(Anti-)vaccination reasoning among Dutch Christian families

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Abstract

Since the early 2000s, vaccination rates in the Netherlands have declined. If this decline continues, herd immunity can be threatened and eventually benefits will get lost: viruses can circulate freely and risks will multiply. This decline in vaccinations is due to several reasons of which religion is one. For instance, the Bible Belt, an area in the Netherlands where a lot of orthodox protestants are living, has experienced epidemics of vaccine preventable diseases. The main goal of this thesis is to get a clearer understanding of (anti-)vaccination reasoning among Dutch Christian families and how their religion plays a role. Cultural schema theory and the life course approach are used in order to understand the motivations behind their reasoning. During the life course, people undergo (personal) experiences that shape their cultural schemas. The way cultural schemas are internalised, depends on the experiences of individuals. On the other hand, existing schemas also cause experiences to be perceived in a certain way and this may strengthen their schemas. Ten in-depth interviews with thirteen adults were conducted in order to understand their reasoning. Most of these interviews were conducted during the COVID-19 pandemic. Some took place online and some at the home of the participants. Grounded theory was used to understand the reasoning of the participants. Reading the verbatim transcripts carefully, enabled me to understand the worlds of the participants which were described in their own words. This way, theory was developed by reading the data. Next to this inductive approach, during the analysis of the transcript, there seemed to be an interplay between induction and deduction. The findings show that broadly four different positions regarding vaccination could be distinguished. Firstly, an anti-vaccination position. These participants believe in God's divine providence and described that their religion plays the main role in their anti-vaccination reasoning. Secondly, an anti-vaccination position with a different reasoning. These participants talked about the necessity and the risks of vaccination and also see their body as a temple. Their faith and medical reasons played a great role in their anti-vaccination reasoning. Participants who believe in the knowledge of doctors and see vaccines as a gift from God were pro-vaccination. The last position is a sceptical point-of-view. These participants were afraid of the risks of vaccinations but also acknowledge the importance of public health. The (anti-)vaccination reasoning of the participants is supported by the cultural schemas faith, respect, critical thinking and individual liberty. However, the four positions are the result of different internalization of these cultural schemas through (personal) experiences during the upbringing of the participants, their time as young parents and contemporary society. To conclude, the (anti-)vaccination reasoning is context-dependent and therefore something intensely personal. The participant's narratives also showed that different denominations within Christianity have different interpretations of faith, and that it is not possible to measure every Christian by the same standards. Some participants feel that the societal pressure to vaccinate violates their individual liberty and bodily autonomy. The findings of this research can inform policy makers how to better respond to Christian families and their (anti-)vaccination reasoning, also in relation to the COVID-19 vaccine. This research focussed on Christianity in general. Future research can focus on a particular denomination of Christianity. This way, more in-depth information about one specific denomination can be obtained.

Keywords: *(Anti-)vaccination, Christianity, COVID-19, cultural schema theory, grounded theory, life course approach, Netherlands, qualitative research.*

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1. Introduction

Mass childhood immunization is of utmost importance to all modern public health systems. It relies on high levels of uptake. Immunization, and child immunization in particular, is often regarded as one of the most successful medical interventions and leads to enormous reduction in child morbidity and mortality from infectious diseases (Hobson-West, 2003). In the Netherlands most children are vaccinated at an Infant Welfare Centre (Blume, 2006). In 2005, the Netherlands had a very high immunization rate of 97%. This is because of the effective organization of vaccination services and efficient surveillance systems. Since the start of the national vaccination program in 1957, most vaccine-preventable infectious diseases have disappeared (Hak et al., 2005). However, over the last couple of decades, a growing number of parents choose not to have their children vaccinated. Up until 2016, the Netherlands experienced a decline in vaccination rates (RIVM, 2019a). Even though it seems stabilised right now, it could be a threat to herd immunity if this number will start to decline again. Herd immunity stresses the idea that achievement of high vaccination uptake (around 95%) is necessary to ensure that those who cannot be vaccinated, for example because of medical reasons, are still protected (Hobson-West, 2003). The resulting decline in vaccination rates creates concern amongst the government's public health authorities. Once vaccination rates fall below 90%, the fear is that herd immunity benefits will be lost: viruses can circulate freely and risks will multiply (Blume, 2006).

This decline in vaccination prevalence in the Netherlands is due to several reasons, among which religion, perceived effectiveness, fear of side effects and alternative medicine (Kata, 2010). Widespread information about (anti-)vaccination on the internet does also play a significant role (Kata, 2010; Blume, 2006). There has been a lot of (mis)information on the internet about a link between several vaccines and a type of autism, even though extensive research has shown there is no link (Hobson-West, 2003). Next to this, social control can play a role too (Krijnen, 2004).

In the Netherlands, researchers found that there is a strong negative relation between vaccination coverage and several Christian denominations. Many orthodox protestants in the Netherlands do not wish their children to be vaccinated (Blume, 2006; Streefland et al., 1999). The Bible Belt, an area in the Netherlands where a lot of orthodox protestants are living, has experienced epidemics of vaccine preventable diseases. Within the Bible Belt, there have been several outbreaks of measles with roughly 2500 reported cases every twelve years. The outbreaks in 1988, 1999 and 2013 have shown many adult cases and hospitalizations (Lisowski et al., 2019). Almost all patients in these epidemics belonged to the orthodox protestant minority group and were unvaccinated because of religious objections (Ruijs et al., 2011). This minority group consists of a few hundred thousand people that are geographically and socially clustered, so they cannot benefit from herd immunity. The fact that the outbreak of measles in this area seems to repeat every twelve years could show that the orthodox protestant minority is still not vaccinating. There is, however, little information on the role of religion in their anti-vaccination reasoning as religion is not recorded in the registration of the national vaccination program (Ruijs et al., 2011).

Within the United Kingdom, researchers found that the debate of religion and vaccination is not about risk but about alternative meanings of health. Religion has been closely associated with resistance to vaccination. This opposition comes from the belief that vaccination was interfering with the will of God: diseases were understood as being part of sin. However, studies do not explain how religiosity operates as a reason. A deeper analysis is needed to understand these ideas (Hobson-West, 2003). In the first place, religion may seem the main motivation behind (anti-)vaccination decisions. On the other side, social control can play a role too. (Anti-)vaccination reasoning is not merely based on beliefs or ideologies such as religion but it is made and shaped through personal experiences and observations, such as negative advice from friends (Krijnen, 2014). Thus, (Anti-)vaccination reasoning cannot be understood in individualistic terms but is likely shared by friends, relatives or neighbours who share their vaccination experiences (Streefland et al., 1999). This may also be the case in the Bible Belt, where

like-minded people are living. Social control may interfere with personal choices (Ruijs et al., 2011). So, the arguments against vaccination are not only focussed on people's interpretation of the Bible. Understanding choices and decisions made through the life course of a person can help with building an analysis. During the life course, an individual undergoes several (personal) experiences that shape their cultural schemas. The cultural schemas of people may be the same, such as religion but how the cultural schemas play a role in their (anti-)vaccination reasoning may differ because of the experiences they had during their life. Through qualitative research it is possible to analyse the life course of a person. This way it can be better understood how their religion plays a role in their (anti-)vaccination reasoning. Therefore, cultural schema theory and the life course approach are applied to this research.

1.1 Research objective and questions

The main goal of this thesis is to understand the (anti-)vaccination reasoning of Dutch Christian families. The objective of the research is thus to get a clearer understanding of the nature of their motivations towards immunization and gain a better insight on how their religion plays a role in that. The purpose is to study how (personal) experiences across the life course play a role in this (anti-)vaccination reasoning too. The central question that suits this goal is:

What is the reasoning behind (anti-)vaccination decisions of Dutch Christian families?

In order to answer this question, this research is based on the life course approach and cultural schema theory. These theories will be explained in the next chapter. The following sub-questions are important to consider:

Which cultural schemas and (personal) experiences over the life course are perceived important in relation to (anti-)vaccination reasoning?

How is the role of religion perceived in those cultural schemas and (personal) experiences?

1.2 Societal and academic relevance

There is remarkable little social scientific research on (anti-)vaccination reasoning (Hobson-West, 2013). In many social science disciplines, religion became neglected in interpreting social phenomena. However, religion is often a great part of people's live (Henkel, 2011). Understanding why people reject scientific consensus on the importance of vaccines is a very important question. Scepticism about vaccines comes with real consequences such as losing herd immunity and resurgences of several infectious illnesses (Motta et al., 2018). Most studies about (anti-)vaccination and religion are based mainly on quantitative research (Shelton et al., 2013). These studies do not explain *how* religion operates as a reason. Yet, understanding peoples' actual reasoning is important for ensuring herd immunization (Grabenstein, 2013). In order to gain in-depth understanding of (anti-)vaccination reasoning of Dutch Christian families, this research applies a qualitative research design. Cultural schema theory, life course approach and grounded theory are used to strengthen the analysis of the in-depth interviews.

Vaccination is a sensitive subject among orthodox protestants and therefore specific research on vaccination related issues in this minority group is scarce (Ruijs et al., 2011). Because of the sensitivity of the subject, it is preferable to obtain an emic perspective and research how people think. So, talking about vaccination reasoning processes with participants, rather than just providing medical information or having an authoritarian stance. The latter will probably only cause resistance and no conversation at all (Grabenstein, 2013). Therefore, this research focussed on giving Dutch Christian families a voice and thereby obtaining a better understanding of their (anti-)vaccination reasoning. As the COVID-19 virus has recently emerged and become a pandemic with big influence on the society we live in, this thesis will also inform about the attitude of Dutch Christian families towards this contemporary topic and a potential COVID-19 vaccine. It is unknown whether further expansion of the vaccination program

of the Netherlands with new vaccines will be accepted by the Christian population (Hak et al., 2005). The findings of this thesis can inform policymakers how to respond to the needs of these people.

2. Theoretical framework

This chapter will elaborate on the theories that are used in this research. Cultural schema theory and the life course approach are used in this research in order to explain the (anti-)vaccination reasoning of Dutch Christian families. Grounded theory is used to analyse the data and will be elaborated on in chapter 3.

