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From funding civil initiatives to creating social capital to establishing sustainable economic development in the Wadden

Wild expectations or a solid strategy?

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Abstract

With this research, it is tried to gain insight into the effects of civil initiatives on social capital. The Waddenfonds funds these initiatives, and it is unclear what the effect of this effort is on their objective to help establish sustainable economic development. The Waddenfonds tries to reach this objective by funding civil initiatives in order to create and sustain social capital, which should help establish sustainable economic development. Social capital is defined as resources embedded in a social structure, which are accessed in purposive actions. In this research, social capital was subdivided in bonding, bridging and linking social capital. The main goal of this research was to evaluate the effects the funding has had on social capital and sustainable economic development. Therefore, a questionnaire was developed and conducted with participants (N=87) living in areas where the funded initiatives took place. The findings implied that the initiatives mostly created bonding social capital, rather than bridging social capital. However, in order to help establish sustainable economic development, bridging social capital is needed and an important condition. The effort of the Waddenfonds has helped the initiatives and the goals of the initiatives, but it remains unclear if it has helped establish sustainable economic development.

Key words: civil initiatives, social capital, sustainable economic development, rurality.

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Chapter 1: Introduction

In the king's speech on the Dutch Prinsjesdag in 2013, it was told that the Netherlands would shift from a welfare society to a participation society. The idea of this shift is that civilians carry more responsibility and rely less on the government. However, already before that moment there was interest in this participation society by researchers in the Netherlands (e.g. Hurenkamp, Tonkens & Duyvendak, 2006). Nowadays, citizens and governments are still trying to give shape to the participation society. Another challenge of this time is the urgent need of building and planning a more sustainable country, on an economic, environmental and social level. The Netherlands committed to this in multiple international treaties. These two challenges meet at the Waddenfonds, a governmental fund where citizens can apply for funding for an initiative they want to start in the Wadden, an area in the northern part of the Netherlands. The idea of the Waddenfonds is that the initiatives will create new and strengthen existing networks. The expectation is that these networks will then help establish sustainable economic development. However, there is literature that questions these relations and effects (Rydin & Holman, 2004; Van Staveren & Knorringa, 2007; Dale & Newman, 2008; Westwood, 2011)

In the expectations of the Waddenfonds are three complex concepts: Social capital, civil initiatives and sustainable economic development. Social capital has received much attention in the past decades. This research takes the publication by Robert Putnam in 1993 as a starting point (Putnam, 1993). His research on social capital culminated in 2000, with the famous book *Bowling Alone* (Putnam, 2000). Social capital are resources embedded in a social structure, which are accessed or mobilized by purposive actions (Lin, 2001). Around 2000, social capital was seen as the missing link, with the power to explain geographical and economic inequalities (Van Staveren & Knorringa, 2007). Before that, the reason for those inequalities was uncertain or unknown and however social capital might explain them, there is some critique on the economization of social relations (Van Staveren & Knorringa, 2007).

Civil initiatives, on the other hand, are discussed in a Dutch context. They are formally or informally organized groups of citizens who are active in and contribute to the public domain (De Haan et al., 2018; De Haan et al., 2019; Meerstra et al., 2020). In a civil initiative, people work voluntarily to achieve a specific goal, like replacing a service or preventing a service from disappearing. Lastly, the research looks into sustainable economic development, since that is one of the goals of the Waddenfonds. Sustainable economic development is economic development that does not harm the environment or increase social inequalities. It is desirable that economic development is always done in a sustainable way, but what does that exactly mean? All of the concepts mentioned above are examined in a rural arena, the Dutch Wadden area. In this arena, the Waddenfonds works on their goals

Context of the research

The Waddenfonds is an organization active in the North of the Netherlands. It is an governmental organization established in 2006 to fund projects and initiatives that help sustain the ecology and help establish sustainable economic development in the Wadden. The Waddenfonds will exist until 2026 and has a total of about 800 million euros to invest in that 20 years of existence. 50% of the total budget is meant to be for ecological goals, while the other 50% is meant to be for economic goals. The window of time of 20 years was decided by the national government of the Netherlands, since it was deemed useful to have a clear start and end. The Waddenfonds has 4 goals, which are:

- A. The increase and enlargement of natural and environmental values of the Wadden;
- B. The decrease or removal of external threats to the natural wealth of the Wadden;
- C. A sustainable economic development in the Wadden, or aiming at a substantial transition to a sustainable energy system in the Wadden and directly adjacent areas;
- D. The development of a sustainable knowledge system regarding the Wadden.

In order to reach these goals, the total amount of financial resources is divided in three budgets: ‘major projects’, ‘thematic openings’ and the ‘budget local innovations’ (BLI). This research is on the BLI. That budget is the smallest and funds initiatives with a maximum of €50.000. In comparison, a project in the major projects category receives a *minimum* of €500.000 with a maximum of 50% of the for funding eligible costs. The BLI is set up to help reach the first part of goal C, which focuses on sustainable economic development. An initiative eligible for BLI-funding has “activities that improve the vitality and socioeconomic sustainability of local communities, and that contribute to new networks or that strengthen existing networks” (Uitvoeringsprogramma 2017-2027). Some examples of BLI-initiatives are a multifunctional centre in Sexbierum, ‘Flower villages Achlum and Oosterbierum’, a sustainable camp site, the renovation of a historic harbour in Den Oever and Ameland Academy, which has the goal to assist people in the catering industry. The initiatives apply for funding by handing in a project plan. In this project plan, the applicants have to substantiate how the project contributes to vitality, socioeconomic sustainability and how they help create new and strengthen existing networks. Because of that process, new goals are added top-down to the initiatives original bottom-up goals. The Waddenfonds expects because of these added goals that the initiatives contribute to the creation of new networks and the strengthening of existing ones. The general idea of the Waddenfonds is that the created and strengthened then help establish sustainable economic development. These expectations are visualized in figure 1. The idea is noble, but due to the complex nature of these social systems, it is curious to know how it works out in reality.

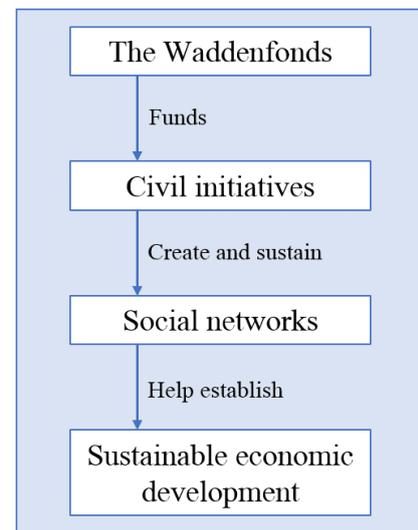


FIGURE 1: THE EXPECTATIONS OF THE WADDENFONDS

Problematization and relevance

This research looks into a problem that can be divided into two. First, the Waddenfonds want to evaluate how their effort has influenced networks in the Wadden. With that knowledge they can adapt the policy and change for example the eligibility criteria that initiatives have to meet to receive funding. Second, this is an opportunity for academics to examine the influences of civil initiatives on social capital. Civil initiatives have a positive image and are expected to have beneficial effects for society (Hurenkamp, Tonkens & Duyvendak, 2011; Meijer, 2019). Social capital has a similar image and is sometimes expected to be the missing link in explaining economic development (Callois & Aubert, 2007; Van Staveren & Knorringa, 2017). Social capital is thoroughly researched and many other and sometimes more negative views on it have surfaced. Examples of this dark side are discrimination, exclusivity, undemocratic tendencies and additional economic costs (Van Staveren & Knorringa, 2017). This is due to the power asymmetries of social capital. Just as with other types of capital, having it and not having it makes a difference for the benefits of an individual or group.

The goal of this research is to examine all the funded BLI-initiatives from 2018 to 2020 quantitatively and give insight in how far the effort of the Waddenfonds did help establish a sustainable economic development. The societal relevance of this research on a larger scale is that other funds like the Waddenfonds can use the insights of this research to their benefit. The research also could grant insight into what improvements can be made regarding the policy of the Waddenfonds.

A conceptual model

The conceptual model as expected by the Waddenfonds (figure 1) needs to be narrowed down. The following conceptual model is proposed (figure 2). This model is roughly the same as the one directly from the Waddenfonds. However, this research exchanges social networks with social capital. This helps with doing the analysis, because social capital as a concept has a more economic connotation, which fits better with the concept of sustainable economic development. Then, the conceptual model is put in a rural context to narrow down the scope, because civil initiatives and social capital have specific characteristics in a rural arena (Callois & Aubert, 2007; Meijer, 2019). An example is that civil initiatives in rural areas are more often focused on maintaining services (Meerstra et al., 2020). Using this conceptual model the research question can be established as: *“How far does the effort of the Waddenfonds help establish sustainable economic development through creating social capital by funding civil initiatives in the rural Wadden area?”*

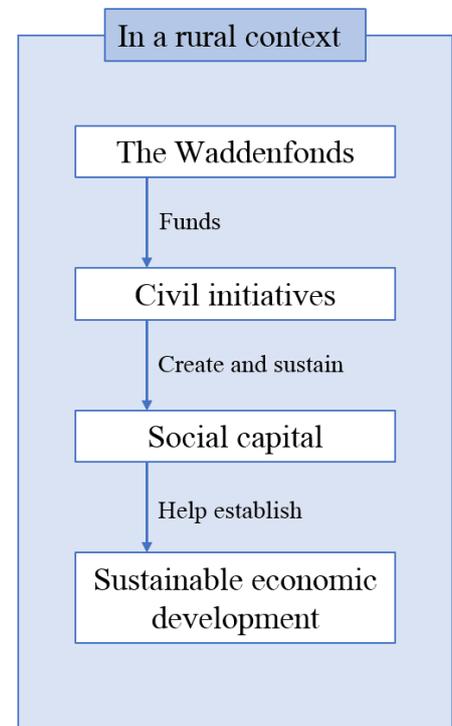


FIGURE 2: THE CONCEPTUAL MODEL

Along with this primary question comes a couple of secondary research questions, which all find their place in this model and help answer the primary research question. The secondary research questions are the following:

1. *In what ways can civil initiatives create social capital?*
2. *In what ways can social capital help establish sustainable economic development?*
3. *How does the rurality of the Wadden influence the effort of the Waddenfonds?*
4. *To what extent have civil initiatives created social capital?*
5. *What are characteristics of the created social capital?*

Secondary questions 1 to 3 are answered with literature research. Questions 4 and 5 are answered with survey data. The first question covers the relation between civil initiatives and social capital. The second question covers the relation between social capital and sustainable economic development. The third question covers the context which is the rural arena. The fourth question adds to the relation between civil initiatives and social capital and, at last, the fifth question adds to both the relation between civil initiatives and social capital, as well as the relation between social capital and sustainable economic development.

Readers guide

The next chapter will provide a theoretical framework on the key concepts of rurality, civil initiatives, social capital and sustainable economic development. The third chapter is on the methodology of this research. The fourth chapter presents the results from the survey. The fifth chapter contains the conclusion, the discussion and the recommendations for future research.

Chapter 2: Theoretical framework

In this chapter, the key concepts are defined and the foundation for the answers for the first three secondary questions is laid. First, the idea of rurality is discussed. What meaning does the rurality of an area hold for the other concepts? Secondly, the idea of civil initiatives is discussed. Civil initiatives are principally not-for-profit and are generally encouraged by politicians and policy makers for the positive impact they are expected to have on the society (Hurenkamp, Tonkens & Duyvendak, 2011; Meijer, 2019). Third, social capital is discussed. The ideas of Putnam (2000) are central, following his distinction of social capital into the bonding and the bridging type. Next to that distinction, the concept of linking social capital is introduced (Woolcock, 1998). Finally, the concept of sustainable economic development is explored. What are ways to define it and how is it connected with the concept of social capital? It is shown how civil initiatives can create and sustain social capital, but also how some expectations are too hopeful and that there can also be negative outcomes (Agger & Jensen, 2015). And, it is shown how social capital can lead to sustainable economic development, including the ways in which the desirable effects of social capital are sometimes exaggerated (Van Staveren & Knorringa, 2007). The goal of this chapter is to substantiate a revised conceptual model, which will be presented in the final chapter.

Rurality

It is important to understand how the rurality of the Wadden area could affect the impact of the civil initiatives on social capital and how it affects the impact of social capital on sustainable economic development. Rurality as a concept has been difficult to define (Woods, 2005). The word itself means the extent in which an area, a person or group of people can be described as rural. This leaves the question what it exactly says about an area when one says that area has a high rurality. What uniquely rural characteristics are then attributed to that area? In the research, the rurality of an entity, in this case an area, a person or a group is determined by how this entity is socially represented. To fully understand what this means, there is elaboration needed on four different approaches in which researchers have tried to define the rural. Then it is discussed what it means for the concept 'rurality' if it is understood as a social representation.

Four approaches

Woods (2005) distinguishes four different approaches in which scholars have tried to define 'rural'. The descriptive approach assumes that a geographical distinction can be made between the rural and the urban measured through statistical indicators. Indicators are for example population density or the total population of an area (Woods, 2005). A problem is that it can occur that an area is no longer rural when it reaches, for example, 2000 inhabitants. An area with 2001 inhabitants is then urban, while an area with 1999 inhabitants is rural, but in reality there may be little difference between the two areas. This problem was sought to be solved with more sophisticated models that offered a less binary distinction than just rural or urban. An example of this is found in two constructed indices of rurality, based in the United Kingdom (Cloke, 1977; Cloke & Edwards, 1986). Different indicators determined the rurality of an area. Demographic statistics like in- and out-migration, population density and age profile are present in these indices, but also dwelling characteristics like if there is hot water and a bath inside, and socio-economic characteristics, like the percentage of people that work in agriculture. The result is a taxonomy that designates areas as extreme rural, intermediate rural, intermediate non-rural, extreme non-rural or urban (Cloke 1977; Cloke & Edwards, 1986). However, there were still problems with these indices. Both the selection and weighing

of the indicators were in need of proper argumentation. Why are baths of importance and, for example, how much does it matter? Essentially, the descriptive approach can describe some different extents of rurality, but it cannot define the concept (Halfacree, 1993).

The socio-cultural approach aims to define rural societies rather than rural territories. For example, Tönnies (1963) designated the rural or non-urban society as *gemeinschaft* and the urban society as *gesellschaft*. This can be useful and is in a way thoughtful, also visible in the following elaboration on social capital, but it faces the same problems as the descriptive approach: there is too little in-between and too much focus on homogeneity. Finally, Pahl (1968) criticized the socio-cultural approach by stating that 'some people are of the city but are not in it, whereas others are in the city but are not of it'. Scholars abandoned the attempt to definitely distinguish between what is rural and what isn't. Then, the approach came to view the rural as a locality. In this approach, researchers tried to define the rural by focusing on the processes that create rural localities. In other words, can certain processes be identified as unique creators of rural areas, so that the rural can be defined as an area in which those unique processes are present? There were three main ways in doing so. The first was that for an area to be rural, there had to be a focus on primary production, such as agriculture, and that unique rural processes could be identified from this characteristic. The same was tried with population density and consumption as causes of those rural processes. If these processes are unique for certain areas with agriculture, low population density and certain consumption patterns, then rurality becomes definable when one can identify those processes in those areas. This approach ultimately faced the problem that none of the processes were uniquely or intrinsically rural, so that the characteristics caused by these processes weren't uniquely and intrinsically rural either.

Rurality as a social representation

It can be said by now that the search for a scientific meaning of 'the rural' has been a fine example of social science. First, scholars tried to give a social concept a definition by the standards of positivist science but there was no definition to be found that way. Secondly, some socio-cultural distinctions were made and, thirdly, there was an attempt to define uniquely rural processes, which feels more postmodern than the other approaches. None of those methods deemed fit for uniquely classifying areas as rural. However, it is still the reality that millions of people designate themselves, their lives, their relatives or acquaintances, and their surroundings as rural. Almost everybody knows somebody from 'the rural' or 'the country'. These designations are the foundation of the approach that views the rural as being a social representation. In this fourth approach, there is no urge to identify particular social, demographic or economic characteristics or to define processes as uniquely rural (Woods, 2005). It focuses rather on the concepts, symbols and images people conjure up when thinking about the rural (Halfacree, 1993). In the rural as a social representation, the rural is socially constructed and it 'becomes a world of social, moral and cultural values in which rural dwellers participate' (Cloke and Milbourne, 1992, p. 360). To clarify, in this approach the attention is shifted from statistical features of rural areas to what people think and feel about that area and the people who live there. Of course, the thoughts of these people can be widely diverse, which consequently helps with the problem of homogeneity the other approaches faced. In this research, the thoughts and the process of exchanging those thoughts in the shape of concepts, symbols and images is what identifies an area as a rural area and which determines the extent of the rurality of an area. This approach also means that for example the first, more

statistical approach or socio-cultural approach are valueless. Those ideas are of course very much part of how an area is socially constructed.

The extent of rurality hints to a continuum of rurality on which entities can be placed through the social construction of rurality. This social construction is done through discourse, in this case through a rural discourse (Woods, 2005). Important to note is that there are more rural discourses than just one (Frouws, 1998). One can for example differentiate between a sociological rural discourse, an anthropological rural discourse and an economic rural discourse among others. In the economic rural discourse for example one can then differentiate between discourses that focus on land use, agriculture or tourism, et cetera. These different discourses are influenced or shaped by for example social, demographic or economic processes, which can take place on a regional to international scale (Woods, 2005). A good example is the process of economic globalization, which changed the agricultural economy by introducing economies of scale and had its influence on the economic rural discourse that way. Another example is technological development, which diminished perceived distances across the world, in that way connecting rural localities with urban ones and in that way influencing the discourse on rural culture. So it seems that the system in which the rurality is constructed is quite a complex one. The continuum is not a two-dimensional one, but rather multidimensional. The other key concepts of social capital, civil initiatives and sustainable economic development will be discussed in a rural context. This rural context is based on literature. How the Wadden are socially represented is examined in the third chapter, which is not necessarily done by scientific literature, but also through popular and political discourse.

