.

¹⁸ 100RC The Hague – Agenda-Setting Workshop Feb 2017. http://action.100resilientcities.org/page/-/100rc/pdfs/170207_Hague_ASW_Final_low_res.pdf

¹⁹ 100RC Network. FAQs. <http://www.100resilientcities.org/pages/100RC-FAQ#/-/>.

²⁰ Resilient Den Haag.

<https://denhaag.raadsinformatie.nl/document/4857640/2/RIS296075%20Resilient%20Den%20Haag>.

Relevance to this thesis

Most relevant to this thesis, is how my research relates to the current efforts undertaken to make The Hague a more resilient city. Even though the definitions used in this thesis and by the 100RC Network are quite similar, there is one important difference.

The main difference between my approach in this study and the approach of the city of The Hague is whether resilience is perceived as a *goal*, or as a *means*.

Resilience as Goal

In this master thesis, increasing social capital and resilience is a goal. Increasing these levels pre-disasters makes a community (and/or city) better equipped to respond and adapt to unforeseen negative effects. The policy recommendations in part VI outline measures the municipality can take to increase social capital, but they do not prevent a specific type of disaster. Rather, they make the entire city more resilient.

Resilience as Means

The municipality's approach to resilience is different. During the Agenda-Setting Workshop, organised in December 2016, attended by a diverse group of stakeholders, no consensus was reached on the definition or meaning of resilience. However, it is clear from the report of the workshop that increasing resilience is not a goal. Rather, resilience is used as a system, a sort of lens, through which to look at difficult problems.

Resilience is not a goal in itself, but an extra layer added to the solution of pressing problems. The outcome of these processes are solutions that are resilient, meaning they are reflective and resourceful; robust, redundant and flexible; and inclusive and integrated.²¹

The municipality's main goal is to solve pressing problems. If the solutions to these problems are resilient, this is an added bonus. However, increasing resilience is not a goal in itself.

²¹ 100RC Network. Agenda-Setting-Workshop The Hague. Source: http://action.100resilientcities.org/page/-/100rc/pdfs/170207_Hague_ASW_Final_low_res.pdf.

The next part of this thesis introduces the Resilience Score Card. The implications of the scores for the different neighbourhoods in The Hague are discussed in part VI. I explain how, from these implications, several policy recommendations are derived.

IV – Resilience Score Card

As explained in part II, after a disaster, a community that is highly resilient is better capable to recover than a community that lacks resilience. Social capital is a very important component of resilience. The presence of social capital is linked to the resilience of a community, and thus to the ability of the community to recover from the disaster. Based on the discussed literature in part II, characteristics of a resilient neighbourhood can be formulated. The different characteristics will be translated into a ‘resilient score-card’. This Resilience Score Card is used to assess the level of social capital in all 44 neighbourhoods of The Hague.

Even though I realise a (neighbourhood) community is not merely the sum or the average of a group of people, and a neighbourhood can constitute of a couple of different social groups, I have chosen to focus on neighbourhoods in this research. Firstly, since the data I use for the Resilience Score Card is only available at a neighbourhood or district level, and not at an individual level. Research on individuals or smaller groups within neighbourhoods would not have been possible within the timeframe of this thesis. But secondly, and more importantly, since the focus on neighbourhoods fits well within the policy framework of The Hague. Over the past years, the municipality has increasingly tried to solve (policy) problems through working together with locals, often representatives of a specific neighbourhood, or through a community gathering at the local neighbourhood centre. In a city that is expecting an increase in residents of roughly 100,000 people over the next fifteen years, the municipality has sought to install a sense of identity in its residents whereby they feel increasingly connected to their neighbourhood. Through community gatherings, local festivals, and other festivities specifically designed for a specific neighbourhood, the city chose to solve issues at the neighbourhood/community level, rather than the city level.

This Resilience Score Card is my main contribution to the existing body of knowledge on resilience, social capital, and post-disaster recovery. Aldrich’s work has proven the importance of social capital, but the main difference between his research and mine is that he established the presence or absence of social capital after a disaster has happened (Aldrich, 2012b; Aldrich & Meyer, 2015; Aldrich & Sawada, 2015).

He uses social capital as an explanation for differences in recovery paces after the disaster. My research is different since it does not explain different outcomes, since it does not examine a specific disaster that has occurred in The Hague. Rather, it shows which neighbourhoods are best equipped to recovery quickly after something would happen in the future. I approach the concepts resilience and social capital differently, by not using them as an explanation, but rather as tools that can be used to increase resilience at the communal level and making the city of The Hague better equipped to deal with disasters.

Since it is highly difficult to assess social capital, proxies have been used. For example, one of Aldrich's explanations for differences in recovery faces after Hurricane Katrina, was the willingness of residents to voluntarily contribute time and resources to the recovery of their neighbourhood (Aldrich, 2012a). He discovered that neighbourhoods with high levels of volunteering prior to the disaster recovered much quicker since residents were continuing this tradition of voluntarily spending time to help others. I have translated this information into my Resilience Score Card, and looked at how many residents in The Hague spent time volunteering. The average in The Hague is 19,5%, in city district Segbroek 27,2%, and in city district Laak only 13,0%. Based on these numbers, the social capital in Segbroek is high, and the social capital in Laak is low. In addition to this example, dozens of other indicators are present in the Resilience Score Card. All these data combined show which neighbourhoods have the highest and lowest levels of social capital and are thus most and least resilient.

The indicator mentioned above – time spent volunteering – is an example of an indicator that has been used by Aldrich. However, a lot of the data I used to assess social capital is connected to indicators that have not been used by Aldrich, but are associated with indicators he used in his own research. For example, I have added to the indicator 'time spent volunteering', the proxy 'parents active at children's school'. Even though the last proxy was never explicitly mentioned by Aldrich, they are part of the same category and are associated with each other. Therefore, I made the decision to include these data in my Resilience Score Card. Every proxy is properly introduced and it is explained how the proxy is related to the type of social capital that is assessed.

I will not gather the necessary data myself, but use existing data from previous surveys and research statistics provided by the city of The Hague.

The Resilience Score Card is divided in three main categories, based on the three types of social capital. These three types are introduced in the next paragraph.

Three types of social capital

Aldrich defines social capital as “the resources available through bonding, bridging, and linking social networks along with the norms and information transmitted through these connections” (Aldrich, 2012a, p. 33). A community that experiences high levels of all three types is a highly resilient community (Aldrich & Meyer, 2015).

Bonding social capital is the most common type of social capital and often evolves naturally between individuals who are part of a group that is emotionally close, such as families or friends. During disaster, 85% of individuals would turn to at least one family member for help, and 36% would solely rely on family members for assistance (F. H. Norris et al., 2002). In practice, usually family members are indeed the first responders and bonding social capital is most common to be present between family members or very close friends (Garrison & Sasser, 2009; Hurlbert, Haines, & Beggs, 2000).

However, bonding social capital is not restricted to families. A study uncovered that groups who had very little in common in terms of cultural and economic characteristics, may also experience high bonding social capital. Differences in ethnicity or social status were overcome through high levels of trust, norms and participation (Nakagawa & Shaw, 2004). Another study showed how a community with high levels of trust and membership of a Catholic Church increased collective response and the community recovered much quicker than a neighbouring community, even though they had less financial resources and suffered more damage. The mere presence of the church does not mean there is social capital, but this church was highly active in the neighbourhood and served as a platform post-disaster where residents could come seeking for help, or assisting wherever they could (Chamlee-Wright & Storr, 2009).

Rather than economic or cultural status, groups with high bonding social capital are often connected to each other through high similarity in attitudes, available information and resources. During a disaster, groups with high bonding social capital provide necessary personal assistance, comfort and social support (Hurlbert et al., 2000). People who experience high bonding social capital feel closely connected to each other, not only during times of crises. A very active church group, with members from all different socio-economic classes, can

experience high bonding social capital despite the fact that the members have relatively little in common.

Disasters have the ability to destroy communities, but in some circumstances, namely when communities are strong and residents are committed to each other, a community actually increases the sense of interdependency and belonging between individuals, thus increasing the bonding social capital in the community (Edelstein, 1988).

However, the presence of such strong bonding capital between members who have only a few things in common is very rare. More often, people who share only one or a few characteristics – such as membership of the same church, race, or a certain economic class – experience *bridging social capital*. This type of social capital is less strong and less common than bonding social capital, and becomes mostly visible in ties between individuals or communities during times of crisis. The relationships between individuals from different groups show more diversity and share less resources than bonding social capital. Bridging social capital can be found in members of horizontal organisations such as sports or religious clubs, or in political and civic institutions (Aldrich & Meyer, 2015). During and after a disaster, bridging social capital is most effective when it allows victims to use their social ties with individuals outside the affected area.

In Aldrich's work, the difference between bonding and bridging capital is not always made clear. However, for pragmatic reasons and to allow the assessment of different neighbourhood communities, a clear distinction must be made. Therefore, I choose to divide the two types of social capital based on their ability to welcome newcomers to their community and give them the opportunity to obtain and experience the same levels of trust and commitment as long-time members of the group.

Bonding social capital is present among people who have tight relationships with each other, and this type of social capital is hard to obtain, since gaining access to this group is difficult. For example, family members experience high levels of bonding social capital. It is relatively hard for newcomers to obtain that same level of trust and friendship. Another characteristic of bonding social capital is that all members of this community know each other. This also makes extracting yourself from this community very hard. Even if a person wishes to sever all ties with (certain) family members, he or she will always be a member of this family. Bonding social capital is associated with terms as love, trust, friendship and a commitment to each other.

Bridging social capital, on the other hand, is not necessarily associated with these terms. It is more accessible and easier to obtain than bonding capital, and more welcome to newcomers. Bridging social capital can be visualised as a spider's web, with the spider being the individual, and the web its social relations with others.

Also, it is not necessary for all members to know each other. The fact that two individuals are members of the same club makes them experience bridging social capital, even when they do not even know each other. However, the openness of the community and the type of social capital also weakens the strength of this type of social capital since a person extract himself fairly easy from the group, for example by cancelling his membership from an organisation.

Even though, as previously mentioned, bonding and bridging social capital are not to be used as synonyms, the two types of social capital can overlap and complement each other. However, their effect on post-disaster recovery is different, since bonding capital is most effective in the short-term (e.g. rescuing, first responders, first aid), while bridging capital is mostly effecting long-term recovery (e.g. sharing information on attracting financial resources or connections with (local) politicians) (Hawkins & Maurer, 2010). However, these functions may overlap. For example, in a local sports club, an organisation whose members experience mainly bridging social capital which benefit them in the long term. Immediately after the crisis, this sports club may serve as temporary shelter or a place where money is raised to assist victims in the short term (A., Hurlbert, & Beggs, 1996).

The third type is *linking social capital*, which connects civilians to those who are in power. The relationships in this type of social capital are formalized through procedures or institutions, and based on mutual trust and respect (Szreter & Woolcock, 2004). During or after a disaster, a community with linking social capital is capable of contacting people who are in power to help them ask for help, or attract necessary resources (Aldrich & Meyer, 2015).

A community that has high levels of all three types of social capital, is highly resilient. Unfortunately, the relative absence of one type of social capital has the potential of seriously undermining resilience and hampering post-disaster recovery, even when the other types are highly present.

A community with high levels of one type, and low levels of the other two types, is still less resilient than a community with only medium levels of all three types of social capital (Elliott, Haney, & Sams-Abiodun, 2010). A community is stronger when all three types are equally available, as opposed to a community with high presence of one type and low presence of the

other two. For example, a community with high bonding capital may suffer less deaths in the short term since family members will provide first-aid and look out for each other immediately after the disaster happens. However, without bridging or linking social capital, this community may take way longer to recover compared to another community, because they lack the information necessary to attract financial resources or supplies from other parties, or because they fail to reach out to (local) politicians for help (Hawkins & Maurer, 2010).

Thus, at different stages in the post-disaster recovery process, the three types of social capital fulfil different functions. The strongest and most resilient community has high levels of all three types of social capital. If one type is missing, the community is significantly less resilient and post-disaster recovery may take way longer. However, there is a ranking among the types of social capital and they are not all equally important. Social capital, resilience and rapid post-disaster recovery start with the first type; bonding social capital. Firstly, since bonding social capital is extremely important in the first hours after the disaster. Having family and close friends who provide immediate assistance can save a significant number of lives. Mutual trust, shared norms and commitment, are crucial to 'kick-start' recovery (Reininger et al., 2013). After this first phase, bridging and linking social capital increase in importance, especially when looking at recovery in the long term.

Measurement and Proxies of Social Capital

Capturing and measuring social capital through objective measures is extremely difficult, and consensus is lacking among scientists on the best approach (Aldrich & Meyer, Social Capital and Community Resilience, 2015). Roughly, there are two different approaches, namely; (1) the cognitive approach; and (2) the behavioural approach. The sections below present what each approach entails and how this thesis research employs both approaches.

The Cognitive Approach

This approach examines the perceptions of individuals and groups, and tries to determine the presence of social capital through surveys and interviews. A researcher looks at the intentions and perspectives of the group he is researching (Putnam, 2000). For example, general trust is an essential component of social capital. This can be measured by asking members of a community whether they experience loyalty, honesty and trust from people in general, and their

neighbours in specific. From these answers, the presence of social capital can be assessed (Nakagawa & Shaw, 2004). For example, someone who has very little trust in people in general, but very high trust in his neighbours, experiences high social capital. Other possible topics for surveys could include levels of trust between residents and their (local) government.

The main problem with this approach is that sometimes people say they feel something or plan to do something, but in reality never do. Social capital is not suddenly present because people say so. Their actions might actually be contradictory to what they are saying. On the other hand, people may have social capital without realising it. These limitations can be addressed by combining the cognitive approach with the behavioural approach.

The Behavioural Approach

The behavioural approach looks at the day-to-day activities of residents, and deduces the presence or absence of social capital from these activities. So, rather than asking people if they trust their neighbours, scientists look at how often people leave their doors unlocked.²² This approach deduces social capital from behaviour, instead of explicitly asking people if they feel social capital is present. The fact that people trust each other and that there is social capital can be concluded based on their behaviour. Neighbours may not even realise how much they trust each other, or that social capital is present. Other behavioural indicators are hours spent volunteering, donating blood, membership of horizontal organisations or the number of names of known neighbours. In addition, questions can be asked about the depth of relationships, thus the amount of people you discuss your most intimate problems with. All the above mentioned behavioural indicators are indicators of social capital and of trust (Aldrich & Meyer, 2015).

The main limitation with this approach is that when most of the boxes are ticked, a scientist may conclude there is a social capital, while in reality, there may not be a shared feeling of commitment or sense of belonging at all. There may be plenty of other reasons why people are engaged in the community, go vote, or spend time volunteering that has nothing to do with being connected to the neighbourhood (Aldrich & Meyer, 2015).

²² The National Social Capital Benchmark Community Survey from Harvard University is the largest and most commonly used survey of social capital.

Combining the Cognitive and Behavioural Approach

Thus, the cognitive approach aims to determine the presence or absence of social capital based on the perception individuals have of their neighbours and people in general, while the behaviour approach looks at the day-to-day activities of residents, and deduces the presence or absence of social capital from these activities. By combining the approaches, the main limitations of both methods are combatted. Therefore, to assess the level of social capital in neighbourhoods in The Hague, both methods will be used.

Resilience Score Card

To assess the level of social capital present in each neighbourhood in The Hague, I have created a Resilience Score Card. Using both the cognitive and behavioural method, the amount of social capital is assessed and comparisons are drawn between the different neighbourhoods. This card is divided in three categories, responding to the three different types of social capital. Each type is divided in several sub-categories, which include several indicators for social capital.

Since there is no research on social capital in which residents of The Hague directly answer questions about their social capital, proxies will be used. For example, a citizen has not been asked whether he or she experiences high levels of bonding social capital, but instead indicated if he/she feels at home in his/her neighbourhood, whether the interactions with neighbours are pleasant, if he/she feels safe at home, or if he/she feels structurally discriminated against by neighbours. When the majority of neighbourhood residents indicate they feel very much at home, are not discriminated against, are satisfied with the amount of social contacts in their life and feel safe both at home and in their neighbourhood, the amount of bonding social capital is high since bonding social capital can only evolve when people have regular contact and feel safe.

The Resilience Score Card is created as follows.

Firstly, I used the existing body of knowledge to search for indicators that were proven to have a positive or negative effect on social capital, resilience, and recovery in a (post-)disaster context. For example, a study regarding Hurricane Katrina, found that areas in which a relative high percentage of the population was structurally volunteering prior to the disaster, recovered

much quicker than communities where less people structurally volunteered(Hawkins & Maurer, 2010). Thus, this study proved the causation between volunteering and a quicker recovery.

Secondly, I looked at the data which was at my disposal, provided by the municipality of The Hague, and looked for information on people in The Hague who structurally volunteer. I found several indicators related to volunteering, on the neighbourhood level of analysis, namely; (1) % of residents structurally volunteering; (2) % of parents active at their children’s school; (3) % of residents who feel they are contributing in a positive manner to their neighbourhood; and (4) % of residents who are willing to voluntarily contribute to increasing the viability of their neighbourhood. All these indicators combined provide information on volunteering.

In total, 44 indicators were chosen, based on the abovementioned method. I used the existing body of knowledge, as well as the data provided by the municipality, to create a Resilience Score Card.

How to Use the Resilience Score Card

The Resilience Score Card is an assessment of social capital in different neighbourhoods in The Hague. Each indicator goes through two steps: (1) categorising the scores of the indicators; (2) assessing the effect of each category on social capital at the community level.

Step 1: Categorising the scores of the indicators

Indicator	AVERAGE THE HAGUE	STANDARD DEVIATION	far below average	below average	average	above average	far above average
Index Social Quality	5,5	0,54	< 4,69	4,69 - 5,22	5,23 - 5,77	5,78 - 6,31	> 6,31
% feels at home in neighbourhood	48,40	10,02	< 33,37	33,37 - 53,40	43,39 - 53,41	53,42 - 63,43	> 63,43
% people in the neighbourhood know each other	62,00	7,58	< 50,63	50,63 - 58,20	58,21 - 65,79	65,79 - 73,73	> 73,73
% has a lot of contact with neighbours	29,70	3,17	< 24,94	24,94 - 28,10	28,11 - 31,28	31,29 - 34,45	> 34,45
% interaction between neighbours is pleasant	57,40	11,93	< 39,50	39,50 - 51,42	51,43 - 63,37	63,38 - 75,30	> 75,30
% feels discriminated by neighbours	3,20	1,24	< 1,34	1,34 - 2,57	2,58 - 3,82	3,83 - 5,06	> 5,06

1 - How to Use the RSC Step 1

To categorise the indicators, I used the standard deviation. The standard deviation is a tool commonly used in statistics, and refers to a quantity used to measure the amount of variation of a set of values. In other words, the standard deviation shows how spread out different values are, by providing us with the ‘mean of the mean’. The standard deviation is unbiased, and not influenced by personal feelings or prejudices. It allows an objective categorisation of

the different neighbourhoods. The average, as well as the standard deviation, is calculated based on data provided by the municipality of The Hague.

The categories are calculated as follows:

- Category average: all results larger than (average minus $0,5 \times$ standard deviation), and smaller than (average plus $0,5 \times$ standard deviation);
 - o For example: if the average result is 10, and the standard deviation 1,2, the category 'average' includes all results between (10 minus $0,5 \times 1,2 =$) 9,4, and (10 plus $0,5 \times 1,2 =$) 10,6.
- Category below average: lowest result of the category 'average' minus the standard deviation;
 - o In the abovementioned example, the category 'below average' includes all results between 9,4 and $(9,4 - 1,2) = 8,2$.
- Category above average: highest result of the category 'average' plus the standard deviation;
 - o In the abovementioned example, the category 'above average' includes all results between 10,6 and $(10,6 + 1,2 =) 11,8$.
- Category far below average: all results lower than the lowest result of the category 'below average';
 - o All results below 8,2 fall within the category 'far below average'.
- Category far above average: all results higher than the highest result of the category 'above average';
 - o All results above 11,8 fall within the category 'far above average'.

Placing the different results in the categories does not attribute any value to them, or provide insight in their effect on social capital. Therefore, in step two, each category is colour-coded, which indicates their effect on social capital at the community level.

Step 2: Assessing the effect of each category on social capital at the community level

Indicator	AVERAGE THE HAGUE	STANDARD DEVIATION	far below average	below average	average	above average	far above average
Index Social Quality	5,5	0,54	< 4,69	4,69 - 5,22	5,23 - 5,77	5,78 - 6,31	> 6,31
% feels at home in neighbourhood	48,40	10,02	< 33,37	33,37 - 53,40	43,39 - 53,41	53,42 - 63,43	> 63,43
% people in the neighbourhood know each other	62,00	7,58	< 50,63	50,63 - 58,20	58,21 - 65,79	65,79 - 73,73	> 73,73
% has a lot of contact with neighbours	29,70	3,17	< 24,94	24,94 - 28,10	28,11 - 31,28	31,29 - 34,45	> 34,45
% interaction between neighbours is pleasant	57,40	11,93	< 39,50	39,50 - 51,42	51,43 - 63,37	63,38 - 75,30	> 75,30
% feels discriminated by neighbours	3,20	1,24	< 1,34	1,34 - 2,57	2,58 - 3,82	3,83 - 5,06	> 5,06

2 - How to Use the RSC Step 2

In step 2, I assess the effect of each category on social capital at the community level. Each category is colourised, and has one of five potential effects on social capital, as is shown in the figure below. There are five possible effects an indicator can have on social capital at the community level, namely; very positive; positive; neutral; negative; and very negative.