2.1 Theories

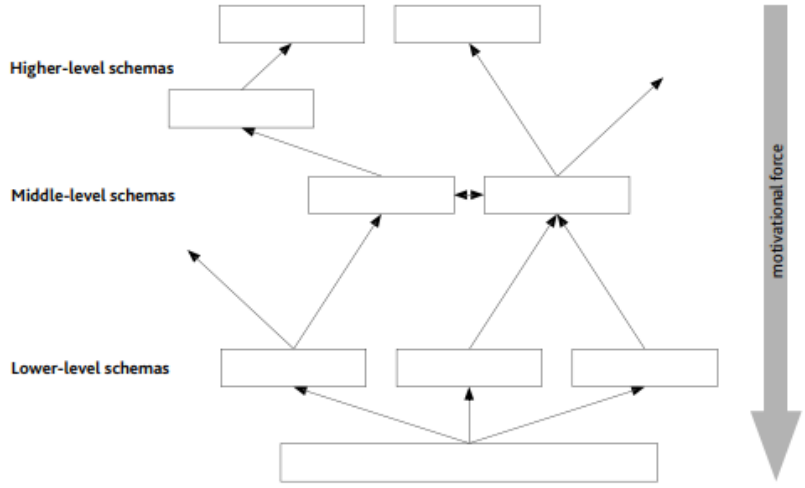
Several cultural schemas may be of importance in (anti-)vaccination reasoning of Dutch Christian families. However, these shared cultural schemas can be interpreted differently because of (personal) experiences. These experiences throughout the life course and corresponding schemas of the participants interact with each other. (Personal) experiences can strengthen their schemas or even change existing ones (Garro, 2000). On the other hand, (cultural) schemas play a role in how certain experiences are perceived.

2.1.1 Cultural schema theory

Cultural schema theory, coming from cognitive-anthropology, looks at individual beliefs and perceptions in a broader context of socio-culturally shared schemas (De Haas, 2017). Cultural schemas are shared by a group of people based on shared knowledge and experiences in their life. Personal knowledge and experiences may influence the interpretation of cultural schemas (De Haas, 2017). So, sharing the same cultural schemas may result in different behaviours by different people (Garro, 2000). For example, faith can be a shared cultural schema. But how faith is internalised and interpreted can differ per person because of individual beliefs about this cultural schema.

Figure 1 shows that within cultural schemas there is a distinction between high-level, middle-level and low-level schemas. High-level schemas give general interpretations of what is going on and contain the most powerful goals. These schemas can provoke actions. Middle-level schemas can generate goals of their own but sometimes require other higher-level schemas to generate some of their goals. Low-level schemas only generate goals in interaction with higher-level schemas. Low-level schemas can be seen as daily activities. They do not instigate action fully autonomously (De Haas, 2017). An example of a high-level schema can be health, a corresponding middle-level schema can be vaccination and a low-level schema can be a vitamin supplement that is taken every day.

Figure 1: Cultural schema theory (De Haas, 2017, p.57).



Cultural schema theory is used in this research to understand the (anti-)vaccination reasoning of Dutch Christian families. In order to understand the cultural schemas of people, it is necessary to understand which (personal) experiences lead them to act as they do. (D'Andrade, 1992). Dutch Christian families may share the same cultural schemas, but the way these schemas are internalised per person may differ because of (personal) experiences with these cultural schemas. For example, the shared cultural schema is religion. However, the way this cultural schema is internalised can be different. Religious families can be against vaccination because being created in God's image means receiving God's perfect immune system (Kata, 2010). Based on this vision, religious people can be against vaccination. On the other hand, other religious families choose to vaccinate because immunization is a gift from God, to be used with gratitude (Grabenstein, 2013). Based on this vision, religious people can be pro-vaccination.

Not only (personal) experiences can cause the interpretation of cultural schemas to be different but social frameworks are important too (Garro, 2000). People rationalize their decisions, judgements and behaviours based on a cultural rationality that is shared. This rationality depends on the cultural context (Bailey & Hutter, 2006). Individuals may unintentionally obtain habits from repeatedly observed and practiced patterns of behaviour (Strauss & Quinn, 1997). So, (anti-)vaccination reasoning cannot be understood in purely individualistic terms but this reasoning is likely shared through friends, relatives or neighbours who share their vaccination experiences (Streefland et al., 1999). The goals that Dutch Christian families want to achieve are context-dependent and culturally valued (D'Andrade, 1992).

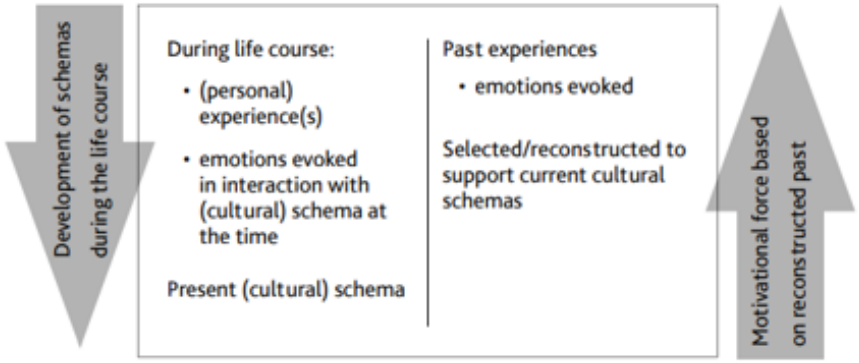
In the first place, religion may seem the most important shared cultural schema that causes (anti-)vaccination reasoning. On the other side, other (shared) cultural schemas and social control can play a role too. (Anti-)vaccination reasoning is not merely based on beliefs or ideologies such as religion but is made and shaped through personal experiences and observations such as negative advice from friends (Krijnen, 2004). These personal experiences are shaped throughout the life course and establish cultural schemas.

2.1.2 Life course approach

The life course approach helps with structuring health related research. This approach has been used for a long time in many scientific disciplines, among which demography (Kuh & Hardy, 2002). The life course approach applied on this research is the one used in cultural schema theory. It starts with the fact that various biological and social factors throughout the life play a role in decision-making. The decisions that people make depend on the (personal) experiences they undergo. In this research, the (personal) experiences of Dutch Christian families are explored. Their experiences and their social frameworks motivate decisions, behaviour and judgements (Garro, 2000). The life course of those families, including lots of experiences, may motivate (anti-)vaccination reasoning. These experiences , and the context in which people live, develop the interpretation of cultural schemas (Garro, 2000). Therefore, it is most important to firstly get to understand the life course of Dutch Christian families, as this life course shapes the interpretation of their schemas.

In figure 2, the life course approached is illustrated. The left arrow shows that during the life course, people undergo (personal) experiences. These experiences will raise emotions and establish the interpretation of cultural schemas. Cultural schemas are shared by groups of people, however, the way people interpret these schemas depends on (personal) experiences throughout the life course. Experiences throughout the life course may shape cultural schemas of those people and complement them with new perceptions (De Haas, 2017). The interpretation of cultural schemas is thus developed throughout the life in interaction with the context in which people live. The arrow on the right shows that new incoming information and new experiences may evoke emotions and provide another interpretation of existing cultural schemas, create new cultural schemas or even change existing ones (Garro, 2000). In order to understand the individual interpretation of shared cultural schemas it is important to know how these schemas are established throughout the life course, as personal experiences may explain this interpretation.

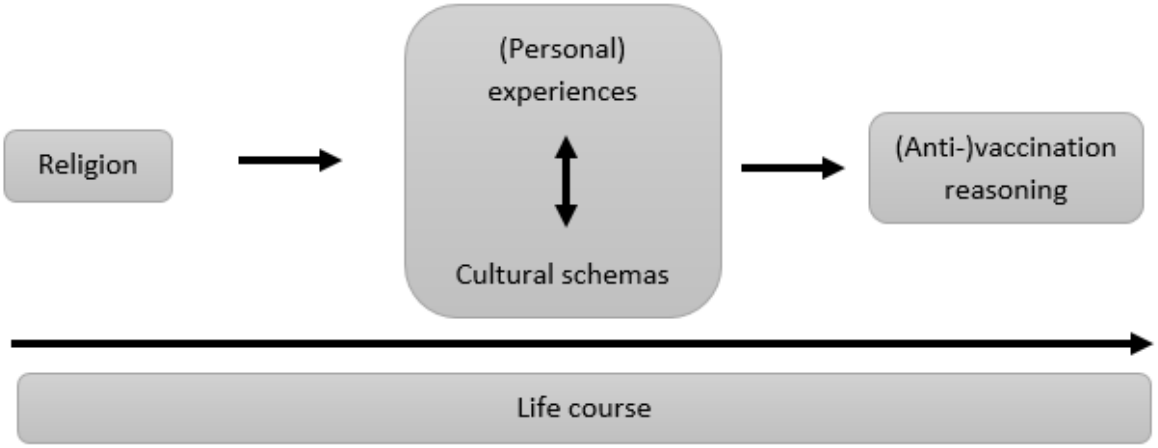
Figure 2: Life course approach (De Haas, 2017, p.59).



2.1.3 Conceptual model

Figure 3 shows the conceptual model of this research and can be interpreted as follows: the religion of the participants is expected to play a role in the interpretation of their cultural schemas and the way they interpret (personal) experiences. There is probably an interaction between experiences and cultural schemas of the participants. New incoming information and new experiences may provide another interpretation of cultural schemas, create new schemas or even change existing ones (Garro, 2000). But the cultural schemas they have, may also play a role in how certain experiences are perceived. These (personal) experiences and cultural schemas are developed over the life course of a participant and eventually can explain their (anti-)vaccination reasoning.

Figure 3: Conceptual model



2.2 Literature review

There are considerations that shape (anti-)vaccination reasoning. A lot of aspects may play a role in (anti-)vaccination reasoning among Dutch Christian families.