Social capital

Social capital is a concept that has been used and independently coined multiple times throughout the 20th century. Hanifan (1920) was the first and used it to advocate an increase in community involvement for schools. His following quote captures it: *'The individual is helpless socially, if left to himself (...). If he comes into contact with his neighbor, and they with other neighbors, there will be an accumulation of social capital, which may immediately satisfy his social needs and which may bear a social potentiality sufficient to the substantial improvement of living conditions for the whole community'* (Hanifan, 1920). The central idea of social capital is that networks between individuals and groups have, direct or indirect, economical value (Putnam, 2000). For this research, the definition for social capital by Lin (2001) is used: *'resources embedded in a social structure, which are accessed/mobilized in purposive actions'*. This definition underlines that social capital is primarily a resource, 'hidden' in networks since purposive action is needed to access it. The definition also underlines the much needed distinction between social networks and social capital. They are not the same thing. You need a network for social capital, and the network needs social capital to be productive. In the 20th century, social capital was also explored further in sociology (Seeley et al., 1956; Bourdieu, 1983), urban planning (Jacobs, 1961) and economy (Loury, 1977; Schlicht, 1984). Also noteworthy are publications by Coleman (1990) and Woolcock (1998). Coleman put social capital firmly on the scientific agenda and did so before Putnam. Woolcock provided thorough synthesis of the discourse on social capital up until that point.

Social capital was popularized by Robert Putnam, first in 1993 (Putnam, 1993) and later with his book *Bowling Alone* (2000). It is relevant to review the latter publication, since it has had a great impact on the scientific discourse. Central in the book is what happened to American

civil and social life between the years 1970 and 2000. The general conclusion is that social capital has crumbled and is in need of refurbishment during the ten years to come until 2010. This conclusion is based on a great amount of longitudinal data, gathered by the US Census (Putnam, 2000). Due to the decrease of social capital, participation in civil society has been eroded. Putnam insists on a wide array of factors that have caused that decline in social capital, among them are that people spend more time in cars in longer commutes, people live in lower density areas, family ties have loosened and people spend more time on the phone. Some of those factors, like the last in this enumeration, seem outdated in 2020, but an equivalent is easily found in the mass use of the internet. The consequences are, for example, that collective problems are resolved less easily, that there is a decline in trust between individuals and communities and that people are less aware of how their fates are linked (Putnam, 2000). The key characteristics of the networks are reciprocity, honesty and trustworthiness (Putnam, 2000). It is those characteristics that can indicate the value of the network and indicate the amount of social capital embedded in the network. Then, Putnam's distinction between bonding and bridging social capital is discussed, followed by the emplacement of social capital in a rural context.

Reciprocity, honesty and trustworthiness

For social capital to enable any kind of productiveness, there needs to be a form of reciprocity in the network that is honest and which can be trusted (Putnam, 2000). This reciprocity is the willingness to do one a favour, without being sure that the other will return that favour in the same way (Taylor, 1982). The honesty and trustworthiness here is the extent and way in which the favour is returned. When there is honesty and trustworthiness, one can speak of *generalized reciprocity*: trust to get a returned favour even when evidence of that is absent (Rotter, 1980). It is exactly this trust that makes interaction and life easier, and which provides for example lower transaction costs. Transaction costs can be defined here as costs of everyday life in the form of energy, time and eventually money (Putnam, 2000). A network without trusts has less social capital and the absence of trust leads to more verification to be needed, which takes time and money. Trust is taken as the main indicator for social capital. Glaeser et al. (2000) have shown in the article that trust is an important indicator of social capital. In that research it was concluded that trust widely differs between different groups and that diversity does not promote trust. Highly educated people were also measured to be more trusting of other people.

Bonding social capital and bridging social capital

Putnam (2000) distinguished social capital into two kinds: bonding social capital and bridging social capital. It is important to get a clear view on what both concepts mean, because these meanings reflect differently on what created the networks, what the nature of those networks are, and what the networks are capable of. In order to provide a clear view to his readers, Putnam (2000) uses a large amount of metaphor, such as '*bonding social capital constitutes a kind of sociological superglue, whereas bridging social capital provides a sociological WD-40*' and '*Bonding social capital is good for getting by, but bridging social capital is crucial for getting ahead*'. The different uses of both kinds of social capital become apparent here. More descriptive definitions are that bonding social capital are more inward looking and exclusive networks, and consists of networks that are inherently more homogenous. Bridging social capital on the other hand are more outward looking and diverse networks, and consists of networks that are more heterogeneous. The nodes in those bridging networks are ethnically, socially, economically and culturally diverse. Being aware of these descriptive definitions,

Putnam's comparison with superglue and WD-40 make more sense. When the network is between people of the same sociological background, one can envision a tight knit network in which trust is high, but the outcomes of the interaction are less innovative. If the network is between a diverse group of people, there could be less trust, but the outcomes can be diverse and accomplish innovation (Putnam, 2000). Bonding social capital and bridging social capital can exist next to each other; the one doesn't exclude the other. Lastly, the famous research '*the strength of weak ties*' by Granovetter (1973) is closely connected to the distinction between bonding and bridging social capital. The strength of weak ties is well represented in the definition of bridging social capital and underlines the reason why the distinction between the two kinds of social capital is made. Other researchers have adopted this distinction and have added other kinds of social capital, like bracing and linking social capital (Woolcock, 1998; Szreter & Woolcock, 2003; Rydin & Holman, 2004; Poortinga, 2012; Häuberer, 2014).

Social capital seems nothing but positive: with social capital, people thrive and it makes life easier on multiple levels (Putnam, 2000). However, just as with other forms of capital, social capital has the ability to establish and maintain inequalities, on individual and collective levels (Putnam, 2000). For example, people with a small network with not much social capital have a harder time finding a job, or the collective network between people of the same group has certain characteristics which make them less trustworthy to outsiders. This behaviour might not only have negative effects for the outsiders, but also for the excluding group, because they may very well be missing out on valuable talents this person has. These negative effects are mainly attributed to bonding social capital (Rydin & Holman, 2004). The tightly knit communities that produce bonding social capital trust and understand each other, but they might fear and mistrust outsiders (Wilson, 1997). Beall (1997) concludes that bonding social capital has the capability to be 'anti-social' capital. In turn, the most important negative characteristic of bridging social capital is that the resources are not always reliable (Callois & Aubert, 2007). What is observable from this theory, is that the negative effects of both kinds of social capital can be solved by the other kind of social capital. These conflicting effects of both kinds of social capital, results in a theoretical struggle. There can be no single indicator that can encompass all phenomena that are under the label 'social capital' (Callois & Aubert, 2007). This means for this research that just measuring social capital is not enough, since it may lead to wildly varying results. There needs to be insight in what the social networks that produce the social capital look like.

Linking social capital

In the same period Putnam's book *Bowling Alone* (2000) was published, Woolcock (1998) developed the concept of linking social capital. This concept is important to be introduced, because of the impact linking social capital can have on sustainable economic development (Woolcock; 1998; Meijer & Syssner, 2017). Linking social capital can be defined as the capability of communities to engage vertically with external organisations, to influence policies or to gain resources (Woolcock, 1998). So where bonding and bridging social capital exist mostly horizontal, linking social capital is more vertical and hierarchical. Linking social capital is said to not be able to be created without bonding and bridging social capital (Agger & Jensen, 2015), because the proportion of bonding and bridging social capital affects the performance of linking social capital (Meijer & Syssner, 2017). Furthermore, linking social capital is sometimes interpreted as another form of bridging social capital (Torpe, 2007, in Agger & Jensen, 2015).

e most important characteristic of linking social capital is that it deals with unequal power relations and the struggle that comes with it (Woolcock, 1998). In another research another type of social capital comes up, namely bracing social capital (Rydin & Holman, 2004). Rydin and Holman stated that *'the reason for adding to the categories of social capital is that the two dominant categories of bridging and bonding do not capture all the possibilities that social capital is trying to address.'* They propose bracing social capital, which is concerned to strengthen links across and between scales and sectors, but only operates within a limited set of actors. That concept is comparable to linking social capital. It has the same vertical type linkages and adds a cross-scale modus operandi and highlights the involvement in multiple sectors. The research sticks to linking social capital from this point on, and the proposition of Rydin and Holman (2004) to add bracing social capital is considered as adding valuable connotations to the concept of linking social capital. When talking about helping establish sustainable economic development through social capital, linking social capital cannot be ignored.

Social capital in a rural context

In a rural context, certain expectations can be had when discussing social capital. These expectations derive from a difference in nature of the social capital in rural and urban areas (Lannoo et al., 2012). The difference is especially clear in the attempt of scholars to define the rural by observing socio-cultural values. The emphasis on the difference between the rural community or *gesellschaft* and the urban society or *gemeinschaft* makes it obvious that the nature of social relations is different in both societies (Tönnies, 1887). This distinction is strengthened by present-day research. Lee et al. (1994) observed that rural elders expect financial aid from their children more frequently than their urban counterparts. In the same fashion, other researchers also concluded that there is more mutual financial support in rural communities, in these cases in the United States (Fischer, 1982; Hofferth & Iceland, 1998). Another body of literature concluded that in rural regions, people more often use their social networks to find a job (Lindsay et al., 2005; Matthews et al., 2009). These findings can be interpreted as evidence that there is more social capital in rural areas. However, the nature and composition of the social networks are different, as well as the type of social investment and amount of returns from the social capital. Central to this idea is that urban people have a wider array of choices, due to the heterogeneous nature of urban areas (Wellman, 1979). This results not necessarily in *less* social capital, but does result in *different* social capital. Research shows that, indeed, people from urban areas are not at all socially isolated (Becker, 1993; Enns et al., 2008). Furthermore, personal networks in rural areas are predominantly based on traditional networks of kin, neighbourhood and church, and less on more modern networks of work, secular organizations, and friendships (Mirande, 1970; Fischer, 1982; Beggs et al., 1996; Bidart & Degenne, 2005). Next to the perspective that the nature of the social capital differs, there is also evidence that people in urban space have more social capital than people in rural space (Mollenhorst et al., 2005; Völker & Flap, 2007; Blokland & Savage, 2008). A striking quote to underline the conclusions of this research is from Wellman (2001: p. 237): *"The cost (of living in the city) is the loss of a palpably present and visible local community to provide a strong identity and belonging. The gain is the increased diversity of opportunity, greater scope for individual agency and the freedom from a single group's constrictive control."* In this quote, the urban-rural distinction regarding social capital is clearly there. The cost of living in the city is low bonding social capital, while the gain is bridging social capital.

The conclusions are contradictory, with some sources stating that people in the rural space have more social capital and others stating that people in the urban space have more social capital (Fischer, 1982; Lee et al., 1994; Mollenhorst et al., 2005; Blokland & Savage, 2008). A logical hypothesis is that the rural space is more affluent in bonding social capital, while the urban space is more affluent in bridging social capital. This is supported by both the sources that argued that there is more social capital in the rural space (e.g. Fischer, 1982; Lee et al., 1994), as well as the sources that argued that there is more social capital in urban space (e.g. Mollenhorst et al., 2005; Blokland & Savage, 2008). Finally, research that examined compositional differences also support that hypothesis (e.g. Mirande, 1970; Beggs et al., 1996; Sorensen, 2016). The theoretical relations between social capital and civil initiatives and sustainable economic development will be explored in the following parts of this chapter.

Civil initiatives

Participation and citizenship

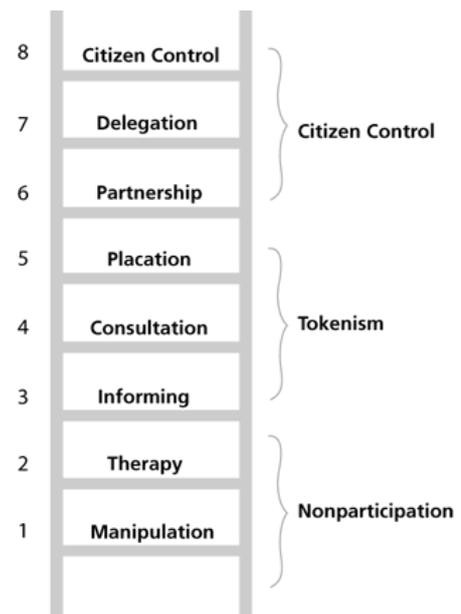
"(...) combined with the necessity to reduce the government deficit, this leads to the traditional welfare state slowly but surely changing into a participation society. Everyone who can do this is asked to take responsibility for his or her own life and environment. When people shape their own their own future, they not only add value to their own life, but also to society as a whole." (King Willem Alexander, 2013).

With this quote from the king's speech in 2013, citizenship and the participation society was firmly put on the Dutch agenda by King Willem-Alexander. In that speech, it was underlined that the Dutch citizen has to take on more responsibilities and rely less on the welfare state organized by the government. This was stressed because the state deficit on the national budget was increasing and because the network and information society was more assertive and independent then before. Also, greater responsibility for citizens and less for the government generally fits in the liberal image of the governing political party, the VVD. A civil initiative is a way in which citizens can participate collectively. In this part, what is meant with civil initiatives is discussed and that idea is then placed in a rural context. Also the concept of civil initiatives in relation to social capital is discussed, so that certain expectations on the results of this research can be made. A civil initiative is a form of participation in society by civilians. Participation here means nothing more or less than involvement in governance processes (Meerstra et al., 2020). This translates for example in informal care for your elderly grandmother, cleaning the park or donating to charity. Indirectly, the government supports the same goals and has the same functions. Citizenship has become more and more important in the '90s and '00s, in the Netherlands (Hurenkamp & Tonkens, 2008; Hurenkamp, Tonkens & Duyvendak, 2011) as well as in other places (Kymlicka & Norman, 1994). Politicians on national, provincial and municipal scale turn to citizens when facing societal challenges (Tonkens, 2008). From this point forward, doing your part as a citizen became normalized and took different forms. These typologies and extents of participating is discussed in the next part and help with the scope of what is meant with civil initiatives.

Typologies and participation ladders

Above all, participation and citizenship are broad concepts. Because of that, those terms are often subdivided into different types. One of them is a distinction in five main types: economic, social, educational, political and societal (Jager-Vreugdenhil, 2011). These types are derived from different contexts in which it is participated. An example of political participation is a voting awareness movement, one of educational participation is volunteering as a tutor in

physics. Another popular way to distinguish between extents of participation are participation ladders, for example by Arnstein (1969), Hart (1992), Pretty (1995) and Kanji and Greenwood (2011). Participation ladders have rungs, with on the first rung the lowest extent of participation and on the last rung the highest extent of participation. A ladder is oftentimes used as a tool to illustrate the power relations between citizens and government in a planning process. The first was made by Sherry Arnstein (figure 3). She emphasizes the power relations and struggles between the public and governmental spheres and concludes that the extent of participation is dependent on the policy of the government on participation (Arnstein, 1969). On the 8th rung the citizen is in control, while the organizations or government is in control at the first rung, in which there is no participation by citizens. On the lower rungs there are terms like manipulation or token participation, the latter meaning that there is the appearance of participation, but it has no real effect or meaning (Pretty, 1995). On higher rungs, there are terms to be found like ‘self-mobilization’, ‘collective action’ or ‘interactive participation’. Participation ladders can be helpful when evaluating initiatives, movements or other forms of participatory action by citizens. The amount of responsibility, the person or organization that took initiative, the type of action undertaken and the outcome shape how the participation can be classified on a ladder.



Arnstein's Ladder (1969)
Degrees of Citizen Participation

FIGURE 3: ARNSTEIN'S PARTICIPATION LADDER

Defining civil initiatives

Civil initiatives are defined using a definition from Meerstra et al. (2020). Civil initiatives are defined as *"formally or informally organized groups of citizens who are active in and contribute to the public domain (De Haan et al., 2018; De Haan et al., 2019; Meerstra et al., 2020)"*. This is different from citizen participation which entails all forms of involvement, while civil initiatives are more specific projects in which citizens try to reach a specific goal together. Oftentimes the main objective of a civil initiative is either to replace a disappearing or disappeared service, facility or amenity or to prevent the disappearance of this service, facility or amenity.

The researched initiatives have some characteristics in common, which are also found back in literature. An important one to highlight is the formal or informal nature that initiatives can have. This can also be found in the definition. In this research, all of the initiatives are formal. This means that there is an organization and the meetings, the people leading the initiatives, their ideas and their goals are documented (Jager-Vreugdenhil, 2011). Generally, civil initiatives are often forms of 'blended social action', meaning that there is engagement from both citizens and governmental and non-governmental agencies such as provinces, municipalities, housing corporations or, for example, forestry management (Sampson, 2005, in Bakker et al., 2012). This notion is confirmed in other literature, even to the extent that in the majority of cases there is a form of blended social action (Hurenkamp, Tonkens & Duyvendak, 2006; Hurenkamp & Rooduijn, 2009). On these ladder the extent of participation

of certain civil involvements can be decided. The rungs of the ladder indicate the amount of power the civil participant has in the process. Civil initiatives are at least placed on the sixth rung of Arnstein's (1969) ladder of citizen participation, which is partnership. Partnership enables citizens to negotiate and engage in trade-offs with traditional powerholders. The traditional powerholder here are the governmental organizations. A good example of a trade-off is that the projects have to have certain goals to be eligible for funding. Those certain goals are added to the original goals of the initiative. However, civil initiatives can also be on higher rungs on the ladder, when there is less involvement of traditional powerholders. On other participation ladders, civil initiatives are also on the upper rungs, with a fitting description of the rungs like 'interactive participation' and 'collective action'. Because of the independent nature and high extent of participation in civil initiatives, policy makers expect much impact on wellbeing and liveability in society from this type of participation (Hurenkamp, Tonkens & Duyvendak, 2006).

Civil initiatives in a rural context

In rural areas, civil initiatives have a different nature and different goals than their urban counterparts. Western regions see an increase of declining rural populations or face 'no growth' (Kempenaar et al., 2016). Civil initiatives in rural areas are more often undertaken to replace disappearing services and facilities or to prevent them from disappearing. Therefore, the activities are a form of community-led planning (Meijer, 2019). This form of planning found their origin in rural areas because local governments were unable to plan accordingly due to the lack of funds and instruments. This lack of means is caused by the prospect of a lack of growth, both economically and demographically, which in turn forced local governments to enact austerity measures (Kempenaar et al., 2016; Meijer & Sysner, 2017; de Haan et al., 2018). Examples of these service-focused initiatives are creating or maintaining community centres, sport accommodations, renovation of local heritage or activities to support local tourism (Meijer, 2019; Meerstra et al. 2020).