Very positive
Positive
Neutral
Negative
Very negative

3 - Five Potential Effects on Social Capital at the Communal Level

Some indicators have more effect on social capital than others. Therefore, a result categorised as 'average' does not equal a 'neutral' effect on social capital. For example, in figure 1, it is visible how the indicator related to discrimination, has four negative and one neutral score. In the next paragraphs I discuss all indicators, and in this case, I will argue how being discriminated can never have a positive effect on social capital, hence the absence of positive scores.

The attribution of colours to the different categories is an assessment which is the result of my interpretation of the indicators, which is based upon the existing body of knowledge, supplemented by my own research. In the next paragraphs, I explain which indicators I have adopted in the Resilience Score Card, and justify the colours attributed to the different categories.

Developing Indicators to Measure Social Capital

As previously mentioned in this part, there are three types of social capital, namely; (1) bonding social capital; (2) bridging social capital; and (3) linking social capital. The Resilience Score Card is built on these three types. Each type is divided in several sub-categories.

In total, there are 44 indicators, divided over the three types of social capital. The following paragraphs will introduce each indicator, and explain what effect each category has on social capital pre-disaster.

Prior to introducing the indicators, it is important to repeat the purpose of this thesis, namely to assess the level of social capital at the neighbourhood level of analysis *pre-disaster*, in an effort to predict what is to be expected of these neighbourhoods in case a real disaster would happen. This thesis is not anticipating a specific type of disaster, nor is it decreasing the city's vulnerability to disaster.

This is an important distinction to keep in mind while discussing the different indicators, since the discussion in part V, as well as the policy recommendations in part VI, are concerned with increasing social capital at the community level pre-disaster. However, in the process of justifying why some indicators are part of the Resilience Score Card, or why some have more effect on social capital than others, sometimes (empirical) information on the effect of these types of social capital during- or post-disaster is used. It is however, important to realise that the information in this thesis is assessed in a pre-disaster context.

Bonding Social Capital

The first type of social capital is based on mutual trust, shared norms and shared perceptions between individuals. This type is strongest between close friends and relatives. Assessing bonding social capital is based on three sub-categories.

Sub-category 1: Social Contacts and Binding

The sense of belonging to a community is based on feelings of trust and safety(Perkins & Long, 2002). Residents who experience bonding social capital feel they are all part of a tight community, where they are respected, and their needs are fulfilled(Ahmed, Seedat, van Niekerk, & Bulbulia, 2004; Goodman et al., 1998; Landau & Saul, 2004; Tse & Liew, 2004).

Therefore, this first sub-category focusses on factors which indicate levels of trust and commitment between neighbours.

The relationship between neighbours is often demanded by circumstance. Your (direct) neighbours are not always people of your own choosing. However, a relationship of some sort often develops between direct neighbours, which may deepen over time. Assessing whether a deep relationship, based on trust and commitment, is present between neighbours, is difficult. However, the factors presented below imply trust and commitment.

Sub-category 1: Social Contacts and Binding								
Indicator	AVERAGE THE HAGUE	STANDARD DEVIATION	far below average	below average	average	above average	far above average	
Index Social Quality	5,5	0,54	< 4,69	4,69 - 5,22	5,23 - 5,77	5,78 - 6,31	> 6,31	
% feels at home in neighbourhood	48,40	10,02	< 33,37	33,37 - 53,40	43,39 - 53,41	53,42 - 63,43	> 63,43	
% people in the neighbourhood know each other	62,00	7,58	< 50,63	50,63 - 58,20	58,21 - 65,79	65,79 - 73,73	> 73,73	
% has a lot of contact with neighbours	29,70	3,17	< 24,94	24,94 - 28,10	28,11 - 31,28	31,29 - 34,45	> 34,45	
% interaction between neighbours is pleasant	57,40	11,93	< 39,50	39,50 - 51,42	51,43 - 63,37	63,38 - 75,30	> 75,30	
% feels discriminated by neighbours	3,20	1,24	< 1,34	1,34 - 2,57	2,58 - 3,82	3,83 - 5,06	> 5,06	

4 - Bonding Social Capital - Social Contacts and Binding

Most of these factors – feeling at home; knowing the people in your neighbourhood; having a lot of contact with neighbours – have in common that they imply deliberate choices of individuals to deepen their relationships with their neighbours, instead of being relationship created by circumstance.

However, having a lot of contact with your neighbours does not automatically lead to higher bonding social capital. In fact, when the interactions are unpleasant, or involve discrimination and exclusion, the effects on bonding social capital are negative. In general, social capital is built very slowly, but can be destroyed very rapidly. This is especially true with bonding social capital, since this type is based on feelings of trust, commitment and belonging. Those are sentiments that develop over a longer period of time but can be destroyed rapidly (Aldrich & Meyer, 2015).

Feeling excluded from a community undermines the ability to start developing meaningful relationships (Hawkins & Maurer, 2010). When issues of race become a factor, bonding social capital rapidly declines (Hero, 2003; Putnam, 2000). Therefore, even though discrimination is relatively rare in The Hague – with a city average of 3,2%, high importance is attributed to the presence of discrimination at the neighbourhood level.

Sub-category 2: Moving Behaviour Residents

The process of neighbours turning into trustworthy friends, requires time. A large amount of people moving to a new house in a neighbourhood has a negative effect on bonding social capital, since the rapid changes in the neighbourhood undermine the ability to develop meaningful relationships.

Residents who move often are at risk of experiencing a lack of place attachment and a lacking sense of community (Tartaglia, 2006). Being attached to a place increases the emotional connection to one's surroundings (Altman & Low, 1992; Manzo & Perkins, 2006). Place attachment increases the will of a community to rebuild post-disaster and revitalize their community (Altman & Low, 1992).

Therefore, neighbourhoods with a less steady population and a lot of relocation, are less capable of building meaningful relationships and bonding social capital than neighbourhoods in which people have lived for at least a decade.

Sub-category 2: Moving Behaviour Residents								
Indicator	AVERAGE THE HAGUE	STANDARD DEVIATION		far below average	below average	average	above average	far above average
% has lived at current address since before 2000	35,00	5,35		< 26,97	26,97 - 32,31	32,32 - 37,68	37,67 - 43,03	> 43,03
% moved house in the past three years	13,80	2,48		< 10,08	10,08 - 12,56	12,56 - 15,04	15,05 - 17,53	> 17,53

5 - Bonding Social Capital - Moving Behaviour Residents

Sub-category 3: Viability & Safety

To allow strong and meaningful relationships to evolve, it is necessary for individuals to feel safe and at home in their neighbourhood. People who feel safe in their homes and neighbourhoods, enjoy living in their neighbourhood. Feelings of unsafety, and high perceptions of social nuisance undermine this (Babb, 2005). Feelings of unsafety have a substantial negative effect on bonding social capital. Therefore, high relevance has been attributed to the indicators related to perceptions of safety.

Sub-category 3: Viability and Safety								
Indicator	AVERAGE THE HAGUE	STANDARD DEVIATION		far below average	below average	average	above average	far above average
Grade safety	6,5	0,62		< 5,88	5,88 - 6,18	6,19 - 6,81	6,82 - 7,12	> 7,12
% feels unsafe in own neighbourhood	31,40	11,72		< 13,82	13,82 - 25,53	25,54 - 37,26	37,27 - 48,98	> 48,98
% feels unsafe in own home	13,60	5,26		< 5,71	5,71 - 10,96	10,97 - 16,23	16,24 - 21,49	> 21,49
Perception social nuisance	2,1	0,96		< 0,66	0,66 - 1,61	1,62 - 2,58	2,59 - 3,54	> 3,54
% probability of burglary	19,30	7,38		< 8,23	8,23 - 15,60	15,61 - 22,99	23,00 - 30,37	> 30,37
% probability of street robbery	8,20	5,29		< 0,26	0,26 - 5,54	5,55 - 10,84	10,85 - 16,13	> 16,13

6 - Bonding Social Capital - Viability and Safety

Not only the perception of the viability and safety of the neighbourhood is relevant to social capital, the actual crime rates of the neighbourhoods are also important. These crime rates become even more important when compared to the feelings of unsafety. As mentioned in part II, the behavioural approach and cognitive approach combined often provides the clearest assessment of the presence or absence of social capital. In some neighbourhoods, residents indicate high levels of safety, while crimes rates are higher than average. This is an indication of high levels of bonding social capital, since residents may be in a harmful environment, but feel supported by a strong social network. The other way around, high levels of unsafety combined with low crime rates, indicate low levels of social capital.

Bridging Social Capital

The second type of social capital is best visualised as a spider’s web, in which the individual is the spider and its web the amount of its relationships. The web is thickest when the individual is capable of mobilising these relationships.

The cognitive approach is used to deduce social capital from people’s perceptions of their lives, their satisfaction with their neighbourhoods, and their neighbours. The behavioural approach is used to deduce social capital from residents’ participation in social activities, or membership of associations.

Sub-category 1: Social Contacts & Binding

People who are friendly to each other, but do not necessarily interact regularly, experience binding capital which can be mobilised in times of crisis. Across various religious, ethnic and economic groups, a coalition can be build (Hawkins & Maurer, 2010).

Sub-category 1: Social Contacts and Binding								
Indicator	AVERAGE THE HAGUE	STANDARD DEVIATION	far below average	below average	average	above average	far above average	
% has enough social contacts (in and out of neighbourhood)	88,10	3,41	< 82,98	82,98 - 86,38	86,39 - 89,81	89,82 - 93,23	> 93,23	
% in need of more social contacts	29,00	5,23	< 21,15	21,15 - 26,38	26,38 - 31,62	31,62 - 36,85	> 36,85	
% satisfied with the demographic composition of my neighbourhood	54,70	15,05	< 32,12	32,12 - 47,16	47,17 - 62,23	62,24 - 77,28	> 77,28	
% in my neighbourhood, people from different ethnic backgrounds live and work together	66,25	17,07	< 40,64	40,64 - 57,70	57,71 - 74,79	74,80 - 91,86	> 91,86	
% the interactions between people from different ethnic backgrounds is positive	63,63	6,30	< 54,18	54,18 - 60,47	60,48 - 66,78	66,78 - 73,08	> 73,08	
% sufficient knowledge of Dutch language since settling in the Netherlands after 2010	5,50	2,54	< 1,69	1,69 - 4,22	4,23 - 6,77	6,78 - 9,31	> 9,31	

7 - Bridging Social Capital - Social Contacts and Binding

This category – social contacts and binding – is also discussed in the paragraph on bonding social capital. However, the indicators used here are less strict, and indicate a looser sense of community than used with bonding social capital.

Bridging social capital is present when residents have enough social contacts, both within and outside of the neighbourhood, and are not in need of more social contacts. For social relations to develop, speaking the same language is a necessary pre-condition. Therefore, sufficient knowledge of the Dutch language is required in neighbourhoods in The Hague.

During a disaster, these proxies are related to the ability to share relevant information during, and post-disaster. The adaptive abilities of a community thrive when there is common understanding and meaning (Comfort, 2005). This information is most valuable when it comes from a trusted source, which in the context of neighbourhoods, is an individual that is known by his neighbours and with whom interactions are mostly pleasant (Longstaff, 2005).

Sub-category 2: Perception Neighbourhood

This sub-category has two dimensions, and influences bridging social capital in two ways.

Sub-category 2: Perception Neighbourhood								
Indicator	AVERAGE THE HAGUE	STANDARD DEVIATION	far below average	below average	average	above average	far above average	
Grade quality living environment	6,9	0,65	< 5,92	5,92 - 6,56	6,57 - 7,23	7,24 - 7,88	> 7,88	
% my neighbourhood has improved over the past year	16,47	5,27	< 8,56	8,56 - 13,82	13,83 - 19,11	19,12 - 24,38	> 24,38	
% my neighbourhood has fallen backward the past year	20,30	7,14	< 9,43	9,43 - 16,56	16,57 - 23,87	23,88 - 31,01	> 31,01	
Grade neighbourhood facilities	6,5	0,96	< 5,0	5,0 - 5,9	6,0 - 6,9	7,0 - 7,9	> 7,90	
% satisfied with playgrounds for children	58,80	8,30	< 46,35	46,35 - 54,64	54,65 - 62,95	62,96 - 71,25	> 71,25	
% satisfied with facilities for youngsters	24,60	2,13	< 21,40	21,40 - 23,52	23,53 - 25,67	25,68 - 27,80	> 27,80	

8 - Bridging Social Capital - Perception Neighbourhood

Firstly, it is relevant to consider these indicators as part of the analysis and interpretation of other (sub-)categories. Views about the neighbourhood, its problems, current status, and satisfaction with playgrounds and other facilities can help interpreting results from other (sub-)categories, and give insights in possible policy-recommendations aimed at improving the residents’ satisfaction with their neighbourhood (Babb, 2005). For example, a high percentage of people moving away from the neighbourhood may be explained by the average resident being highly unsatisfied with the facilities in the neighbourhood. Or, a high percentage of

people moving away, despite residents highly appreciating their neighbourhood facilities, implies a different reason for the rapid moving of residents.

The second way in which these indicators are influencing bridging social capital is because a high appreciation of neighbourhood facilities means residents regularly use these facilities. Playgrounds, and other accessible public places increase the number of possibilities for people to meet each other, and thus, to broaden (and deepen) their ‘spider-web’ of social relations, thereby increasing their bridging social capital.

Sub-category 3: Volunteering and Community Work

A study regarding Hurricane Katrina proved a correlation between residents structurally volunteering and a quicker recovery pace. Areas in which a relative high percentage of the population was structurally volunteering prior to the disaster, recovered much quicker than communities where less people structurally volunteered (Hawkins & Maurer, 2010). Volunteering is an indicator related to social engagement and social participation, as well as the other factors present in this sub-category (Álvarez & Romani, 2016).

Sub-category 3: Volunteering and Community Work								
Indicator	AVERAGE THE HAGUE	STANDARD DEVIATION		far below average	below average	average	above average	far above average
% is doing volunteer work	19,50	5,09		< 11,86	11,86 - 16,94	16,95 - 22,05	22,06 - 27,14	> 27,14
% parents volunteering at their children's school	20,70	4,56		< 13,86	13,86 - 18,41	18,42 - 22,98	22,99 - 27,54	> 27,54
% contributes to viability of neighbourhood	18,20	3,59		< 12,81	12,81 - 16,39	16,40 - 20,00	20,01 - 23,59	> 23,59
% residents willing to voluntarily contribute to improve neighbourhood	49,20	7,08		< 38,58	38,58 - 45,65	45,66 - 52,74	52,75 - 59,82	> 59,82

9 - Bridging Social Capital - Volunteering and Community Work

These four indicators have a positive effect on bridging social capital. A lack of volunteers does not negatively influence bridging social capital. However, some of the results of the ‘far below average’ categories are so low, their effect on bridging social capital is hardly existent, which is why they are coloured grey, indicating a neutral effect.

The four indicators of this sub-category can be the cause or the product of bridging social capital, or both. By voluntarily spending time improving the viability of the neighbourhood, residents broaden and deepen their ‘spider-web’ in their community. They are increasingly feeling a connection to their neighbourhood and its residents, increasing their linking social capital. In this situation, volunteering and community work are the cause of bridging social capital increasing in the neighbourhood. However, volunteering can also be the product of

already present bridging capital, whereby citizens feel obliged to help others, and expect this favour would be returned in case they ever needed help. In this situation, a sense of belonging and a shared commitment to the neighbourhood inspires more volunteer work and more willingness to contribute (Putnam, 1993). Of course, this sub-category can be a combination of both a cause and a product of bridging social capital.

One final remark regarding this sub-category must be made. As previously mentioned, when volunteering is the product of already present social capital, this is based on feelings of trust, shared norms, and commitment. These terms are mostly associated with bonding social capital, rather than bridging social capital. Therefore, this category could also have been placed under the first type of social capital. However, I made the decision to place this category under bridging social capital, mainly because the average number of residents volunteering in The Hague is not so high that it indicates a strong sense of obligation between residents to help each other. Rather, the structural volunteering can be interpreted as the cause of bridging social capital, whereby volunteers have the opportunity to broaden their social network and start new social relations. However, when volunteering numbers increase rapidly, it may be more suited to place this sub-category under bonding social capital rather than bridging social capital.

Sub-category 4: Membership Organisations

Having multiple connections, both inside and outside of your neighbourhood, provides access to resources needed during disaster. An engaged community is characterised by membership of multiple formal organizations, including sports associations, religious organisations, residents' organizations or art organisations (Perkins & Long, 2002; Wandserman, 2000). Bridging social capital is increased when residents are not merely members of an association, but are also actively contributing in, for example, board positions or through contributing as volunteer (Maton & Salem, 1995).

Membership of these associations is not only beneficial pre-disaster. During a disaster, people who fulfil leadership positions in these associations are likely to develop grass-root leadership, and their pre-disaster commitment to the association and community adds credibility to their role as leader of post-disaster projects (Ganor & Ben-Lavy, 2003; Goodman et al., 1998).

Sub-category 4: Membership Associations								
Indicator	AVERAGE THE HAGUE	STANDARD DEVIATION		far below average	below average	average	above average	far above average
% member of sports association	34,50	5,86		< 25,71	25,71 - 31,56	31,57 - 37,43	37,44 - 43,29	> 43,29
% member of ideal organisation	31,00	9,56		< 16,66	16,66 - 26,21	26,22 - 35,78	35,79 - 45,34	> 45,34
% member of art organisation	21,50	8,57		< 8,64	8,64 - 17,20	17,21 - 25,79	25,80 - 34,36	> 34,36
% member of residential organisation	26,75	7,98		< 14,78	14,78 - 22,75	22,76 - 30,74	30,75 - 38,72	> 38,72
% member of trade union	17,38	2,88		< 10,18	13,06 - 15,93	15,94 - 18,82	18,83 - 21,70	> 21,70
% member of ecclesiastical organisation	19,50	3,42		< 14,37	14,37 - 17,78	17,79 - 21,21	21,22 - 24,63	> 24,63

10 - Bridging Social Capital - Membership Associations

Regarding the allocation of colours to the different categories, the same reasoning of the previous sub-category – volunteering and community work – applies here. A lack of membership does not negatively affect bridging social capital, hence the absence of red colours. However, the ‘far below average’ results are very low, meaning the neighbourhoods that fall within this category do not experience an effect on their bridging social capital based on this sub-category. On the other hand, two indicators have a more positive effect on bridging social capital at the community level than others, namely; (1) sports associations; and (2) residential organisations. Firstly, sports associations often have members that from different geographical, social, economic, and cultural backgrounds (Hawkins & Maurer, 2010). Therefore, these associations are increasing bridging capital more rapidly than the others. Secondly, the effect of membership of residential organisations has been assessed as more relevant than the others, since this thesis focuses on residents and their neighbourhoods. The membership of a residential organisation implies a stronger commitment to the neighbourhood, and an increase in social relationships with neighbours.

Linking Social Capital

The third type of social capital refers to the ability of residents to connect with politicians, policy makers, and others who are capable of providing (financial) resources for recovery. Related to the number of (official) relationships, is the perception people have of their local government and their elected officials.

Sub-category 1: Commitment Municipality with Neighbourhood

Sub-category 1: Commitment Municipality with Neighbourhood								
Indicator	AVERAGE THE HAGUE	STANDARD DEVIATION		far below average	below average	average	above average	far above average
% highly satisfied with municipality's efforts concerning viability and security in neighbourhood	33,88	5,70		< 25,33	25,33 - 31,02	31,03 - 36,73	36,74 - 42,43	> 42,43
% highly unsatisfied about municipality's efforts concerning viability and security in neighbourhood	15,82	4,39		< 9,23	9,23 - 13,61	13,62 - 18,02	18,03 - 22,41	> 22,41
% municipality has attention for issues of viability and security in my neighbourhood	46,34	8,29		< 33,90	33,90 - 42,18	42,19 - 50,49	50,50 - 58,78	> 58,78
% municipality informs residents about its efforts concerning viability and security in my neighbourhood	44,85	7,30		< 33,90	33,90 - 41,19	41,20 - 48,50	48,50 - 55,80	> 55,80
% municipality is actively involving its citizens in issues of viability and security	37,11	6,80		< 26,91	26,91 - 33,70	33,71 - 40,51	40,52 - 47,31	> 47,31

11 - Linking Social Capital - Commitment Municipality with Neighbourhood

This sub-category is a combination of efforts of the municipality to increase safety and viability in the neighbourhoods, and the perception of residents on whether they are satisfied with the level of commitment of their local government.

Sub-category 2: Commitment Residents with Local Public Administration

Sub-category 2: Commitment Residents with Local Public Administration								
Indicator	AVERAGE THE HAGUE	STANDARD DEVIATION		far below average	below average	average	above average	far above average
% member of a political party	6,38	1,92		< 3,50	3,50 - 5,41	5,42 - 7,34	7,35 - 9,26	> 9,26
% voter turnout most recent parliamentary elections (March 2017)	77,70	10,59		< 61,81	61,81 - 72,39	72,40 - 83,00	83,01 - 93,59	> 93,59
Number of politicians of city council living in neighbourhood	5,63	4,50		0,0	0 - 3,37	3,38 - 7,88	7,89 - 12,38	> 12,38

12 - Linking Social Capital - Commitment Residents with Local Public Administration

An important component of linking social capital is the access residents have to their elected officials. Therefore, the number of politicians residing in the neighbourhood is an important indicator for this type of social capital. Having a politician in your neighbourhood increases your chances of gaining access to your local public administration. During disaster, gaining access to goods and services may be compromised when (local) government is failing. Having connections allows residents to contact local officials, bend the rules, or even pay bribes to gain access (Rose, 1998). The Hague has a total of 45 members of the city council, and 44 neighbourhoods. The presence of one or more city council members in the neighbourhood significantly increases the linking social capital.