2.2.1 Dutch history

(Anti-)vaccination decisions in the Netherlands are usually grounded in religious beliefs, especially orthodox protestants (Streefland et al., 1999). This opposition to vaccination dates to the 19th century since the side effects of smallpox vaccination appeared. In 1881 the Association to Oppose Compulsory Vaccination (*Bond ter Bestrijding van Vaccinedwang)* was established in the Netherlands (Blume, 2006). This association was established because the Dutch government wanted all school children to be

vaccinated after an epidemic broke out. Mostly Christian people were part of this association and thus against compulsory vaccination because it represented an infringement of individual liberty. It turned out that much of the resistance was against the compulsory nature of vaccination, rather than vaccination itself (Blume, 2006). The National Vaccination Program was established in 1952 (RIVM, 2019b). For many parents, it goes without saying that they vaccinate their children. It is simply part of the Dutch health system. Therefore, participating in this program is not mandatory. The Dutch National Institute for Public Health and the Environment (RIVM) does not only emphasize the importance of vaccines as a reason for the decline in infectious illnesses in the Netherlands but also explain the decline due to the healthcare system and better hygiene. The Dutch Association for Conscientious Vaccination (*Nederlandse Vereniging Kritisch Prikken*) was established in 1994 (NVKP, 2019). The NVKP is established by a group of people who experienced bad effects of vaccinations as a parent or in their profession. NVKP's objective is to support parents in making their own personal decisions. It is neither for nor against vaccination, it merely exists to advice and support families. Despite the voluntarily character of the National Vaccination Program, the founders of the NVKP felt that societal and medical pressure to participate was too high. Therefore, they still felt obliged to participate in the program and do not feel there is freedom of choice. Even though individual rights are embedded in many cultures, vaccine decisions may affect more than an individual's health. There are examples of vaccine-preventable outbreaks among religious schools and communities. However, these outbreaks are not limited to particular areas. Vaccine-preventable diseases can also spread to well-immunized communities when herd protection is affected (Grabenstein, 2013). The arguments against vaccination focus on people's interpretation of the Bible, the personal responsibility and individual choice of church members (Ruijs et al., 2011).

2.2.2 (Anti-)vaccination reasoning among Christian families

Within the United States, researchers examined the relation between religion and parental vaccine decisions. Through quantitative research, the conclusion was that religion had been found to be influential in making those decisions. Parents who frequently attended religious services were more likely to have decided against vaccination (Shelton et al., 2013). This research specifically goes into detail regarding sexually transmitted infections and the Human Papillomavirus (HPV) vaccine. The main belief of religious parents is the fact that vaccinating their daughters is unnecessary and morally inappropriate. Vaccinating their daughter against HPV thus goes against their religious norms. Thus, religion can be a reason why people refuse to vaccinate. Christian families experience the presence of God in everyday life and their religion is a strong motivational force in today's world (Karabenick & Maehr, 2005). However, how their religion plays a role as a motivation in making decisions, differs per person. Such matters are intensely personal and therefore can result in different behaviour outcome. Some Christian denominations or churches believe in healing through faith alone and thus are against vaccination. However, other religious communities see immunization as a gift from God, to be used with gratitude (Grabenstein, 2013).

However, (anti-)vaccination reasoning cannot be understood in purely individualistic terms, but is likely to be shared by friends, relatives or neighbours who share their vaccination experiences (Streefland et al., 1999; Krijnen, 2004). There is a possibility that Christians decline immunization because of social tradition within their religious community, more than a theological objection. The rural character of the Bible Belt in the Netherlands may play a role as social control is more prevalent in rural areas. This social control interfered with personal choices (Grabenstein, 2013). The life course approach and cultural schema theory connect to this point of view. Experiences throughout the life course of a Dutch Christian family may play a great role in their (anti-)vaccination reasoning. (Anti-)vaccination reasoning is not merely shaped by religion, but is shaped by shared beliefs of friends, relatives and neighbours (Streefland et al., 1999). Therefore, a person's individual religious beliefs are probably not the only factor that contributes to their (anti-)vaccination reasoning.

Within a Christian family, morality, religion and ideology can be several reasons to be against vaccination. Being created in God's image means receiving God's perfect immune system (Kata, 2010). However, for those religious families, their religion is not always the only factor of anti-vaccination reasoning. Safety, effectiveness, alternative medicine and civil liberties can also be seen as reasons to be against vaccination (Kata, 2010). Reasons for refusing vaccines may involve alternative understandings of health, different perspectives of parental responsibility or questioning the legitimacy of traditional authorities. This means that religious families may have several other reasons to be against vaccination. These reasons are likely shaped by (personal) experiences people had in the context in which they live. Even though people may share the same cultural schemas, (anti-)vaccination reasoning is intensely personal because of individual experiences throughout the life course. Therefore, assuming that every religious person has the same set of beliefs is wrong (Moberg, 2005).

This means that the risks that come with vaccinating your children may not be a factor of the anti-vaccination reasoning of every Dutch Christian family. The debate of religion and vaccination is not always about risk but about alternative meanings of health (Hobson-West, 2003). Nevertheless, it is important to consider that there could be a possibility that Dutch Christian families could talk about the risks of vaccination. Therefore, reasons about risks should not be excluded preliminary. Information about risks of vaccines on the internet is prevalent. This information supports vaccine objections but is often not filtered or reviewed (Kata, 2010). Parents translate the potential risks of vaccination with their personal experiences and spread their views to their social groups. People mostly do not read medical literature or visit health practitioners as they rather search for information online. (Anti-)vaccination views are most famously and most accessibly present on the internet. There is a lot of concern among government public health authorities regarding how easily parents, seeking information, stumble on them (Blume, 2006).

Most Christians are against vaccination because it represents a violation of individual liberty. Those people are against any form of compulsory nature of vaccination, rather than the vaccination itself (Blume, 2006). Thus, there may be a possibility that anti-vaccination reasoning of Dutch Christian families has to do with civil liberties, rather than mere theological objections or because of risks of vaccinations. A combination of factors may play a role. Whatever factors are part the of (anti-)vaccination reasoning of a Dutch Christian family, (personal) experiences throughout the life course and the context the families live in, play a great role in this (anti-)vaccination reasoning (Krijnen, 2004). For example, negative advice from friends can be internalised into an individuals' schema and may be part of the anti-vaccination reasoning.

In the end, there could be many reasons involved in the (anti-)vaccination reasoning of Dutch Christian families. The question if it is mere theological objection or not is answered in this thesis. It is important to get to know one's life course consisting of (personal) experiences that shape their interpretation of shared cultural schemas. Whether the cultural schemas they have are about religion, experiences of relatives and friends, infringement of individual liberty or risks of vaccination, the personal stories of Dutch Christian families must be disclosed in order to fully understand their (anti-)vaccination reasoning.

2.3 Expectations

The expectations of this research are based on previous academic research, and therefore the following:

Which cultural schemas and (personal) experiences over the life course are perceived important in relation to (anti-)vaccination reasoning?

It is expected that (anti-)vaccination reasoning among Christian families in the Netherlands is based on (personal) experiences and observations, rather than mere theological objection. Conversations with friends, relatives and neighbours and information on the internet may influence the decision-making of these families.

How is the role of religion perceived in those cultural schemas and (personal) experiences?

The expectation is that the interpretation of the Bible will play a role in (anti-)vaccination decisions, especially amongst orthodox protestants. There may also be a possibility that some religious families see immunization as a gift from God, to be used with gratitude, and therefore are not against vaccination. So, religion is a shared cultural schema but it is probably internalised differently because of different (personal) experiences throughout the life course. Therefore, it is also a possibility that religion plays an indirect role in (anti-)vaccination reasoning, for example the importance of individual liberty as a religious value.

This means that the reasoning behind (anti-)vaccination decisions of Dutch Christian families is expected to come forth out of several causes: their (personal) experiences, their religion and the context in which people live.

3. Methodology

This chapter focusses on the research design, participant recruitment, data collection method and strengths and limitations of the research. This research was done through qualitative research. The purpose of qualitative research is to gain a detailed understanding of a certain phenomenon, to identify socially constructed meanings of the phenomenon and the context in which a phenomenon occurs (Hennink et al., 2011). In order to gain an in-depth understanding of (anti-)vaccination reasoning of Dutch Christian families, a qualitative study design is applied in this study. The (anti-)vaccination reasoning of these families is often constructed through conversations with loved ones, their upbringing, faith and the contemporary society. Therefore, the (anti-)vaccination reasoning of Dutch Christian families is socially constructed and context-dependent as the participants all have different backgrounds. Through in-depth interviews, more understanding will be obtained in comparison to quantitative research. In-depth interviews will provide the story behind (anti-)vaccination reasoning of Dutch Christian families.

3.1 Research design

This research was based on a cross-sectional design. In a cross-sectional study all the interviews are made at a single point in time or over a short period with no requirement for a follow-up period. Recruitment for a cross-sectional study is generally less difficult than for cohort studies as follow-up data is not necessary. The participants do not have to be interviewed more than one time (Patel et al., 2018). This research adopted a cross-sectional design because the focus of this study is to obtain information about the current (anti-)vaccination reasoning of Dutch Christian families and how their lives play a role in this reasoning. A follow-up interview is not necessary as the information about their lives can be obtained in one interview. One interview was conducted in May 2019, the other interviews were conducted between April and September 2020.

In-depth interviews were used to understand answers to complicated questions (Patel et al., 2018). This way of doing qualitative research gains in-depth information about emotions, motivations, consideration and experience of the participants (Hennink et al., 2011). Qualitative research allowed the researcher to understand behaviour, beliefs, opinions and emotions from the perspective of the participants themselves (Prasad, 2005). The focus of this research was on the way people make sense of their experiences and to understand social phenomena (in this case (anti-)vaccination reasoning) perceived by individuals and their culture. The basis of qualitative research lies in the interpretive approach to social reality (Holloway & Galvin, 2017). This study was conducted within the interpretivist paradigm because the aim was not to obtain an outsider's perspective and capturing facts as is achieved within the positivist paradigm (Hennink et al., 2011) but to get a clearer understanding of the perspective of the participants themselves. Therefore, this study focussed on subjectivity. Next to this, the research focussed on how the reasoning of the participants was embedded in the context in which they live. Within this interpretivist approach, this study seeks to understand the lived experience from the perspective of the participant. In this way, it can be explained that their (anti-)vaccination reasoning was socially constructed and influenced by the social, cultural and personal context of the participants (Hennink et al., 2011). The reasoning of Dutch Christian families to be against or for vaccination are probably shaped by their cultural and social background. Therefore, it is important to understand the perspective of the participants.

3.2 Participant recruitment

Recruitment is the conversation that took place between the researcher and a potential participant prior to the consent process. It involved providing information and creating interest in the study (Patel et al, 2018). I was afraid that that COVID-19 would throw a spanner in the works. However, it turned out to be not much of an issue, as people were willing to do an interview through video calling. However, for this research, participant recruitment was difficult because of the sensitivity of the subject. Vaccination

is a sensitive subject among orthodox protestants and therefore specific research on vaccinated related issues in this minority is scarce (Ruijs et al., 2011). Such matters are intensely personal and some people are not comfortable discussing religious issues (Grabenstein, 2013). As academic literature supports the sensitiveness of the topic, a good recruitment strategy was necessary in order to find participants for this study. Problems with recruitment can disrupt the timetable of the research (Patel et al., 2018). As I do not have a religious background, nor do I know many people who do, it turned out to be rather difficult to find people who were willing to talk to me about their (anti-)vaccination reasoning. In order to decrease the concerns about recruiting participants and non-response, I read about several recruitment strategies that were of help. The following sections elaborate on the characteristics of the study population and recruitment strategies that were used in order to find participants. The elaboration on these recruitment strategies also contain a reflection hereof.