Rural civil initiatives in depopulating regions are generally regarded as very positive by national and local professionals and are looked at as a valid way for citizens to do their part in the participation society (De Haan et al., 2018; Healey, 2008). They are praised for the added value on social coherence, citizen empowerment, cost-efficiency, problem ownership and strengthening autonomy and self-reliance of citizens (Agger & Jensen, 2015; Healey, 2008). Still, there is the risk these local governments rely too much on the citizens' initiative to take the responsibility to plan their surroundings (Meijer, 2019; Bisschops & Beunen, 2019), among some other negative connotations such as the unprofessional and marginal character of the community-led plans (Alexander, 2015; Mukhija & Loukaitou-Sideris, 2014). To conclude, civil initiatives in a rural context are generally focused on the provision of services and facilities as a reaction to demographic and economic pressure, and have their place in planning theory as being part of community-led planning.

Civil initiatives and social capital

Civil initiatives as a concept is often spoken of in relation to social capital. Multiple researchers have found that civil initiatives can create social capital and, vice versa, that social capital helps people start civil initiatives (e.g. Agger & Jansen, 2015; Meijer & Sysner, 2017; Meijer, 2019; Healey, 2008). So, civil initiatives come to fruition because of social capital, and civil initiatives themselves have the capacity to create it. This implies some sort of perpetuity: social capital creates civil initiatives, which creates social capital, which helps start initiatives. Furthermore, it indicates that in areas with little social capital, it is less likely that an initiative is started. It

seems like it that a civil initiative carries more value for an area with little social capital, because the creation of social capital by the initiative is relatively unique for that area. This system indicates a vicious cycle for areas with social capital, and no cycle at all for areas with little of it. However, other researchers have concluded that there is little clarity on whether civil initiatives necessarily lead to an increase in social capital (Swanson, 2001; Veen 2015; Vermeij, 2015), meaning that there is no guarantee that it even happens. A description of what an initiative needs to do to be funded by the Waddenfonds is provided in the third chapter. Certainly, the Waddenfonds do want a guarantee that the initiative has an effect on social capital.

A question that comes up is based on the type of social capital that may be created by civil initiatives in rural areas. As discussed before, the type of social capital has an impact on the effects it can have on society and the economy (Putnam, 2000). Is it likely that civil initiatives create bonding social capital? Or may civil initiatives specifically be useful ways to create the bridging social capital that a rural area may be missing? This research takes Agger and Jensen (2015) as a starting point. Agger and Jensen provide in their research a conceptual and argumentative framework for studying how area-based initiatives can facilitate contact between public networks with external forms of power. Their qualitative study is on linking social capital, although they state that linking social capital cannot be disconnected from bonding and bridging, as those two being a necessity for the occurrence of the linking kind. Without sufficient social capital at the base, the link to vertically situated and generally and relatively more powerful social structures is hard to be made in a constructive, productive and equal way. Agger and Jensen (2015) present in their findings three bases on how initiatives create bonding, bridging and linking social capital. The basis for bonding social capital are similar interests and needs. For bonding social capital, the basis is a shared interest or need. If that basis is there, then initiatives can be platforms where networks can create bonding social capital. For bridging social capital, the basis are shared spaces and Agger and Jensen (2015) identified two strategies in which these shared spaces are created. The first is tangible and physical, namely the meeting places, where it is possible for diverse stakeholders and groups to meet each other. The second being new institutional designs for participation. They state that 'steering committees' can be used as a strategic tool to meet this end. A steering committee can in our case be identified as the Waddenfonds, which does steer the initiative in the form of demanding a project plan in order to determine the eligibility for funding. Importantly, they acknowledge that bringing diverse stakeholders together is no guarantee that bridging social capital will be created. They identified different conflicts between different interests in the localities. To conclude this review of their study, it seems that those two bases reflect in a useful way on their likeness and capability to create social capital. In general, the process of the Waddenfonds requires those bases, making it more likely for initiatives to create bonding and bridging social capital.

So, the relation between civil initiatives seems complex and dynamic. Civil initiatives can create social capital, but without social capital it is not likely that many civil initiatives will start (Meijer & Sysner, 2017). This means that enabling civil initiatives with funding, like the Waddenfonds does, can help regions breaking through a stalemate.

Sustainable economic development

Referring to the first chapter, the end-goal of the Waddenfonds and their budget local innovations is to establish sustainable economic development through the funding of civil

initiatives. In order to determine if this goal is theoretically valid, it is needed to define the concept of sustainable economic development and discuss the relation between social capital and sustainable economic development, so that some broad expectations can be made on the effects of the civil initiatives on sustainable economic development.

The starting point to define sustainable economic development is the Brundtland Definition (UNCED, 1987). Sustainable development is defined as *'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'*. If the goal is to decide if development is sustainable, one looks at three aspects, namely the environmental aspect, the economic aspect and the social aspect (McKenzie, 2004). The general idea is that when the generation of today emits too much CO₂, the future generations can't meet their environmental needs. The same goes for sustainable economic development. If present generations act economically unsustainable, future generations will not be able to keep the same economic standards. The social aspect of sustainable development mainly lies in social justice and equality and focuses on the unsustainability of socioeconomic disparities and skewed power relations (McKenzie, 2004). The three aspects are visualized as in figure 4, which also highlights interdependency: there can be no sustainable development, if one of the three aspects is not taken into consideration. However, it seems that the social aspect is generally deemed as less important than the other two (McKenzie, 2004).

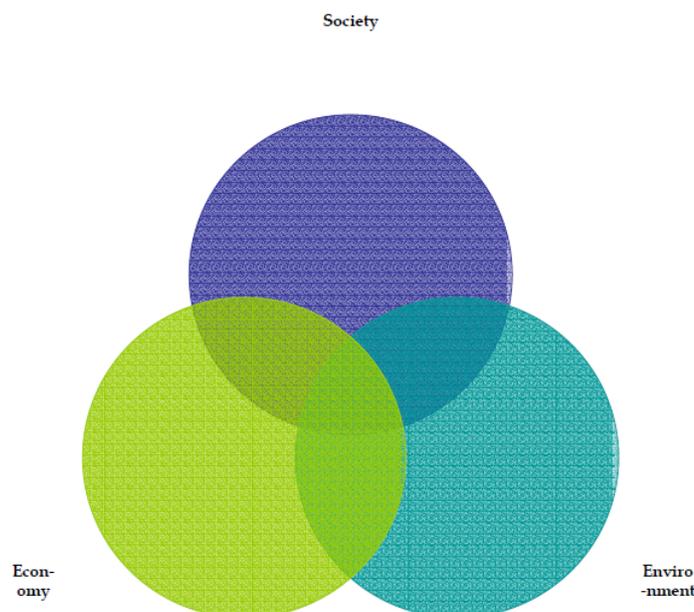


FIGURE 4: INTERDEPENDENCY IN SUSTAINABILITY

And there is some criticism regarding the Brundtland definition, among others for it leaving too much room for ignoring the social aspect of sustainable development (McKenzie, 2004). For this research, the Brundtland definition is sufficient, since the economic aspect is the main point of focus of the Waddenfonds and the scale is regional, while the criticism is mainly on the global scale. Still, it is acknowledged that there can be no sustainable economic development, without considering the social aspect as equally important. This acknowledgment does lead to an important conclusion: sustainable economic development

cannot be measured with the normal (socio)economic indicators like joblessness and GDP, but rather than a range of other indicators. These indicators are not necessarily only economic, but also social and environmental. When the GDP goes up, then there is economic development, but that is not sustainable economic development when inequality increases. To conclude sustainable economic development, it is economic development that takes social sustainability and environmental sustainability into equal account. It is a more integral approach to economic development, including environmental and social parameters to determine development.

Sustainable economic development and social capital

As discussed before, social capital has 'dark' sides and does not necessarily lead to positive results, including sustainable economic development. If the social capital of an area is measured as high, then that is no guarantee that (sustainable) economic development will occur in that area (Van Staveren & Knorringa, 2007). On the other hand, social capital seems to be an important condition for an area to economically develop (Callois & Aubert, 2007; Dale & Newman, 2008). This complex relation between social capital and sustainable economic development has been thoroughly examined (Rydin & Holman, 2004; Innes & Rongerude, 2013; Lam et al., 2020). Economists saw social capital as a missing link, with the power to explain the occurrence of, for example, economies of scale and spatial inequalities (Van Staveren & Knorringa, 2007). For social economists the concept of social capital in relation to economic development was not new at all (Van Staveren & Knorringa, 2007). Social economists have paid more attention to issues of class, conflict and power relations and the impact that has on the employed value of social capital (Fine, 2001; Harriss, 2001). That point of view is more fitting with the concept of sustainable economic development, as it includes the social aspect inherently. The more powerful the individual, the more easily he can capitalize on his social capital. If one takes the social aspect of sustainable development in consideration, it is safe to say economic development driven by social capital is not always sustainable economic development.

Knowing this, the question to ask and answer is the following: what characteristics should social capital have to help establish sustainable economic development? Innes and Rongerude (2013) provide some insight in a research that examined four initiatives focussing on sustainability and the networks that emerged from them. They identified eight features of networks which are, theoretically, effective for building sustainable regions. They interviewed participants, who were insiders to the initiatives, on the initiatives' history, philosophy, structure, activities and outcomes. The product of this method was a narrative, presented in four working papers (Christensen & Rongerude, 2004; Innes, 2004; Innes & Sandoval, 2004; Saxenian & Chinoy Dabby, 2004). These features are enumerated below:

1. Fit to region
2. Theory of change
3. The role of research
4. Leadership
5. Structure
6. Activity
7. Outcomes
8. Transition and evolution

Not all eight features are necessary to discuss, but some are. First, 'fit to region' essentially means that it is effective for sustainable development if the network is place-based and bottom-up. This helps the network to be able to address the regional problems, which includes sustainability issues. However, place-based social capital tends to be or at least indicate bonding social capital (Ryding & Holman, 2004). This is contradictory, since bridging social capital is more capable of bringing about change and in this case sustainable change. A second important feature is 'leadership' and that is in this case about the capability of the network to collaborate vertically with governmental organizations. There is a connection between this feature and the research done about linking and bracing social capital (Agger & Jensen, 2015; Ryding & Holman, 2004). As mentioned before, a network with complex power relations is difficult in an area with low bonding social capital. The tight networks with a lot of trust is needed for the less powerful to cooperate and collaborate with the more powerful agents. As a third feature, Innes and Rongerude (2013) named 'structure'. Structure revolves around bridging and bonding social capital (Putnam, 2000). Innes and Rongerude write:

"Connectivity is important as it allows ideas and knowledge to flow among a wide array of participants. Flexible structure allows nodes and links in the network to change in response to evolving conditions and new opportunities. Diversity among participants brings multiple skills, points of view, and experience that contribute to learning, creativity, and robustness of efforts to address problems. Finally, while strong ties in networks are necessary, networks with few weak ties are handicapped because ideas spread slowly (...)."

Fourth and last, 'outcomes' is about two kinds of network outcomes that can be regarded as contributing to a sustainable region. The first are tangible products that directly help the economic, environmental or social aspect of sustainable development, preferably in a synergistic way and at least not at the expense of another aspect. Secondly, an effective network outcome is the creation of a physical and digital infrastructure in which people collaborate, gather, discuss and learn (Rogers & Weber, 2010). The first of these two outcomes refers directly to our definition of sustainable economic development: synergy between the economic, social and environmental aspects. The second outcome finds agreement with the study by Agger & Jensen (2015), who emphasized on shared spaces, material and immaterial, as a basis to create bridging social capital. Of course, it is bridging social capital that is needed to bring about sustainable change. A third study concludes that the three different kinds of social capital are needed in different phases of the initiative (Dale & Newman, 2008). The initiative they studied was First, bonding social capital is needed to get together and start the initiative. This is in line with Agger and Jensen (2015) and what they say about similar interests and needs. Then, leadership by key individuals were nodes in networks with bridging social capital. This is also demonstrated in the research by Innes & Rongerude. In the end phases, Dale and Newman identified the creation of linking social capital, also by those key individuals. From the three studies discussed here, it seems that the appearance of bridging and linking social capital are desirable in order to help establish sustainable economic development (Innes & Rongerude, 2013; Agger & Jensen, 2015; Dale & Newman, 2008). To conclude, there is certain knowledge needed about the social networks and the social capital of those networks. The indicators above provide a good framework for analysing networks and to be able to explore the networks capability and likeliness to help establish sustainable economic development.

Methodology

In this third chapter, it is explained how the research was conducted and what the specific circumstances were while conducting the research. In that way, it becomes clear how other researchers can reproduce this research as accurately as possible. First, the research design is discussed and the choices in the design are substantiated. Then, the regional context of the Wadden area is described. Third, the choice of target group is discussed, and the descriptions of the sample group is presented. Fourth, the contents of the questionnaire are presented. Fifth, the procedure of data collection is described, including limitations. And, finally, the statistical analysis that was used is described in the final part of this chapter.

Research design: literature research and a questionnaire method

The use of the methods revolve around the conceptual model that was presented at the end of the first chapter. To answer the research question, the research design is as follows. First, literature research was conducted on the relations between civil initiatives and social capital and social capital and sustainable economic development. Additionally, rurality as a concept was explored with literature. The selected literature consists mostly of peer-reviewed articles, with some addition of scientific books. It was pursued to use recent literature, preferably from 2000 and onward. Whenever pre-2000 research is included, then it mostly concerns seminal works on the key concepts. Next to the literature research, a quantitative method was employed with the use of questionnaires.

This quantitative method is used to look at the effects of civil initiatives on social capital. The choice of the quantitative method was made on multiple considerations. The first consideration was that not only data needed to be gathered to answer the research question, but also to evaluate the funding of the Waddenfonds. Therefore, data needed to be gathered on many different topics. Second, the COVID-19 pandemic and the corresponding uncertainty nudged towards a method in which it was better possible to follow the rules around distancing. Third, the Budget Lokale Innovatie has funded many different initiatives, about 50 from 2018 until now. Many researchers have employed qualitative methods and case studies to examine civil initiatives, often involving two to five initiatives and interviewing people that had undertaken the initiative or people who are involved with the initiative (Innes & Rongerude, 2013; Lambru & Petrescu, 2016; Meijer & Syssner, 2017). A qualitative method seems suitable for a subject like civil initiatives and social capital, because of the complex nature of those concepts and the holistic nature of a qualitative method (Swanborn, 1987). It has been considered to do qualitative research, but there is to some extent a special opportunity to gather a large dataset on this subject, with the overarching Waddenfonds as an organization from which quantitative research is more possible. This opportunity was leading in the choice of method, with the condition that the data and the conclusions derived from the data is solidly substantiated with existing literature. An overview of the research design is visualized in a table in appendix A.

The Wadden area

As discussed earlier, the rurality of the Wadden depends on the way it is represented. In this part, the social representation of the Wadden is described, based on different discourses, such as the media discourse, the political discourse expressed through policy and the scientific discourse. The sources are because of that policy documents, socioeconomic databases, media articles and scientific works. The reason why this is included in the methodology chapter, is because the context has an impact on the reproducibility of the findings. If there is

any difference in the findings, could that be explained with the differing rural context? So how do people talk about the area, how does the media portray the area, what policy is made for the area, for now and for the future? All these ideas from different agents construct the rurality of the Wadden. It shapes the views and pictures of people, and those views and pictures shape the way people treat the area, behave in the area and influence the way people attach themselves to the area. Difficulty is found in the diversity of the Wadden. There, for example, are big differences to be found between the northernmost point of the province of Noord-Holland and the easternmost point of the province of Groningen. Also noteworthy is the difference between the islands and the mainland, because economically speaking, the first is more dependent on tourism, while the latter is more dependent on the agricultural industry. In the following part, some key characteristics of the Wadden are shown. It is acknowledged that some characteristics might not be true for the whole area.

First, the Wadden has been known as an area with a declining population, but it seems that this has come to a stop in some parts (Omrop Fryslan, 2020). However, the mainland of Friesland and Groningen still have some villages with shrinking population numbers (Basismonitoring Wadden, 2019; SPB Groningen, 2020). The population is ageing at about the same speed as the Dutch population (Basismonitoring Wadden, 2019). The pressure on the population and the demographical composition has negative implications for the continuity of public services and facilities and for real estate prices. These are general worries of the population in the Wadden: the decline of services and following dependency on services further away and the decrease of capital by declining real estate prices. The liveability, quantitatively measured, is pressured by the access to (public) services (Leefbaarometer, 2020). Housing prices are among the lowest in the Netherlands (RTL Nieuws, 2021). To conclude, the rurality of the Wadden includes that there is an ageing population, that there are areas with population decline and that real estate prices are relatively low.

Furthermore, the economic future of the mainland of the Wadden seems continuously dependent on agriculture (Baptist et al., 2019). This report shows that it is likely that the Wadden will continue to be an agricultural area, more so than other agricultural areas. The current way in which agriculture is practiced has been pressured because of the intensive character and the impact of that intensive character on the national sustainability goals. Examples are suggestions to halve the livestock and the 'stikstofcrisis' or nitrogen crisis (Trouw, 2020), which were met with heavy protests (Omrop Fryslân, 2021). Still, agriculture in the Wadden is expected to be more circular and in that way more sustainable (Baptist et al., 2019). It will also be more focused on saline ways of growing crops, to accommodate the fact that sea levels are rising, while soil levels are declining. To conclude, the agricultural activities will be undergoing impactful changes, but one of the area's main economic activities will remain agriculture. For other rural regions in the Netherlands, it is less likely that those regions will remain focused on agriculture as much as the Wadden (Baptist et al., 2019).