In addition, linking social capital is also influenced by the perceptions of residents towards their local administration. Pre-disaster, residents who feel they are able to influence decision-making

processes, experience higher linking social capital. During a disaster, residents who are engaged with their local elected officials, are more likely to turn to these official institutions during disaster. This engagement can be measured using two indicators, namely; (1) voter turnout during elections; and (2) percentage of residents that is a member of a political party. A low turnout implies a lack of engagement, and decreases linking social capital (Babb, 2005).

The Resilience Score Card

All these indicators combined make up the following resilience score card;

Bonding Social Capital

Sub-category 1: Social Contacts and Binding								
Indicator	AVERAGE THE HAGUE	STANDARD DEVIATION	far below average	below average	average	above average	far above average	
Index Social Quality	5,5	0,54	< 4,69	4,69 - 5,22	5,23 - 5,77	5,78 - 6,31	> 6,31	
% feels at home in neighbourhood	48,40	10,02	< 33,37	33,37 - 53,40	43,39 - 53,41	53,42 - 63,43	> 63,43	
% people in the neighbourhood know each other	62,00	7,58	< 50,63	50,63 - 58,20	58,21 - 65,79	65,79 - 73,73	> 73,73	
% has a lot of contact with neighbours	29,70	3,17	< 24,94	24,94 - 28,10	28,11 - 31,28	31,29 - 34,45	> 34,45	
% interaction between neighbours is pleasant	57,40	11,93	< 39,50	39,50 - 51,42	51,43 - 63,37	63,38 - 75,30	> 75,30	
% feels discriminated by neighbours	3,20	1,24	< 1,34	1,34 - 2,57	2,58 - 3,82	3,83 - 5,06	> 5,06	

Sub-category 2: Moving Behaviour Residents								
Indicator	AVERAGE THE HAGUE	STANDARD DEVIATION	far below average	below average	average	above average	far above average	
% has lived at current address since before 2000	35,00	5,35	< 26,97	26,97 - 32,31	32,32 - 37,68	37,67 - 43,03	> 43,03	
% moved house in the past three years	13,80	2,48	< 10,08	10,08 - 12,56	12,56 - 15,04	15,05 - 17,53	> 17,53	

Sub-category 3: Viability and Safety								
Indicator	AVERAGE THE HAGUE	STANDARD DEVIATION	far below average	below average	average	above average	far above average	
Grade safety	6,5	0,62	< 5,88	5,88 - 6,18	6,19 - 6,81	6,82 - 7,12	> 7,12	
% feels unsafe in own neighbourhood	31,40	11,72	< 13,82	13,82 - 25,53	25,54 - 37,26	37,27 - 48,98	> 48,98	
% feels unsafe in own home	13,60	5,26	< 5,71	5,71 - 10,96	10,97 - 16,23	16,24 - 21,49	> 21,49	
Perception social nuisance	2,1	0,96	< 0,66	0,66 - 1,61	1,62 - 2,58	2,59 - 3,54	> 3,54	
% probability of burglary	19,30	7,38	< 8,23	8,23 - 15,60	15,61 - 22,99	23,00 - 30,37	> 30,37	
% probability of street robbery	8,20	5,29	< 0,26	0,26 - 5,54	5,55 - 10,84	10,85 - 16,13	> 16,13	

Bridging Social Capital

Sub-category 1: Social Contacts and Binding								
Indicator	AVERAGE THE HAGUE	STANDARD DEVIATION	far below average	below average	average	above average	far above average	
% has enough social contacts (in and out of neighbourhood)	88,10	3,41	< 82,98	82,98 - 86,38	86,39 - 89,81	89,82 - 93,23	> 93,23	
% in need of more social contacts	29,00	5,23	< 21,15	21,15 - 26,38	26,38 - 31,62	31,62 - 36,85	> 36,85	
% satisfied with the demographic composition of my neighbourhood	54,70	15,05	< 32,12	32,12 - 47,16	47,17 - 62,23	62,24 - 77,28	> 77,28	
% in my neighbourhood, people from different ethnic backgrounds live and work together	66,25	17,07	< 40,64	40,64 - 57,70	57,71 - 74,79	74,80 - 91,86	> 91,86	
% the interactions between people from different ethnic backgrounds is positive	63,63	6,30	< 54,18	54,18 - 60,47	60,48 - 66,78	66,78 - 73,08	> 73,08	
% sufficient knowledge of Dutch language since settling in the Netherlands after 2010	5,50	2,54	< 1,69	1,69 - 4,22	4,23 - 6,77	6,78 - 9,31	> 9,31	

Sub-category 2: Perception Neighbourhood								
Indicator	AVERAGE THE HAGUE	STANDARD DEVIATION	far below average	below average	average	above average	far above average	
Grade quality living environment	6,9	0,65	< 5,92	5,92 - 6,56	6,57 - 7,23	7,24 - 7,88	> 7,88	
% my neighbourhood has improved over the past year	16,47	5,27	< 8,56	8,56 - 13,82	13,83 - 19,11	19,12 - 24,38	> 24,38	
% my neighbourhood has fallen backward the past year	20,30	7,14	< 9,43	9,43 - 16,56	16,57 - 23,87	23,88 - 31,01	> 31,01	
Grade neighbourhood facilities	6,5	0,96	< 5,0	5,0 - 5,9	6,0 - 6,9	7,0 - 7,9	> 7,90	
% satisfied with playgrounds for children	58,80	8,30	< 46,35	46,35 - 54,64	54,65 - 62,95	62,96 - 71,25	> 71,25	
% satisfied with facilities for youngsters	24,60	2,13	< 21,40	21,40 - 23,52	23,53 - 25,67	25,68 - 27,80	> 27,80	

Sub-category 3: Volunteering and Community Work								
Indicator	AVERAGE THE HAGUE	STANDARD DEVIATION		far below average	below average	average	above average	far above average
% is doing volunteer work	19,50	5,09		< 11,86	11,86 - 16,94	16,95 - 22,05	22,06 - 27,14	> 27,14
% parents volunteering at their children's school	20,70	4,56		< 13,86	13,86 - 18,41	18,42 - 22,98	22,99 - 27,54	> 27,54
% contributes to viability of neighbourhood	18,20	3,59		< 12,81	12,81 - 16,39	16,40 - 20,00	20,01 - 23,59	> 23,59
% residents willing to voluntarily contribute to improve neighbourhood	49,20	7,08		< 38,58	38,58 - 45,65	45,66 - 52,74	52,75 - 59,82	> 59,82

Sub-category 4: Membership Associations								
Indicator	AVERAGE THE HAGUE	STANDARD DEVIATION		far below average	below average	average	above average	far above average
% member of sports association	34,50	5,86		< 25,71	25,71 - 31,56	31,57 - 37,43	37,44 - 43,29	> 43,29
% member of ideal organisation	31,00	9,56		< 16,66	16,66 - 26,21	26,22 - 35,78	35,79 - 45,34	> 45,34
% member of art organisation	21,50	8,57		< 8,64	8,64 - 17,20	17,21 - 25,79	25,80 - 34,36	> 34,36
% member of residential organisation	26,75	7,98		< 14,78	14,78 - 22,75	22,76 - 30,74	30,75 - 38,72	> 38,72
% member of trade union	17,38	2,88		< 10,18	13,06 - 15,93	15,94 - 18,82	18,83 - 21,70	> 21,70
% member of ecclesiastical organisation	19,50	3,42		< 14,37	14,37 - 17,78	17,79 - 21,21	21,22 - 24,63	> 24,63

Linking Social Capital

Sub-category 1: Commitment Municipality with Neighbourhood								
Indicator	AVERAGE THE HAGUE	STANDARD DEVIATION		far below average	below average	average	above average	far above average
% highly satisfied with municipality's efforts concerning viability and security in neighbourhood	33,88	5,70		< 25,33	25,33 - 31,02	31,03 - 36,73	36,74 - 42,43	> 42,43
% highly unsatisfied about municipality's efforts concerning viability and security in neighbourhood	15,82	4,39		< 9,23	9,23 - 13,61	13,62 - 18,02	18,03 - 22,41	> 22,41
% municipality has attention for issues of viability and security in my neighbourhood	46,34	8,29		< 33,90	33,90 - 42,18	42,19 - 50,49	50,50 - 58,78	> 58,78
% municipality informs residents about its efforts concerning viability and security in my neighbourhood	44,85	7,30		< 33,90	33,90 - 41,19	41,20 - 48,50	48,50 - 55,80	> 55,80
% municipality is actively involving its citizens in issues of viability and security	37,11	6,80		< 26,91	26,91 - 33,70	33,71 - 40,51	40,52 - 47,31	> 47,31

Sub-category 2: Commitment Residents with Local Public Administration								
Indicator	AVERAGE THE HAGUE	STANDARD DEVIATION		far below average	below average	average	above average	far above average
% member of a political party	6,38	1,92		< 3,50	3,50 - 5,41	5,42 - 7,34	7,35 - 9,26	> 9,26
% voter turnout most recent parliamentary elections (March 2017)	77,70	10,59		< 61,81	61,81 - 72,39	72,40 - 83,00	83,01 - 93,59	> 93,59
Number of politicians of city council living in neighbourhood	5,63	4,50		0,0	0 - 3,37	3,38 - 7,88	7,89 - 12,38	> 12,38

Limitations of this study

There are several limitations to the research conducted in this master thesis.

Due to the time constraints of this master thesis, I was not able to conduct my own data collection method. Therefore, I had to use the data provided by the municipality. This causes two problems.

Firstly, even though the information was highly useful, I would have liked to obtain additional information as well, especially on the third type of social capital – linking social capital. For some districts, the information on perceptions of residents of their local government is not available, which means the conclusions on the level of linking social capital in these districts and neighbourhoods are not sufficiently substantiated to draw conclusions from. This is unfortunate, but I have attempted to indicate these limitations as clearly as possible.

In addition, I managed to obtain information on the residential situations of members of the local city council, but the political parties refused to share information on the living situations of the members of parliament. This is unfortunate, since, for example, the current prime minister allegedly currently resides in one of the wealthier neighbourhoods of The Hague, and this would have affected the level of linking social capital in that neighbourhood. However, I was not able to confirm this information, and therefore I decided not to incorporate this in my thesis.

Also, information on family ties is missing from this thesis. This is unfortunate, since one of the main indicators of bonding social capital – as elaborately explained in part II – are the ties between family members.

Secondly, the available data dictates the interpretation of social capital. This is not a limitation only occurring in this thesis, but is one of the main concerns of critics who claim the objective measurement of social capital is impossible (Inglehart, Granato, & Leblang, 1997). This concern should be considered in the broader discussion on social capital, namely that there is no universal agreement on its meaning, let alone on how to measure it.

V – Resilience Score of Neighbourhoods in The Hague

Data

This thesis relies largely on data derived from the website denhaagincijfers.nl. This website is owned by the municipality of The Hague, and provides a dataset with extensive information on the city, its residents, their income, level of education, employment, health, and activities. In addition, information on *inter alia* crime rates, social cohesion, integration, volunteering and membership of organisations is provided. This information is derived from numerous sources, for example the National Safety Monitor²³ and the poverty index²⁴. In addition, a research was conducted in 2015, in which residents were asked about their perceptions of their city and neighbourhood. For example, they were asked if they feel safe, or have experienced discrimination or intimidation.²⁵ All this information is combined into the Municipal Social Index.²⁶ The information is updated annually.

Based on this Index, the city presented so-called district- and neighbourhood programmes in October 2015. The city council drafted priorities for each of the 8 districts and 44 neighbourhoods of The Hague. These priorities were discussed with residents, local entrepreneurs and other partners. These consultations, combined with the data from the Municipal Social Index and the priorities formulated by the city council, were translated into concrete district programmes.²⁷

These district programmes outline concrete information on, and challenges for, all 44 neighbourhoods for the four-year period between 2016-2019. Each plan is unique, but based on eight themes, namely; (1) youth and education; (2) housing; (3) activities; (4) liveability and

²³ Veiligheids Monitor. www.veiligheidsmonitor.nl.

²⁴ Index Mundi. <https://www.indexmundi.com/map/?v=69&l=nl>.

²⁵ Maatschappelijke Sociale Index. <https://www.denhaag.nl/home/bewoners/to/Maatschappelijke-index-Den-Haag.htm>.

²⁶ Maatschappelijke Sociale Index. <https://www.denhaag.nl/home/bewoners/to/Maatschappelijke-index-Den-Haag.htm>.

²⁷ Den Haag. Raadsinformatie Wijkprogramma's. https://denhaag.raadsinformatie.nl/modules/13/overige_bestuurlijke_stukken/61468.

safety; (5) employment and income; (6) upbringing and care; (7) social cohesion; and (8) neighbourhood involvement. Residents have actively participated in the creation of these district programmes, and therefore, the plans received large support when they were published in October 2015.²⁸

The Hague

The Hague is the capital of the province of Zuid-Holland, an area of approximately 2,900 square kilometres and home to 3.5 million people. The province is the most densely populated province of the Netherlands, with 1,220 inhabitants per square kilometre. The Hague is home to over 500.000 residents, and more than 1.000.000 if the suburbs are included.

The Hague is an ethnically highly diverse city, with more than half of the population being the result of immigration. The ethnically Dutch population amounts for 47%, and the highest proportions of immigrants come from Surinam (9%) and Turkey (7%).²⁹ Just over half of the residents identify themselves as religious, with 32% of the residents being Christian, while 16% of the residents identify with Islam.³⁰

The city is divided into eight official districts which are, in turn, divided into neighbourhoods.³¹ An overview of all districts and their corresponding neighbourhoods can be found in the annex at the end of this thesis. Some of the most prosperous and some of the poorest neighbourhoods of the Netherlands can be found in The Hague.³²

²⁸ <https://denhaag.raadsinformatie.nl/modules/13/Overige%20bestuurlijke%20stukken/62518>
<https://denhaag.raadsinformatie.nl/modules/13/Overige%20bestuurlijke%20stukken/61468>

²⁹ Den Haag. Buurtmonitor. https://denhaag.buurtmonitor.nl/jive?cat_open_code=c923&lang=nl.

³⁰ Den Haag. Buurtmonitor. https://denhaag.buurtmonitor.nl/jive?cat_open_code=c923&lang=nl.

³¹ 100RC The Hague – Agenda-Setting Workshop Feb 2017. http://action.100resilientcities.org/page/-/100rc/pdfs/170207_Hague_ASW_Final_low_res.pdf

³² <https://www.cpb.nl/persbericht/329212/inkomensongelijkheid-neemt-toe-door-stijgende-vraag-naar-hoogopgeleiden>.



13 – The Hague is divided in eight districts. These eight districts are divided in 44 neighbourhoods.

Neighbourhoods

The most prosperous neighbourhoods, such as Belgisch Park, Marlot, Benoordenhout, Archipelbuurt and Statenkwartier, are located in the north-western part of the city. On the other hand, the south-eastern neighbourhoods such as Moerwijk, Schilderswijk and Transvaal, are significantly poorer. The distribution of the population has caused polarisation.³³

Some of the most prosperous neighbourhoods include the pre-war Archipelbuurt and the Bezuidenhout, where highly educated and relatively wealthy residents live. These neighbourhoods also house a lot of expats, who are working at one of the many international organizations or embassies.³⁴ However, just a few kilometres away from these high-end areas, there are neighbourhoods such as Transvaal or the Schilderswijk, who offer the best and the worst of the multicultural Dutch society. They experience relatively higher crime rates, and suffer from a bad reputation. However, these neighbourhoods are cultural, lively areas, where people from over 100 nationalities reside. In some cases, citizens from countries who have been at war with each other for decades, manage to peacefully live together in these neighbourhoods in The Hague.³⁵

In sharp contrast to these multicultural neighbourhoods are Scheveningen and Duindorp. Over the past years, residents in these areas have overwhelmingly voted for anti-immigration, anti-

³³ Den Haag. Residents. <https://www.denhaag.nl/en/residents/introducing-the-hague/society-and-culture.htm>.

³⁴ Den Haag. Residents. <https://www.denhaag.nl/en/residents/introducing-the-hague/society-and-culture.htm>.

³⁵ Den Haag. Residents. <https://www.denhaag.nl/en/residents/introducing-the-hague/society-and-culture.htm>.

EU, and far-right politicians. In 2014, Duindorp received national (media) attention after concern about racism surfaced. Former residents claimed to have moved due to ongoing bullying and intimidation.³⁶

Resilience Score of The Hague

The assessment of social capital in the different neighbourhoods of The Hague is organised as follows. The city is divided in 44 neighbourhoods, which are distributed among eight districts. I have created eight Resilience Score Cards, one for each district, which will be presented below, in alphabetical order.

The Resilience Score Card, after the information of the neighbourhoods and the district is put into it, is presented as follows:

Indicator	AVERAGE THE HAGUE	Sub-category:					City District
		Neighbourhood	Neighbourhood	Neighbourhood	Neighbourhood	Neighbourhood	
Indicator	-	-	-	-	-	-	-
Indicator	-	-	-	-	-	-	-
Indicator	-	-	-	-	-	-	-
Indicator	-	-	-	-	-	-	-
Indicator	-	-	-	-	-	-	-
Indicator	-	-	-	-	-	-	-

14 - Example RSC Neighbourhoods

As explained, the colours indicate the effect the results have on social capital in the neighbourhood. After each Resilience Score Card, a short assessment is provided on the level of bonding, bridging, and social capital.

The implications of these results, as well as corresponding policy recommendations to improve social capital at the neighbourhood level, are discussed in part VI, where the neighbourhoods are distributed among six neighbourhood profiles.

³⁶ Omroep West. Duindorp is Uniek, Maar Racistische Uitspraken van Bewoners Niet. <http://www.omroepwest.nl/nieuws/2532413/Duindorp-is-uniek-maar-racistische-uitspraken-van-bewoners-niet>. Joop. Volop Racisme in Hollandse Wijk. <http://www.joop.nl/nieuws/volop-racisme-in-hollandse-wijk>. Nu.nl. Racisme en Intimidatie in Haagse Volkswijk. <http://www.nu.nl/binnenland/3754638/racisme-en-intimidatie-in-haagse-volkswijk.html>.

Resilience Score City Centre

City Centre

Bonding Social Capital = Low to Medium

Sub-category 1: Social Contacts and Binding											
Indicator	AVERAGE THE HAGUE	Archipelbuurt/Willemspark	Binnenstad	Het Oude Centrum	Kortenbos	Rivierenbuurt	Schilderswijk	Stationsbuurt	Transvaal, Groente- en Fruitmarkt	Zeeheldenkwartier	District: City Centre
Index Social Quality	5,5	6,2	4,9	4,9	4,9	4,8	5	4,8	4,8	6	5,1
% feels at home in neighbourhood	48,40	69,30	37,00	37,00	37,00	34,20	40,40	34,20	34,10	54,90	40,70
% people in the neighbourhood know each other	62,00	72,60	46,90	46,90	46,90	51,50	60,60	51,50	48,50	62,00	56,50
% has a lot of contact with neighbours	29,70	30,70	19,50	19,50	19,50	24,70	32,00	24,70	33,30	27,40	27,70
% interaction between neighbours is pleasant	57,40	72,60	46,10	46,10	46,10	43,40	40,60	43,40	42,70	66,20	47,10
% feels discriminated by neighbours	3,20	4,10	1,70	1,70	1,70	1,70	2,80	1,70	2,80	4,10	2,60
Sub-category 2: Moving Behaviour Residents											
Indicator	AVERAGE THE HAGUE	Archipelbuurt/Willemspark	Binnenstad	Het Oude Centrum	Kortenbos	Rivierenbuurt	Schilderswijk	Stationsbuurt	Transvaal, Groente- en Fruitmarkt	Zeeheldenkwartier	District: City Centre
% has lived at current address since before 2000	35,00	40,30	61,00	47,60	43,60	54,60	29,40	48,60	38,90	47,70	40,40
% moved house in the past three years	13,80	32,40	53,10	40,50	37,90	49,60	12,70	42,00	16,50	39,90	26,20
Sub-category 3: Viability and Safety											
Indicator	AVERAGE THE HAGUE	Archipelbuurt/Willemspark	Binnenstad	Het Oude Centrum	Kortenbos	Rivierenbuurt	Schilderswijk	Stationsbuurt	Transvaal, Groente- en Fruitmarkt	Zeeheldenkwartier	District: City Centre
Grade safety	6,5	7,8	6,1	6,1	6,1	5,9	5,1	5,9	5,9	6,9	5,8
% feels unsafe in own neighbourhood	31,40	9,40	39,50	39,50	39,50	43,40	53,70	43,40	54,00	23,30	43,80
% feels unsafe in own home	13,60	4,70	11,00	11,00	11,00	14,20	27,80	14,20	21,60	6,40	18,50
Perception social nuisance	2,1	1	3,9	3,9	3,9	3,5	4,3	3,5	4	2,3	3,7
% probability of burglary	19,30	9,00	13,50	13,50	13,50	18,40	40,50	18,40	38,10	6,80	26,50
% probability of street robbery	8,20	3,30	10,10	10,10	10,10	13,90	22,70	13,90	20,90	2,30	15,40

Two neighbourhoods immediately stand out. Archipelbuurt/Willemspark and Zeeheldenkwartier score medium to high social bonding social capital, while the others are scoring low bonding social capital. For the latter, especially the crime rates, perceptions of unsafety, and relatively low percentage of residents indicating they feel at home in their own neighbourhoods are alarming. Other remarkable results are both indicators related to moving behaviour. A very positive effect on bonding social capital is caused by high numbers of residents who lived at their current address since 2000, while a similar remarkable high number of residents only recently started living in the neighbourhood decreases the amount of bonding social capital. Therefore, the positive indicators are overshadowed by the negative indicators, leading to an assessment of low social capital for all neighbourhoods except Archipelbuurt/Willemspark and Zeeheldenkwartier, who are assessed medium to high social capital.