3.2.1 The study population

Recruiting potential participants to research studies involved three stages: identifying, approaching and obtaining the consent of potential participants to join a study (Preston et al., 2016; Patel et al., 2018). Before approaching potential participants at all, it was critical to identify the study population. This was the first stage of participant recruitment (Hennink et al., 2011). The study population of this research is the following:

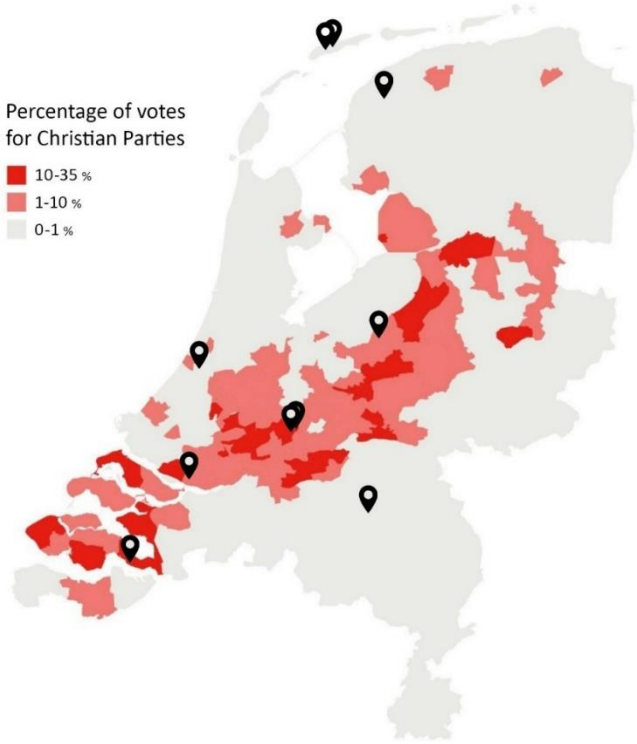
Table 1: Requirements of the participants

Nationality	Dutch
Religion	Christian
Preferable residence	Bible Belt
Specific characteristic	Having an opinion about vaccination

The Bible Belt roughly spans from the southwest to the middle of the Netherlands. In this area, the percentage of votes for Christian Parties is relatively high compared to other parts of the Netherlands. The immunization rate in the Bible Belt region is especially low, so preferably the study population are people who live in this area. However, there are Christian families who do not live in this area who are suitable for this research. So, it is not required that the participants live in the Bible Belt. Other requirements are not necessary, except that the participant is willing to talk about their (anti-)vaccination reasoning. Identifying people with these specific characteristics requires a non-random approach to participant recruitment (Hennink et al., 2011).

In figure 4, the residences of the participants are depicted.

Figure 4: The Bible Belt (RIVM.nl, 2010) and the residences of the participants.



3.2.2 Recruitment strategies

Researchers are increasingly concerned with how to recruit and retain members of minority groups (Patrick et al., 1998). The more sensitive the phenomenon of the study, the more difficult the sampling will be (Browne, 2005). Part of the study population in this research are Dutch Christian families who are against vaccination and this study population does belong to a minority group in the Netherlands. Achieving information about minority groups is severely constrained by low levels of participation in health-related research. Some researchers have identified religiosity as a barrier to participant recruitment because of deviating views of disease (Fouad et al., 2000). The perception of trust and mistrust of scientific investigators, the government and of academic institutions are found to be a central barrier to recruitment too (Yancey et al., 2006). However, there are also researchers who have found religiosity to be positively associated with the willingness to participate (Sengupta et al., 2000).

After identifying the study population, the second stage of participant recruitment was identifying strategies for recruiting participants from this study population. A variety of techniques were used to recruit participants. No method of recruitment can be completely ideal. Therefore, different recruitment strategies may be necessary in a single project (Hennink et al., 2011). The strategies used in this research are formal networks and services, media approaches, the use of informal networks and snowball sampling. Using several methods to recruit the study population may be beneficial in offsetting the shortcomings of one method by complementing it with another method. Table 2 gives an overview of the participants and the corresponding recruitment strategy. The real names of the participants are replaced with pseudonyms, so anonymity of them was guaranteed.

Table 2: Participants and the corresponding recruitment strategy

Recruitment strategy	Participants
Informal networks	Anne Jasper Klaas & Guusje Sophie Lieke
Media approaches	Henk Tessa
Snowball sampling	Emma & Julia Lucas & Sara Lotte

The reflection on the recruitment strategies is found in the paragraphs below. Working through community-based organizations, which refers to the strategy of approaching formal networks such as municipalities and gatekeepers of church communities, has frequently been used and turned out most effective (Yancey et al., 2006; Mohammadi et al., 2008). This was unfortunately not the case for me. after telling I had good intentions, they were not willing to help. Concerns about data being used to portray communities in an unfavourable light were prevalent. This seemed to be the case when contacting municipalities and foundations. Researchers often rely on healthcare staff, such as doctors and nurses, to identify and approach potential participants (Preston et al., 2016). As this research focusses on (anti-)vaccination reasoning, a subject that is linked to health, I contacted municipal health services and asked if they could help me. However, healthcare providers do not always identify participants because of overprotection of vulnerable participants or doubts about the necessity of research (Preston et al., 2016). I experienced this when I contacted municipalities of several towns that are known for their high percentage of religious people. Many trust-related barriers may be eliminated by improved communication to increase the understanding of participants about the researchers' goals and motivations (Yancey et al., 2006). Even though I told them that my intentions were not to cast aspersions, they did not want to bother their inhabitants as religious communities are often in the newspaper regarding outbreaks of illnesses. Another formal network can be a religious group network (Hennink et al., 2011). This formal network could provide a concentration of the study population who meet on regular schedule. It is possible, with the permission of the church, to recruit participants through attending church services and I hoped this way of recruiting participants was going to work very well. Unfortunately, COVID-19 threw a spanner in the works and therefore it was not possible to attend church services.

Unfortunately, reaching out to formal networks was a strategy that was not a success. On the other hand, media approaches, informal networks and snowball sampling were. Especially through the approach of participants by acquaintances, friends and colleagues of my mother, the trust-related barrier was eliminated and therefore the participants from this minority group were willing to do an interview.

One recruitment strategy that appeared to be effective in previous research was advertising in the media (The DPP Research Group, 2002). Advertisements in the media can be placed in order to target as wide as possible. Therefore, Facebook groups or local newspapers with the study population can be consulted to recruit participants. In several Facebook-groups I posted an advertisement were I call-up for participants for my research. Especially in the Facebook-group 'Geloof en wetenschap' ('*Religion and science'*). I had two responses of people that were willing to help me. Other Facebook-groups, such as 'Stichting Vaccin-Vrij' (*'Foundation Vaccine-Free'*) did not want to help me, yet again because of the sensitivity of the subject of this research.

Participant recruitment may also be conducted through informal networks used by the study population (Hennink et al., 2011). Once identified informal networks, it is necessary to ensure that potential

participants have the required criteria for the study. Regarding informal networks, there was also a possibility to do a request within my own network. This included help from friends and relatives (Behtoui, 2008). Relatives and friends within my social network knew people who had the requirements of the study population. At first, this recruitment strategy did not have my preference. A disadvantage of using my own social network is that people that are not within this network, are automatically excluded from the research (Browne, 2005). Therefore, I first started recruiting participants through formal networks and media approaches. However, along the way, it seemed almost impossible to recruit enough participants as the subject of this research was just too sensitive, as many religious people seemed to be afraid of being judged, they were not willing to help me. Eventually, when I expressed my frustrations to my mother, she told me she was willing to ask some of her friends who probably knew people who were willing to help me. Next to this, she also asked around at the company she works at. The friends and colleagues of my mother did indeed know some people and asked around if they were willing to do an interview with the daughter of a friend or colleague. It seemed to work. People were willing to help because it meant helping the daughter of a friend or colleague graduate. Next to this, I also asked the new neighbours of my partner who lives at Terschelling. They were known to be a religious family. Word travels fast on an island and two more people were willing to help me. I think that the disadvantage of automatically excluding people not within my social network was not prevalent, as I approached different people from different social groups.

After finding a handful of participants, snowballing was another recruitment strategy that was used. It appeared to be successful especially when the study population is hard to reach because they are a minority group and therefore feel socially excluded or vulnerable (Sedgwick, 2013). This strategy was needed for this research to reach a representative group of participants. After having done a few interviews, it got easier to find more participants as I used the snowball-recruitment strategy. During the interviews I had built rapport by showing that I was objective and not judging the vaccination choices of the participants. After the interviews, I asked the participants if they knew anyone else who were willing to do an interview. As I already built rapport with participants during the interview, they were willing to contact other persons for me to get in touch with. A disadvantage of snowball sampling is the automatically exclusion of potential participants that are not in the friendship group (Browne, 2005). However, the snowball-recruitment strategy was applied to the participants that I found through Facebook and different informal networks. Therefore, participants from different social groups were found, and not only the friends or relatives from one particular participant.

I recruited one participant in May 2019, through a university friend. The rest of the participant recruitment took place between April and September 2020. Even though the study population seemed to be well defined, the research population turned out to be quite distinctive because of the many denominations within Christianity. The research population consisted of nine protestant women and four protestant men, some of them were cohabiting or married and gave the interview together. In total ten in-depth interviews were conducted with thirteen adults. The participants had distinguished religion convictions. Some of them orthodox, others more liberal. Table 3 gives an overview of the participant's characteristics. It sometimes turned out to be difficult for the participants to appoint the denomination they belong to, as there are so many.