The other main economic activity is tourism. This predominantly takes place on the islands of Texel, Vlieland, Terschelling, Ameland and Schiermonnikoog. However, there is some tourism to be found on the mainland, focused on cycling, nature, and tranquillity. There are some calls on the islands to better control the flow of tourists to avoid overcrowding and the goal to establish sustainable tourism has gained popularity among entrepreneurs and inhabitants alike (Friesch Dagblad, 2020). To conclude, the islands will continue to be touristic attractions and the focus will be on making tourism more sustainable.

Then, in a societal perspective, the Wadden is represented as tightly knit and connected. This is seen in the use of the Frisian word *mienskip*, which roughly translates to community. The word describes the culture and the village life in Friesland and stands for people knowing, helping and understanding each other. In the mainland of Groningen, the same culture or idea of their culture lives, an idea that promotes village life. It is oftentimes presented that the people of the mainland, but also of the islands, are tightknit and close. This matches with theoretical ideas that bonding social capital is more prevalent in rural areas and it seems likely that the Wadden is no exception.

The initiatives and how the Waddenfonds works

The initiatives that were researched applied for funding at the Waddenfonds between January 2018 and January 2020. It usually takes between seven to thirteen weeks for the Waddenfonds to decide if an initiative is eligible. A total of 50 initiatives were granted funding, of which 39 are researched. An overview of those 39 initiatives is given in appendix B. Funding can be given to activities that improve the vitality and socio-economic sustainability of local communities, and that create new networks or strengthen existing ones. This has to become clear in a project plan. One needs for example strict budget plans, so that the Waddenfonds can decide which costs are fundable, and which are not. Next to a budget plan, there are many other technical and financial requirements, but it is for this research only necessary to discuss the projects activities, since those are directly related with the possible creation of social capital.

An applicant has to thoroughly describe the activities of the initiative to be given funding. When there is cooperation, the applicant needs to distinguish for every partner what their respective activities are. The applicant also has to provide a visual map or design to give insight how the (geo)graphical situation changes due to the project activities. Then, the applicant has to describe the results or output when the initiative is realized, with measurable output indicators. The applicant also has to describe the expected effects for the Wadden and the applicant has to relate this to the goals of the Waddenfonds. In other words, they have to paint an image of how their initiative contributes to new networks or the reinforcement of existing ones. This process is important for this research since it makes sure that the initiative might influence new and existing networks. Then, the applicant has to give a short description of the plan, in which they have to imagine what the effects are on the environment. Furthermore, the applicant has to, again, make an argument on how the initiative contributes to the goals of the Waddenfonds, but this time more concisely. Finally, the Waddenfonds encourages applicants to include a list of stakeholders and they refer applicants to possible stakeholders. This process influences the initiative's capability to create linking and bridging social capital. The Waddenfonds want to make sure that their effort is helping their goals and because the process is this thorough, it is assumed that the initiatives will have some effect on social networks and in that way on social capital.

The participants and participant profile

Participants for the research had to meet two criteria. First, they needed to be from the area in which the BLI-project was organized and, second, they had to be familiar with the BLI-project. The participants were asked by applicants of BLI-funding to fill in the questionnaire. This has multiple implications for the gathered data, which will be discussed later. The questionnaire was filled in 120 times. Of those 120, 32 participants did not fill in the

questionnaire completely and were excluded from analysis. This leaves a sample group of 87 participants (N=87). The characteristics of the sample group are presented in table 1:

| | |
|--------------------|--|
| Sex | 64% is male, 35% are female, 1% rather did not say. |
| Age | Mean age is 58 years. |
| Marital status | 64% are married, 20% live together and 7% live alone. The remaining 9% are in a relationship, are widows, or are divorced. |
| Education | 14% did not finish an education after secondary education. 27% finished an mbo-education, while the remaining 59% finished a hbo-education or got a scientific degree. |
| Children | 82% have kids, while 18% do not have children. |
| Age youngest child | 17% of the youngest children are in primary education, 37% are in secondary education, 17% are in higher education and 29% have graduated. |
| Years in area | The mean years that participants live in the area is 34 years. |
| Inhabitants | 72% of the participants live in areas with an estimated 2000 or less inhabitants. 17% percent live in areas between 2000 and 10000 inhabitants while the other 11% live in areas with more than 10000 inhabitants. |

Table 1: characteristics of sample group

Contents of the questionnaire

The questionnaire (Appendix C) consisted of four parts. Most questions were statements which were to be answered on a five-point Likert scale. The five-point scale was chosen above a seven-point Likert scale because using five point scale reduces the frustration level of the respondent and increases response rate and response quality as opposing to a seven-point Likert scale (Sachdev & Verma, 2004). Other options were four and six-point Likert scales, but those scale do not have a neutral option, which were regarded as desirable. Participants have to choose between strongly agree, somewhat agree, neutral, somewhat disagree, disagree, strongly disagree. The first part of the questionnaire, items Q1 to Q13, covered the personal opinion towards the initiative. The second part, items Q14 to Q30, measured the experienced effects of the initiative for participants on the environmental quality, on vitality, on sense of community and on networks. This part can be subdivided into two subparts. Items Q14 to Q22 were on environmental quality, vitality and sense of community, while Q23 to Q31 were on social networks and social capital. The third part, items Q31 to Q41, covered personal qualitative characteristics, mainly regarding the participants behaviour in networks and behaviour towards the community. Items Q31 and Q32 were on a binary scale instead of on the five-point Likert scale, since they measure participation in a local committee or local association. The last and fourth part, items Q42 to Q49, covered the demographic data, as shown in the table above. Some parts of the questionnaire were not exclusively for this research but were also meant for the ends of the Waddenfonds. Quite a few of the questions the Waddenfonds wanted answered, were outside the scope of this research. Which statements are meant for which goal is given an overview in table 2.

| Meant for: | What items: |
|-----------------|--------------------------------|
| The Waddenfonds | Q3 to Q22, Q31 to Q34 |
| Both | Q1, Q2, Q23 to Q30, Q42 to Q49 |
| This research | Q35 to Q41 |

Table 2: overview of purpose of statements

In the part of the questionnaire meant for this research, participants were asked about the perceived effects on networks in statements like item Q26: 'because of this initiative I have

come to know new people outside of my environment' and item Q23: 'I can say that because of the initiative my network has grown'. The goal of these statements was to simply ask the participants what they thought the influence of the initiative was. How participants act in networks was asked in statements like item Q39: 'I don't hesitate to use my network, inside or outside of my environment, when something needs to happen' and item Q40: 'when somebody asks me for a favour, I do not need anything in return immediately'. With the data derived from these statements, the goal is to gain insight into the kind of people that take place in the networks that were created and sustained by the initiatives.

Procedure of data collection

The data is primary data, collected digitally with software by Qualtrics. Participants were able to fill in the questionnaire with a smartphone, computer, or tablet. In order to reach people who fitted the participant profile, the applicants for funding were asked if they wanted to be distributors of the questionnaire. This group was gathered from the administration of the Waddenfonds, which kept a list of projects with email addresses and phone numbers. The exact question for these possible distributors was if they wanted to approach ten to fifteen people that fit the participation profile. If every applicant could get eight people to fill in a questionnaire, then the total number of people that filled in a questionnaire would be 400.

In the first step of the questionnaire itself, participants got some information, most importantly some definitions of key concepts like what is meant with vitality, sense of community, networks and 'your environment'. Participants had to decide for themselves what 'your area' exactly is, and had to keep that area in mind for the whole questionnaire. Their environment is exactly what they experience their environment to be. Then, as mentioned above, participants gave their thoughts on the different statements. When finalizing the questionnaire, the answers were automatically added to a database.

Limitations and ethical considerations in the procedure

The most important limitation in the procedure is giving in on some control in the data collection. While it was not possible to reach people with the desired profile without distributors, it was not necessarily desirable to leave the data collection to a group of persons in-between. It relied on solid communication on both sides and on goodwill from the applicant's side. Not every applicant (of funding) wanted to cooperate with the research. Next to that, applicants did not want to be fully responsible for the filling in of the questionnaires. They often agreed to send one mail to a group of people but did not want to send reminders because they felt they were bothering their communities. Then, the administration of the Waddenfonds, which was used to reach out to the applicants, was not completely in order. Applicants of funding were not always the initiator of the project, while it was the initiator who was the person this research aimed at as distributor. It was not entirely clear at the Waddenfonds that some initiators hire external people with knowledge on the process of getting funding to apply for it. Sometimes, it were those external people whose email addresses and phone numbers are in the administration. Lastly, due to the COVID-19 pandemic, almost all culturally focused initiatives were not ready to be researched. Because of this, the cultural type of initiative is missing, while valuable conclusions could be derived from that specific data.

It is important to mention that along with conducting this research, there was also an internship at the Waddenfonds that the author of this research. As shortly mentioned before, the Waddenfonds has additional goals, aiming for an increase in vitality, environmental quality

and sense of community. Along with this research, the Waddenfonds wanted an evaluation on the effects of the initiatives on vitality, environmental quality and sense of community. This internship included working together with the people who decided for initiatives if they were eligible for funding or not. When they do decide so, there is some responsibility that the initiatives will have positive effects on the goals of the Waddenfonds. Evaluating those results might lead confronting results for the officials of the Waddenfonds. However, during the research process it was perceived that the organization was not scared or wary for a, for them, negative outcome. It was encouraged that the research was critical and officials of the Waddenfonds empathically helped with reaching that goal.

Furthermore, the internship brought some time constraints with it. The Waddenfonds had to revise their policy around the end of March and the beginning of April. Because of that, the questionnaire was set out in the beginning of January. This meant that the questionnaire was not as substantiated by literature as desired. The result of this is that when writing, revising and finishing the theoretical framework from December to February, there were insights from existing literature that were preferably included in the questionnaire. Examples of inclusions in the questionnaire are statements that give insight into linking social capital, to explore if that kind of social capital was created as well. Instead of that, the assumption was made from theory that it was possible and likely that some linking social capital was created due to the policy of the Waddenfonds. Another example are the indicators by Innes and Rongerude (2013) that would preferably have been included in the questionnaire. It would have been possible to provide insight in the relation between social capital and sustainable economic development. Insights from studies by Dale and Newman (2008), Agger & Jensen (2015) and Meijer and Syssner (2017) were also preferably have been included in the questionnaire. The ethical considerations that were taken ensured that participants remained in anonymity. The software by Qualtrics automatically gathers personal data like IP-addresses and the coordinates of the location the questionnaire was filled in. These data were immediately deleted.

Data preparation and statistical analysis

In order to analyse the data in a meaningful way, it needed to be prepared. Some statements from the questionnaire might measure the same thing. For example Q23 to 30 are all about networks and social capital, albeit about different aspects of those concepts. Cronbach's alpha was used to see if the statements measure the same thing. If that is the case, then it is valid to combine those items by taking the sum or the mean of the values. In table 3 is presented how the data was prepared using Cronbach's alpha.

| Used items | Shared concept | Cronbach's alpha | Name of new item |
|-------------------------|-------------------------|------------------|----------------------------------|
| Q23 to Q30 | Social capital | .934 | C1: Social Capital Mean |
| Q23, Q26, Q28 | Bridging social capital | .860 | C2: Bridging Social Capital Mean |
| Q24, Q25, Q27, Q29, Q30 | Bonding social capital | .891 | C3: Bonding Social capital Mean |
| Q35, Q36, Q37 | Personal network | .867 | C4: Personal Network |
| Q39, Q40, Q41 | Reciprocity and trust | .883 | C5: Reciprocity and trust |

Table 3: Cronbach's alpha

All of the scores for the Cronbach's alpha are higher than 0,70, meaning that it is acceptable to combine the items. In the results chapter, the descriptive statistics of these items are presented.

In this research, it was only valid to analyse the data of the questionnaire through the descriptive statistics, rather than statistical tests. In the statements themselves, in for example item Q23, the relation between the concepts of civil initiatives and social capital are already made. There were no statistical tests possible that could have produced meaningful answers to the fourth and fifth secondary research questions. In the results chapter, the graphs are presented from the more or less raw data. The goal of the analysis is to reach an answer to the fourth secondary research question '*To what extent have civil initiatives created social capital?*' and to the fifth secondary research question '*What are characteristics of the created social capital?*'. For the fourth secondary research question, this means that the results of items Q23 to Q30 were put in a table and both items Q23 to Q30 and items C1 to C3 are put in graphs. The fifth secondary research question on the characteristics of the created networks is also answered with data from the questionnaire, namely with items Q31 to Q41. Graphs derived from the data on items Q31 to Q41 were made, as well as graphs from items C4 and C5. Furthermore, because none of the data is normally distributed, it is not possible to present means and standard deviations. Instead the median and interquartile range are presented instead. The graphs and the medians and interquartile range of items C1 to C5 are presented in the results chapter. Along with the information in the graphs, it is tried to come to a sensible answer to both secondary research questions.

Limitations of the statistical analysis

It is important to know what the original research design was in order to understand the choices that were made for the statistical analysis. A limitation to the analysis undertaken in this research is that there are no statistical tests undertaken, leading to the absence of any significance numbers. In a quantitative study like this one, it is desirable to present those numbers. The data was not normally divided, thus violating the assumptions for any parametric test. Then, in the research process, it was decided to change the research question. This research question, the one as named in the introduction, and the accessory secondary questions were not to be answered with any statistical test, but rather need some quantitative implications that are backed solidly with existing literature. How far the effort of the Waddenfonds has helped the Wadden area is indicatively answerable with quantitative data and more expectations can be made with existing literature.

Chapter 4 Results

In this chapter, the base of the answers on two secondary research questions will be laid. These are the fourth and fifth research questions, namely *'To what extent have civil initiatives created social capital?'* and *'What are characteristics of the created social capital?'*. Descriptive statistics of the original items and the created items are analysed to answer these questions. Note that only with the original items the results are on the five-point Likert scale. On the created items there is a mean on a ratio scale, ranging from 1 to 5.

To what extent have civil initiatives created social capital?

In table 4, the results on items Q23 to Q30 are presented. In appendix D are eight graphs to be found that visualize this data.

| Value | Q23 | Q24 | Q25 | Q26 | Q27 | Q28 | Q29 | Q30 |
|-------|------|------|------|------|------|------|------|------|
| 1 | 1,2 | 1,2 | 1,1 | 1,1 | 1,1 | 2,3 | 2,3 | 2,3 |
| 2 | 1,2 | 1,2 | 5,7 | 9,2 | 2,3 | 9,2 | 1,1 | 0 |
| 3 | 27,9 | 24,7 | 13,8 | 20,7 | 23 | 29,9 | 21,8 | 11,5 |
| 4 | 32,6 | 36,5 | 40,2 | 35,6 | 27,6 | 33,3 | 33,3 | 32,2 |
| 5 | 37,2 | 36,5 | 39,1 | 33,3 | 46 | 25,3 | 41,4 | 54 |

Table 4: values are in percentages. The score '1' stands for 'totally disagree' and '5' for 'totally agree'.

The table shows that participants mainly filled in that they agreed or totally agreed with the statements, but there are also differences between the different statements. Q28 (*'Because of the initiative I felt more strongly connected to people outside of my area'*) is one of the indicators for created bridging social capital and Q28 has a lower score than indicators for bonding social capital, which are Q27 and Q29, for example. As shown in chapter 3, it was possible to combine the statements on bridging social capital and bonding social capital. This results in figure 5 on social capital in general, figure 6 on bridging social capital and figure 7 on bonding social capital.

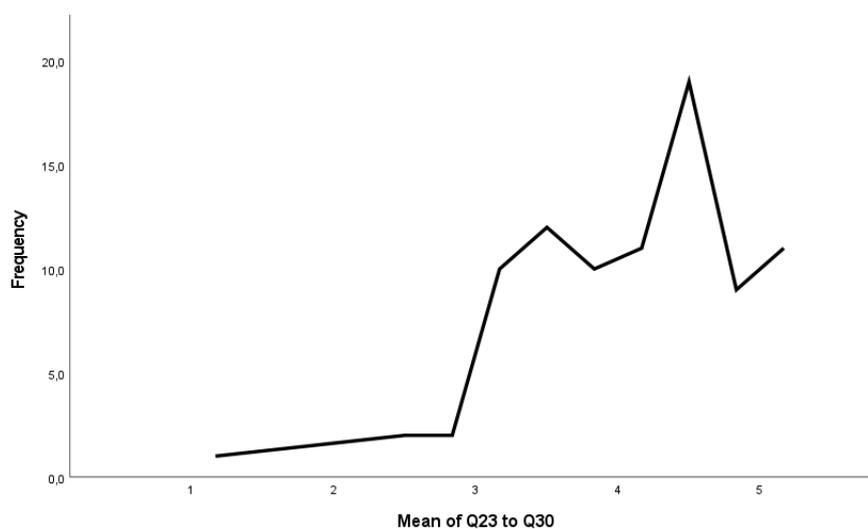


Figure 5: item C1

Figure 5 shows what is mentioned above and what is shown in the table: participants mainly filled in that they agreed or totally agreed with the statements. The median of this data is 4.125 with an interquartile range (IQR) of 1,13. With a maximum score of 5 this can be interpreted as a high score on this variable.

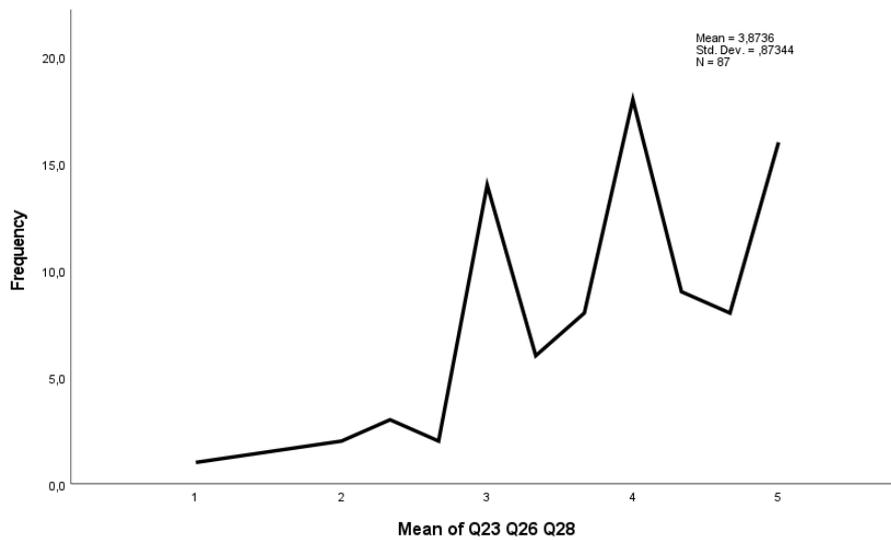


Figure 6: item C2

Then, the results on item C2 show that there is some doubt about the effect of the initiative on bridging social capital (figure 6). The median is 4 (IQR = 1,67). It should be kept in mind that the participants feel involved with the initiative, and may answer more positively to the statements in general.