City Centre

Bridging Social Capital = Medium

Sub-category 1: Social Contacts and Binding											
Indicator	AVERAGE THE HAGUE	Archipel- buurt/ Willemspark	Binnenstad	Het Oude Centrum	Kortenbos	Rivieren- buurt	Schilders- wijk	Stations- buurt	Transvaal, Groente- en Fruitmarkt	Zeehelden- kwartier	District: City Centre
% has enough social contacts (in and out of neighbourhood)	88,10	89,40	88,90	88,90	88,90	88,90	85,30	88,90	85,30	89,40	87,00
% in need of more social contacts	29,00	30,50	32,20	32,20	32,20	32,20	33,00	32,20	33,00	30,50	33,10
% satisfied with the demographic composition of my neighbourhood	54,70	76,90	45,50	45,50	45,50	42,30	35,50	42,30	33,40	68,00	44,50
% in my neighbourhood, people from different ethnic backgrounds live and work together	66,25	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	75,00
% the interactions between people from different ethnic backgrounds is positive	63,63	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	66,00
% sufficient knowledge of Dutch language since settling in the Netherlands after 2010	5,50	15,80	24,30	12,20	11,00	19,60	n/a	16,90	8,40	13,00	7,60
Sub-category 2: Perception Neighbourhood											
Indicator	AVERAGE THE HAGUE	Archipel- buurt/ Willemspark	Binnenstad	Het Oude Centrum	Kortenbos	Rivieren- buurt	Schilders- wijk	Stations- buurt	Transvaal, Groente- en Fruitmarkt	Zeehelden- kwartier	District: City Centre
Grade quality living environment	6,9	8,1	6,9	6,9	6,9	6,9	5,7	6,4	5,8	7,5	6,4
% my neighbourhood has improved over the past year	16,47	n/a	n/a	n/a	n/a	n/a	19,00	36,40	14,65	n/a	n/a
% my neighbourhood has fallen backward the past year	20,30	n/a	n/a	n/a	n/a	n/a	17,30	11,70	28,75	n/a	n/a
Grade neighbourhood facilities	6,5	9,1	n/a	n/a	n/a	n/a	6,1	6,4	5,9	6,9	6,3
% satisfied with playgrounds for children	58,80	60,80	36,40	36,40	36,40	36,40	63,40	57,20	59,90	36,80	52,70
% satisfied with facilities for youngsters	24,60	20,80	20,90	20,90	20,90	20,90	30,00	24,00	25,30	17,30	25,50
Sub-category 3: Volunteerism and Community Work											
Indicator	AVERAGE THE HAGUE	Archipel- buurt/ Willemspark	Binnenstad	Het Oude Centrum	Kortenbos	Rivieren- buurt	Schilders- wijk	Stations- buurt	Transvaal, Groente- en Fruitmarkt	Zeehelden- kwartier	City Centre
% is doing volunteer work	19,50	17,00	18,60	18,60	18,60	18,60	14,00	18,60	14,00	17,00	15,30
% parents volunteering at their children's school	20,70	21,40	24,70	24,70	24,70	24,70	26,80	24,70	26,80	21,40	25,30
% contributes to viability of neighbourhood	18,20	11,00	18,70	18,70	18,70	18,70	17,90	18,70	17,90	11,00	16,10
% residents willing to voluntarily contribute to improve neighbourhood	49,20	46,50	51,10	51,10	51,10	51,10	44,70	51,10	44,70	46,50	46,40
Sub-category 4: Membership Associations											
Indicator	AVERAGE THE HAGUE	Archipel- buurt/ Willemspark	Binnenstad	Het Oude Centrum	Kortenbos	Rivieren- buurt	Schilders- wijk	Stations- buurt	Transvaal, Groente- en Fruitmarkt	Zeehelden- kwartier	City Centre
% member of sports association	34,50	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	31,00
% member of ideal organisation	31,00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	27,00
% member of art organisation	21,50	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	20,00
% member of residential organisation	26,75	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	19,00
% member of trade union	17,38	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	12,00
% member of ecclesiastical organisation	19,50	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	23,00

The neighbourhoods experience medium bridging social capital. The results do not have a remarkable negative, nor positive effect on social capital. However, the percentage of residents volunteering or doing community work is very positive. Therefore, the neighbourhood is assessed medium bridging social capital. However, the results of Schilderswijk and Transvaal differ from the other neighbourhood, leading to a more negative effect on social capital.

City Centre

Linking Social Capital = Low to Medium

Sub-category 1: Commitment Municipality with Neighbourhood											
Indicator	AVERAGE THE HAGUE	Archipel- buurt/ Willemspark	Binnenstad	Het Oude Centrum	Kortenbos	Rivieren- buurt	Schilders- wijk	Stations- buurt	Transvaal, Groente- en Fruitmarkt	Zeehelden- kwartier	District: City Centre
% highly satisfied with municipality's efforts concerning viability and security in neighbourhood	33,88	n/a	n/a	n/a	n/a	n/a	28,70	39,70	30,70	n/a	32,45
% highly unsatisfied about municipality's efforts concerning viability and security in neighbourhood	15,82	n/a	n/a	n/a	n/a	n/a	18,80	11,50	20,40	n/a	17,78
% municipality has attention for issues of viability and security in my neighbourhood	46,34	n/a	n/a	n/a	n/a	n/a	46,40	61,10	40,10	n/a	46,93
% municipality informs residents about its efforts concerning viability and security in my neighbourhood	44,85	n/a	n/a	n/a	n/a	n/a	40,30	53,60	37,05	n/a	42,00
% municipality is actively involving its citizens in issues of viability and security	37,11	n/a	n/a	n/a	n/a	n/a	30,60	43,30	31,15	n/a	34,05
Sub-category 2: Commitment Residents with Local Public Administration											
Indicator	AVERAGE THE HAGUE	Archipel- buurt/ Willemspark	Binnenstad	Het Oude Centrum	Kortenbos	Rivieren- buurt	Schilders- wijk	Stations- buurt	Transvaal, Groente- en Fruitmarkt	Zeehelden- kwartier	District: City Centre
% member of a political party	6,38	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	7,00
% voter turnout most recent parliamentary elections (March 2017)	77,70	88,80	135,10	n/a	n/a	n/a	64,90	122,70	62,75	76,90	91,86
Number of politicians of city council living in neighbourhood	5,63	0	5	0	0	0	1	1	3	4	1,56

The high voter-turnout is remarkable. However, since a few years, residents of The Hague are allowed to vote in any polling station within their city. Since many people work in the city centre, these high numbers are most likely the result of people from other districts voting, rather than the result of highly politically engaged residents of these specific neighbourhoods. This makes interpretation of these results difficult.

Therefore, linking social capital in the City Centre district is carefully assessed low to medium, except for Transvaal and Schilderswijk, where the linking social capital is low.

RESILIENCE SCORE CITY CENTRE

All in all, the City Centre has low to medium bonding social capital, medium bridging social capital, and low to medium linking social capital.

Resilience Score Escamp

Escamp

Bonding Social Capital = Low

Sub-category 1: Social Contacts and Binding										
Indicator	AVERAGE THE HAGUE	Bouwlust	Leyenburg	Moerwijk	Morgenstond	Rustenburg-Oostbroek	Vrederust	Wateringseveld		District: Escamp
Index Social Quality	5,5	4,9	5,8	4,7	4,9	4,9	4,9	5,6		5,1
% feels at home in neighbourhood	48,40	37,90	62,30	36,20	36,30	34,10	37,90	50,20		41,30
% people in the neighbourhood know each other	62,00	54,30	65,60	54,60	49,80	49,10	54,30	62,00		56,00
% has a lot of contact with neighbours	29,70	29,90	38,40	25,80	24,30	24,30	29,90	30,10		28,40
% interaction between neighbours is pleasant	57,40	43,80	60,90	39,10	45,20	50,30	43,80	53,70		48,40
% feels discriminated by neighbours	3,20	3,80	4,30	3,00	3,00	4,30	3,80	6,50		4,30
Sub-category 2: Moving Behaviour Residents										
Indicator	AVERAGE THE HAGUE	Bouwlust	Leyenburg	Moerwijk	Morgenstond	Rustenburg-Oostbroek	Vrederust	Wateringseveld		District: Escamp
% has lived at current address since before 2000	35,00	34,30	27,40	38,60	37,30	36,00	34,40	27,70		33,70
% moved house in the past three years	13,80	26,90	10,80	14,80	13,70	15,00	28,70	13,00		13,30
Sub-category 3: Viability and Safety										
Indicator	AVERAGE THE HAGUE	Bouwlust	Leyenburg	Moerwijk	Morgenstond	Rustenburg-Oostbroek	Vrederust	Wateringseveld		District: Escamp
Grade safety	6,5	5,7	6,7	5,8	6,3	5,8	5,7	6,6		6,1
% feels unsafe in own neighbourhood	31,40	40,30	26,50	47,40	40,30	46,10	40,30	26,20		38,40
% feels unsafe in own home	13,60	21,90	13,20	20,70	13,50	21,60	21,90	13,50		17,70
Perception social nuisance	2,1	2,3	1,3	2,5	1,9	3	2,3	1,5		2,1
% probability of burglary	19,30	30,70	15,20	26,90	15,50	24,90	30,70	24,00		24,20
% probability of street robbery	8,20	13,40	4,00	12,20	10,30	13,00	13,40	5,70		10,20

Two neighbourhoods are standing out in district Escamp, namely Leyenburg and Wateringseveld. Their bonding social capital is medium to high. However, the bonding social capital in the other neighbourhoods is low, especially due to alarmingly high crime rates and perceptions of unsafety.

Escamp

Bridging Social Capital = Low to Medium

Sub-category 1: Social Contacts and Binding									
Indicator	AVERAGE THE HAGUE	Bouwlust	Leyenburg	Moerwijk	Morgenstond	Rustenburg-Oostbroek	Vrederust	Wateringseveld	District: Escamp
% has enough social contacts (in and out of neighbourhood)	88,10	83,90	84,50	85,00	85,00	84,50	83,90	89,00	85,10
% in need of more social contacts	29,00	27,40	29,40	31,70	31,70	29,40	27,40	20,60	29,90
% satisfied with the demographic composition of my neighbourhood	54,70	35,90	61,60	36,30	40,80	35,30	35,90	51,50	42,20
% in my neighbourhood, people from different ethnic backgrounds live and work together	66,25	n/a	n/a	n/a	n/a	n/a	n/a	n/a	83,00
% the interactions between people from different ethnic backgrounds is positive	63,63	n/a	n/a	n/a	n/a	n/a	n/a	n/a	54,00
% sufficient knowledge of Dutch language since settling in the Netherlands after 2010	5,50	7,60	2,60	6,30	4,30	8,50	7,00	1,70	4,60
Sub-category 2: Perception Neighbourhood									
Indicator	AVERAGE THE HAGUE	Bouwlust	Leyenburg	Moerwijk	Morgenstond	Rustenburg-Oostbroek	Vrederust	Wateringseveld	District: Escamp
Grade quality living environment	6,9	6,1	6,9	6,1	6,5	6,1	6,1	7	6,4
% my neighbourhood has improved over the past year	16,47	11,00	n/a	8,00	11,60	12,20	11,00	n/a	10,76
% my neighbourhood has fallen backward the past year	20,30	22,60	n/a	33,20	31,00	31,30	22,60	n/a	28,14
Grade neighbourhood facilities	6,5	6,5	7,7	6,5	6,8	6,5	6,5	5,9	6,4
% satisfied with playgrounds for children	58,80	51,70	58,90	53,20	55,90	51,00	51,70	69,00	55,70
% satisfied with facilities for youngsters	24,60	24,30	19,90	27,60	21,00	21,30	24,30	29,70	24,20
Sub-category 3: Volunteering and Community Work									
Indicator	AVERAGE THE HAGUE	Bouwlust	Leyenburg	Moerwijk	Morgenstond	Rustenburg-Oostbroek	Vrederust	Wateringseveld	District: Escamp
% is doing volunteer work	19,50	14,40	15,20	16,30	16,30	15,20	14,40	19,60	15,70
% parents volunteering at their children's school	20,70	22,60	20,30	28,00	28,00	20,30	22,60	22,20	24,30
% contributes to viability of neighbourhood	18,20	15,90	17,50	10,60	10,60	17,50	15,90	16,30	15,20
% residents willing to voluntarily contribute to improve neighbourhood	49,20	42,40	49,20	44,60	44,60	49,20	42,40	43,70	46,60
Sub-category 4: Membership Associations									
Indicator	AVERAGE THE HAGUE	Bouwlust	Leyenburg	Moerwijk	Morgenstond	Rustenburg-Oostbroek	Vrederust	Wateringseveld	District: Escamp
% member of sports association	34,50	n/a	n/a	n/a	n/a	n/a	n/a	n/a	30,00
% member of ideal organisation	31,00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	23,00
% member of art organisation	21,50	n/a	n/a	n/a	n/a	n/a	n/a	n/a	12,00
% member of residential organisation	26,75	n/a	n/a	n/a	n/a	n/a	n/a	n/a	21,00
% member of trade union	17,38	n/a	n/a	n/a	n/a	n/a	n/a	n/a	16,00
% member of ecclesiastical organisation	19,50	n/a	n/a	n/a	n/a	n/a	n/a	n/a	20,00

Bridging social capital is low to medium in Escamp, mainly caused by residents indicating a lack of social contacts. The results regarding the residents' perceptions of their neighbourhood are alarming. Especially in Moerwijk and Rustenburg-Oostbroek, residents indicate their neighbourhood has fallen backward. Based on the first two categories, bridging social capital is low. However, the percentage of residents doing volunteering and community work is a positive sign, hence the assessment of low to medium bridging social capital.

Escamp

Linking Social Capital = Low to Medium

Sub-category 1: Commitment Municipality with Neighbourhood									
Indicator	AVERAGE THE HAGUE	Bouwlust	Leyenburg	Moerwijk	Morgenstond	Rustenburg-Oostbroek	Vrederust	Wateringseveld	District: Escamp
% highly satisfied with municipality's efforts concerning viability and security in neighbourhood	33,88	32,10	n/a	24,50	31,80	30,40	32,10	n/a	30,18
% highly unsatisfied about municipality's efforts concerning viability and security in neighbourhood	15,82	13,10	n/a	22,20	14,60	16,70	13,10	n/a	15,94
% municipality has attention for issues of viability and security in my neighbourhood	46,34	43,80	n/a	31,00	47,60	40,30	43,80	n/a	41,30
% municipality informs residents about its efforts concerning viability and security in my neighbourhood	44,85	41,70	n/a	33,40	38,90	45,20	41,70	n/a	40,18
% municipality is actively involving its citizens in issues of viability and security	37,11	33,60	n/a	26,20	29,50	35,50	33,60	n/a	31,68
Sub-category 2: Commitment Residents with Local Public Administration									
Indicator	AVERAGE THE HAGUE	Bouwlust	Leyenburg	Moerwijk	Morgenstond	Rustenburg-Oostbroek	Vrederust	Wateringseveld	District: Escamp
% member of a political party	6,38	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5,00
% voter turnout most recent parliamentary elections (March 2017)	77,70	60,80	74,10	59,40	67,10	57,40	60,80	73,10	64,67
Number of politicians of city council living in neighbourhood	5,63	1	0	0	3	1	0	2	1

The linking social capital in Escamp is assessed as low to medium. There is no consensus among residents about their perceptions of the municipality's efforts regarding issues of viability and safety in their neighbourhood. One neighbourhood has remarkable scores, namely Moerwijk. High numbers indicating dissatisfaction with the municipality, and a low voter turnout, lead to the assessment of low social capital in this neighbourhood.

RESILIENCE SCORE ESCAMP

All in all, Escamp has low bonding social capital, and low to medium bridging and linking social capital.

Resilience Score Haagse Hout

Bonding Social Capital = Medium to High

Sub-category 1: Social Contacts and Binding						
Indicator	AVERAGE THE HAGUE	Benoordenhout	Bezuidenhout Midden-Oost	Bezuidenhout West	Mariahoeve en Marlot	District: Haagse Hout
Index Social Quality	5,5	6,6	5,8	5,8	5,5	5,9
% feels at home in neighbourhood	48,40	70,70	59,10	59,10	46,50	57,60
% people in the neighbourhood know each other	62,00	77,80	64,20	64,20	58,10	67,90
% has a lot of contact with neighbours	29,70	42,40	24,90	24,90	22,60	30,10
% interaction between neighbours is pleasant	57,40	81,30	69,90	69,90	54,80	68,70
% feels discriminated by neighbours	3,20	1,40	3,50	3,50	5,90	4,20
Sub-category 2: Moving Behaviour Residents						
Indicator	AVERAGE THE HAGUE	Benoordenhout	Bezuidenhout Midden-Oost	Bezuidenhout West	Mariahoeve en Marlot	District: Haagse Hout
% has lived at current address since before 2000	35,00	36,60	38,50	47,00	36,00	37,60
% moved house in the past three years	13,80	13,00	31,70	42,40	29,70	13,70
Sub-category 3: Viability and Safety						
Indicator	AVERAGE THE HAGUE	Benoordenhout	Bezuidenhout Midden-Oost	Bezuidenhout West	Mariahoeve en Marlot	District: Haagse Hout
Grade safety	6,5	7,9	7,1	7,1	6,8	7,3
% feels unsafe in own neighbourhood	31,40	10,10	18,70	18,70	26,50	19,20
% feels unsafe in own home	13,60	5,10	7,80	7,80	10,30	7,90
Perception social nuisance	2,1	0,50	1,00	1,00	1,10	0,90
% probability of burglary	19,30	11,10	8,30	8,30	12,90	9,90
% probability of street robbery	8,20	1,00	0,50	0,50	5,20	1,80

The Benoordenhout neighbourhood has high social capital, due to its low crime rates and perceptions of unsafety. All in all, residents of Haagse Hout are familiar with their neighbours, which leads to high social capital scores. However, in Bezuidenhout and Mariahoeve/Marlot, crime rates are higher and there is less contact with neighbours. Therefore, their assessment is medium to high bonding social capital.

Haagse Hout

Bridging Social Capital = Medium to High

Sub-category 1: Social Contacts and Binding						
Indicator	AVERAGE THE HAGUE	Benoordenhout	Bezuidenhout Midden-Oost	Bezuidenhout West	Mariahoeve en Marlot	District: Haagse Hout
% has enough social contacts (in and out of neighbourhood)	88,10	92,30	90,40	90,40	85,10	89,10
% in need of more social contacts	29,00	17,80	23,90	23,90	28,60	25,20
% satisfied with the demographic composition of my neighbourhood	54,70	81,80	76,70	76,70	46,50	69,90
% in my neighbourhood, people from different ethnic backgrounds live and work together	66,25	n/a	n/a	n/a	n/a	62,00
% the interactions between people from different ethnic backgrounds is positive	63,63	n/a	n/a	n/a	n/a	69,00
% sufficient knowledge of Dutch language since settling in the Netherlands after 2010	5,50	7,50	10,90	19,10	12,80	5,90
Sub-category 2: Perception Neighbourhood						
Indicator	AVERAGE THE HAGUE	Benoordenhout	Bezuidenhout Midden-Oost	Bezuidenhout West	Mariahoeve en Marlot	District: Haagse Hout
Grade quality living environment	6,9	8,2	7,5	7,5	7,1	7,6
% my neighbourhood has improved over the past year	16,47	n/a	n/a	n/a	n/a	n/a
% my neighbourhood has fallen backward the past year	20,30	n/a	n/a	n/a	n/a	n/a
Grade neighbourhood facilities	6,5	7,10	6,90	6,90	6,50	6,90
% satisfied with playgrounds for children	58,80	56,60	64,20	64,20	61,90	60,60
% satisfied with facilities for youngsters	24,60	25,30	19,20	19,20	21,90	23,10
Sub-category 3: Volunteering and Community Work						
Indicator	AVERAGE THE HAGUE	Benoordenhout	Bezuidenhout Midden-Oost	Bezuidenhout West	Mariahoeve en Marlot	District: Haagse Hout
% is doing volunteer work	19,50	27,00	27,40	27,40	20,90	24,50
% parents volunteering at their children's school	20,70	9,70	13,50	13,50	19,70	15,00
% contributes to viability of neighbourhood	18,20	23,20	23,70	23,70	28,80	24,50
% residents willing to voluntarily contribute to improve neighbourhood	49,20	55,30	57,40	57,40	47,00	55,30
Sub-category 4: Membership Associations						
Indicator	AVERAGE THE HAGUE	Benoordenhout	Bezuidenhout Midden-Oost	Bezuidenhout West	Mariahoeve en Marlot	Haagse Hout
% member of sports association	34,50	n/a	n/a	n/a	n/a	30,00
% member of ideal organisation	31,00	n/a	n/a	n/a	n/a	42,00
% member of art organisation	21,50	n/a	n/a	n/a	n/a	32,00
% member of residential organisation	26,75	n/a	n/a	n/a	n/a	38,00
% member of trade union	17,38	n/a	n/a	n/a	n/a	17,00
% member of ecclesiastical organisation	19,50	n/a	n/a	n/a	n/a	17,00

Bridging social capital is assessed medium to high in Haagse Hout. However, Mariahoeve and Marlot scores low to medium social capital, based on the results indicating a need for more social contacts.