Table 3: Participants' characteristics

NAME (PSEUDONYMS)	SEX	CHRISTIAN DENOMINATION	CHRISTIAN DENOMIMATION IN DUTCH	PROVINCE	AGE
ANNE	Female	Assemblies of brethren	Vergadering van Gelovigen	Friesland	53
HENK	Male	A-typical reformed	A-typisch Gereformeerd	Zeeland	36
JASPER	Male	Jehovah's witness	Jehovah's Getuigen	Brabant	30
TESSA	Female	Liberated Reformed / evangelical	Vrijgemaakt Gereformeerd / Evangelisch	Zuid-Holland	26
KLAAS	Male	Reformed Churches in the Netherlands	Gereformeerd	Utrecht	67
GUUSJE *(KLAAS'S WIFE)*	Female	Dutch Reformed Churches	Hervormd	Utrecht	66
SOPHIE	Female	'I do not belong to a 'denomination' but believe that God is love'	'Ik behoor niet tot een 'stroming' maar geloof dat God liefde is.'	Utrecht	70
EMMA	Female	Reformed congregation in the Netherlands	Gereformeerde Gemeente	Zuid-Holland	34
JULIA *(EMMA'S HOUSEMATE)*	Female	Reformed congregation in the Netherlands	Gereformeerde Gemeente	Zuid-Holland	34
LUCAS	Male	Evangelical	Evangelisch	Gelderland	69
SARA *(LUCAS'S WIFE)*	Female	Evangelical	Evangelisch	Gelderland	69
LIEKE	Female	Evangelical	Evangelisch	Friesland	41
LOTTE	Female	Liberated Reformed / Liberated Baptists	Vrijgemaakt Gereformeerd / Vrije Baptisten	Friesland	33

3.3 Data collection method

In order to answer the research question of this study ('*What is the reasoning behind (anti-)vaccination decisions of Dutch Christian families?')* in-depth interviews were necessary. This way of doing qualitative research gains in-depth information about motivations and experiences of participants (Hennink et al., 2011). Experiences throughout the life course shape the schemas of the participants and may motivate their (anti-)vaccination reasoning. This section will elaborate on the interview guide, saturation, the analytical method and code development.

3.3.1 Interview guide

The interviews started with an introduction where I explained the purpose of the interview. The interview guide (Appendix 8.1) was formed based on the life course approach, cultural schema theory and the role of religion. Table 4 shows the operationalization of these concepts in the interview guide. Appendix 8.1 shows the complete interview guide including the exact questions.

Table 4: Operationalization of concepts in the interview guide

Concept	**Operationalization: questions about…**
Life course approach	Upbringing Norms and values Parent's choices Personal experiences regarding vaccination Experiences of others regarding vaccination
Cultural schema theory	Perceptions of characteristics of the environment Contemporary society Neighbours/friends/relatives School/day-care Church General practitioner/consultancy office
Religion	Importance of religion Difficult aspects of religion

These are concepts that could go hand in hand with the (anti-)vaccination reasoning of Dutch Christian families. Questions such as '*Can you tell me something about your time as a child?', 'What are your personal experiences with vaccination?', 'What does the Bible say about illnesses?'* and *'How does the contemporary society we live in influence your decision on vaccination?'* were asked in order to understand the reasoning behind (anti-)vaccination decisions among Dutch Christian families.

The interview guide is semi-structured, which means that the interview has an open outline (Fedyuk & Zantai, 2018). The most structured interviews resemble more of a survey, where all questions are written down beforehand. In the interview guide of this research, I did put questions in advance of the interviews, only to have a handout at the time the interviews took place. This way, the participants stayed close to the topic but it also leaves enough space for coherent topics (Fedyuk & Zantai, 2018). The participants were given the space to tell their own story, the way they wanted to and felt comfortable with. This was also part of building rapport. Chapter four will elaborate on how rapport was built and maintained during this research.

The interview guide was the research instrument in the in-depth interviews. However, I – as the interviewer- was also a research instrument because I needed to listen and react to the participant. It seemed natural to want to contribute and give an opinion about a certain issue but it was better not to do so in order to prevent influencing the views of the participant (Hennink et al., 2011). There were several ways to ask questions in interviews and it was important that those questions needed to be asked in a non-directive way without leading the participant in any way (Wengraf, 2001). In addition, I responded to what the participant was saying with short prompting questions without judgement. To encourage the participant to continue, motivational probes were used whereby I acknowledged the participants' comments (Hennink et al., 2011). In the interviews I used probes like: '*mhm*' or '*yes*'. However, just a simple nod with the head also showed that I understood the participant, and this ensured that the participant told further. Next to this, reflective probing was used. Hereby, I repeated the remark of a participant. In this way, I checked if I understood the participant correctly. As a response to this, most of the time participants said something like: '*yes*' or '*exactly*' and would elaborate on it or continue with their story. Expansive probing refers to asking for more information and examples (Hennink et al., 2011). Probing was used during the interviews in order to get the most complete information.

The interviews were held in Dutch, as this is the mother tongue of the participants and therefore the easiest way to communicate. Some interviews were conducted via video-call due to COVID-19. At the beginning of the interview, the participants were asked to read and fill in the informed consent (Appendix 8.2). All participants had no objection about the interview being recorded. Chapter four will

elaborate on ethical principles during (online) interviews. The interviews lasted 45 minutes to one hour. All questions were asked and answered within this time. The participants were extensive in their answers and as the interview proceeded, the point of view of the participants and the factors that played a role in their vaccination reasoning were made clear. The answers to the last questions '*To what extent does religion plays a role to your vaccination reasoning?*' and '*What other factors play a role?*' were a short repetition and therefore provided a conclusion of the interview.

3.3.2 Saturation

The number of participants in a qualitative study is often small because the depth of information and the variation in experiences are of interest. This means a high number of participants is neither practical nor beneficial (Hennink et al., 2011). Therefore, the number of participants that were recruited in this research was based on saturation. As the gained information started to repeat itself, saturation was reached, and data collection became redundant. During the interviews, the participants talked about their own vaccination reasoning but also the vaccination reasoning their parents or other loved ones had. Therefore, I collected more information than only the stories of the participants themselves. However, these stories came from the participants and therefore only provide information from their perspective. After having done ten interviews with thirteen adults, information started to repeat itself and therefore I felt saturation was reached.

3.3.3 Analytical method

An approach to analysing this qualitative data is the process of grounded theory. Grounded theory was well suited to understanding human behaviour and identifying social processes and cultural norms (Hennink et al., 2011). Grounded theory was used in this research. The focus was on subjectivity and the context of people's lives. Grounded theory provided an approach through which theory can be built up through careful observation of the social world. Verbatim transcripts were used in this analysis and this enabled me to understand the views of the participants in their own words (Hennink et al., 2011). When I felt saturation in the interviews was achieved, verbatim transcripts were made and analysed with the software Atlas.ti. In this software for qualitative data analysis, codes were developed and defined in a codebook. Grounded theory offered an inductive approach to data analysis. Codes, concepts and theory were derived from the data during the analysation of the data.

However, deductive techniques in qualitative data analysis did also play a part in theory building too (Hennink et al., 2011). In qualitative data analysis the possibility of interaction between induction and deduction existed. Some codes were derived from topics of the conceptual framework and the concepts in the interview guide of this research (deductive), while other codes were developed by reading the data carefully (inductive). During the analysis of the data there was indeed an interplay between induction and deduction.

3.3.4 Code development

As the analytical method is a combination of an inductive and deductive approach, the code development was a combination of both too. First, I analysed the transcripts through the deductive approach and was searching for sentences that led back to my conceptual model and the concepts in the interview guide. I analysed one interview and made broad codes such as '*Religion*'. However, everything the participant said about religion, I put under this code. I found out it was difficult to easily find an opinion of the participant because of the broadness of the code. I realised I had to make more detailed codes and I started analysing again through the deductive approach.

Analysing the transcripts sentence by sentence, I stumbled upon interesting quotes that did not derive from the interview guide and thus were inductively derived from the data through applying grounded theory. This way, theory was built up through careful observation of the words of the participants.

By applying grounded theory, themes were found by reading the data carefully. These inductively generated themes can be subdivided into the themes that derived from the interview guide. Table 5 gives

an overview of deductive and inductive codes. Without using grounded theory, these important inductive themes were maybe not recognized. Within deductive themes, inductive themes appeared by carefully reading the data. Some of these inductively generated themes were prevalent in multiple periods in the life course (the upbringing, time as a parent of young children and contemporary society).

Table 5: Deductive themes (conceptual model and interview guide) and inductive themes (grounded theory).

Examples of deductive themes	**Examples of inductive themes**
The role of faith	Denominations within Christianity Interpretations of the Bible Relation vs. religion God's divine providence Vaccines as a gift from God The body as a temple
The upbringing	Faith Respect Critical thinking Own research Generational differences Following footsteps of parents
Time as a parent of young children	Faith Respect Negative personal experiences Homeopathy Conversations with loved ones Critical thinking Own research Stories of side effects The importance of public health Faith in our doctors
Contemporary society	Faith Respect The importance of public health Critical thinking Own research Internet Individual liberty Government Pharmaceutical industry

As I made progress and coded a few transcripts, I noticed I made a large number of codes already. Therefore, I decided to make code groups and categorized each code I made into one of these code groups, to gain overview again. For example, the code group '*Bible*' contained 29 codes that referred to the Bible. This way, particular codes appeared more often than others and themes popped up.

During the analysis of the interviews, I also made several *In Vivo* codes. I thought some quotes of participants were nice to capture as a code, as the participants told so passionate about it or simply explained their opinion in a particular way: *'Do not touch the living…'*. This *In Vivo* code refers to the religious principle of being against abortion and euthanasia. But also: '*Being a Christian is a… yes.. a way of life. More than being part of a specific club.'*

Identical to the data collection, code development typically stopped at the point of saturation (Glaser and Strauss, 1967). Because of the sensitive and complex topic of this research, the research was realised on a micro level. Therefore, I conducted micro-level analysis. Micro-level analysis focusses on an

individual in their social setting. As participants will be analysed on micro-level, the code development will be very detailed, as every participant has their own story to tell. This way, the data was explored in more depth (Hennink et al., 2011). Thus, explanation of the reasoning of Dutch Christian families can be developed. After coding seven interviews, a total of 314 codes were made and new issues were not identified in the data, so I felt that saturation was achieved. After analysing the data, it seemed that codes were overlapping with other codes such as '*Baarmoederhalskanker-vaccin'* and '*Tegen HPV-vaccin'* and therefore could be merged.

3.4 Strengths and limitations

There has been very little qualitative research about (anti-)vaccination reasoning among (Dutch) Christian families. Existing studies do not explain how religion operates as a reason for these (anti-)vaccination decisions (Grabenstein, 2013). This research adds to academic literature through in-depth interviewing of Dutch Christian families about their (anti-)vaccination reasoning and the role of religion.