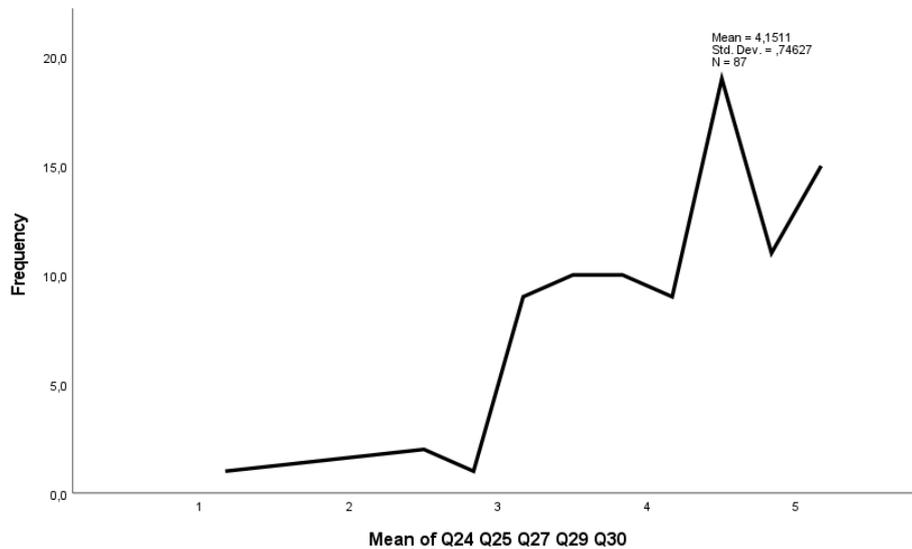


Figure 7: item C3

Figure (7) provides a different picture. Participants seem more sure that the initiatives have created bonding social capital, in comparison to bridging social capital. The median is 4,4 (IQR = 1,2). So, the median of item C3 is higher than item C2 and the IQR is smaller. A larger IQR means that the values are more dispersed.

What are the characteristics of the created social capital?

The participants are the people that take place in the created networks. A social network is not guaranteed to contain social capital and to be able to say something about the social

capital, some characteristics of those people need to be presented. Statements in the questionnaire that were asked on this subject are items Q35 to Q41. In appendix F, graphs of items Q35 to Q41 with the exception of Q38 are to be seen.

The graphs show that participants answered mostly positively to the statements. The data show that the participants seem know many people in the area and perceive their networks as strong, according to their answers to item Q35 and item Q37. A graph of item C4, which is items Q35 to Q37 combined, results in the same idea, namely that participants generally have a strong network (figure 8). The median of item C4 is 4,33 (IQR = 1,00).

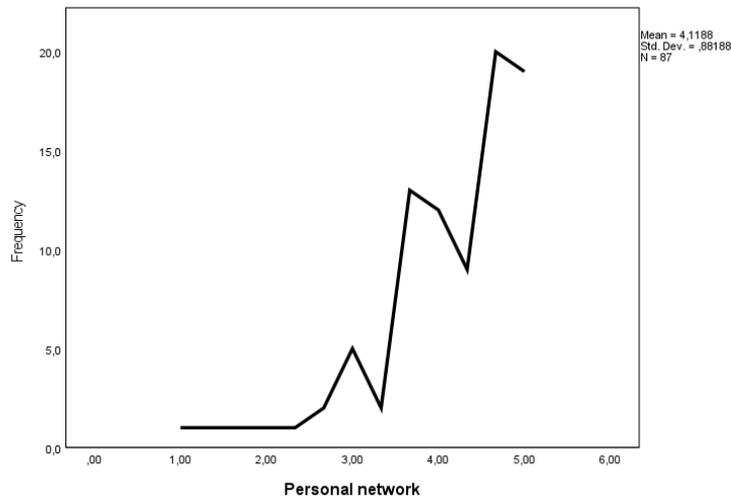


Figure 8: item C4

The item C4 trust and reciprocity is measured with items Q39 to Q41. Appendix G shows the graphs of those items. These items are combined in item C5 (figure 9). The median of item C5 is 4,67 (IQR = 0,67). The graphs, the median and IQR show that the participants are generally very trusting and reciprocal. It seems that the participants are ready to do something for anybody, without directly expecting something in return. What should be kept in mind is that trust and reciprocity are generally strong indicators of bonding social capital. This result then implies that there is sufficient bonding social capital in the area.

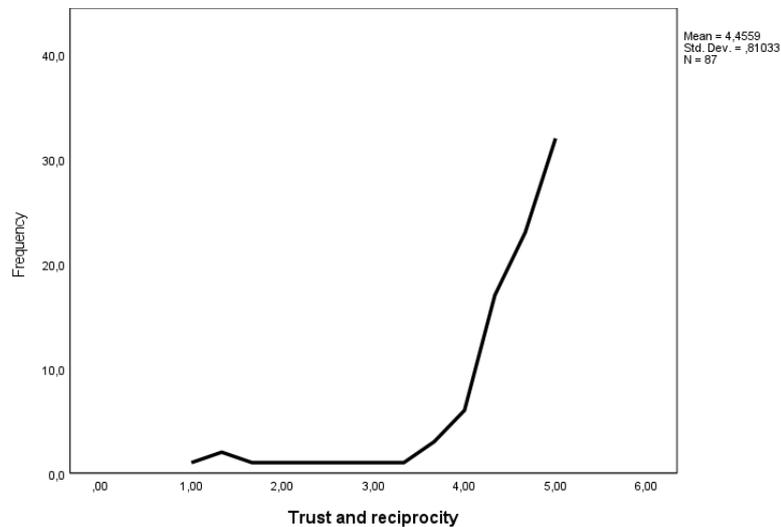


Figure 9: item C5

Chapter 5 Discussion and conclusion

This research has found that the effort of the Waddenfonds to help establish sustainable economic development deserves critical evaluation. This last chapter first provides a short overview of the literature study, to present what the findings are regarding the first three secondary research questions:

1. In what ways can civil initiatives create social capital?
2. In what ways can social capital help establish sustainable economic development?
3. How does the rurality of the Wadden influence the effort of the Waddenfonds?

The first part is concluded with an extended conceptual model, which builds on the conceptual model as presented in the introduction. Then, the implications of the results from the questionnaire are discussed, regarding the fourth and fifth secondary research questions:

4. To what extent have the civil initiatives created social capital?
5. What are characteristics of the created social capital?

Then, the answer to the research question is presented, followed by the limitations of this research and the recommendations for further research.

Interpretations and implications of literature study

The first secondary research question is *'in what ways can civil initiatives create social capital?'* The literature review shows that the relation between civil initiatives and social capital is quite complex. There are different ways in which civil initiatives can create social capital, but social capital can have negative external effects on society. Social capital can be created from civil initiatives from different bases (Agger & Jensen, 2011). The first basis is similar interests and needs, which is the basis to create bonding social capital. Those similar interests or needs form a goal that can make people see the need to unite. The second is shared spaces, which is the basis to create bridging social capital. These shared spaces can be material or immaterial. Identifying these bases can be crucial indicators for the extent of the social capital creating capability of the initiative. Finally, linking social capital is thoroughly explored in literature (Meijer & Syssner, 2017; Agger & Jensen, 2011; Rydin & Holman, 2004). Linking social capital is a unique resource, which may be useful for rural areas like the Wadden, in a way the other two kinds cannot. The contact and connection with governmental entities can deliver resources, like the funding of the Waddenfonds, to realize initiatives and to find solutions to local sustainability problems.

The relation between social capital and sustainable economic development is examined with the second secondary research question *'in what ways can social capital help establish sustainable economic development?'* Innes and Rongerude (2013) serve as benchmark study here. They identified eight features of what might make a network have a positive outcome on the sustainability of the region. One of those is 'fit-to-region', meaning a feature of a network is meshed with the culture and style of operating for their particular regional context. This implies that a place-based network might provide a positive outcome. The initiatives funded by the Waddenfonds are all place-based, bottom-up initiatives, implying that the networks and social capital created by the initiatives is 'fit-to-region'. Another feature of effective networks from Innes and Rongerude (2013) is the structure of the network. This structure is related to the distinction between bonding and bridging social capital. The main

idea is that there should be strong ties between similar people as well as weak ties between more diverse people in the networks. This implies that networks containing both bonding social capital and bridging social capital are more likely to be effective in establishing sustainable economic development.

The rurality of the Wadden and how the area is socially represented was discussed in the third chapter. The representation implies that it is an area that knows demographic pressure, meaning that the area is ageing and the population is shrinking. This brings along that the quality and quantity of services cannot always be sustained. Many of the initiatives funded from the BLI are meant to keep certain services in the area and the Wadden is regarded as an area in which bonding social capital is important. The promotion of *mienskip* in Friesland implies the prevalence of bonding social capital. *Mienskip* is also promoted in the other parts of the Wadden like the islands, but in other wordings. This prevalence in bonding social capital has theoretical consequences for the Wadden area. From multiple perspectives it seems that the area is rural, in the sense that it is affluent in bonding social capital, there is an ageing and sometimes shrinking population, there is pressure on services and a large part of the civil initiatives undertaken are focused on maintaining services.

An extended conceptual model

In the extended conceptual model (figure 10) most concepts are in the rural context. Importantly, in this rural context, bonding social capital is more prevalent. Do note that bonding social capital is good for getting by, but bridging capital is needed to get ahead. In rural areas, the need to get by is more apparent than the need to get ahead, which is seen in the fact that the goals of civil initiatives in rural areas are mainly focused on maintaining or sustaining services. The need of getting by is apparent in those initiatives. The ‘may create’ in the model underlines the uncertainty that initiatives are actually creating bridging social capital.

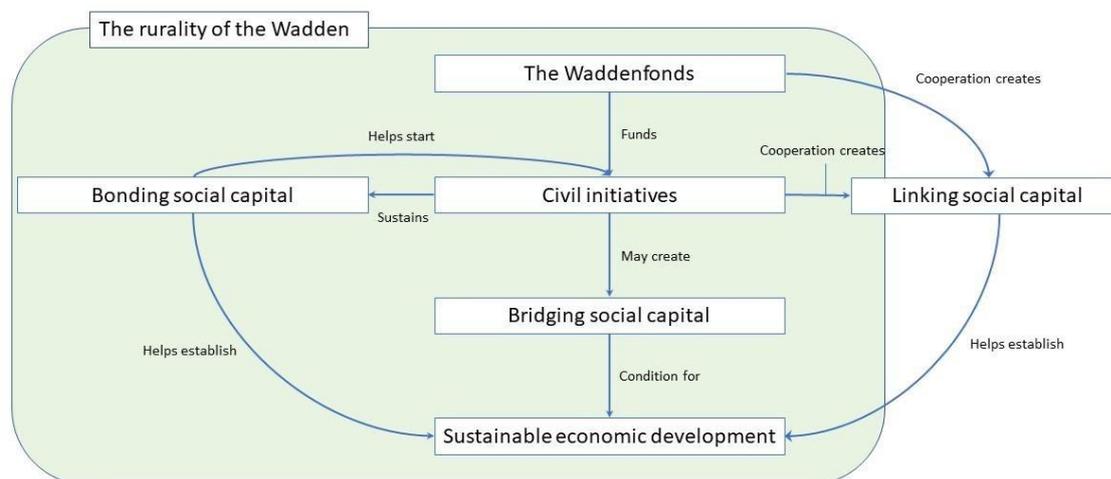


Figure 10: the extended conceptual model

The model shows how the effort of the Waddenfonds might help establish sustainable economic development. Bonding social capital is part of helping establishing it, but that effect is not certain and it cannot solely help establish sustainable economic development. The presence of the other types are conditions. For example, a network of farmers might have

some serious trust in each other and have access to bonding social capital, it may still be that that social capital is used for unsustainable activities. Then, linking social capital is placed outside of the rural arena. This underlines the multi-sectoral nature and cross-scale activity of that kind of social capital. Bridging social capital is identified as a condition for sustainable economic development. The idea of sustainable economic development, with the three aspects needing to synergize, calls for creativity, multiple types of skills, multiple points of view and equal power relations. This last concept is needed to accommodate the social aspect of sustainable economic development. These calls for creativity, multiple types of skills and points of views are similar to what bridging social capital entails: a broader range of agents and diverse relations between those agents. Theoretically, it seems that the expectations of the Waddenfonds are valid. It is possible to help establish sustainable economic development by funding civil initiatives. The route the social effects have to take are however complex, and results of the effort may vary. Importantly for the Waddenfonds and other funds, the position of bridging social capital in a rural area should be acknowledged as crucial when trying to bring rural areas ahead. Those areas oftentimes have sufficient bonding social capital: it is bridging social capital that should be focused on. This remains difficult to control, because it would mean that more precise goals have to be added to the initiatives existing goals.

Interpretations and implications of questionnaire data

First, the initiatives generally have created new and strengthened existing social networks and in that way contributed to social capital in the Wadden. The participants answered positively to the statements that acknowledged the effect of the civil initiative on social networks and social capital. The creation of social capital is the expected result, in line with previous studies (e.g. Agger & Jensen, 2015). This can be looked at as a positive result, but interpreting it that way should be met with care. When the goal is to create social capital, it needs to be clear what type of social capital is aimed for. When the goal is to help establish sustainable economic development, it should be the explicit goal to create bridging social capital.

Then, it seems that the initiatives have created more bonding social capital than bridging social capital. This has multiple implications. First, it is not unexpected because of the rurality of the Wadden. This is in line with findings in other studies (Thissen, 2010; Lannoo et al., 2012). Secondly, this is not necessarily a positive result for the expectation that the effort will lead to sustainable economic development, since bridging social capital is expected to be more capable of bringing about change and is named as a condition for sustainable economic development (Dale & Newman, 2008). This finding does imply for the Waddenfonds that they have to focus on creating bridging social capital more, possibly by changing the eligibility criteria that initiatives have to meet to get funding.

Then, finally, it seems that the participants, who are agents in the networks, are active agents who are likely to employ purposive action, looking for social capital in their networks. This is positive, because if the data showed the opposite, it should not be expected that people would use the social capital in the networks. However, the results also show that the participants are very trusting of the people in their networks. This means that the social capital inside those networks is predominantly bonding social capital (Putnam, 2000). Again, it is desirable for the initiatives to create bridging and linking social capital in order to help establish sustainable economic development (Dale & Newman, 2008).

Conclusions

The effort of the Waddenfonds has helped create and sustain social capital, since it was clear from the perceptions of the participants of the questionnaire that they perceived that the initiative impacted their networks positively. However, it remains unclear what kind of social capital has been created, and the results imply that it has added bonding social capital to an area already affluent in that kind of social capital. This is not unexpected: bonding social capital is a condition for an initiative to start and the rurality of the Wadden already implies that there is more bonding social capital. However, and as an important indicator for sustainable economic development, there are little to no implications that much bridging social capital has been created by the initiatives in the Wadden. To answer the question:

'How far does the effort of the Waddenfonds help establish sustainable economic development through creating social capital by funding civil initiatives in the rural Wadden area?'

The way in which the concepts interact and relate to each other remain difficult to measure and are complex of nature. Still, it is desirable that the results of the questionnaire would have brought back a clear indication that the initiatives did create bridging social capital. This has not conclusively happened and it is in that way not possible to say that the effort of the Waddenfonds has led to sustainable economic development. Although, it needs to be stated that the effort has conclusively positive effects on the communities of the Wadden. For many citizens in the Wadden it was made possible to realize their initiatives and in that way more or less plan their environment in a bottom-up, community-led way. Still, when it is the end-goal to help establish sustainable economic development and the creation of bridging social capital does not seem to happen greatly, then the effort is deserving of further critical evaluation.

Limitations

This research has some limitations. First, the initial goal of the research was to provide a clear picture of the social capital that was created by the initiatives. The fact that this is not possible with the gathered data has limited the conclusion of this research. The sample size was smaller than expected. This is due to the method of having distributors that ask participants to fill in the questionnaire. However, the distributors were needed in order to reach people that fitted the participant profile, which is an inhabitant of an area with a BLI-initiative in it. Next to that, mainly people who were or felt involved with the initiative were reached with the questionnaire. This has to do with the method of data collection with distributors, who were the applicants of the funding. The applicants reached out to people of which they knew for sure were familiar with the initiative. Improvement on this method lies mainly in the communication with the distributors. It was experienced in the process that calling people helps greatly for distributors to understand what they have to do, and, more importantly, why.

Second, the sample was not normally distributed. As mentioned above, the participants were involved or felt involved with the initiative. This ruled out many statistical tests that are normally possible with data from a questionnaire. The initial goal in the research design was to use regressions to gain insight on the created social capital. What remained were the median and interquartile distance, now used to analyse if the initiatives created bonding social

capital or rather bridging social capital. This restricted the explaining power of the quantitative data greatly.

Third, the questionnaire was kept short to increase the chance that participants would complete the questionnaire. The length of the questionnaire may cause people to not finish filling in the questionnaire, which would cause a small sample size. However, in the same questionnaire were statements that were specifically there to measure the effects of the initiatives on vitality, environmental quality and sense of community. These concepts are not what this research was about, but they did take up space in the questionnaire. The consequence of this may be

Fourth, the COVID-19 pandemic made it more difficult to conduct the research. For example, feedback loops with Waddenfonds officials sometimes took some time due to the fact that everybody had to work at home. It was also hard to plan when it remains uncertain what restrictions will be in the future. With that in mind, the choice for the quantitative method was influenced by the pandemic, albeit not decisively. Additionally, some of the applicants of the initiatives and possible distributors felt uneasy distributing the questionnaire since they made little to no progress with the initiative from March 2019 to January 2020. This has probably caused some applicants to not distribute any questionnaires. This has limited the results of this research.