Haagse Hout

Linking Social Capital = High

Sub-category 1: Commitment Municipality with Neighbourhood						
Indicator	AVERAGE THE HAGUE	Benoordenhout	Bezuidenhout Midden-Oost	Bezuidenhout West	Mariahoeve en Marlot	District: Haagse Hout
% highly satisfied with municipality's efforts concerning viability and security in neighbourhood	33,88	n/a	n/a	n/a	n/a	n/a
% highly unsatisfied about municipality's efforts concerning viability and security in neighbourhood	15,82	n/a	n/a	n/a	n/a	n/a
% municipality has attention for issues of viability and security in my neighbourhood	46,34	n/a	n/a	n/a	n/a	n/a
% municipality informs residents about its efforts concerning viability and security in my neighbourhood	44,85	n/a	n/a	n/a	n/a	n/a
% municipality is actively involving its citizens in issues of viability and security	37,11	n/a	n/a	n/a	n/a	n/a
Sub-category 2: Commitment Residents with Local Public Administration						
Indicator	AVERAGE THE HAGUE	Benoordenhout	Bezuidenhout Midden-Oost	Bezuidenhout West	Mariahoeve en Marlot	District: Haagse Hout
% member of a political party	6,38	n/a	n/a	n/a	n/a	7
% voter turnout most recent parliamentary elections (March 2017)	77,70	92,1	79,3	79,3	68,2	79,73
Number of politicians of city council living in neighbourhood	5,63	n/a	n/a	4	1	2,5

Assessing linking social capital is difficult for Haagse Hout, since information on the perception of residents of their municipality is not available. However, the relatively high voter turnout leads to the assessment of high linking social capital in Haagse Hout.

RESILIENCE SCORE HAAGSE HOUT

Haagse Hout has medium to high bonding and bridging social capital, and high linking social capital.

Resilience Score Laak

Laak

Bonding Social Capital = Low

Sub-category 1: Social Contacts and Binding							
Indicator	AVERAGE THE HAGUE	Laak Centraal	Laakhaven	Molenwijk	Schipperskwartier	Spoorwijk	District: Laak
Index Social Quality	5,5	4,7	4,7	4,7	4,7	4,7	4,7
% feels at home in neighbourhood	48,40	34,10	34,10	34,10	34,10	34,10	34,10
% people in the neighbourhood know each other	62,00	51,30	51,30	51,30	51,30	51,30	51,30
% has a lot of contact with neighbours	29,70	24,40	24,40	24,40	24,40	24,40	24,40
% interaction between neighbours is pleasant	57,40	41,10	41,10	41,10	41,10	41,10	41,10
% feels discriminated by neighbours	3,20	5,30	5,30	5,30	5,30	5,30	5,30
Sub-category 2: Moving Behaviour Residents							
Indicator	AVERAGE THE HAGUE	Laak Centraal	Laakhaven	Molenwijk	Schipperskwartier	Spoorwijk	District: Laak
% has lived at current address since before 2000	35,00	40,70	32,60	41,90	43,80	26,60	39,00
% moved house in the past three years	13,80	34,90	26,70	34,90	37,70	21,10	17,40
Sub-category 3: Viability and Safety							
Indicator	AVERAGE THE HAGUE	Laak Centraal	Laakhaven	Molenwijk	Schipperskwartier	Spoorwijk	Laak
Grade safety	6,5	5,8	5,8	5,8	5,8	5,8	5,8
% feels unsafe in own neighbourhood	31,40	45,30	45,30	45,30	45,30	45,30	45,30
% feels unsafe in own home	13,60	18,80	18,80	18,80	18,80	18,80	18,80
Perception social nuisance	2,1	2,9	2,9	2,9	2,9	2,9	2,9
% probability of burglary	19,30	26,40	26,40	26,40	26,40	26,40	26,40
% probability of street robbery	8,20	13,60	13,60	13,60	13,60	13,60	13,60

Crime rates, as well as perceptions of unsafety, are alarmingly high in Laak. Combined with low results related to social contacts in the neighbourhoods, this leads to the assessment of low bonding social capital in Laak.

Laak

Bridging Social Capital = Medium

Sub-category 1: Social Contacts and Binding							
Indicator	AVERAGE THE HAGUE	Laak Centraal	Laakhaven	Molenwijk	Schipperskwartier	Spoorwijk	District: Laak
% has enough social contacts (in and out of neighbourhood)	88,10	83,80	83,80	83,80	83,80	83,80	83,80
% in need of more social contacts	29,00	38,60	38,60	38,60	38,60	38,60	38,60
% satisfied with the demographic composition of my neighbourhood	54,70	33,30	33,30	33,30	33,30	33,30	33,30
% in my neighbourhood, people from different ethnic backgrounds live and work together	66,25	n/a	n/a	n/a	n/a	n/a	90,00
% the interactions between people from different ethnic backgrounds is positive	63,63	n/a	n/a	n/a	n/a	n/a	63,00
% sufficient knowledge of Dutch language since settling in the Netherlands after 2010	5,50	18,30	8,30	15,70	15,40	6,60	9,60
Sub-category 2: Perception Neighbourhood							
Indicator	AVERAGE THE HAGUE	Laak Centraal	Laakhaven	Molenwijk	Schipperskwartier	Spoorwijk	District: Laak
Grade quality living environment	6,9	6	6	6	6	6	6
% my neighbourhood has improved over the past year	16,47	n/a	n/a	n/a	n/a	n/a	n/a
% my neighbourhood has fallen backward the past year	20,30	n/a	n/a	n/a	n/a	n/a	n/a
Grade neighbourhood facilities	6,5	9,3	9,3	9,3	9,3	9,3	9,3
% satisfied with playgrounds for children	58,80	55,60	55,60	55,60	55,60	55,60	55,60
% satisfied with facilities for youngsters	24,60	26,00	26,00	26,00	26,00	26,00	26,00
Sub-category 3: Volunteering and Community Work							
Indicator	AVERAGE THE HAGUE	Laak Centraal	Laakhaven	Molenwijk	Schipperskwartier	Spoorwijk	District: Laak
% is doing volunteer work	19,50	13,00	13,00	13,00	13,00	13,00	13,00
% parents volunteering at their children's school	20,70	21,00	21,00	21,00	21,00	21,00	21,00
% contributes to viability of neighbourhood	18,20	15,40	15,40	15,40	15,40	15,40	15,40
% residents willing to voluntarily contribute to improve neighbourhood	49,20	54,60	54,60	54,60	54,60	54,60	54,60
Sub-category 4: Membership Associations							
Indicator	AVERAGE THE HAGUE	Laak Centraal	Laakhaven	Molenwijk	Schipperskwartier	Spoorwijk	District: Laak
% member of sports association	34,50	n/a	n/a	n/a	n/a	n/a	28,00
% member of ideal organisation	31,00	n/a	n/a	n/a	n/a	n/a	13,00
% member of art organisation	21,50	n/a	n/a	n/a	n/a	n/a	13,00
% member of residential organisation	26,75	n/a	n/a	n/a	n/a	n/a	17,00
% member of trade union	17,38	n/a	n/a	n/a	n/a	n/a	21,00
% member of ecclesiastical organisation	19,50	n/a	n/a	n/a	n/a	n/a	24,00

Even though Laak scores low results on all indicators related to social contacts inside and outside the neighbourhood, the district is the only one with such high appreciation for facilities for children and youngsters. Another very positive sign is the high willingness of residents to voluntarily contribute to the neighbourhood. These are all very positive signs, which result in an assessment of medium bridging social capital.

Laak

Linking Social Capital = Low

Sub-category 1: Commitment Municipality with Neighbourhood							
Indicator	AVERAGE THE HAGUE	Laak Centraal	Laakhaven	Molenwijk	Schipperskwartier	Spoorwijk	District: Laak
% highly satisfied with municipality's efforts concerning viability and security in neighbourhood	33,88	n/a	n/a	n/a	n/a	n/a	n/a
% highly unsatisfied about municipality's efforts concerning viability and security in neighbourhood	15,82	n/a	n/a	n/a	n/a	n/a	n/a
% municipality has attention for issues of viability and security in my neighbourhood	46,34	n/a	n/a	n/a	n/a	n/a	n/a
% municipality informs residents about its efforts concerning viability and security in my neighbourhood	44,85	n/a	n/a	n/a	n/a	n/a	n/a
% municipality is actively involving its citizens in issues of viability and security	37,11	n/a	n/a	n/a	n/a	n/a	n/a
Sub-category 2: Commitment Residents with Local Public Administration							
Indicator	AVERAGE THE HAGUE	Laak Centraal	Laakhaven	Molenwijk	Schipperskwartier	Spoorwijk	District: Laak
% member of a political party	6,38	n/a	n/a	n/a	n/a	n/a	5,00
% voter turnout most recent parliamentary elections (March 2017)	77,70	58,70	58,70	58,70	58,70	58,70	58,70
Number of politicians of city council living in neighbourhood	5,63	1	0	0	0	1	0,3

It is highly unfortunate that information on the perception of residents of their municipality is not available for this district. Especially considering the low scores in the previous two types of social capital, related to social contacts, and the high appreciation for neighbourhood facilities.

Since the low voter-turnout is one of the few indicators for this district, linking social capital is assessed as low.

RESILIENCE SCORE LAAK

All in all, Laak has low bonding social capital, medium bridging social capital, and low linking social capital.

Resilience Score Leidschenveen-Ypenburg

L'veen-Ypenburg

Bonding Social Capital = Medium

Sub-category 1: Social Contacts and Binding				
Indicator	AVERAGE THE HAGUE	Leidschenveen	Ypenburg	District: L'veen-Ypenburg
Index Social Quality	5,5	5,90	5,80	5,80
% feels at home in neighbourhood	48,40	55,30	50,20	50,70
% people in the neighbourhood know each other	62,00	68,00	69,90	69,40
% has a lot of contact with neighbours	29,70	33,20	34,40	33,10
% interaction between neighbours is pleasant	57,40	68,40	65,70	66,40
% feels discriminated by neighbours	3,20	4,70	3,60	4,10
Sub-category 2: Moving Behaviour Residents				
Indicator	AVERAGE THE HAGUE	Leidschenveen	Ypenburg	District: L'veen-Ypenburg
% has lived at current address since before 2000	35,00	26,00	25,80	26,00
% moved house in the past three years	13,80	11,30	11,40	11,30
Sub-category 3: Viability and Safety				
Indicator	AVERAGE THE HAGUE	Leidschenveen	Ypenburg	District: L'veen-Ypenburg
Grade safety	6,5	6,80	6,80	6,80
% feels unsafe in own neighbourhood	31,40	23,70	25,50	25,00
% feels unsafe in own home	13,60	10,30	12,20	11,50
Perception social nuisance	2,1	1,30	1,30	1,30
% probability of burglary	19,30	22,50	13,10	18,40
% probability of street robbery	8,20	2,00	4,20	3,40

Leidschenveen-Ypenburg experiences medium to high bonding social capital. Despite high results indicating plenty social interactions between neighbours, the relatively low percentage of residents residing in the district prior to 2000 and the relatively high perception of unsafety, the assessment is medium bonding social capital.

L'veen-Ypenburg

Bridging Social Capital = High

Sub-category 1: Social Contacts and Binding				
Indicator	AVERAGE THE HAGUE	Leidscheven	Ypenburg	District: L'veen-Ypenburg
% has enough social contacts (in and out of neighbourhood)	88,10	92,80	93,80	93,30
% in need of more social contacts	29,00	21,80	20,70	21,90
% satisfied with the demographic composition of my neighbourhood	54,70	66,40	56,50	60,60
% in my neighbourhood, people from different ethnic backgrounds live and work together	66,25	n/a	n/a	75,00
% the interactions between people from different ethnic backgrounds is positive	63,63	n/a	n/a	70,00
% sufficient knowledge of Dutch language since settling in the Netherlands after 2010	5,50	1,50	2,50	2,00
Sub-category 2: Perception Neighbourhood				
Indicator	AVERAGE THE HAGUE	Leidscheven	Ypenburg	District: L'veen-Ypenburg
Grade quality living environment	6,9	7,30	7,20	7,20
% my neighbourhood has improved over the past year	16,47	n/a	n/a	n/a
% my neighbourhood has fallen backward the past year	20,30	n/a	n/a	n/a
Grade neighbourhood facilities	6,5	7,30	6,70	6,70
% satisfied with playgrounds for children	58,80	76,70	77,90	76,90
% satisfied with facilities for youngsters	24,60	25,70	30,30	28,80
Sub-category 3: Volunteering and Community Work				
Indicator	AVERAGE THE HAGUE	Leidscheven	Ypenburg	District: L'veen-Ypenburg
% is doing volunteer work	19,50	22,70	20,90	20,90
% parents volunteering at their children's school	20,70	26,00	16,00	21,50
% contributes to viability of neighbourhood	18,20	19,20	12,00	15,50
% residents willing to voluntarily contribute to improve neighbourhood	49,20	48,70	56,20	54,40
Sub-category 4: Membership Associations				
Indicator	AVERAGE THE HAGUE	Leidscheven	Ypenburg	District: L'veen-Ypenburg
% member of sports association	34,50	n/a	n/a	36,00
% member of ideal organisation	31,00	n/a	n/a	32,00
% member of art organisation	21,50	n/a	n/a	12,00
% member of residential organisation	26,75	n/a	n/a	24,00
% member of trade union	17,38	n/a	n/a	17,00
% member of ecclesiastical organisation	19,50	n/a	n/a	17,00

The bridging social capital is high. Residents experience a rich social life, are very satisfied with neighbourhood facilities, and willing to voluntarily contribute to the neighbourhood.

L'veen-Ypenburg

Linking Social Capital = High

Sub-category 1: Commitment Municipality with Neighbourhood				
Indicator	AVERAGE THE HAGUE	Leidschenveen	Ypenburg	District: L'veen-Ypenburg
% highly satisfied with municipality's efforts concerning viability and security in neighbourhood	33,88	n/a	n/a	n/a
% highly unsatisfied about municipality's efforts concerning viability and security in neighbourhood	15,82	n/a	n/a	n/a
% municipality has attention for issues of viability and security in my neighbourhood	46,34	n/a	n/a	n/a
% municipality informs residents about its efforts concerning viability and security in my neighbourhood	44,85	n/a	n/a	n/a
% municipality is actively involving its citizens in issues of viability and security	37,11	n/a	n/a	n/a
Sub-category 2: Commitment Residents with Local Public Administration				
Indicator	AVERAGE THE HAGUE	Leidschenveen	Ypenburg	District: L'veen-Ypenburg
% member of a political party	6,38	n/a	n/a	4,00
% voter turnout most recent parliamentary elections (March 2017)	77,70	79,20	78,50	78,85
Number of politicians of city council living in neighbourhood	5,63	0	0	0

Despite relatively few results being available for this district, the linking social capital is assessed high.

RESILIENCE SCORE LEIDSCHENVEEN-YPENBURG

All in all, L'veen-Ypenburg experiences a medium level of bonding social capital, and high levels of bridging and linking social capital.

Resilience Score Loosduinen

Loosduinen

Bonding Social Capital = Medium

Sub-category 1: Social Contacts and Binding								
Indicator	AVERAGE THE HAGUE	Bohemen en Meer en Bos	Houtwijk	Kraayenstein	Kom Loosduinen	Ockenburg/ Kijkduin	Waldeck	District: Loosduinen
Index Social Quality	5,5	6,2	6,1	6,2	6,1	6,2	5,7	6
% feels at home in neighbourhood	48,40	67,50	60,40	67,50	60,40	67,50	57,10	59,20
% people in the neighbourhood know each other	62,00	62,70	71,80	62,70	71,80	62,70	64,20	66,90
% has a lot of contact with neighbours	29,70	30,80	39,60	30,80	39,60	30,80	26,90	32,40
% interaction between neighbours is pleasant	57,40	69,80	65,60	69,80	65,60	69,80	59,40	65,40
% feels discriminated by neighbours	3,20	4,90	1,70	4,90	1,70	4,90	1,90	2,40
Sub-category 2: Moving Behaviour Residents								
Indicator	AVERAGE THE HAGUE	Bohemen en Meer en Bos	Houtwijk	Kraayenstein	Kom Loosduinen	Ockenburg/ Kijkduin	Waldeck	District: Loosduinen
% has lived at current address since before 2000	35,00	24,20	21,70	35,20	27,70	26,60	29,00	27,00
% moved house in the past three years	13,80	8,50	17,40	12,00	23,40	8,50	10,10	9,60
Sub-category 3: Viability and Safety								
Indicator	AVERAGE THE HAGUE	Bohemen en Meer en Bos	Houtwijk	Kraayenstein	Kom Loosduinen	Ockenburg/ Kijkduin	Waldeck	District: Loosduinen
Grade safety	6,5	7,1	6,7	7,1	6,7	7,1	6,7	6,8
% feels unsafe in own neighbourhood	31,40	18,90	27,80	18,90	27,80	18,90	27,40	25,50
% feels unsafe in own home	13,60	10,70	11,50	10,70	11,50	10,70	13,20	12,20
Perception social nuisance	2,1	1,2	1,2	1,2	1,2	1,2	1,2	1,3
% probability of burglary	19,30	16,60	16,30	16,30	16,30	16,60	15,60	16,00
% probability of street robbery	8,20	4,70	7,00	4,70	7,00	4,70	6,60	7,00

Due to a combination of positive effects regarding social contacts in the neighbourhood, but negative effects caused by relatively high crime rates and perceptions of unsafety, bonding social capital in Loosduinen is assessed as medium.

Loosduinen

Bridging Social Capital = Medium

Sub-category 1: Social Contacts and Binding								
Indicator	AVERAGE THE HAGUE	Bohemen en Meer en Bos	Houtwijk	Kraayenstein	Kom Loosduinen	Ockenburg/ Kijkduin	Waldeck	District: Loosduinen
% has enough social contacts (in and out of neighbourhood)	88,10	87,40	90,60	87,40	90,60	87,40	87,20	87,30
% in need of more social contacts	29,00	24,80	28,20	24,80	28,20	24,80	20,80	26,10
% satisfied with the demographic composition of my neighbourhood	54,70	79,90	65,60	79,90	65,60	79,90	60,80	67,10
% in my neighbourhood, people from different ethnic backgrounds live and work together	66,25	n/a	n/a	n/a	n/a	n/a	n/a	43,00
% the interactions between people from different ethnic backgrounds is positive	63,63	n/a	n/a	n/a	n/a	n/a	n/a	54,00
% sufficient knowledge of Dutch language since settling in the Netherlands after 2010	5,50	2,00	2,80	3,80	3,40	5,80	1,80	2,20
Sub-category 2: Perception Neighbourhood								
Indicator	AVERAGE THE HAGUE	Bohemen en Meer en Bos	Houtwijk	Kraayenstein	Kom Loosduinen	Ockenburg/ Kijkduin	Waldeck	District: Loosduinen
Grade quality living environment	6,9	7,8	7,4	7,8	7,4	7,8	7,2	7,4
% my neighbourhood has improved over the past year	16,47	n/a	n/a	n/a	n/a	n/a	n/a	n/a
% my neighbourhood has fallen backward the past year	20,30	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Grade neighbourhood facilities	6,5	6,9	7	6,9	7	6,9	n/a	6,9
% satisfied with playgrounds for children	58,80	45,60	64,80	45,60	64,80	45,60	42,90	53,30
% satisfied with facilities for youngsters	24,60	17,80	27,30	17,80	27,30	17,80	15,10	21,90
Sub-category 3: Volunteering and Community Work								
Indicator	AVERAGE THE HAGUE	Bohemen en Meer en Bos	Houtwijk	Kraayenstein	Kom Loosduinen	Ockenburg/ Kijkduin	Waldeck	District: Loosduinen
% is doing volunteer work	19,50	24,20	21,80	24,20	21,80	24,20	22,20	22,10
% parents volunteering at their children's school	20,70	9,60	12,10	9,60	12,10	9,60	14,10	12,30
% contributes to viability of neighbourhood	18,20	22,20	24,00	22,20	24,00	22,20	18,60	21,90
% residents willing to voluntarily contribute to improve neighbourhood	49,20	37,50	36,30	37,50	36,30	37,50	36,10	35,00
Sub-category 4: Membership Associations								
Indicator	AVERAGE THE HAGUE	Bohemen en Meer en Bos	Houtwijk	Kraayenstein	Kom Loosduinen	Ockenburg/ Kijkduin	Waldeck	District: Loosduinen
% member of sports association	34,50	n/a	n/a	n/a	n/a	n/a	n/a	36,00
% member of ideal organisation	31,00	n/a	n/a	n/a	n/a	n/a	n/a	38,00
% member of art organisation	21,50	n/a	n/a	n/a	n/a	n/a	n/a	23,00
% member of residential organisation	26,75	n/a	n/a	n/a	n/a	n/a	n/a	37,00
% member of trade union	17,38	n/a	n/a	n/a	n/a	n/a	n/a	21,00
% member of ecclesiastical organisation	19,50	n/a	n/a	n/a	n/a	n/a	n/a	23,00

Assessing bridging social capital in Loosduinen is difficult, due to conflicting results. In general, residents are satisfied with their social lives, and willing to contribute voluntarily to their neighbourhood. However, integration between people from different ethnic backgrounds seems to be a real obstacle in Loosduinen. Therefore, the bridging social capital is assessed medium.