Many people assume that characteristics of a population as a whole apply to every person within it. They believe that every individual within a particular community has the same identical needs and beliefs (Moberg, 2005). This research shows that we cannot apply one single measure to all Dutch Christian families. For example, the people who live in the Bible Belt. Half of the interviewees live in the Bible Belt and different (anti-)vaccination reasonings were forthcoming out of the interviews held with these participants. Thus, we cannot simply assume that these people share the same anti-vaccination reasoning, namely being anti-vaccination because of religious objection.

This research also knows some limitations. Along the way, I found out that there are many more denominations within Christianity than I could possibly imagine. Though I felt saturation of information during the interviews was reached, the number of denominations – and therefore ways to interpret religion and faith – may be much greater than described in this thesis. During the data collection, a very broad group of believers from different denominations was interviewed and this led to a lot of distinguished information. This resulted in analysing four distinguished positions towards vaccination reasoning with a limited number of interviews. Even though a lot of information has been obtained, this thesis could have focused on one denomination and the interpretation of faith. This way, more in-depth information could have been collected about one particular denomination. I realise however, that with a broader target audience, it was probably easier to recruit potential participants, even though I struggled with this too. I can imagine that reaching out to one particular denomination within Christianity comes with even more difficulty as the study population is a lot smaller and may result in more non-response.

4. Ethical considerations

This chapter focusses on ethical considerations during the entire research. From rapport building during participant recruitment until the end of the interviews. Ethical considerations are important in every research. However, in this research they are particularly important because of the sensitivity of the subject and the study population being a minority. This is the reason why I dedicated a complete chapter to ethical considerations. This chapter will elaborate on the three basic ethical principles from the Belmont Report, the positionality of the researcher and gaining informed consent.

4.1 Three basic ethical principles

The Belmont Report refers to three basic ethical principles. One main basic ethical principle is respect for persons (The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979). It is important to respect the participants. Respecting diversity in terms of religion and attempt to understand the diverse cultural backgrounds is important (Frame, 2000). Respect of the researcher towards the participants is the most important thing when it comes to ethical principles (Patel et al., 2018). Being disrespectful will not help with gathering data in interviews.

The second basic ethical principle according to The Belmont Report is beneficence (The National commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979). This refers to the researcher to maximize possible benefits and minimize possible harms. Religion could be the reason why people refuse to vaccinate. Such matter is intensely personal, and some people are not comfortable discussing religious issues. As stated in the previous chapter, there may be a possibility that Dutch Christian families do not trust academic institutions and scientific researchers (Yancey et al., 2006). On the contrary, this research exists to give them a voice and let them be heard. There may be concerns about data being used to portray communities in an unfavourable light, and therefore it is important to be well prepared and tell the participants about my motivations as a researcher. Interviewing them is not about obtaining the truth and do them any harm but about obtaining people's perception (Hennink et al., 2011).

The third basic ethical principle according to The Belmont Report is justice (The National commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979). Justice refers to people being treated as equals and as individuals. Many people assume that characteristics of a population as a whole apply to every person within it. People stereotype persons and respond to each person as if every individual in the same category has identical needs, limitations, interests, beliefs and responses (Moberg, 2005). Not every religious participant I interviewed had the same set of beliefs. Assuming that every participant with a Christian background has identical (religious) beliefs is wrong. Therefore, I was open-minded during the interviews. I did not generalise and jump to conclusion prematurely. This should be avoided (Moberg, 2005).

4.2 Positionality of the researcher

The positionality of the researchers regarding religion-research is important because of the hostility between religion and science (Henkel, 2011). I conducted in-depth interviews with Christian families and was aware that I was an outsider who was a non-religious person. However, I did not feel uncertain about this. But it is important that I was aware of my positionality as a non-religious researcher who researched religious people. This awareness helped to better understand the context of the religious participants and being open-minded (Kapinga et al., 2020). It is important to consider my role as the researcher and thus have respect for the participants, do not cause harm to them and that I do not generalise the participants, as they are all individual beings. In this section I elaborate on my positionality and reflect on how I worked with the three basic ethical principles during the entire research.

4.2.1 Building rapport

Establishing rapport with the participant is widely recognized as an important part of the qualitative interviewer's role (Hubbard et al., 2001). It minimises social distance and establishes trust. The beginning of recruiting is also the beginning of building rapport with participants. Therefore, communication skills are needed (Patel et al., 2018). In e-mails and messages on Facebook groups I was polite, used formal language and made sure there were not any typos to be found so that potential participants took me seriously. The contacts I gained via my mother were phone numbers of potential participants. I made sure I was being polite and clear about the objectivity of the research when I contacted them. During the recruitment of participants, my age did not seem to matter, but the fact that I was a student doing research discouraged potential participants to take part. This probably had to do with the mistrust in scientific investigators and concerns about data being used to portray these communities in a poor light (Yancey et al., 2006). After finding participants through Facebook group 'Geloof en wetenschap', the fact that I am a student did not matter anymore, as this Facebook group focussed on religion and science. Some participants even noted during the interview that I was an objective and pleasant, analytical student.

During the interviews, rapport building continued. If the participants feel comfortable, they will tell their stories in more detail and therefore data quality is high when rapport is built (Weller, 2017). The participant should feel comfortable with giving their true opinion and perception about (anti-)vaccination. In order to do an effective interview, rapport should be skilfully built and maintained (Walsh & Bull, 2011). Therefore, I did not rush into asking interview questions but took some time to become acquainted with the participant. Making small talk, chatting about the weather and drink coffee or tea are examples of daily activities that support building rapport. The fact that I am -like the participants- a Dutch person, helped as the interviews could be held in their mother-tongue. But even though the participants and I were Dutch, I did not feel we shared the same culture, as I am not a religious person. Therefore, I made sure that I heard about their cultural norms as much as possible, in order to understand their culture (Hennink et al., 2011).

4.2.2 Joint-interviewing

Sometimes the participants preferred to do the interview together with their partner or housemate. The disadvantage of joint-interviewing could be that the participants would easily agree with each other, even though they do not share the same opinion completely. However, joint-interviewing made them feel more comfortable and there are also advantages to this type of interviewing. The participants were able to complement each other. This may have led to the provision of more information that probably would not have been provided when these participants were interviewed individually, especially when it comes to health practices (Polak & Green, 2015). Nevertheless, (anti-)vaccination reasoning is socially constructed and often partners play a role in this reasoning, so joint-interviewing highlights aspects of how partners share their opinions about (anti-)vaccination. During the joint-interviews, I experienced indeed that the participants complemented each other.

4.2.3 Avoidance of sharing medical information

In the early development of medicine, a difference between medical and religious perspectives on illness and health became visible. Mental health professionals often meet with patients who have religious beliefs and commitments about medicine (Lomax II, 2002). It is preferable to discuss vaccine decision-making processes rather than just providing medical information and advice (Grabenstein, 2013). Religiosity can cause consequences that are harmful to persons or to society at large (Moberg, 2005). With regards to anti-vaccination decision, there is a possibility that the herd-community will be lost, and an outbreak of a (preventable) disease can occur (Motta et al., 2018). But telling the participants about harmful consequences can also constitute to a violation of religious liberty (Moberg, 2005). An authoritarian stance will not create trust and therefore I did not bring up this subject as it could be an imposing opinion and the participant may consider not to continue with the interview. Nevertheless, this

is more of a conversation that belongs to the Dutch Christian family and their practitioner. Therefore, the aim of this research is to get know the story behind (anti-)vaccination reasoning of Dutch Christian families and give them a voice, as they are a minority who are often stereotyped by society ((Moberg, 2005).

4.2.4 Emotion, religious values and the researcher

It is important to focus on the role of the interviewer, who wants to gain insight on the situation (Frame, 2000), rather than giving an opinion and lead the participant in any way (Wengraf, 2001). Therefore, I was careful and did not include discussions about religion but tried to understand the (anti-)vaccination reasoning of the participant. During the interview this was done through motivational probing such as nodding and saying '*ah ha'* (Hennink et al., 2011). Within the interpretivist approach, I sought to understand the experience from the perspective of the participant (Hennink et al., 2011). Here and there, emotions of the participants did appear during the interview. This was also used as data (Hubbard et al., 2001). Rather than only listening to the words of the participant, I made conclusions out of the emotions the participant expressed during the interview. Especially when they convincingly told me about their faith and what God means to them.

As I am not raised with religion and thus do not have a religious background, it was important not to impose my religious values on the participants as it may be of influence on rapport building and thus on gathering data (Frame, 2000). It was important for me, as the researcher, that I stayed objective within my questioning and my reaction to the stories. Before this research, I did not know anything about Christianity at all, except for some basic knowledge. At the beginning of the interviews, I told the participants that I was brought up in a non-religious environment in Noord-Brabant and therefore did not know much about the life in the Bible Belt or other religious sites, Bible stories and faith. As I told them I was a layman that did not know much about Christianity, the participants became enthusiastic and told me (Bible)stories that I was not familiar with. I was also curious about their experience with faith, as I cannot imagine believing in a God. Therefore, I simply asked the question '*What does faith mean to you?'*. I was carried away by their sincere stories about how they believe in God and how He helps them in life.

4.2.5 Building rapport through video calls

As the COVID-19 pandemic appeared, for several months it was not responsible to visit people for an interview. Therefore, three of the ten interviews were taken through video calling. Internet video calls turned out to be a valuable tool for data collection in the COVID-19 pandemic. Where audio-only online interviews have been a subject of discussion over two decades, video capabilities for doing online interviews is a contemporary phenomenon as the interviewer is able to see a participant face-to-face online. Facial expression and body language are two important features of building rapport (Weller, 2017). Online interviewing is sometimes even regarded as the new 'methodological frontier'. The advantages of this way of interviewing are overcoming the challenge of visits to isolated areas (Weller, 2017).

However, the loss of intimacy was a potential disadvantage as the participants and the interviewer cannot observe each other well (Seitz, 2015). This means that the first interaction of a greeting was vital in building rapport (Weller, 2017). I have experienced that being enthusiastic and friendly are very important at the beginning of the interview, as was with face-to-face interviews of course. Therefore, remote modes of interviewing did not necessarily mean that rapport was more challenging to build or maintain. However, the disadvantage of practical issues such as bad online connection and the technology can be a challenge (Weller, 2017). I have experienced this in one interview. After about five minutes into a Skype-interview, the microphone of my laptop seemed to have given up. Luckily, the interaction through e-mail with the participants beforehand was already going well and the first five minutes of the interview were too. The participants were very helpful, and we proceeded the interview

with Facetime through our cell phones. The housemate of the participant was willing to record the conversation with her cell phone.