Recommendations for further research

The implications, conclusion and limitations bring up some recommendations for future research. First of all, a qualitative method with interviews is a valid way to research roughly same things and can be useful to come to more in-depth insights. How far the effort has helped the goals of the Waddenfonds is researchable with interviews or a focus group with the people who started the initiatives.

Future research might specifically be on bridging social capital and how initiatives may create this types of social capital. If bridging social capital is a condition for sustainable economic development, what does that look like and how is having bridging social capital experienced by people in rural areas? An answer to this question enables the Waddenfonds and other funds to update and adapt their policy to increase the probability or likeliness that sustainable economic development is established in the Wadden. Either way, if the goal is to create social capital, research like that makes the different funds aware of the existence of different types of social capital, and what their effects society and economy are.

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Appendix A: research design

| Question | Which information | Moment of retrieval | Source | Method of retrieval | Documentation method | Method of analysis |
|--|--|--------------------------------|---|--|---|---|
| In what ways can civil initiatives influence social capital? | Insights from existing literature | Fall (and winter) of 2020/2021 | Literature on civil initiatives and social capital | Literature study | A theoretical framework and conceptual model | No specific method of analysis used here. |
| In what ways can social capital help establish sustainable economic development? | Insights from existing literature | Fall (and winter) of 2020/2021 | Literature on social capital and sustainable economic development | Literature study | A theoretical framework and conceptual model | No specific method of analysis used here. |
| In what way does a rural perspective influence the key concepts of civil initiatives, social capital and sustainable economic development? | Insights from existing literature | Fall (and winter) of 2020/2021 | Literature on rurality | Literature study | A theoretical framework and conceptual model | No specific method of analysis used here. |
| To what extent is the social capital of citizens influenced by civil initiatives in the Wadden area? | Survey information from respondents/citizens in the Wadden area. | Winter 2021 | Survey data | Questionnaires taken from citizens in the Wadden area. | Tables and figures extracted from the questionnaire database. | Qualtrics. SPSS. Use median and IQD. |
| What are characteristics of the created social capital? | Survey information from respondents/citizens in the Wadden area. | Winter 2021 | Survey data | Questionnaires taken from citizens in the Wadden area. | Tables and figures extracted from the questionnaire database. | Qualtrics. SPSS. Use median and IQD. |

Appendix B: list of initiatives

| Nr | Initiative name | Initiative type | VILLAGE NAME |
|----|--|---------------------------------|------------------|
| 1 | Multifunctionele Accommodatie Sexbierum-Pietersbierum | Services | SEXBIERUM |
| 2 | Gezamenlijk aan de slag met het Haventje De Opslach | Experiencability core qualities | NIAWIER |
| 3 | TerpENLand, Archeologie langs het Wad | Experiencability core qualities | OUDE BILDTZIJL |
| 4 | Amelander Kroketten | Economy | HOLLUM |
| 5 | Ferwalde te Plak! | Services | FERWOUDE |
| 6 | Verbouw en herinrichting Dorpshuis It Waltahus Tjerkwerd | Services | TJERKWERD |
| 7 | Ameland Academy | Economy | BUREN |
| 8 | Sport- en recreatiegebouw Ried | Services | RIED |
| 9 | Waddencampus 2.0 | Economy | BALLUM |
| 10 | MFC Froubuurt | Services | SINT ANNAPAROCHE |
| 11 | Meiinoar troch de tiid foarut | Services | PARREGA |
| 12 | Vlinderdorpen Burgwerd en Vrouwenparochie | Experiencability core qualities | VROUWENPAROCHE |
| 13 | Beleef het streekproduct van Amelander bodem | Culture | BUREN |
| 14 | Bloemendorpen Achlum en Oosterbierum | Experiencability core qualities | OOSTERBIERUM |
| 15 | Vogeldorpen Dongjum Boer Peins en Ried | Experiencability core qualities | RIED |
| 16 | Aanbouw MFA tbv Zorg en Welzijn | Services | MINNERTSGEA |
| 17 | Oliemolen de Phenix | Culture | NES AMELAND |
| 18 | We wolle us klaai werom | Experiencability core qualities | HOLWERD |
| 19 | 52 dorpen, 52 verhalen | Experiencability core qualities | GRONINGEN |
| 20 | Initiatief Boetn Toen 2.0 | Experiencability core qualities | PIETERBUREN |
| 21 | Camping Holland Poort | Experiencability core qualities | BAD NIEUWESCHANS |
| 22 | Multi functioneel centrum Pietershoeve | Services | ULRUM |
| 23 | Buurthuis Ganzedijk-Hongerige Wolf | Services | FINSTERWOLDE |
| 24 | Toekomstig Dorpshuis Warffum | Services | WARFFUM |
| 25 | Wadden Made | Economy | GRONINGEN |
| 26 | Veur Aaltied | Culture | ZUIDLAARDERVEEN |
| 27 | Dorpshuis Bierum | Services | BIERUM |
| 28 | Hospice Het Tweede Thuis | Services | HIPPOLYTUSHOEF |
| 29 | Behoud het Texels Schaap | Experiencability core qualities | DEN BURG |
| 30 | Natuuravontuur De Cocksdorp | Experiencability core qualities | DE COCKSDORP |
| 31 | Wad leert jongeren Wat | Culture | DEN HELDER |
| 32 | Texel Academy | Economy | DE KOOG |
| 33 | Historisch centrum van Texel | Services | DEN BURG |
| 34 | Nieuwbouw boet molen De Onderneming | Experiencability core qualities | ANNA PALOWNA |
| 35 | Waddensee in Natuurcentrum | Services | DEN HELDER |
| 36 | Zichtbaar Landschap / Kijk over Dijk | Experiencability core qualities | ALKMAAR |
| 37 | Expertisecentrum Island Berry | Economy | DEN BURG |
| 38 | Historische Hoek Visserijhaven Den Oever | Experiencability core qualities | HIPPOLYTUSHOEF |
| 39 | Reizende tentoonstelling Helderse Helden | Culture | DEN HELDER |

Appendix C: the questionnaire

Questionnaire BLI-projects

Dear Sir / Madam,

First of all, thank you for taking the time to fill in this survey. The results of this research will be valuable not only for the Waddenfonds as an organisation, but also for science in general. In the survey you are asked how you experience the influence of the project/initiative on the vitality in the environment, the sense of community, the quality of the environment and on your personal social networks. The way of questioning is by means of theses, with which you can agree or disagree.

The number of initiatives is very diverse in nature. Therefore, some questions may not apply to the initiative you are answering the questions about. Finally, personal characteristics and demographic data will also be questioned. The reason this is done to look for explanations to your answers to the statements about the initiative. The survey is, of course, anonymous.

Important: the survey contains a few terms, which it is important to explain in advance.

The initiative = the project about which you answer questions

The environment = This is a spatial area of which you determine the boundaries yourself. For example, 'the environment' can consist of a village and the surrounding farms, but also three villages, or the western part of a village. It is important that you keep in mind the same area as the environment every time.

Environmental quality = perceived quality of the physical environment.

Vitality = commotion, liveliness.

For questions we can be reached via telephone number 0633652278 (both by telephone and via Whatsapp) and the email address adriaanvdveer@gmail.com.

| Question number | Theses |
|-----------------|--|
| Q1 | I'm familiar with the initiative |
| Q2 | I feel involved with the initiative |
| Q3 | I am positive about the initiative |
| Q4 | I hear a lot about the initiative |
| Q5 | I hear other people talk about the initiative |
| Q6 | The area needed the initiative |
| Q7 | I think the initiative is an enrichment for the area. |
| Q8 | People in the area are generally positive about the initiative. |
| Q9 | I'm proud that the initiative was undertaken in my area. |
| Q10 | There is frequent communication on the initiative. |
| Q11 | There is sufficient communication on the initiative. |
| Q12 | I think it is good that there is subsidy available for the initiative. |
| Q13 | I think it's logical that there is subsidy available for the initiative. |

Part two: effects of the initiative

| Question number | Theses |
|-----------------|--|
| Q14 | I think the initiative has impact on the quality of the environment. |
| Q15 | If Q14 is 4 or 5, I think that this impact on the quality of the environment is positive. |
| Q16 | If Q14 is 4 or 5, I could give specific examples of how the quality of the environment has changed. |
| Q17 | I think the initiative has impact on the vitality in the environment. |
| Q18 | If Q17 is 4 or 5, I think that this impact on vitality in the environment is positive. |
| Q19 | If Q17 is 4 or 5, I could give specific examples of how the vitality in the environment has changed. |
| Q20 | I think the initiative has impact on the sense of community. |
| Q21 | If Q20 is 4 or 5, I think that this impact on the sense of community is positive. |
| Q22 | If Q20 is 4 or 5, I could give specific examples of how the sense of community has changed. |

| Question number | Theses |
|-----------------|--|
| Q23 | I can say that because of the initiative my network has grown. |
| Q24 | I can say that because of the initiative my network got stronger. |
| Q25 | Because of the initiative I have met new people in my area. |
| Q26 | Because of the initiative I have met new people from outside of my area. |
| Q27 | Because of the initiative I felt more strongly connected to people in my area. |
| Q28 | Because of the initiative I felt more strongly connected to people outside my area. |
| Q29 | I have the idea that because of the initiative, trust in each other has grown in the area. |
| Q30 | Because the initiative was undertaken, I feel willing to do something for the area too. |

Part 3: personal characteristics

| Question number | Theses |
|-----------------|---|
| Q31 | I am active in the area in for example a committee. |
| Q32 | I'm member of an association in the area. |
| Q33 | I experience the community in my area as tightknit. |
| Q34 | I experience the community in my area as pleasant. |
| Q35 | I know most people from my area. |

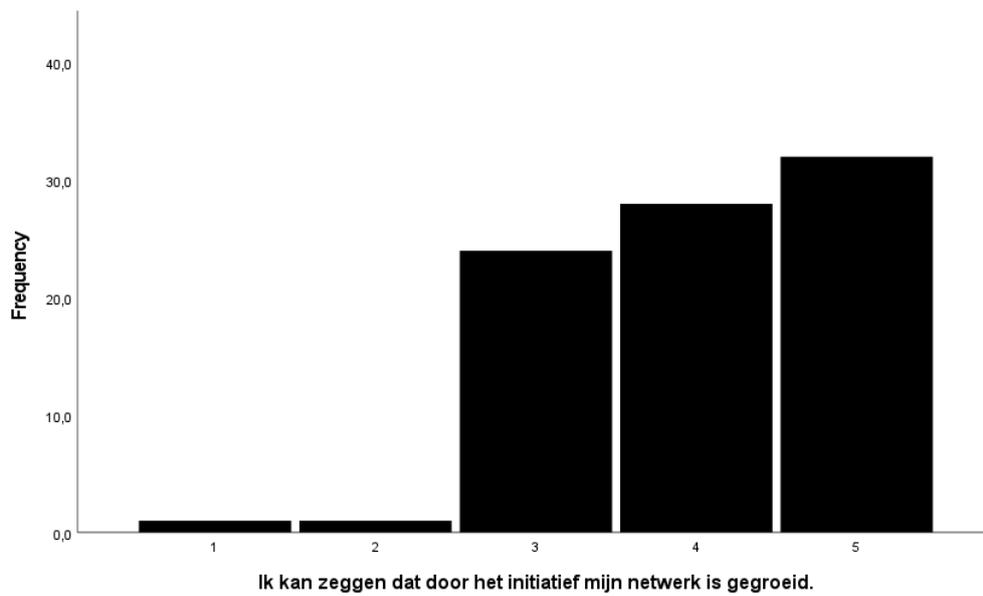
| | |
|-----|---|
| Q36 | I have a strong network within my area. |
| Q37 | My network reaches far out of my area |
| Q38 | I think it is important to know what happens in the area. |
| Q39 | I do not hesitate to employ my network, inside or outside of the area. |
| Q40 | If somebody from the area asks me for a favour, I don't need anything in return (immediately). |
| Q41 | If somebody from outside of the area asks me for a favour, I don't need anything in return (immediately). |

Part 4: demographical data

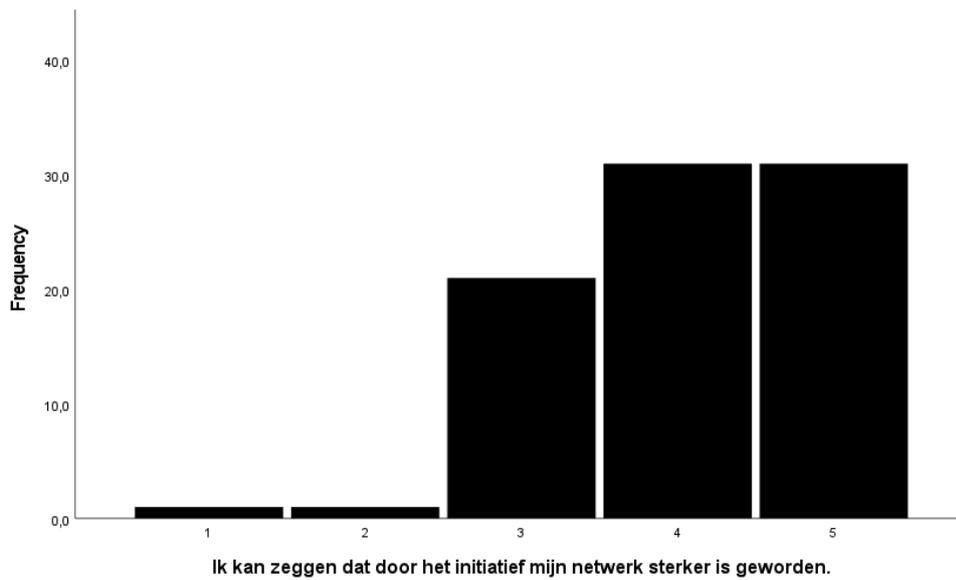
| Question number | Theses |
|-----------------|---|
| Q42 | Sex |
| Q43 | Age |
| Q44 | Marital status |
| Q45 | Children |
| Q46 | If Q45 is yes, what type of education does your youngest child go to? |
| Q47 | Highest education |
| Q48 | How long have you lived in the area? |
| Q49 | What is your estimate on how many inhabitants your area has? |

Appendix D: graphs on Q23 to Q30

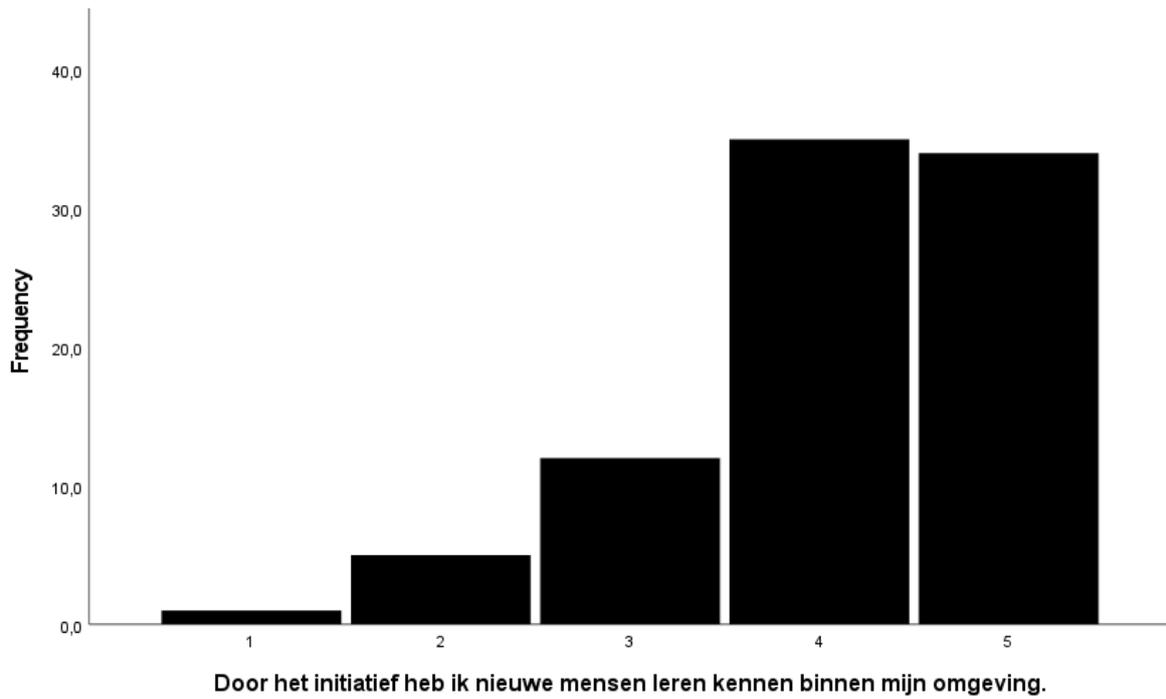
Q23: I can say that because of the initiative, my network has grown. (Figure (...)).