Loosduinen

Linking Social Capital = High

Sub-category 1: Commitment Municipality with Neighbourhood								
Indicator	AVERAGE THE HAGUE	Bohemien en Meer en Bos	Houtwijk	Kraayenstein	Kom Loosduinen	Ockenburg/ Kijkduin	Waldeck	District: Loosduinen
% highly satisfied with municipality's efforts concerning viability and security in neighbourhood	33,88	n/a	n/a	n/a	n/a	n/a	n/a	n/a
% highly unsatisfied about municipality's efforts concerning viability and security in neighbourhood	15,82	n/a	n/a	n/a	n/a	n/a	n/a	n/a
% municipality has attention for issues of viability and security in my neighbourhood	46,34	n/a	n/a	n/a	n/a	n/a	n/a	n/a
% municipality informs residents about its efforts concerning viability and security in my neighbourhood	44,85	n/a	n/a	n/a	n/a	n/a	n/a	n/a
% municipality is actively involving its citizens in issues of viability and security	37,11	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Sub-category 2: Commitment Residents with Local Public Administration								
Indicator	AVERAGE THE HAGUE	Bohemien en Meer en Bos	Houtwijk	Kraayenstein	Kom Loosduinen	Ockenburg/ Kijkduin	Waldeck	District: Loosduinen
% member of a political party	6,38	n/a	n/a	n/a	n/a	n/a	n/a	5,00
% voter turnout most recent parliamentary elections (March 2017)	77,70	85,20	72,70	97,80	72,70	103,80	71,30	83,92
Number of politicians of city council living in neighbourhood	5,63	0	0	2	0	0	0	0,3

The voter turnout in Loosduinen is high, leading to the assessment of high linking social capital.

RESILIENCE SCORE LOOSDUINEN

All in all, the bonding social capital and bridging social capital are medium, while the linking social capital is high.

Resilience Score Scheveningen

Scheveningen

Bonding Social Capital = High

Sub-category 1: Social Contacts and Binding										
Indicator	AVERAGE THE HAGUE	Duindorp	Duinoord	Havenkwartier en Vissenbuurt	Noordelijk Scheveningen	Scheveningen-Dorp	Staten-en Geuzenkwartier	Van Stolkpark	Wittebrug en Duttendel	District: Scheveningen
Index Social Quality	5,5	6,2	6,2	6,1	6,1	6,1	6,2	6,1	6,1	6,1
% feels at home in neighbourhood	48,40	56,40	70,40	57,70	57,70	57,70	70,40	57,70	57,70	60,20
% people in the neighbourhood know each other	62,00	83,10	69,90	69,50	69,50	69,50	69,90	69,50	69,50	70,10
% has a lot of contact with neighbours	29,70	42,70	32,30	35,20	35,20	35,20	32,30	35,20	35,20	33,90
% interaction between neighbours is pleasant	57,40	56,10	74,30	66,80	66,80	66,80	74,30	66,80	66,80	70,00
% feels discriminated by neighbours	3,20	2,50	2,10	2,50	2,50	2,50	2,10	2,50	2,50	2,40
Sub-category 2: Moving Behaviour Residents										
Indicator	AVERAGE THE HAGUE	Duindorp	Duinoord	Havenkwartier en Vissenbuurt	Noordelijk Scheveningen	Scheveningen-Dorp	Staten-en Geuzenkwartier	Van Stolkpark	Wittebrug en Duttendel	District: Scheveningen
% has lived at current address since before 2000	35,00	31,60	44,70	16,00	20,00	35,20	35,60	46,20	37,10	36,70
% moved house in the past three years	13,80	13,20	15,50	29,50	31,10	29,90	12,00	39,70	30,00	13,20
Sub-category 3: Viability and Safety										
Indicator	AVERAGE THE HAGUE	Duindorp	Duinoord	Havenkwartier en Vissenbuurt	Noordelijk Scheveningen	Scheveningen-Dorp	Staten-en Geuzenkwartier	Van Stolkpark	Wittebrug en Duttendel	District: Scheveningen
Grade safety	6,5	6,7	7,6	7,1	7,1	7,1	7,6	7,1	7,1	7,3
% feels unsafe in own neighbourhood	31,40	24,40	9,30	16,10	16,10	16,10	9,30	16,10	16,10	14,30
% feels unsafe in own home	13,60	8,30	4,40	5,70	5,70	5,70	4,40	5,70	5,70	5,20
Perception social nuisance	2,1	2,10	0,70	1,50	1,50	1,50	0,70	1,50	1,50	1,30
% probability of burglary	19,30	12,60	6,20	7,00	7,00	7,00	6,20	7,00	7,00	7,30
% probability of street robbery	8,20	2,30	1,80	2,30	2,30	2,30	1,80	2,30	2,30	1,90

Scheveningen is one of the largest districts of The Hague, and based on these results a very social one. Crime rates are very low, and residents indicate high satisfaction with their social lives. Therefore, the bonding social capital of Scheveningen is assessed high, except for Havenkwartier en Vissenbuurt and Noordelijk Scheveningen, which is assessed medium to high.

Scheveningen

Bridging Social Capital = Medium to High

Sub-category 1: Social Contacts and Binding										
Indicator	AVERAGE THE HAGUE	Duindorp	Duinoord	Haven-kwartier en Vissenbuurt	Noordelijk Scheveningen	Scheveningen-Dorp	Staten-en Geuzen-kwartier	Van Stolkpark	Wittebrug en Duttendel	District: Scheveningen
% has enough social contacts (in and out of neighbourhood)	88,10	89,20	92,60	89,20	91,90	89,20	92,60	91,90	91,90	90,70
% in need of more social contacts	29,00	24,30	25,10	24,30	23,90	24,30	25,10	23,90	23,90	26,00
% satisfied with the demographic composition of my neighbourhood	54,70	57,00	79,20	73,50	73,50	79,20	79,20	73,50	73,50	73,20
% in my neighbourhood, people from different ethnic backgrounds live and work together	66,25	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	48,00
% the interactions between people from different ethnic backgrounds is positive	63,63	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	66,00
% sufficient knowledge of Dutch language since settling in the Netherlands after 2010	5,50	1,70	7,30	7,60	11,30	8,80	7,10	11,30	8,30	5,70
Sub-category 2: Perception Neighbourhood										
Indicator	AVERAGE THE HAGUE	Duindorp	Duinoord	Haven-kwartier en Vissenbuurt	Noordelijk Scheveningen	Scheveningen-Dorp	Staten-en Geuzen-kwartier	Van Stolkpark	Wittebrug en Duttendel	District: Scheveningen
Grade quality living environment	6,9	7,1	8,1	7,6	7,6	7,6	8,1	7,6	7,6	7,7
% my neighbourhood has improved over the past year	16,47	13,30	n/a	n/a	n/a	n/a	n/a	n/a	n/a	13,30
% my neighbourhood has fallen backward the past year	20,30	17,30	n/a	n/a	n/a	n/a	n/a	n/a	n/a	17,30
Grade neighbourhood facilities	6,5	6,3	6,9	8	8	8	6,9	8	8	6,6
% satisfied with playgrounds for children	58,80	75,40	59,70	50,70	50,70	50,70	59,70	50,70	50,70	58,30
% satisfied with facilities for youngsters	24,60	23,50	22,10	20,10	20,10	20,10	22,10	20,10	20,10	23,30
Sub-category 3: Volunteering and Community Work										
Indicator	AVERAGE THE HAGUE	Duindorp	Duinoord	Haven-kwartier en Vissenbuurt	Noordelijk Scheveningen	Scheveningen-Dorp	Staten-en Geuzen-kwartier	Van Stolkpark	Wittebrug en Duttendel	District: Scheveningen
% is doing volunteer work	19,50	19,20	26,40	19,20	24,90	19,20	26,40	24,90	24,90	23,90
% parents volunteering at their children's school	20,70	13,90	16,50	13,90	17,70	13,90	16,50	17,70	17,70	16,60
% contributes to viability of neighbourhood	18,20	22,30	18,00	22,30	17,20	22,30	18,00	17,20	17,20	19,30
% residents willing to voluntarily contribute to improve neighbourhood	49,20	51,00	58,90	51,00	51,00	51,00	58,90	51,00	51,00	53,10
Sub-category 4: Membership Associations										
Indicator	AVERAGE THE HAGUE	Duindorp	Duinoord	Haven-kwartier en Vissenbuurt	Noordelijk Scheveningen	Scheveningen-Dorp	Staten-en Geuzen-kwartier	Van Stolkpark	Wittebrug en Duttendel	District: Scheveningen
% member of sports association	34,50	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	40,00
% member of ideal organisation	31,00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	38,00
% member of art organisation	21,50	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	31,00
% member of residential organisation	26,75	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	31,00
% member of trade union	17,38	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	18,00
% member of ecclesiastical organisation	19,50	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	16,00

Bridging social capital in Scheveningen is medium to high. The indicators related to social contacts are very positive, but the perception of residents of the status of their neighbourhood has a negative effect on bridging social capital.

Scheveningen

Linking Social Capital = Medium to High

Sub-category 1: Commitment Municipality with Neighbourhood										
Indicator	AVERAGE THE HAGUE	Duindorp	Duinoord	Haven- kwartier en Vissenbuurt	Noordelijk Scheve- ningen	Scheve- ningen-Dorp	Staten- en Geuzen- kwartier	Van Stolkpark	Wittebrug en Duttendel	District: Scheve- ningen
% highly satisfied with municipality's efforts concerning viability and security in neighbourhood	33,88	31,10	n/a	n/a	n/a	n/a	n/a	n/a	n/a	31,10
% highly unsatisfied about municipality's efforts concerning viability and security in neighbourhood	15,82	19,40	n/a	n/a	n/a	n/a	n/a	n/a	n/a	19,40
% municipality has attention for issues of viability and security in my neighbourhood	46,34	39,90	n/a	n/a	n/a	n/a	n/a	n/a	n/a	39,90
% municipality informs residents about its efforts concerning viability and security in my neighbourhood	44,85	41,90	n/a	n/a	n/a	n/a	n/a	n/a	n/a	41,90
% municipality is actively involving its citizens in issues of viability and security	37,11	36,40	n/a	n/a	n/a	n/a	n/a	n/a	n/a	36,40
Sub-category 2: Commitment Residents with Local Public Administration										
Indicator	AVERAGE THE HAGUE	Duindorp	Duinoord	Haven- kwartier en Vissenbuurt	Noordelijk Scheve- ningen	Scheve- ningen-Dorp	Staten- en Geuzen- kwartier	Van Stolkpark	Wittebrug en Duttendel	District: Scheve- ningen
% member of a political party	6,38	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9,00
% voter turnout most recent parliamentary elections (March 2017)	77,70	65,20	88,60	78,90	78,90	78,90	84,30	105,30	68,1	81,03
Number of politicians of city council living in neighbourhood	5,63	0	0	0	0	4	2	0	0	0,7

Duindorp is assessed to have medium social capital, due to its dissatisfaction with the municipality's efforts in the neighbourhood. However, since information on other neighbourhoods is not available, it is unclear whether these feelings are only present in Duindorp, or whether they are present in the entire district. Therefore, linking social capital is carefully assessed as medium to high in Scheveningen.

RESILIENCE SCORE SCHEVENINGEN

Bonding social capital in Scheveningen is high, while bridging and linking social capital are medium to high.

Resilience Score Segbroek

Segbroek

Bonding Social Capital = Medium to High

Sub-category 1: Social Contacts and Binding							
Indicator	AVERAGE THE HAGUE	Bomen- en Bloemen- buurt	Heester- buurt	Regentesse- en Valkenbos- kwartier	Vogelwijk	Vruchten- buurt	District: Segbroek
Index Social Quality	5,5	6,4	6,4	5,8	6,4	5,8	6
% feels at home in neighbourhood	48,40	71,10	71,10	52,30	71,10	52,30	56,40
% people in the neighbourhood know each other	62,00	75,40	75,40	66,40	75,40	66,40	68,60
% has a lot of contact with neighbours	29,70	35,50	35,50	30,00	35,50	30,00	30,70
% interaction between neighbours is pleasant	57,40	78,90	78,90	66,90	78,90	66,90	69,70
% feels discriminated by neighbours	3,20	2,40	2,40	1,30	2,40	0,60	1,80
Sub-category 2: Moving Behaviour Residents							
Indicator	AVERAGE THE HAGUE	Bomen- en Bloemen- buurt	Heester- buurt	Regentesse- en Valkenbos- kwartier	Vogelwijk	Vruchten- buurt	District: Segbroek
% has lived at current address since before 2000	35,00	27,55	35,00	48,30	25,70	23,70	35,70
% moved house in the past three years	13,80	22,50	28,30	41,20	7,20	8,80	14,00
Sub-category 3: Viability and Safety							
% probability of street robbery	AVERAGE THE HAGUE	Bomen- en Bloemen- buurt	Heester- buurt	Regentesse- en Valkenbos- kwartier	Vogelwijk	Vruchten- buurt	Segbroek
Grade safety	6,5	7,3	7,3	6,8	7,3	6,8	6,9
% feels unsafe in own neighbourhood	31,40	18,00	18,00	21,50	18,00	21,50	22,00
% feels unsafe in own home	13,60	5,70	5,70	8,80	5,70	8,80	8,60
Perception social nuisance	2,1	1,40	1,40	1,70	1,40	1,70	1,70
% probability of burglary	19,30	14,50	14,50	12,90	14,50	12,90	14,00
% probability of street robbery	8,20	3,90	3,90	4,40	3,90	4,40	4,60

The results related to social contacts in the neighbourhood have a very positive effect on social capital. However, the relatively high number of residents that only recently moved to the neighbourhood, has a negative effect on bonding social capital. Therefore, Segbroek has medium to high social capital.

Segbroek

Bridging Social Capital = High

Sub-category 1: Social Contacts and Binding							
Indicator	AVERAGE THE HAGUE	Bomen- en Bloemen- buurt	Heester- buurt	Regentesse- en Valkenbos- kwartier	Vogelwijk	Vruchten- buurt	District: Segbroek
% has enough social contacts (in and out of neighbourhood)	88,10	92,80	92,80	91,10	92,80	94,30	92,50
% in need of more social contacts	29,00	21,80	21,80	31,00	21,80	20,60	26,50
% satisfied with the demographic composition of my neighbourhood	54,70	81,10	81,10	62,50	81,10	62,50	67,30
% in my neighbourhood, people from different ethnic backgrounds live and work together	66,25	n/a	n/a	n/a	n/a	n/a	54,00
% the interactions between people from different ethnic backgrounds is positive	63,63	n/a	n/a	n/a	n/a	n/a	67,00
% sufficient knowledge of Dutch language since settling in the Netherlands after 2010	5,50	4,90	8,30	14,20	3,00	1,80	5,50
Sub-category 2: Perception Neighbourhood							
Indicator	AVERAGE THE HAGUE	Bomen- en Bloemen- buurt	Heester- buurt	Regentesse- en Valkenbos- kwartier	Vogelwijk	Vruchten- buurt	District: Segbroek
Grade quality living environment	6,9	7,9	7,9	6,3	7,9	7,2	7,4
% my neighbourhood has improved over the past year	16,47	n/a	n/a	20,70	n/a	n/a	20,70
% my neighbourhood has fallen backward the past year	20,30	n/a	n/a	12,75	n/a	n/a	12,75
Grade neighbourhood facilities	6,5	7,1	7,1	6,3	7,1	6,3	6,8
% satisfied with playgrounds for children	58,80	73,20	73,20	65,00	73,20	65,00	67,60
% satisfied with facilities for youngsters	24,60	25,40	25,40	22,90	25,40	22,90	24,60
Sub-category 3: Volunteering and Community Work							
Indicator	AVERAGE THE HAGUE	Bomen- en Bloemen- buurt	Heester- buurt	Regentesse- en Valkenbos- kwartier	Vogelwijk	Vruchten- buurt	District: Segbroek
% is doing volunteer work	19,50	27,10	27,10	25,80	27,10	27,30	27,20
% parents volunteering at their children's school	20,70	20,70	20,70	21,20	20,70	16,60	21,10
% contributes to viability of neighbourhood	18,20	21,80	21,80	20,10	21,80	20,40	21,10
% residents willing to voluntarily contribute to improve neighbourhood	49,20	54,10	54,10	51,90	54,10	54,00	54,80
Sub-category 4: Membership Associations							
Indicator	AVERAGE THE HAGUE	Bomen- en Bloemen- buurt	Heester- buurt	Regentesse- en Valkenbos- kwartier	Vogelwijk	Vruchten- buurt	District: Segbroek
% member of sports association	34,50	n/a	n/a	n/a	n/a	n/a	45,00
% member of ideal organisation	31,00	n/a	n/a	n/a	n/a	n/a	35,00
% member of art organisation	21,50	n/a	n/a	n/a	n/a	n/a	29,00
% member of residential organisation	26,75	n/a	n/a	n/a	n/a	n/a	27,00
% member of trade union	17,38	n/a	n/a	n/a	n/a	n/a	17,00
% member of ecclesiastical organisation	19,50	n/a	n/a	n/a	n/a	n/a	16,00

Bridging social capital is high. Residents are satisfied with their social life, their neighbourhood, and the high percentage related to volunteering have a positive effect on bridging social capital.

Segbroek

Linking Social Capital = High

Sub-category 1: Commitment Municipality with Neighbourhood							
Indicator	AVERAGE THE HAGUE	Bomen- en Bloemen- buurt	Heester- buurt	Regentesse- en Valkenbos- kwartier	Vogelwijk	Vruchten- buurt	District: Segbroek
% highly satisfied with municipality's efforts concerning viability and security in neighbourhood	33,88	n/a	n/a	42,25	n/a	n/a	42,25
% highly unsatisfied about municipality's efforts concerning viability and security in neighbourhood	15,82	n/a	n/a	9,45	n/a	n/a	9,45
% municipality has attention for issues of viability and security in my neighbourhood	46,34	n/a	n/a	57,85	n/a	n/a	57,85
% municipality informs residents about its efforts concerning viability and security in my neighbourhood	44,85	n/a	n/a	55,70	n/a	n/a	55,70
% municipality is actively involving its citizens in issues of viability and security	37,11	n/a	n/a	46,80	n/a	n/a	46,80
Sub-category 2: Commitment Residents with Local Public Administration							
Indicator	AVERAGE THE HAGUE	Bomen- en Bloemen- buurt	Heester- buurt	Regentesse- en Valkenbos- kwartier	Vogelwijk	Vruchten- buurt	District: Segbroek
% member of a political party	6,38	n/a	n/a	n/a	n/a	n/a	9,00
% voter turnout most recent parliamentary elections (March 2017)	77,70	79,10	n/a	64,50	92,30	79,00	78,73
Number of politicians of city council living in neighbourhood	5,63	1	1	1	1	5	1,8

The negative result related to residents being unsatisfied with the municipality is outweighed by several results that have a (highly) positive effect on linking social capital. Therefore, linking social capital is assessed as high.

RESILIENCE SCORE SEGBROEK

All in all, bonding social capital is medium to high, while bridging and linking social capital is high.

VI – Implications and Policy Recommendations

This part of the thesis is outlined as follows.

Firstly, a few remarks are made concerning the dark sides of social capital, and how government agents should take the negative effects of social capital into account prior to, during, and post-disaster.

Secondly, a few general policy recommendations are made on how to increase social capital at the communal level pre-disaster, and how to protect and enhance it during and post-disaster. The first two parts include general policy recommendations which can be applied to all types of communities.

The third part includes specific policy recommendations for the neighbourhoods of The Hague. These recommendations are pre-disaster, and aim to increase social capital throughout the city to make the city more resilient to disaster.

Dark Sides of Social Capital

As mentioned in section II, social capital can prove to be a double-edged sword. Firstly, because communities capable of mobilising and attracting necessary resources, may steer attention away from areas that are also in high need of help. However, they are being overshadowed by the communities with higher social capital which hampers their recovery (Aldrich & Crook, 2008). Secondly, a strong in-group cohesion protects those on the inside, but when gaining access to the group is hard, those on the outside become ever more vulnerable since they do not have access to the same information or resources as those who are inside the group (Aldrich & Crook, 2008). And lastly, because a civil society that becomes too strong, can obstruct recovery plans because they do not see the benefits for their own community and want to protect themselves against this government intervention (Aldrich, 2012a; Aldrich & Crook, *Strong Civil Society as a Double-Edged Sword: Siting Trailers in Post-Katrina New Orleans*, 2008).