Because of the possibility of technology to fail, I preferred doing face-to-face interviews. Next to this, I found that building rapport through real-life interviews goes smoother as there was a possibility to sit down before the interview and drink a cup of coffee or tea and make small talk.

4.3 Informed consent

Ethical principles are based on the respect of the researcher for all potential participants and thus require the researcher to obtain informed consent and maintain confidentiality (Patel et al., 2018). Respect for the participants requires that they are given the opportunity to choose if and how they will participate in this research (The National commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979). I therefore informed all participants about the research beforehand (Appendix 8.2). Informed consent is the process by which a fully informed individual voluntarily decides whether to take part as a research participant (Patel et al., 2018).

4.3.1 Information, comprehension and voluntariness

According to the Belmont Report, three elements should be included in this informed consent: information, comprehension and voluntariness (The National commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979). I informed the participants about the subject of the research and explained what my aim was, namely the understanding of (anti-)vaccination reasoning of Dutch Christian parents and giving them a voice. Next to this, it was my task as a researcher to make sure that the participant has comprehended this information. Therefore, I added in the informed consent that the participant can ask questions about the research at any time. Lastly, in the document of informed consent, the participants were also informed about the fact that participation is completely voluntary and that they could stop participating at any point in time. An agreement on participation is an important part of the validation of the consent, provided that this agreement is voluntarily given (The National commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979).

I sent the informed consent document through e-mail before the interview took place, so the participants knew what they were getting into. The three participants that I interviewed through video calling, signed the informed consent at home and sent it back to me. The other participants, that invited me to their home for the interview, were also informed before the start of the interview and signed the form after the interview took place. I made sure that they got a copy of the signed informed consent. No participant had objections to using their first name in this research. However, I still replaced their names with pseudonyms, as other characteristics of the participants are visible, such as age and residence. This way, the anonymity of the participants was guaranteed.

5. Findings

The findings show that the faith of the participants plays a great role in their life and is sometimes even the most important thing. Therefore, the first section of this chapter will focus on *faith* as a shared cultural schema. The way faith was internalised in the schemas of the participants differs because of different (personal) experiences throughout the life course. In the next sections, the life courses of the participants are described. These sections show participants' reflections on their upbringing, their time as a parent of young children and contemporary life. The experiences of the participants were found to be embedded in the following cultural schemas: *faith*, *respect*, *critical thinking* and *individual liberty*. Therefore, every section based on the experiences in the life course will elaborate on these cultural schemas as well. As faith was found to be a common thread throughout the life course of the participants, this theme will not only be described in the first section but is also intertwined in the other sections.

5.1 The role of faith

The participants referred to the Bible, prayer and God as important aspects of their faith. They mentioned that believing in God is not about religion alone but mainly about having a relationship with Him. According to the participants, an important aspect of the relationship with God was communication with Him through prayer and the Bible. The Bible had a central place in their lives, and they used it as a manual. It gives answers when they had a question. According to the participants, the Bible was universal, timeless and it speaks the truth. However, most participants did not have a clear understanding of the Bible. They felt it is necessary to talk about the content of the Bible with other church members and the pastor.

"An interpreter is needed […] We are not able to comprehend everything ourselves…" – Guusje, 66.*

According to the participants, the Bible was more than a manual. For them, reading the Bible wase a way to get into contact with God and to communicate with Him. This way, the participants felt they maintained the relationship they have with God. They found that this can also be done through prayer. Through praying, they ask for guidance from God in certain situations. The participants have experienced that many prayers have been answered. However, prayer was more than just maintaining a relationship with God:

"Prayer is the breath of life; you cannot live without it." – Guusje, 66.

5.1.1 Denominations within Christianity

Even though all participants believed in the same God, their narratives showed that there are many denominations within Christianity and all these denominations have their own principles and perceptions of faith. For all participants, faith was part of their upbringing. The way of believing depended on the denomination someone was part of. Therefore, faith was something personal. Participants referred to their upbringing when they talked about faith and concluded that the denomination someone was part of, was mostly determined by the upbringing the participants had when they were young. All participants said that they struggle with the number of denominations. They had difficulties with different interpretations of the Bible and they especially emphasized their difficulty about the fact that people are becoming the central point of faith, instead of God.

"I have my doubts about this… The ground crew of God. So, the other Christians who sometimes walk around here on earth and talk nonsense. I have no doubts about what the Bible says but I do sometimes have doubts about the explanation people can give to it and how certain they are about it. I have difficulty with that." – Lieke, 41.

**The quotes in this chapter are English translations. The original Dutch quotes can be found in Appendix 8.3.*

The participants said they struggle with the number of denominations and different perceptions of faith within different denominations, especially when Christian people give their own meaning to the Bible.

"Being a Christian is a… yes.. a way of life. More than being part of a specific club." – Henk, 36.

The faith of the participants was found to be an important cultural schema. Although faith in general was shared by the participants, this shared schema results in divergent behaviour by different participants as the interpretation of faith differs. The participants referred to the interpretation of the Bible and that this differs per denomination of Christianity. As the Bible has so many different verses, the participants valued one verse more than the other and selected different verses to motivate their (anti-)vaccination reasoning. The participants felt that it is sometimes hard to understand all the principles of the different denominations but they still respected and accepted the choices other people make.

"The Bible… it contains sentences and words and the interpretation of this: that is what makes the content" – Tessa, 26.

"For example, one says that you have to believe everything the Bible says. The other says you can interpret it as a metaphor." – Lieke, 41.

Especially the more orthodox-reformed participants emphasized their personal interpretation of the Bible. Their religion seemed to be a big part of their faith. These, and some other participants, had difficulty with the many differences within Christianity and the many church walls that exist. They referred to religion as man's interpretation:

"Religion is actually man's interpretation. So, people have made certain rules that they consider very important and that are guiding at that time […] then they build a wall around those rules, make it a building and fill it with people. And at one point, the people are central instead of God." – Henk, 36.

The differences in interpretation of the Bible and denominations of Christianity played a great role in the reasoning behind (anti-)vaccination decisions. Based on the vaccination intentions of the participants, four positions can be distinguished. Table 6 gives an overview of these four positions and the main reason that suits with this position. However, it is important to keep in mind that this main reason is not the only factor that plays a role in (anti-)vaccination reasoning. As the life course and experiences of the participants were very personal, other aspects were found to also play a role in their (anti-)vaccination reasoning as well.

Table 6: Four positions regarding (anti-)vaccination reasoning of the participants

Group	Position	Main reason	Explanation
1	Anti-vaccination	Religion	God's divine providence
2	Anti-vaccination	Medical and faith	The necessity/risks of vaccines and the body as a temple.
3	Pro-vaccination	Medical and faith	The belief in the knowledge of doctors and a gift from God
4	Sceptical	Medical	The risks of vaccines and the importance of public health

However, there seemed to be two clear principles that all participants agreed on. They referred to Exodus 20:13: '*You shall not murder'* and Jeremiah 7:6: *'Do not shed innocent blood'.* Whenever there are human cells of aborted foetuses put into vaccines, none of the participants was willing to make use of these vaccines. Next to this, all participants had the same opinion about the Human Papilloma Virus (HPV) as this virus is mostly transmitted from person to person through sexual contact. The participants

referred to several Bible verses, which all speak of the importance of marriage. For example, Corinthians 7:2: *'But since sexual immorality is occurring, each man should have sexual relations with his own wife, and each woman with her own husband'* and Hebrews 13:4: *'Marriage should be honoured by all, and the marriage bed kept pure, for God will judge the adulterer and all the sexually immoral.'* Therefore, the participants did not see the necessity of the HPV vaccine:

"We believe that God instituted marriage. That you are just made for one partner and that you do not hop from one to the other… And you get the HPV virus from having different [sexual] contact, mostly…" – Lieke, 41.

The next sections elaborate on participants with regard to the role of religion or faith in their (anti-)vaccination reasoning. Chapter 5.2, 5.3 and 5.4 will elaborate on other factors.

5.1.2 Anti-vaccination

Some of the participants said that they believe in the divine providence of God, by which He orders all events within the universe. Therefore, it was important for them to trust in Him and to surrender to God. These participants referred to Matthew 9:12: *'It is not the healthy who need a doctor but the sick'*. According to this verse, the participants were against vaccines as it is something that will prevent illnesses. On the other hand, medicine could be used with gratitude because this is something people use when they are actually ill.

The participants said that the subject of vaccination was not really talked about much in church. These participants did admit that their anti-vaccination reasoning also had to do with their upbringing. Thereby, sometimes unconsciously, they followed the footsteps of their parents.

"If you are going to vaccinate yourself, then you are actually going to anticipate […] So you are not acting dependent at all and you do not agree in advance with the way that God has for you." – Emma, 34.

For these participants, the main objection to vaccination had to do with religion. Other participants who were against vaccination, did not refer to the divine providence of God. These participants did, however, refer to a Biblical verse, Corinthians 6:19: *'Do you not know that bodies are temples of the Holy Spirit, who is in you, whom you have received from God?'*. Their objection to vaccination arose from the belief that the body is a temple, and you must take good care of it. Next to this, they found that the body is able to regenerate itself after disease and therefore vaccination is not necessary. These participants did not see their faith or religion as the main reason of their anti-vaccination decision. They believed that the vaccines are not necessary and the ingredients of the vaccines are not acceptable.

5.1.3 Pro-vaccination

Some participants did not believe in the divine providence of God and even said this is totally not Biblical. They refer to Ecclesiastes 9:11: *'Time and chance happen to them all'*. So, these participants did not share the thought that God has already determined your way. Next to this, they did believe that God has given doctors talent and wisdom to create medicine and vaccines. For them, vaccines were a gift from God and blessed by Him. They believed you must be grateful for it. However, they also believed that God takes care of everyone and He is capable of healing. Therefore, prayer must not be forgotten:

"Even if you vaccinate and take medication – things like this must happen, right? – Let it not fade away that we are actually totally dependent on Him. We need the Lord in all those things. He blesses those resources, and we ask [God] if those resources may help." – Guusje, 66.

For these participants, it was a combination of both: accepting the vaccines that God gave us but also believing in the ability to heal through faith in God.

In the next sections, the life courses of the participants are described in chronological order: from their youth until their present day life. Their faith is an important cultural schema that runs like a common thread throughout their life. There are also experiences throughout the life course of the participants that showed the importance of other cultural schemas. Every section has a paragraph about the importance of cultural schemas during a particular time in life.