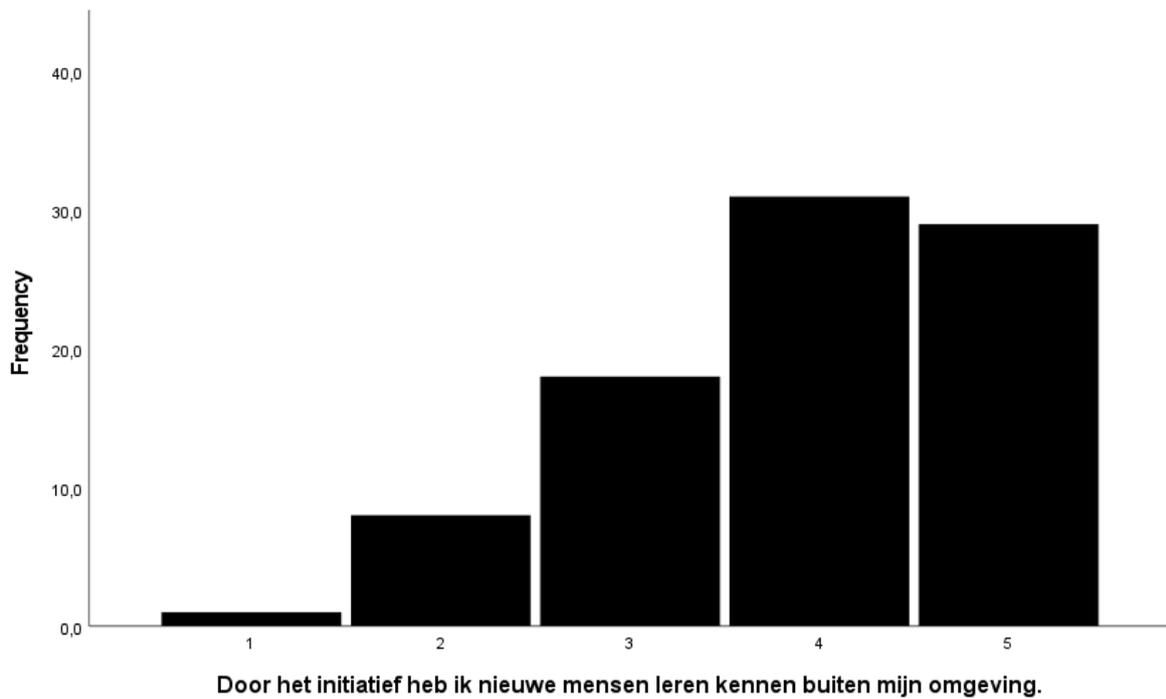
Q24: I can say that because of the initiative my network got stronger.



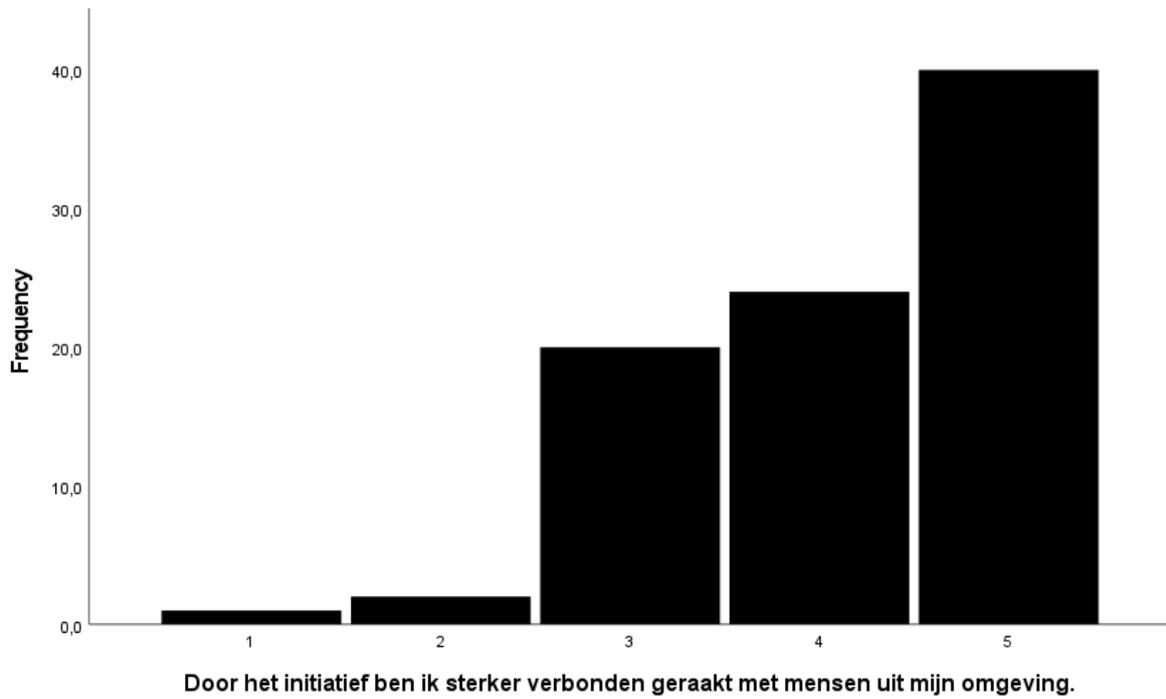
Q25: Because of the initiative I have met new people in my area.



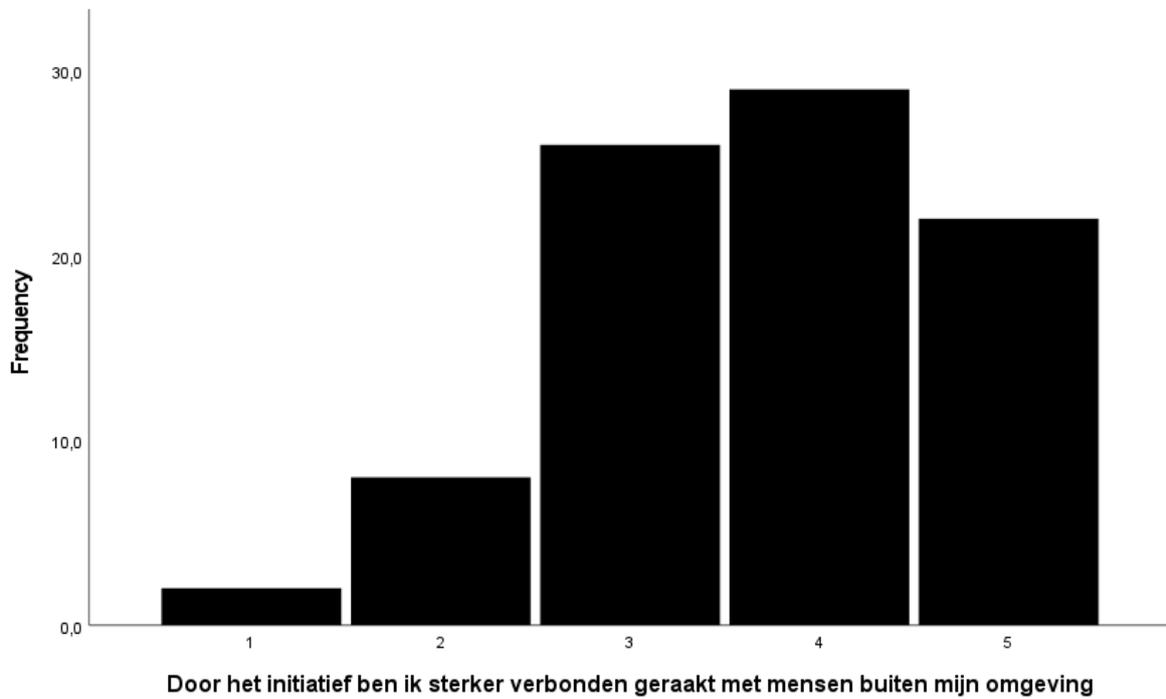
Q26: Because of the initiative I have met new people from outside my area.



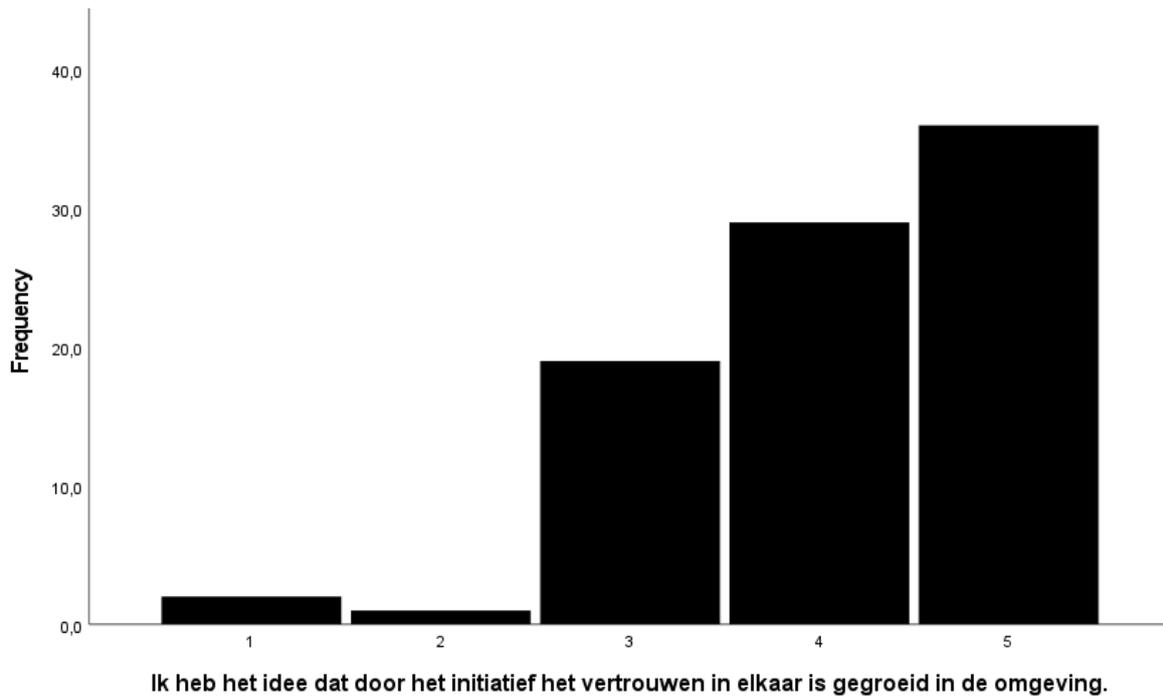
Q27: Because of the initiative I felt more strongly connected to people in my area.



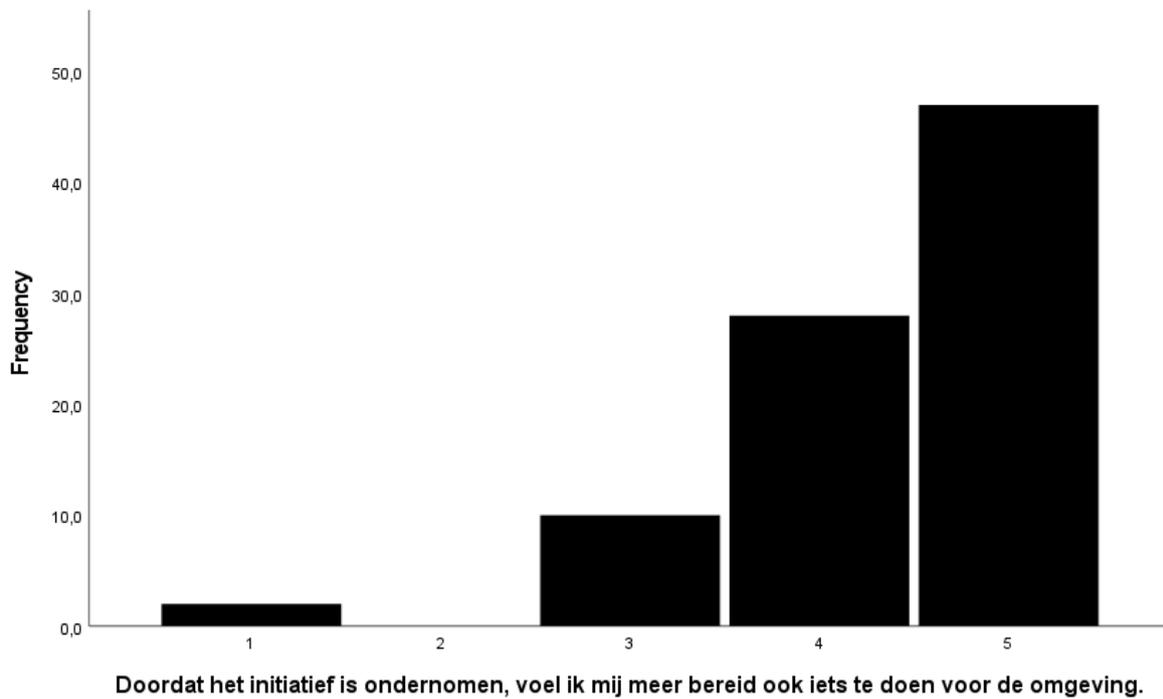
Q28: Because of the initiative I felt more strongly connected to people outside my area.



Q29: have the idea that because of the initiative, trust in each other has grown in the area.

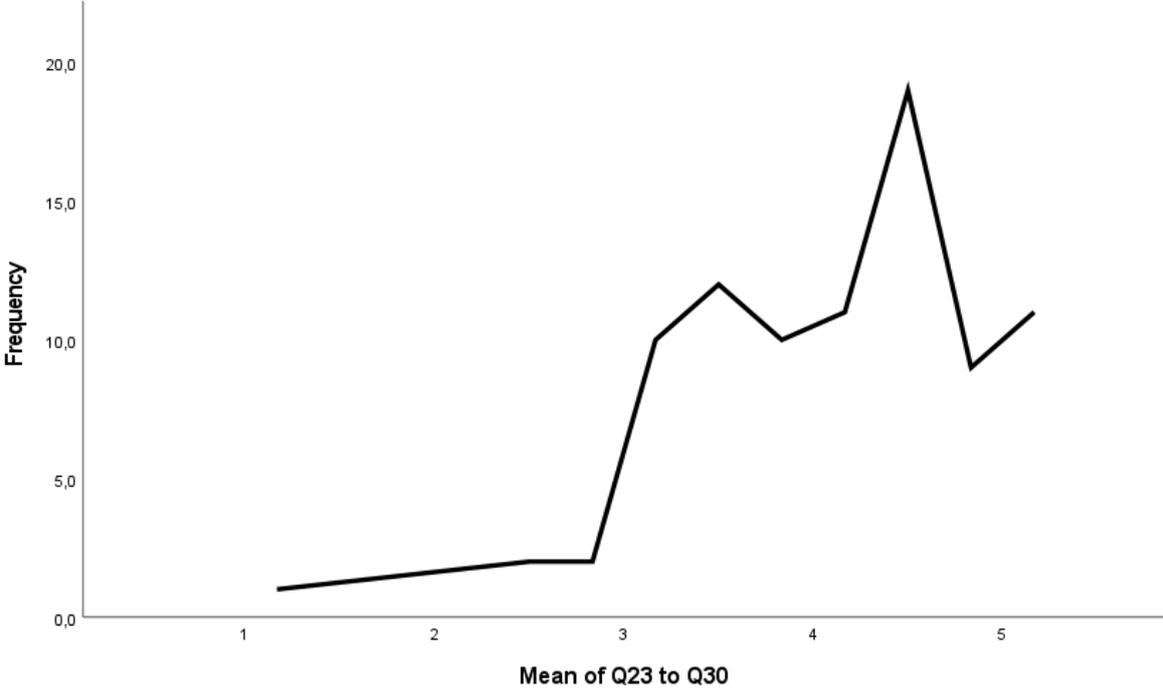


Q30: Because the initiative was undertaken, I feel willing to do something for the area too.