These dark sides undermine the notion that strong social capital has a positive effect on post-disaster recovery. Policy makers, aid and rescue workers, and other government officials involved in post-disaster recovery should be highly aware of these dark sides. A few recommendations flow from this discussion. Firstly, policy makers should be careful that resources are distributed equally and that one community does not receive a disproportionate amount, simply because they are better capable of organizing themselves. Secondly, government officials should be aware of the dangers of the us-versus-them paradigm and ensure that nobody is excluded. Lastly, to prevent the delay of recovery, governmental organizations could aim to identify neighbourhoods with high levels of social capital and avoid these areas. Rather, they should seek cooperation with areas with lower social capital and lower potential for controversy and resistance (Daniel P. Aldrich & Crook, 2008).

Increasing Social Capital Pre-Disaster

The purpose of the following recommendations is to increase social capital at the communal level to make communities more resilient to disaster. It has been established that communities who experience a high level of social capital recover faster and are able to attract resources during and after a disaster (Aldrich, 2012a). Therefore, policy makers should aim to not only cherish, but also *deepen* strong social networks. For any policymaker aiming to make their community more resilient, the strengthening of the social networks between residents should be the starting point and core activity (Aldrich, 2012b).

There are three ways to increase social capital at the communal level.

Firstly, the *best practices of time banking and community currency* can be used. Hours spent volunteering can be rewarded by coupons, or a form of local currency which can be used at small-scale local merchants. This system creates a virtuous cycle, in which volunteers are spending time in their own neighbourhood, and are connected to local shops and entrepreneurs (Lietaer, 2004). Time banking and community currency does not only increase social capital, but also has a positive effect on mental and physical health of those involved (Lasker et al., 2011).

Secondly, social capital can be enhanced through the organisation of *social activities*, for example fairs, markets, an ice-skating range, and parades. These provide a low-key opportunity for neighbours to meet and engage with each other. In addition to these social activities, group

meetings can be organised, during which these social ties can be deepened through discussions on topics that are of interest to the community, such as school choices or local sustainable initiatives (Aldrich, 2010). Having these meetings regularly increases the overall level of trust in a community, and has a positive effect on the livelihood of the entire neighbourhood (Brune & Bossert, 2009). Even those who do not actively participate benefit from the outcome of these social activities or group meetings (Pronyk et al., 2008). Having these regular meeting can generate output which is of benefit to the entire community, such as a community garden, mentoring programmes for and by children, or local sports leagues and other after school programmes (Aldrich, 2010).

The third way of increasing social capital at the communal level is to design the *physical layout* of the neighbourhood in such a way that encourages participation and socialization. This includes libraries, parks, squares, playgrounds, but also bars, a lunch room or a hair salon (Oldenburg, 1999). Another way of increasing social capital is to include a space or activity and make neighbourhoods responsible for this project. For example, an annual fair whereby local residents are responsible for food stands, entertainment and stalls (Ostrom, 1990). Another possibility is to give residents control over what they prefer in the spaces around their homes. Communities where residents are actively participating in designing their shared space, experience lower crime rates and higher bonding capital (Newman, 1996).

Protecting Social Capital During the Disaster

During times of crisis, social capital must be protected. One of the main threats to social capital are forced evacuations whereby social groups are split up. In times of crises, *evacuations* are often unavoidable. However, those who are evacuated should remain as closely as possible in their own social group. If that is not possible, people should be placed together with those who as closely as possible represent their own social environment. Remaining in this social support network will make coordination and mobilisation easier, and could even save lives.

Over the past years, the desire to rapidly evacuate entire areas and split elderly from their social support system has caused ‘lonely deaths’, whereby survivors of the initial disasters deceased because they were separated from their friends and family (Aldrich, 2012b). In addition, citizens who were separated from the social group they were heavily relying on – for example single mothers – had much more difficulty recovering than those who remained within their social

group (Tobin-Gurley, Peek, & Loomis, 2010). The more intact a social group remains, even when they are evacuated out of their own environment, the stronger they are and more rapidly able to recover (Aldrich, 2012b).

Protecting and Enhancing Social Capital Post-Disaster

Post-disaster, social capital should be both protected and enhanced. Post-disaster, aid givers should focus more on the *protection of social capital*, especially in case of evacuations or resettlements. Currently, the majority of aid is allocated to the protection of material rehabilitation, such as the protection of infrastructure or buildings. Most of this aid is focusing on short-term recovery. While this is important, more resources should be allocated to protect social capital, since this is such an important part of the recovery process. This is not to say that aid workers should aim to establish new network (Aldrich D. , Rethinking Civil Society-State Relations in Japan after the Fukushima Accident, 2013) (Aldrich & Crook, Taking the High Ground: FEMA Trailer Siting after Hurricane Katrina, 2013)s, but should rather focus on existing social ties and aim to protect and/or strengthen them. Aid workers should assist in protecting social capital during and after the disaster, which may take months or even years. However, it is important to have this medium- to long-term commitment since social capital is crucial in post-disaster recovery (Aldrich, 2012b).

In addition, post-disaster planners should be careful that those activities that created the social capital in the first place, for example community gatherings, socializing with neighbours, or public meetings, are starting to disappear because of the aftershocks of the disaster, the social capital is rapidly declining. When this happens, a community enters a vicious circle where social capital will only further decrease and recovery will stall (Ritchie, 2012). Therefore, post-disaster recovery should not focus solely on re-building infrastructure or homes, but on protecting and re-building social capital as well (Aldrich & Meyer, 2015).

Increasing Social Capital in The Hague

The discussion on how to increase social capital at the neighbourhood level, and which policy recommendations are most fitted, is organised as follows. Six different neighbourhood profiles were created, and all neighbourhoods are distributed among these six profiles.

The Hague

The differences in bonding, bridging and linking social capital in the neighbourhoods of The Hague are significant, and therefore, general remarks that can be made are limited. However, three challenges are present city-wide.

Firstly, The Hague is expected an increase in population from 500,000 to 600,000 residents in 2030.³⁷ The influx of roughly 100,000 new residents over the course of ten years, can negatively influence social capital.

Secondly, the University of Leiden, campus The Hague, is planning to expand its number of studies, which will lead to an increase in the student population in The Hague. Currently, 3000 students are following a study at the Campus The Hague. In 2021, the University aims to have 4500 students.³⁸ This can have positive effects on social capital, since a city-wide student network has positive effects on bridging social capital, but an increase in the number of students can also undermine social capital at the neighbourhood level. Often, students rent a room or apartment for a short period of time, and are therefore not inclined to heavily invest in their neighbourhood. The disengagement in their local community, combined with the student lifestyle, can divide a neighbourhood into students and non-students, which has negative effects on social capital.

The municipality should anticipate these newcomers, and try to integrate them into the neighbourhoods as smoothly as possible. For example, by providing newcomers with specific information on their neighbourhood, including information regarding neighbourhood meetings and social activities. This is especially important to neighbourhoods where large residential towers will be built, like Bezuidenhout and Scheveningen.³⁹ In neighbourhoods where large amounts of students are to be expected, for example Zeeheldenkwartier and Rivierenbuurt, the municipality should consider organising activities to integrate these students with the locals.

The third problem facing The Hague, is that its residents largely remain within their own ethnic group. Surveys showed that citizens hardly interact with people from other ethnic groups. However, when there is interaction between different ethnic groups, this is overwhelmingly

³⁷ Centraal Bureau voor de Statistiek. PBL/CBS Prognose: Groei Steden Zet Door. <https://www.cbs.nl/nl-nl/nieuws/2016/37/pbl-cbs-prognose-groei-steden-zet-door>.

³⁸ NOS. Universiteit Leiden breidt Campus uit in Den Haag. <http://nos.nl/artikel/2110030-universiteit-leiden-breidt-campus-uit-in-den-haag.html>.

³⁹ Den HaagFM. Extra Informatieavond over Woonflat naast Vuurtoren. <http://denhaagfm.nl/2017/03/11/extra-informatieavond-over-woonflat-naast-vuurtoren/>.

experienced as pleasant. Therefore, it seems like a lack of contact is not caused by a conflict between ethnic groups. Rather, it may be difficult for many people to initiate contact.

Six Profiles

To organise the discussion on policy recommendations for the neighbourhoods of The Hague, I created six neighbourhood profiles. Each neighbourhood is placed in one of the following profiles.

Neighbourhood Profile 1: Medium to High Social Capital

Even though there is room for improvement in these neighbourhoods, immediate actions are not necessary. The following neighbourhoods score medium to high on the Resilience Score Card.

Bomen- en Bloemenbuurt, Heesterbuurt, Vogelwijk, Vruchtenbuurt (district Segbroek), Benoordenhout, Bezuidenhout Midden Oost, Bezuidenhout West (district Haagse Hout), Duinoord, Havenkwartier en Vissenbuurt, Noordelijk Scheveningen, Scheveningen-Dorp, Staten- en Geuzenkwartier, Van Stolkpark (district Scheveningen), Leidschenveen, Ypenburg (district Leidschenveen-Ypenburg), Bohemen en Meer en Bos, Houtwijk, Kraayenstein, Kom Loosduinen, Ockenburg/Kijkduin, Waldeck (district Loosduinen).

However, the city-wide challenges are also present here. Especially the neighbourhoods Binnenstad, Oude Centrum, Kortenbos, Rivierenbuurt (district City Centre), and Regentesse- and Valkenboskwartier (district Segbroek) are neighbourhoods where people only reside a few years before moving elsewhere. Ways must be found to better integrate these people in the neighbourhood. With the expanding of the University of Leiden to the Hague, and an increase in studies and students, it is to be expected that especially these areas will see a lot more young people coming to these neighbourhoods, since these neighbourhoods have plenty affordable houses for students.

Neighbourhood Profile 2: Medium to High Social Capital; despite being part of a district with a majority of neighbourhoods with low social capital

Leyenburg and Wateringseveld (district Escamp) and Archipelbuurt and Zeeheldenkwartier (district City Center), are four neighbourhoods with medium to high social capital scores.

However, these scores are remarkable since they are located in a district which is mostly characterised by neighbourhoods with low social capital.

My recommendation is to conduct further research, to find out why these neighbourhoods score so differently on the Resilience Score Card than the others. These factors should be identified, and translated into concrete policy measures that can be implemented at the neighbourhoods that are currently experiencing low social capital.

Neighbourhood Profile 3: Medium to High Social Capital; but very inward looking

Duindorp and Wittebrug/Duttendel are two neighbourhoods with deviant scores, compared to the other neighbourhoods in their district. The most remarkable difference between these two neighbourhoods and the others, is the low satisfaction with the neighbourhood facilities, the high levels of unsafety, and the dissatisfaction with the municipality. However, the residents score very positive on indicators related to social contacts in their neighbourhood. Residents are content with their social life, and feel at home.

My recommendation for the municipality is to improve its relationship with the residents of Duindorp and Wittebrug/Duttendel. Further research is necessary to determine why the residents are dissatisfied with the municipality, and how this relationship can be improved.

Neighbourhood Profile 4: Low to Medium Social Capital; with very positive signs for a future increase of social capital

The Stationsbuurt is the only neighbourhood in this profile. However, its specific characteristics are so different from the others in the city that it deserves further discussion. The neighbourhood has low to medium social capital, but with a lot of positive signs indicating an increase in social capital in the future. Residents are positive about the improvements their neighbourhood has gone through the past year, a relatively high percentage of residents is content with the municipality's involvement in the neighbourhood, and believes the municipality notices issues affected their neighbourhood and takes them seriously.

The Stationsbuurt (district City Centre) is located next to the Schilderswijk and Transvaal, Groente- en Fruitmarkt. The latter two neighbourhoods are facing complex problems, and have a low to medium social capital score. My recommendation is to further research why Stationsbuurt is experiencing positive signs, while the other two neighbourhoods are facing

highly complex problems. Perhaps lessons learned from the Stationsbuurt can be implemented in both the Schilderswijk and Transvaal, Groente- en Fruitmarkt.

Neighbourhood Profile 5: Low to Medium Social Capital; caused by a lack of social contacts

The social capital scores of Mariahoeve and Marlot (district Haagse Hout) are different from the other three neighbourhoods in its district. This is mainly caused by low results on indicators related to social contacts inside and outside of the neighbourhood. The same low scores are present in Laak Centraal, Laakhaven, Molenwijk, Schipperskwartier, and Spoorwijk (district Laak). All these neighbourhoods have potentially a lot of isolated and lonely people, who are in need of more social contacts.

My recommendation is to improve the social fabric in this neighbourhood by organising neighbourhood festivals, or other social activities. Also, all neighbourhoods have a relatively high number of residents indicating they are willing to voluntarily contribute to the viability of their neighbourhood. Through volunteering programmes, social capital can be improved.

An additional remark regarding Laak must be made. Essential data is missing regarding resident's perceptions of their own neighbourhood, and whether it has improved or instead fallen backward over the past years. This is unfortunate, since the Laak district is producing conflicting results on the resilience score card. However, since this information is not available, I decided to place these neighbourhoods in this profile, instead of in profile 6. However, when information regarding citizen's perceptions would be acquired, and turn out to have a negative effect on social capital, all neighbourhoods of district Laak will fit in profile 6.

Neighbourhood Profile 6: Low Social Capital; caused by a highly complex mix of problems, and with no clear-cut solutions

Applying both Schilderswijk and Transvaal, Groente- en Fruitmarkt (hereafter: Transvaal) neighbourhoods to the Resilience Score Card leads to conclusions that are hard to interpret.

On the positive side, (bonding and bridging) social capital is relatively high in both neighbourhoods. People know each other, their interactions are pleasant, and residents from the Schilderswijk and Transvaal, are content with their social lives. In addition, people from different ethnic backgrounds seem to live together peacefully. Another remarkable positive sign is the sharp contrast between Schilderswijk and Transvaal, and the rest of the neighbourhoods

of the city centre district regarding appreciation of children's playgrounds, with both Schilderswijk and Transvaal indicating high satisfaction with the facilities, opposed to the residents of the other neighbourhoods in the same district who are not satisfied with the facilities. Another positive indicator is that a relatively high percentage of residents has lived at the same address since 2010. Lastly, plenty residents are volunteering.

However, all these positive indicators are confronted with (very) negative results. Both neighbourhoods are experiencing high crime rates, and a relatively high percentage of residents indicate they feel unsafe in their neighbourhood and/or their home. Most disturbing, however, is that residents claim their neighbourhood has fallen backward the previous year. Only a small number of residents indicate they experienced a general improvement of their neighbourhood. Another concerning factor is the low linking social capital in both neighbourhoods. Residents from both neighbourhoods feel the municipality does not have enough attention for issues concerning viability and safety in their neighbourhood. Roughly 20% of residents of both neighbourhoods indicate they are highly unsatisfied with the municipality's efforts to improve their neighbourhood. These sentiments also translate into voter turnout during elections, which is lower than average.

All in all, the results of both neighbourhoods in the Resilience Score Card indicate a medium level of bonding and bridging social capital, despite several serious challenges facing these neighbourhoods. The relative absence of linking social capital is problematic, since these neighbourhoods are facing multiple challenges which involve the municipality as well.

My recommendation for these neighbourhoods is to start at restoring and building linking social capital. To address the other issues in the neighbourhood, goodwill must be built between the municipality and the residents.

Other neighbourhoods that are facing a complex mix of problems are Bouwlust, Moerwijk, Morgenstond, Rustenburg-Oostbroek, and Vrederust (district Escamp). In many ways, this district resembles the issues that Schilderswijk and Transvaal are facing. Low satisfaction with their social life, combined with high crime rates and feelings of unsafety, lead to low bonding social capital. Bridging social capital is negatively influenced by low satisfaction with the neighbourhood, and linking social capital is undermined by sentiments of dissatisfaction with the municipality. However, a positive sign is that all neighbourhoods are experiencing high levels of residents willing to voluntarily contribute to the viability of the neighbourhood.

My recommendation for all neighbourhoods that fit in profile six, is to mobilise the residents that are indicating they are willing to contribute to the neighbourhood. A combined effort of the municipality, and local volunteer programmes, could have a positive effect on these problematic areas, and be a first step towards increase social capital at the neighbourhood level.

VII – Conclusion

This thesis aimed to answer the following research question:

How resilient are the neighbourhoods of The Hague, according to a Resilience Score Card based on Daniel Aldrich's research on recovery, resilience, and social capital?

The Resilience Score Card, based on Aldrich's research on recovery, resilience, and social capital, showed the level of social capital of different neighbourhoods in The Hague. As explained in the theoretical framework of this thesis – part II – the presence or absence of social capital is a critical component of resilience.

In this thesis, forty-four neighbourhoods, divided over eight districts, were assessed. This led to the following results.

Segbroek, Haagse Hout, Loosduinen, and Scheveningen are districts with the highest social capital. Benoordenhout (Haagse Hout), and Archipelbuurt/Willemspark (City Centre) are the two neighbourhoods with the highest social capital, while Moerwijk, Rustenburg-Oostbroek and Bouwlust have the lowest social capital.

Since the results produced by the Resilience Score Card are so diverse, it is difficult to draw conclusions on resilience in The Hague in general. However, based on all information discussed in this thesis, it seems fair to conclude that even though The Hague has some highly resilient communities, the city is facing many challenges. The municipality is making efforts to increase resilience, and has joined the 100 Resilient Cities Network in November 2016. However, the city is facing many challenges. Several neighbourhoods – for example, Schilderswijk, Moerwijk, and Transvaal – are confronted with a complex mix of problems, undermining their resilience to disaster.

This thesis should be perceived as a first step in increasing social capital and resilience in The Hague, and the policy recommendations can be used as first steps towards making The Hague a more resilient and more social city. However, further research is necessary to identify which factors can explain the differences in results of the Resilience Score Card. In addition, more research is necessary to improve the policy recommendations, and to draft concrete policy measures on how to improve social capital and resilience at the neighbourhood level.

Bibliography

- A., H. V., Hurlbert, J. S., & Beggs, J. J. (1996). Exploring the Determinants of Support Provision: Provider Characteristics, Personal Networks, Community Contexts, and Support Following Life Events. *Journal of Health and Social Behavior*, 37(3), 252-264.
- Adger, W. N. (2000). Social and Ecological Resilience: Are They Related? *Progress in Human Geography*, 24, 347-364.
- Ahern, J., & Galea, S. (2006). Social Context and Depression after a Disaster: The Role of Income Inequality. *Journal of Epidemiology and Community Health*, 60, 766-770.
- Ahmed, R., Seedat, M., van Niekerk, A., & Bulbulia, S. (2004). Discerning Community Resilience in Disadvantaged Communities in the Context of Violence and Injury Prevention. *South African Journal of Psychology*, 34, 386-408.
- Albala-Bertrand, J. (1993). *The Political Economy of Large Natural Disasters With Special Reference to Developing Countries*. Oxford: Clarendon Press.
- Aldrich. (2012a). *Building Resilience: Social Capital in Post-Disaster Recovery*. Chicago: The University of Chicago Press.
- Aldrich. (2012b). Social, not Physical, Infrastructure: The Critical Role of Civil Society after the 1923 Tokyo Earthquake. *Disasters*, 36(3), 398-419.
- Aldrich. (2017, May 24). How Social Ties Make Us Resilient to Trauma. *The Conversation*. Opgehaald van <http://theconversation.com/how-social-ties-make-us-resilient-to-trauma-78223>
- Aldrich, D. (2013). Rethinking Civil Society-State Relations in Japan after the Fukushima Accident. *Polity*, 45(2), 249-264.
- Aldrich, D. P. (2010). Fixing Recovery, Social Capital in Post-Crisis Resilience. *Journal of Homeland Security*, 6, 1-10.
- Aldrich, D., & Crook, K. (2008). Strong Civil Society as a Double-Edged Sword: Siting Trailers in Post-Katrina New Orleans. *Political Research Quarterly*, 61(3), 379-389.
- Aldrich, D., & Crook, K. (2013). Taking the High Ground: FEMA Trailer Siting after Hurricane Katrina. *Public Administrative Review*, 73(4), 613-622.
- Aldrich, D., & Meyer, M. A. (2015). Social Capital and Community Resilience. *American Behavioral Scientist*, 59(2), 254-269.
- Aldrich, D., & Sawada, Y. (2015). The Physical and Social Determinants of Mortality in the 3.11 Tsunami. *Social Science & Medicine*, 124, 66-75.
- Alexander, D. E. (2013). Resilience and Disaster Risk Reduction: An Etymological Journey. *National Hazards and Earth Systems Science*, 13, 2707-2716.

- Altman, I., & Low, S. (1992). *Place Attachment*. New York: Plenum Press.
- Álvarez, E., & Romaní, J. (2016). Measuring Social Capital: Further Insights. *Gac Sanit*, 31(1), 57-61.
- Babb, P. (2005). Measurement of Social Capital in the UK. *Statistics, Knowledge and Policy*, 532 - 535.
- Bean, J. (2002). The Implementation of the Incident Control System in NSW: Span of Control and Management by Objectives. *Australian Journal of Emergency Management*, 17(3), 8-16.
- Beatley, T. (1994). *Promoting Sustainable Land Use: Mitigating Natural Hazards through Land Use Planning*. College Station, TX, Texas, USA: Hazard Reduction and Recovery Center, Texas A&M University.
- Berke, P., Cooper, J., Aminto, M., Grabich, S., & Horney, J. (2014). Adaptive Planning for Disaster Recovery and Resiliency: An Evaluation of 87 Local Recovery Plans in Eight States. *Journal of the American Planning Association*, 80(4), 310-323.
- Berke, P., Kartez, J., & Wenger, D. (1993). Recovery after Disaster: Achieving Sustainable Development. *Disasters*, 17(2), 93-109.
- Bhamra, R., Dani, S., & Burnard, K. (2011). Resilience: The Concept, a Literature Review and Future Directions. *International Journal of Production Research*, 49(18), 5375-5393.
- Bodin, Ö., & Nohrstedt, D. (2016). Formation and Performance of Collaborative Disaster Management Networks: Evidence from a Swedish Wildfire Response. *Global Environmental Change*, 41, 183-194.
- Bodin, P., & Wiman, B. (2004). Resilience and other Stability Concepts in Ecology: Notes on their Origin, Validity, and Usefulness. *ESS Bulletin*, 2, 33-43.
- Boin, A., & McConnell, A. (2007). Preparing for Critical Infrastructure Breakdowns: The Limits of Crisis Management and the Need for Resilience. *Journal of Contingencies & Crisis Management*, 15(1), 50-59.
- Boin, A., 't Hart, P., & McConnell, A. (2009). Crisis Exploitation: Political and Policy Impacts of Framing Contests. *Journal of European Public Policy*, 16(1), 81-106.
- Boin, A., 't Hart, P., Stern, E., & Sundelius, B. (2005). *The Politics of Crisis Management: Public Leadership Under Pressure*. Cambridge: Cambridge University Press.
- Bolin, R., & Bolton, P. (1986). *Race, Religion, and Ethnicity in Disaster Recovery*. Boulder, CO: University of Colorado.
- Bonanno, G. (2004). Loss, Trauma, and Human Resilience: Have We Underestimated the Human Capacity to Thrive after Extremely Aversive Events? *American Psychologist*, 59, 20-28.
- Borwn, D., & Kulig, J. (1996/97). The Concept of Resiliency: Theoretical Lessons from Community Research. *Health and Canadian Society*, 4, 29-52.

- Bourdieu, P. (1985). The Forms of Capital. In J. Richardson, *Handbook of Theory and Research for the Sociology of Education* (p. 248). New York: Greenwood.
- Brune, N., & Bossert, T. (2009). Building Social Capital in Post-Conflict Communities: Evidence from Nicaragua. *Social Science & Medicine*, 68, 885-893.
- Bullard, R. D., & Wright, B. (2009). *Race, Place, and Environmental Justice after Hurricane Katrina: Struggles to Reclaim, Rebuild, and Revitalize New Orleans and the Gulf Coast*. Boulder, CO: Westview Press.
- Butler, L., Morland, L., & Leskin, G. (2007). Psychological Resilience in the Face of Terrorism. In B. Bongar, L. Brown, L. Beutler, J. Breckenridge, & P. Zimbardo, *Psychology of Terrorism* (pp. 400-417). New York: Oxford University Press.
- Chamlee-Wright, E., & Storr, V. H. (2009). Club Goods and Post-Disaster Community Return. *Rationality and Society*, 21, 429-458.
- Chang, S. E. (2010). Urban Disaster Recovery: A Measurement Framework and its Application to the 1995 Kobe Earthquake. *Disasters*, 34, 303-327.
- Chang, S. E., & Miles, S. B. (2004). The Dynamics of Recovery: A Framework. In Y. Okuyama, & S. E. Chang, *Modeling the Spatial Economic Impact of Disasters* (pp. 181-204). Berlin: Springer.
- Coffe, H., & Geys, B. (2005). Institutional Performance and Social Capital: An Application to the Local Government Level. *Journal of Urban Affairs*, 27(5), 485-501.
- Coleman, J. S. (1988). Social Capital in the Creation of Human Capital. *The American Journal of Sociology*, 94, S95-S120.
- Comfort, L. (2005). Risk, Security, and Disaster Management. *Annual Review of Political Science*, 8, 335-356.
- Comfort, L., Birkland, T., Cigler, B. A., & Nance, E. (2010). Retrospectives and Prospectives on Hurricane Katrina: Five Years and Counting. *Public Administration Review*, 70(5), 669-678.
- Cutter, S., Emrich, C., Mitchell, J., Boruff, B., Gall, M., & Schmidtlein, M. (2006). The Long Road Home: Race, Class, and Recovery from Hurricane Katrina. *Environment*, 48, 10-20.
- DeMel, S., McKenzie, D., & Woodruff, D. (2011). Enterprise Recovery Following Natural Disasters. *The Economic Journal*(122), 64-91.
- Denney, D. (2008). Editorial Introduction: Living in Dangerous Times - Fear, Insecurity, Risk and Social Policy. *Social Policy & Administration*, 42(6), 557-559.
- Donner, W., & Rodríguez, H. (2008). Population Composition, Migration, and Inequality: The Influence of Demographic Changes on Disaster Risk and Vulnerability. *Social Forces*, 87(2), 1089-1114.
- Duit, A. (2014). Review: Building Resilience: Social Capital in Post-Disaster Recovery. *Public Administration*, 92(2), 514-516.

- Dynes, R. (2005). *Community Social Capital as the Primary Basis for Resilience*. Newark: University of Delaware, Disaster Resource Center.
- Dynes, R. (2006). Social Capital: Dealing with Community Emergencies. *Homeland Security Affairs*, 2(2), 1-26.
- Edelstein, M. (1988). *Contaminated Communities: The Social and Psychological Impacts of Residential Toxic Exposure*. Boulder, CO: Westview Press.
- Elliott, J. R., & Pais, J. (2006). Race, Class, and Hurricane Katrina: Social Differences in Human Responses to Disaster. *Social Science Research*, 35(2), 295-321.
- Elliott, J., Haney, T., & Sams-Abiodun, P. (2010). Limits to Social Capital: Comparing Network Assistance in Two New Orleans Neighbors Devastated by Hurricane Katrina. *Sociological Quarterly*, 51, 624-648.
- Eoh, M. S. (2005). A Comparative Study of Recovery Time between Countries that Experience Floods Frequently and Infrequently. *Unpublished PhD dissertation for Texas A&M University, College Station*.
- Faciane, V. (2007, April 23). Vietnamese Community Thriving in Eastern N.O. *Times Picayune*.
- Finch, C., Emrich, C., & Cutter, S. (2010). Disaster Disparities and Differential Recovery in New Orleans. *Population and Environment*, 31(4), 179-202.
- French, S. P., Feser, E., & Peacock, W. G. (2008). *Quantitative Models of the Social and Economic Consequences of Earthquakes and Other Natural Hazards*. Urbana-Champaign, Urbana, IL: Mid-America Earthquake Center, University of Illinois.
- Furedi, F. (2008). Fear and Security: A Vulnerability-led Policy Response. *Social Policy & Administration*, 42(6), 645-661.
- Ganapati, N. E. (2013). Measuring the Processes and Outcomes of Post-Disaster Housing Recovery: Lessons from Gölcük, Turkey. *Natural Hazards*, 65(3), 1783-1799.
- Ganor, M., & Ben-Lavy, Y. (2003). Community Resilience: Lessons Derived from Gilo under Fire. *Journal of Jewish Communal Service*(Winter/Spring), 105-108.
- Garrison, M., & Sasser, D. (2009). Families and Disasters: Making Meaning out of Adversity. In K. E. Cherry, *Lifespan Perspectives on Natural Disaster: Coping with Katrina, Rita, and other Storms* (pp. 113-130). New York, NY: Springer.
- Garvin, G. (2010, February 15). Haiti Quake Fear: What if Recovery Looks like Managua's? *Miami Herald*. Opgehaald van <http://www.mcclatchydc.com/news/nationworld/world/article24573616.html>
- Gill, T. (2014). Review: Building Resilience: Social Capital in Post-Disaster Recovery. *Social Science Japan Journal*, 17(1), 118-122.

- Godschalk, D. (2003). Urban Hazard Mitigation: Creating Resilient Cities. *Natural Hazards Review*, 4, 136-143.
- Goodman, R., Speers, M., McLeroy, K., Fawcett, S., Kegler, M., & Parker, E. (1998). Identifying and Defining Dimensions of Community Capacity to Provide a Basis for Measurement. *Health Education & Behavior*, 25, 258-278.
- Goodman, R., Speers, M., McLeroy, K., Fawcett, S., Kegler, M., & Parker, E. (1998). Identifying and Defining the Dimensions of Community Capacity to Provide a Basis for Measurement. *Health Education & Behavior*, 25, 258-278.
- Guo, Y. (2012). Urban Resilience in Post-Disaster Reconstruction: Towards a Resilient Development in Sichuan, China. *International Journal of Disaster Risk Science*, 3(1), 45-55.
- Handmer, J., & Dovers, S. (1996). A Typology of Resilience: Rethinking Institutions for Sustainable Development. *Industrial and Environmental Crisis Quarterly*, 9, 482-511.
- Hanifan, L. J. (1916). The Rural School Community Centre. *Annals of the American Academy of Political and Social Sciences*, 67, 130-138.
- Hasegawa, K. (2004). *Constructing Civil Society in Japan: Voices of Environmental Movements*. Melbourne, Australia: TransPacific Press.
- Hawkins, R., & Maurer, K. (2010). Bonding, Bridging and Linking: How Sociap Capital Operated in New Orleans Following Hurricane Katrina. *British Journal of Social Work*, 40, 1777-1793.
- Healy, S. (2001). Privileging Process over "Fact": The Sydney Water Scare as "Organised Irresponsibility. *Science and Public Policy*, 28(2), 123-129.
- Hero, R. E. (2003). Social Capital and Racial Inequality in America. *Perspectives on Politics*, 1(1), 113-122.
- Hurlbert, J., Haines, V., & Beggs, J. (2000). Core Networks and Tie Activation: What Kinds of Routine Networks Allocate Resources in Nonroutine Situations? *American Sociological Review*, 65, 598-618.
- Hurlbert, J., Haines, V., & Beggs, J. (2000). Core Networks and Tie Activation: What Kinds of Routine Networks Allocated Resources in Nonroutine Situations? *American Sociological Review*, 65, 598-618.
- Inglehart, R., Granato, J., & Leblang, D. (1997). *The Impact of Culture on Economic Growth, in Modernization and Postmodernisation*. Princeton U.P.: Princeton N.J. .
- Kage, R. (2011). *Civic Engagement in Postwar Japan: The Revival of a Defeated Society*. Cambridge: Cambridge University Press.
- Klein, R., Nicholls, R., & Thomalla, F. (2003). Resilience to Natural Hazards: How Useful is this Concept? *Environmental Hazards*, 5, 35-45.

- Klinenberg, E. (2003). *Heat Wave: A Social Autopsy of Disaster in Chicago*. Chicago, IL: University of Chicago Press.
- Knack, S. (2002). Social Capital and the Quality of Government: Evidence from States. *American Journal of Political Science*, 46(4), 772-785.
- Landau, J., & Saul, J. (2004). Facilitating Family and Community Resilience in Response to Major Disaster. In F. Walsh, & M. McGoldrich, *Living Beyond Loss: Death in the Family* (pp. 285-309). New York: Norton.
- Lasker, J., Collom, E., Bealer, T., Ni Claus, E., Keefe, J. Y., Kratzer, Z., & Perlow, K. (2011). Time Banking and Health: The Role of a Community Currency Organization in Enhancing Well-Being. *Health Promotion Practice*, 12, 102-115.
- Lietaer, B. (2004). Complementary Currencies in Japan Today: History, Originality and Relevance. *International Journal of Community Currency Research*, 8, 1-23.
- Lin, N. (2001). *Social Capital: A Theory of Social Structure and Action*. New York: Cambridge University Press.
- Longstaff, P. (2005). *Security, Resilience, and Communication in Unpredictable Environments such as Terrorism, Natural Disasters, and Complex Technology*. Syracuse, New York: Author.
- Manzo, L., & Perkins, D. (2006). Finding Common Ground: The Importance of Place Attachment to Community Participation and Planning. *Journal of Planning Literature*, 20, 335-350.
- Maton, K., & Salem, D. (1995). Organizational Characteristics of Empowering Community Settings: A Multiple Case Study Approach. *American Journal of Community Psychology*, 23, 631-656.
- McConnell, A. (2003). Overview: Crisis Management, Influences, Responses and Evaluation. *Parliamentary Affairs*, 56(3), 393-409.
- McCreight, R. (2010). Resilience as a Goal and Standard in Emergency Management. *Journal of Homeland Security and Emergency Management*, 7(1).
- Mileti, D. S. (1999). *Disasters by Design: A Reassessment of Natural Hazards in the U.S.* Washington, DC.: Joseph Henry Press.
- Nakagawa, Y., & Shaw, R. (2004). Social Capital: A Missing Link to Disaster Recovery. *International Journal of Mass Emergencies and Disasters*, 22, 5-34.
- Newman, O. (1996). *Creating Defensible Space*. Washington, DC: U.S. Department of Housing and Urban Development.
- Norris, F., Friedman, M., Watson, P., Byrne, C., Diaz, E., & Kaniasty, K. (2002). 60,000 Disaster Victims Speak: Part I. An Empirical Review of the Empirical Literature, 1981-2001. *Psychiatry*, 65, 207-239.

- Norris, F., Stevens, S., Pfefferbaum, B., Wyche, K., & Pfefferbaum, R. (2008). Community Resilience as a Metaphor, Theory, Set of Capacities, and Strategy for Disaster Readiness. *American Journal of Community Psychology, 41*(1), 127-150.
- Nossiter, A., & Eaton, L. (2007, December 21). Violent Protest over Housing in New Orleans. *The New York Times*.
- Okada, A. (2014). Review: Building Resilience, Social Capital in Post-Disaster Recovery. *Journal of Comparative Policy Analysis, 16*(1), 112-115.
- Oldenburg, R. (1999). *The Great Good Place: Cafes, Coffee Shops, Bookstores, Bars, Hair Salons, and other Hangouts at the Heart of a Community* (3rd ed.). Washington, DC: Marlowe.
- Olshansky, R. B., & Johnson, L. A. (2010). *Clear as Mud: Planning for the Rebuilding of New Orleans*. Washington, DC.: Island Press.
- Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge, England: Cambridge University Press.
- O'Toole, L. J. (1997). Treating Networks Seriously: Practical and Research-Based Agendas in Public Administration. *Public Administration Review, 57*(1), 45-52.
- Perkins, D., & Long, D. (2002). Neighborhood Sense of Community and Social Capital: A Multi-Level Analysis. In A. Fisher, C. Sonn, & B. Bishop, *Psychological Sense of Community: Research, Applications, and Implications* (pp. 291-318). New York: Plenum.
- Perry, R., & Lindell, M. (2006). *Emergency Planning*. Hoboken, NJ: John Wiley & Sons.
- Pfefferbaum, B., Reissman, D., Pfefferbaum, R., Klomp, R., & Gurwitch, R. (2005). Building Resilience to Mass Trauma Events. In L. Doll, S. Bonzo, J. Mercy, & D. Sleet, *Handbook on Injury and Violence Prevention Interventions*. New York: Kluwer Academic Publishers.
- Portes, A. (1987). The Social Origins of the Cuban Enclave Economy of Miami. *Sociological Perspectives, 30*, 340-372.
- Pronyk, P., Harpham, T., Busza, J., Phetla, G., Morison, L., Hargreaves, J., & Porter, J. (2008). Can Social Capital be Intentionally Generated? A Randomized Trial from Rural South Africa. *Social Science & Medicine, 67*, 1559-1570.
- Putnam, R. (1993). *Making Democracy Work: Civic Transitions in Modern Italy*. Princeton, N.J. : Princeton University Press.
- Putnam, R. (1995). Bowling Alone: America's Declining Social Capital. *Journal of Democracy, 6*(1), 65-78.
- Putnam, R. (2000). *Bowling Alone: The Collapse and Revival of American Community*. New York, NY: Simon & Schuster.

- Reininger, B., Rahbar, M., Lee, M., Chen, Z., Alam, S., Pope, J., & Adams, B. (2013). Social Capital and Disaster Preparedness among Low Income Mexican Americans in a Disaster Prone Area. *Social Science & Medicine*, 83, 50-60.
- Ritchie, L. A. (2012). Individual Stress, Collective Trauma, and Social Capital in the Wake of Exxon Valdez Oil Spill. *Sociological Inquiry*, 82(2), 187-211.
- Robinson, L., & Jarvie, J. K. (2008). Post-Disaster Community Tourism Recovery: The Tsunami and Arugam Bay, Sri Lanka. *Disasters*, 32(4), 631-645.
- Rose, R. (1998). Getting Things Done in an Anti-Modern Society: Social Capital Networks in Russia. *Social Capital Initiative Working Paper No. 6*. Washington, DC: The World Bank.
- Rosenthal, U., Boin, R., & Comfort, L. (sd). Management, The Changing World of Crisis and Crisis. In U. Rosenthal, & R. A. Boin, *Managing Crises: Threats, Dilemmas and Opportunities* (pp. 5-27). Springfield: Charles C. Thomas.
- Rutter, M. (1993). Resilience: Some Conceptual Considerations. *Journal of Adolescent Health*, 14, 626-631.
- Shaw, R., & Goda, K. (2004). From Disaster to Sustainable Civil Society: The Kobe Experience. *Disasters*, 28, 16-40.
- Smith, G. P., & Wenger, D. (2007). Sustainable Disaster Recovery: Operationalizing an Existing Agenda. In H. Rodriguez, E. L. Quarantelli, & R. Dynes, *Handbook of Disaster Research* (pp. 234-274). New York, NY: Springer.
- Szreter, S., & Woolcock, M. (2004). Health by Association? Social Capital, Social Theory, and the Political Economy of Public Health. *International Journal of Epidemiology*, 33, 650-667.
- 't Hart, P. (1993). Symbols, Rituals and Power: The Lost Dimension in Crisis Management. *Journal of Contingencies and Crisis Management*, 1(1), 36-50.
- Takeda, J., Tamura, K., & Tatsuki, S. (2003). Life Recovery of 1995 Kobe Earthquake Survivors in Nishinomiya City: A Total-Quality-Management-Based Assessment of Disadvantaged Populations. *Natural Hazards*, 29(3), 567-585.
- Tartaglia, S. (2006). A Preliminary Study for a New Model of Sense of Community. *Journal of Community Psychology*, 34, 25-36.
- Tobin-Gurley, J., Peek, L., & Loomis, J. (2010). Displaced Single Mothers in the Aftermath of Hurricane Katrina: Resource Needs and Resource Acquisition. *International Journal of Mass Emergencies and Disasters*, 28, 170-206.
- Torgler, B. (2013). Review: Building Resilience: Social Capital in Post-Disaster Recovery. *Journal of Economic Literature*, 51(2), 576-578.

- Tse, S., & Liew, T. (2004). New Zealand Experiences: How is Community Resilience Manifested in Asian Communities? *International Journal of Mental Health and Addiction*, 2, 1-8.
- Vale, L., & Campanella, T. (2005). *The Resilient City: How Modern Cities Recover from Disaster*. New York: Oxford University Press.
- Waller, M. (2001). Resilience in Ecosystemic Context: Evolution of the Concept. *American Journal of Orthopsychiatry*, 71, 290-297.
- Wandersman, A. (2000). Citizen Participation. In A. Kazdin, *Encyclopedia of Psychology* (2 ed., pp. 87-90). Washington, DC: American Psychological Association.
- Wildavsky, A. (1988). *Searching for Safety*. New Brunswick: Transaction.
- Yasui, E. (2007). *Community Vulnerability and Capacity in Post-Disaster Recovery: The Case of Mano and Mikura Neighbourhoods in the Wake of the 1995 Kobe Earthquake*. Vancouver, Canada: University of British Columbia.

Annex 1 – Overview Districts & Neighbourhoods The Hague

I – LOOSDUINEN

1. Bohemen en Meer en Bos
2. Houtwijk
3. Kraayenstein
4. Kom Loosduinen
5. Ockenburgh/Kijkduin
6. Waldeck

II – ESCAMP

1. Bouwlust
2. Leyenburg
3. Moerwijk
4. Morgenstond
5. Rustenburg-Oostbroek
6. Vrederust
7. Wateringseveld

III – SEGBROEK

1. Bomen- en Bloemenbuurt
2. Heesterbuurt
3. Regentesse- en Valkenboskwartier
4. Vogelwijk
5. Vruchtenbuurt

IV – SCHEVENINGEN

1. Duindorp
2. Duinoord
3. Havenkwartier en Vissenbuurt
4. Noordelijk Scheveningen
5. Scheveningen-Dorp
6. Staten- en Geuzenkwartier
7. Van Stolkpark
8. Wittebrug en Duttendel
9. Zorgvliet

V – CENTRUM

1. Archipelbuurt/Willemspark
2. Binnenstad
3. Het oude centrum
4. Kortenbos
5. Rivierenbuurt
6. Schilderswijk
7. Stationsbuurt
8. Transvaal, Groente- en Fruitmarkt
9. Zeeheldenkwartier

VI – LAAK

1. Binckhorst
2. Laak Centraal

3. Laakhaven
4. Molenwijk
5. Schipperskwartier
6. Spoorwijk

VII – HAAGSE HOUT

1. Benoordenhout
2. Bezuidenhout Midden Oost
3. Bezuidenhout West
4. Mariahoeve en Marlot

VIII – LEIDSCHENVEEN-YPENBURG

1. Leidschenveen
2. Ypenburg