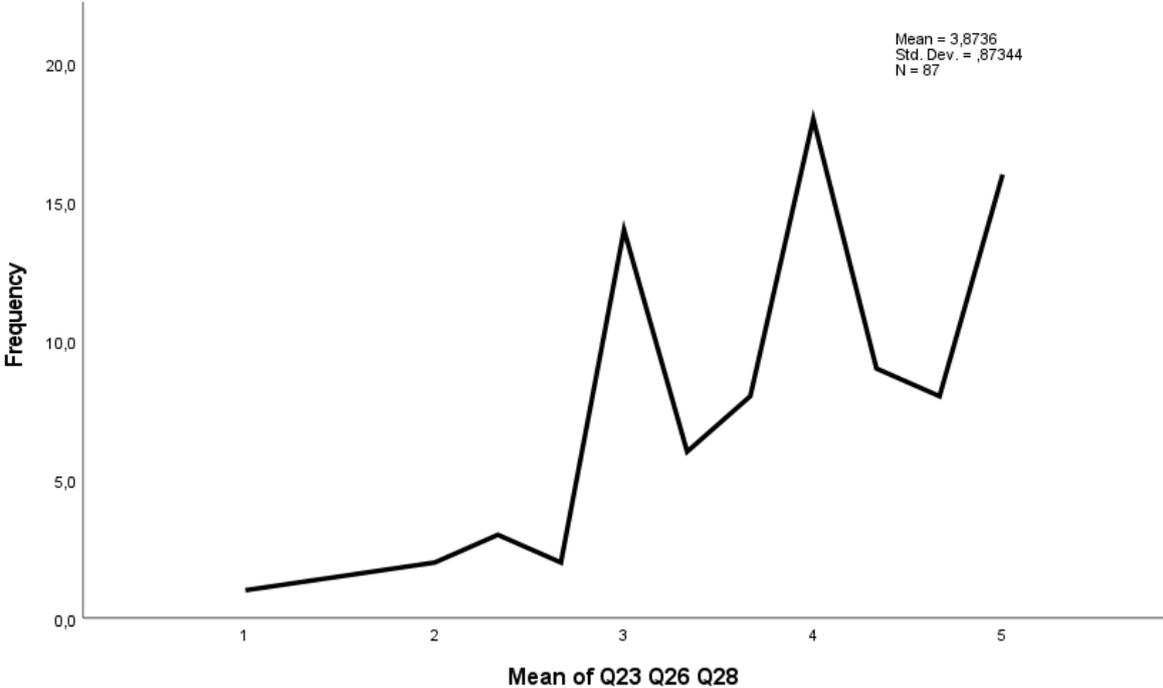


Appendix E: combined variables C1 to C3

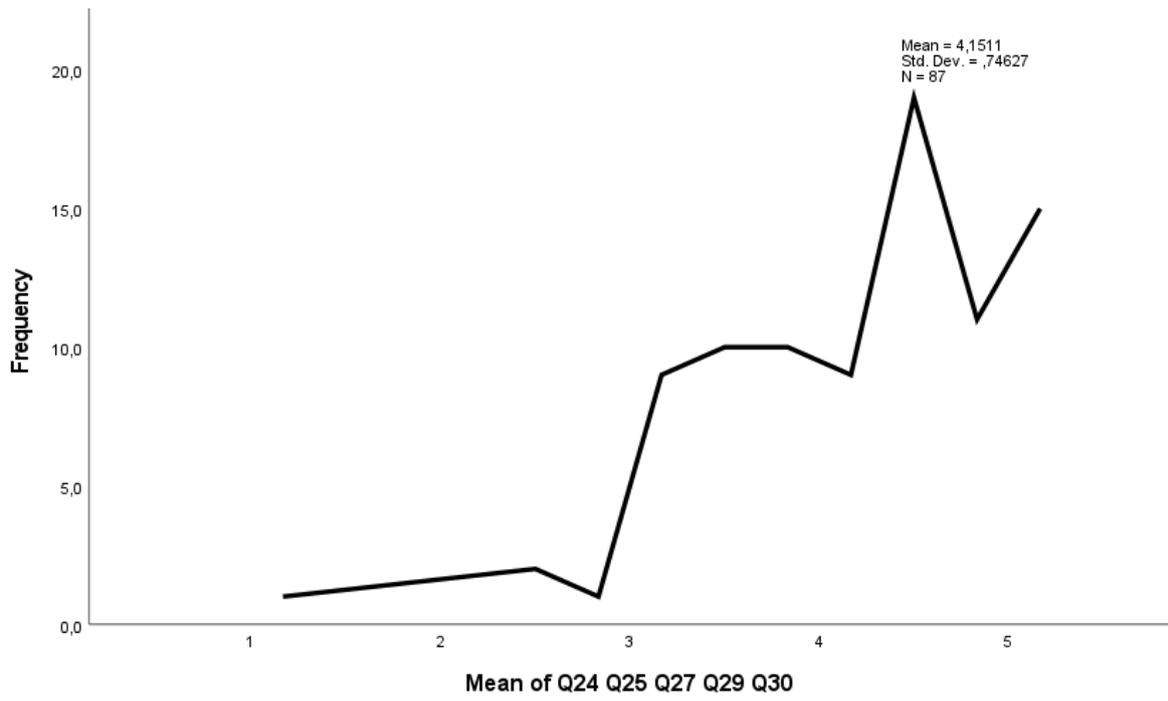
C1: Social Capital Mean



C2: Bridging Social Capital Mean

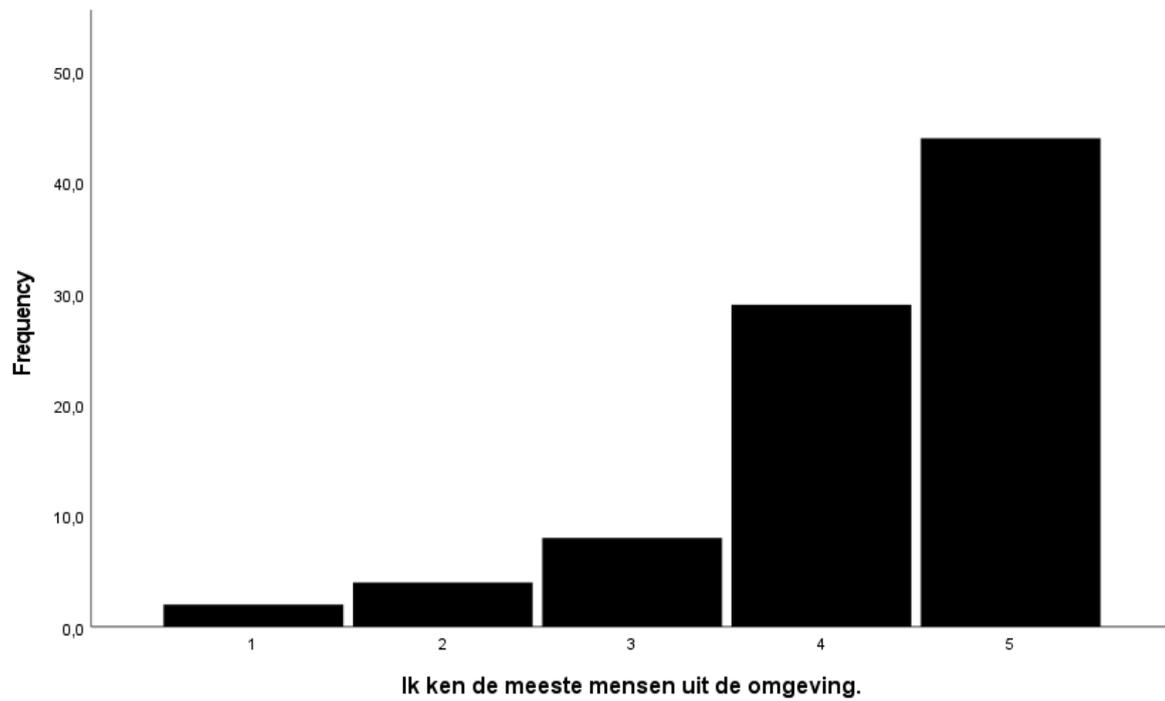


C3: Bonding Social Capital Mean

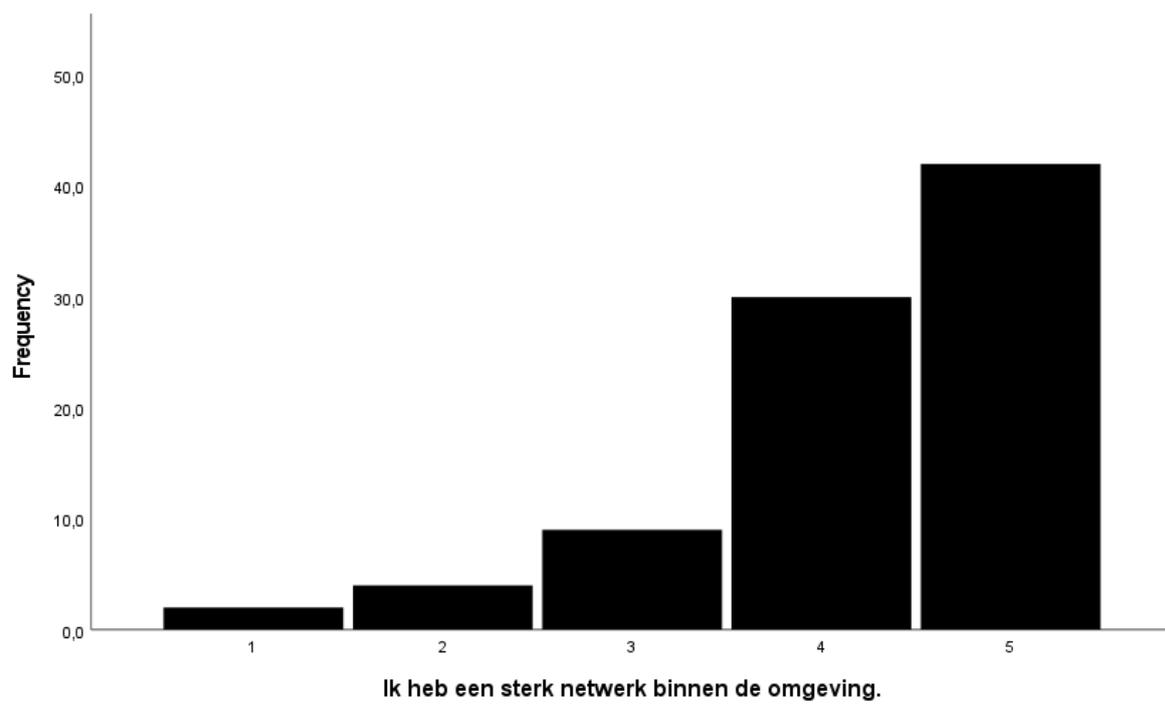


Appendix F: personal networks

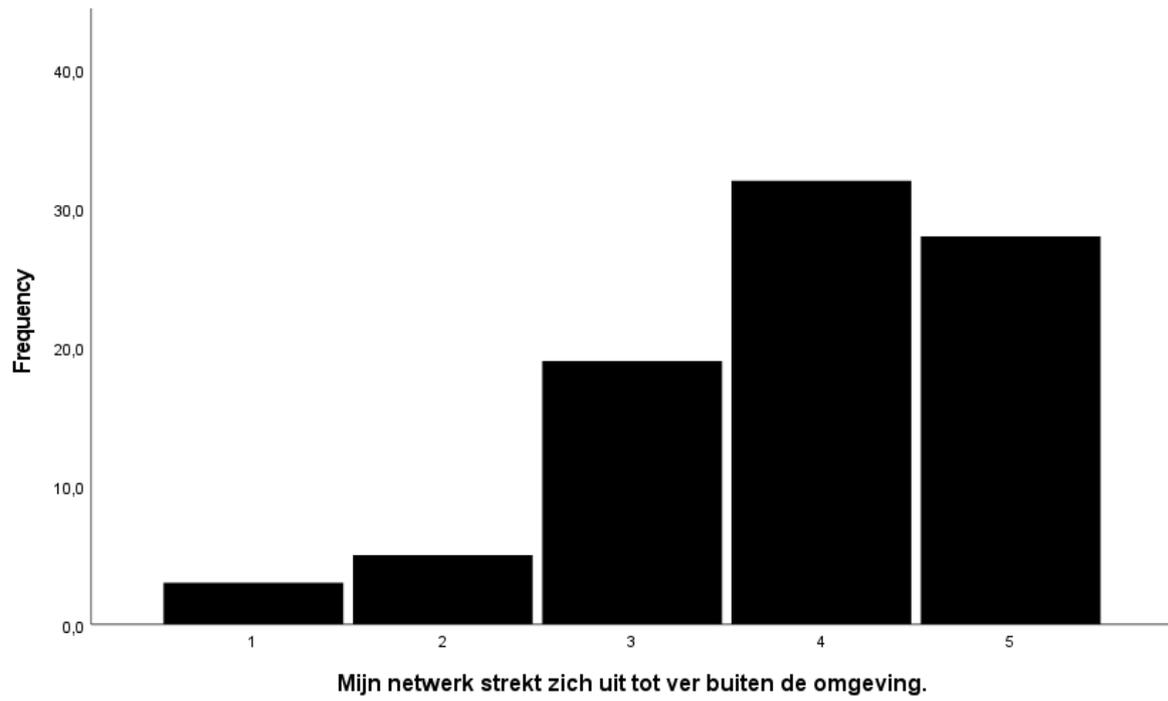
Q35: I know most people in the area



Q36: I have a strong network inside the area

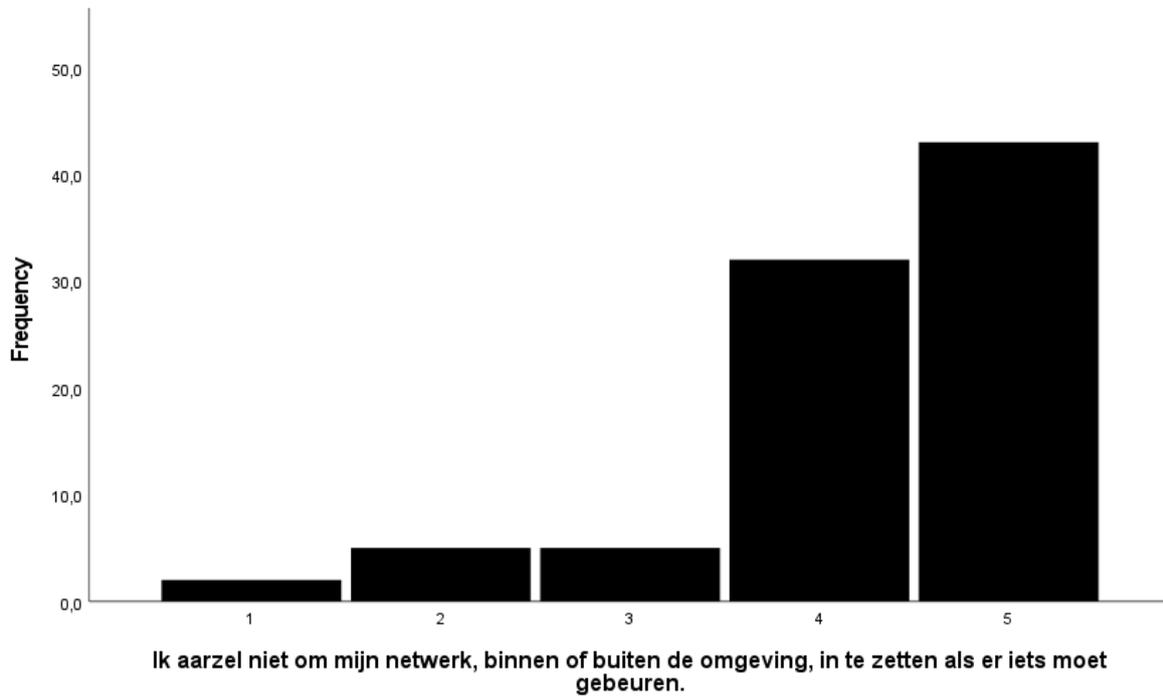


Q37: my network reaches to far outside the area.

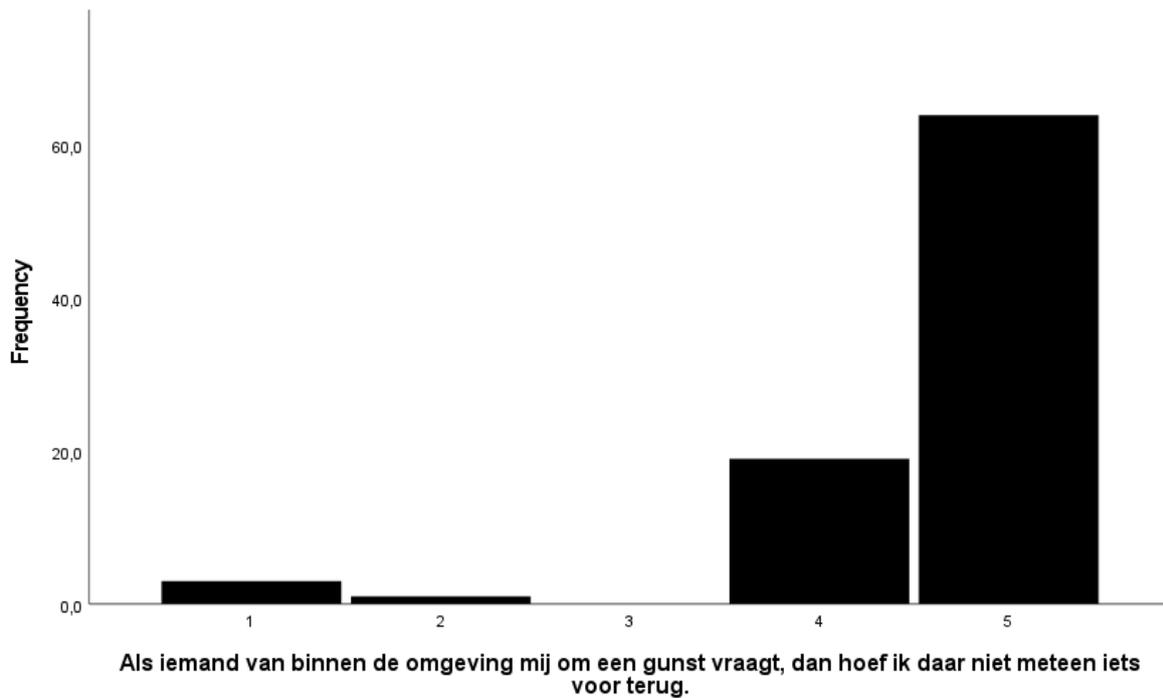


Appendix G: trust and reciprocity

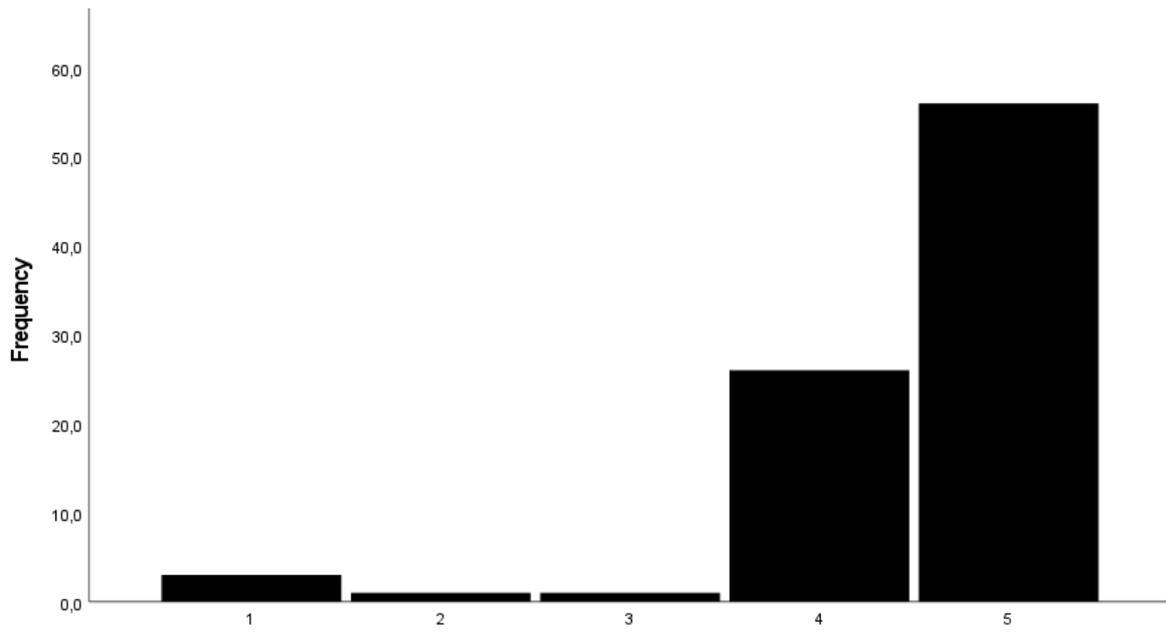
Q39: I do not hesitate, inside or outside of the area, to employ my network when something needs to happen.



Q40: When somebody from inside the area asks me a favour, I do not need anything in return directly.



Q41: When somebody form outside the area asks me a favour, I do not need anything in return directly.



Als iemand van buiten de omgeving mij om een gunst vraagt, dan hoef ik daar niet meteen iets voor terug.