5.2 The upbringing

When talking about the upbringing, participants referred to the many things they were taught by their parents. The norms and values that the participants mentioned they are brought up with were respect, honesty, being grateful, love, no judging, no cursing and no stealing. They said that these norms and values were taught within the household but also on the Christian primary schools where the participants went to. These norms and values came from the Bible. Respect was a value that seems to be of paramount importance to every participant. It did not matter what decisions other people make, also regarding vaccination, they respected and accepted it.

"Everyone is welcome, accept everyone, love and respect each other.. That was the key-value." – Tessa, 26.

5.2.1 Generational differences

The participants talked about the tradition of religion in their upbringing and hereby referred to following certain rules, such as going to church every Sunday. Especially the participants of older age referred to this experience. The spirit of age affected the way people dealt with their faith. The participants of older age were brought up in the period a couple of years after the Second World War ended, in the 1950s and 1960s. They believed that the spirit of age in this period was a lot different than the time that participants of younger age grew up in, mostly in the 1980s. According to them, this upbringing in the 1950s had a stricter character than when you were born in the 1980s.

"... It [the war] has had a long aftermath […] If you look at my grandfather, how I know him… he was really grumpy […] It was a gloomy time, very gloomy, you could hardly share joy because everyone was having a hard time" – Lotte, 33.

The participants talked about their parents, that they lived in a completely different time, just after the Second World War and when the National Vaccination Program did not yet exist. They addressed the importance of the tradition of religion and thus following certain rules, during this era. Especially the participants of older age experienced this when they were younger. They said they felt that vaccination was not up for discussion, as you had to have respect for God's divine providence:

"It was not allowed […] You had to have faith, and if you got ill, well than that was the case […] And the Lord will make you better, or you will die of it..." – Klaas, 67.

The participants of older age recalled that back in the days, when they were young, many more children were not vaccinated because of religion. It was not that much integrated within the society.

The relatively young participants referred to their upbringing as pretty liberal: there was always room for questions, discussions and critical thinking about what they were taught. This was even stimulated, especially when it came to exploring the Bible themselves when they reached a certain age, mostly when they reached puberty. At this point in time, the participants realised that you do not always have to agree with everything your parents say and that it is important to create an opinion of your own. Even if this meant their parents had to see their child going to another church, which could be difficult.

"…And she [mother] always encouraged us in that. To explore for yourself: what is truth, what do you believe: do your own research. And yes, I have always had the feeling that I have been very free in doing so." – Jasper, 30.

The participants referred to their upbringing as an important factor of making choices in contemporary life. The upbringing of the participants was part of their life course and a great factor in their contemporary cultural schemas. Sometimes, the things that people were brought up with and still hold on to, were just out of habit or unconsciously present:

"If you are brought up with it, then you are going to follow these tracks…" – Guusje, 66.

Though their faith is still an important aspect of their contemporary life and their upbringing played a role in present-day decision-making, they did not blindly follow the exact footsteps of their parents. The critical thinking that the participants learned during their youth seemed to play a role in their contemporary life. Some participants did believe in the divine providence of God and still followed the footsteps of their parents. However, they mentioned that they have thought about it thoroughly and made their own decision about this subject.

"Yes, that is also the case for me [as it is for Julia]: I will continue the same road my parents did… in terms of vaccination, faith and things like that. However, I thought about it thoroughly" – Emma, 34.

There seems to be a difference in the sternness of the upbringing between younger and older participants. However, as some participants who were born in the 1950s are anti-vaccination, others in this age-category are pro-vaccination. The same goes for the participants who were born in the 1980s. Even though the upbringing played a great role in contemporary decision-making, it was not the only factor.

5.2.2 Respect and critical thinking

The upbringing of the participants played a great role in how they internalised specific cultural schemas. Critical thinking and respect as a key-value were, and still are, prevalent and are therefore embedded in the contemporary cultural schemas of the participants. These factors played a role in their (anti-)vaccination reasoning in present-day life. As children they were encouraged not to take anything for granted, which resulted in being critical later in life. The same goes for respect being a key-value during their upbringing. They were taught to respect others and live and let live, and this played a great role in their contemporary thinking.

5.3 Time as a parent of young children

This section elaborates on the importance of the social group participants are living in and how their reasoning is context-dependent. These experiences refer to the groups of participants whose (anti-)vaccination reasoning is mainly based on medical beliefs.

5.3.1 Negative personal experiences

Two of the participants were against vaccination mainly because of medical reasons, recalled how they started to follow the National Vaccination Program when they had children, as it was part of the society. They said it was almost something automatic, letting your children get vaccinated. However, they said that they became sceptical about vaccinations when their children exhibited different behaviour after being vaccinated.

"When you get the vaccination shot, after it.. the child is listless.. or had a rash" – Anne, 53.

Others, such as Lucas and Sara, turned to a homeopathic doctor after their child would not stop crying. This doctor advised them to give their children Thuja, a homeopathic drainage remedy that is often used

after vaccination to redeem vaccination damage. This remedy seemed to work for their child and thereby triggered them to look into homeopathy as well as the vaccines and the ingredients later on.

Among those interviewed, those who had bad experiences of their own seem to be more sceptical. For some, these experiences adjusted their reasoning regarding vaccination. Participants with children who did not experience side effects from vaccination seem to be a lot less sceptical regarding vaccinations.

5.3.2 Conversations with loved ones

All participants emphasized that they were brought up in a religious environment where asking questions and being critical was stimulated: *'Test everything, hold fast what is good'* (Thessalonians 5:21). The participants explained that the way that they were brought up played a role in their thinking and reasoning later in life. Especially for the ones that were brought up with the belief in God's divine providence and therefore were not vaccinated in their time as a child. Even though asking questions and being critical was stimulated, their parents believed in God's divine providence and therefore these participants said they also followed this belief. They mentioned that they have thought about it thoroughly themselves and made their own decision about this subject but emphasize the role of their parents back in the days.

For some other participants, who were brought up with vaccinations, also refer to their upbringing. They were also brought up in an environment where questions were stimulated. They talked about conversations they had with their loved ones who did their own research: parents, husband/wife, daughter/son or close friends:

"Yes, I am against vaccination […] And we were able to convince our children, that some of our grandchildren did are not vaccinated right now. They [our children] have also come to see it" – Sara, 69.

The participants said that vaccination was not much of a subject that is talked about within their church. It was, however, a subject the participants talked about with their friends and especially with their families. They said that talking about vaccination with others was a trigger to start doing research of their own. Some became completely against vaccination; others believed that vaccination at a later age causes less harm and thus postponed it:

"I knew that my in-laws were now fiercely against [vaccination] […] So my mother-in-law kept coming up with articles and books and so on about it… So, I started looking into it myself… And that resulted in my sons starting with the vaccination programs at a later age." – Lieke, 41.

The conversations some participants had with their loved ones turned out to be a trigger for them to start thinking about vaccinations themselves. Some postponed vaccination after doing some research but still chose to do it at a later age. After conversations with friends one participant came to the following conclusion:

"Others said: Imagine standing in the hospital at the bed of your sick child. Can you still stand behind your decision not to vaccinate? That… that was when I was convinced to do it [vaccination]." – Lieke, 41.

This was for some other participants also an important motivation to still vaccinate their children. The social group of many participants seemed an important factor in their (anti-)vaccination reasoning. The participants mentioned that they got information of loved ones that are sceptical about vaccination and this triggered these participants to investigate it themselves. On the other side, the participants who were completely pro-vaccination, did not know any people who did not vaccinate. Meaning that they did not have any conversations with dissenters about vaccination and therefore were not influenced by opinions

of those people. Except for one, Lotte. Her sister was completely against vaccination because of the ingredients and God's divine providence. However, that did not play a role in the choice that Lotte and her husband have made for their own kids. She had not done research of her own but she believes in the fact that God has given the doctors talent and He has blessed vaccines. She was very grateful for that.

5.3.3 Stories of side effects

Most participants indicated that they have heard or read about stories of other parents regarding the side effects or allergic reactions that are assigned to vaccinations. This emphasized the importance of the opinions of people who had to deal with the same circumstances, in this case also parents of young children. Stories about paralysis, autism, shock, epilepsy, ADHD and even deafness were circulating. Some of the participants did not believe in those stories and put their trust in doctors and scientific research. Others found loads of documentation of side effects of vaccination and therefore stopped using it. Others weighed risks and benefits of vaccination and decided:

"I would think about it carefully of course. But then it is a very simple calculation: what are the risks and what are the benefits [of vaccination]? For example, if one in a hundred thousand develops a certain side effect… but the moment he or she develops wooping cough and hundreds of children become infected with it… Then the risks of not vaccinating is greater than the risk of any side effects" – Jasper, 30.

The importance of public health played a great role for participants who vaccinate their children. These opinions of these participants were not affected by stories about side effects, even if it happened to a person they knew. It did mean that they have become more conscious before they make decisions. Others were affected by stories they heard about side effects of vaccination. Especially by stories they find on the internet and documentaries they watched.

5.3.4 Respect and critical thinking

Whatever (anti-)vaccination reasoning the participants had, they all respect the choices others will make. Respect was still a key-value in this time in the life course of the participants. Experiences during their time as a parent of young children played a great role in (anti-)vaccination reasoning of the participants. They all wanted the best for their children. The participants were stimulated in their youth to be critical and this is also prevalent in their times as a parent. So, critical thinking was still prevalent in the cultural schemas of the participants in their time as a young parent. Some parents were sceptical towards vaccines and had doubts about the necessity of it. Having children of their own, meant they had to decide for their children about participating in the National Vaccination Program. This triggered some participants to be critical, something they learned to be in their time as a child. Personal experiences and experiences from families and friends reinforced this critical thinking. So, in this period in the life of the participants, their social groups played a great role in their (anti-)vaccination reasoning. This emphasized the importance of the opinions and experiences of the social groups of the participants. The participants were affected by conversations of loved ones and therefore their (anti-)vaccination reasoning is not merely based on individual beliefs.

5.4 Contemporary society

As cultural schemas of people were context-dependent, this section will elaborate on the contemporary society the participants live in. Most participants recalled that their upbringing was pretty liberal, and they were able to find out wat their faith means to themselves. The participants noticed that people have become freer, that the society has changed from a religion-society to a relation-society in terms of faith. According to the participants, the relationship with God had become more important than the rules that were to be followed within religion. They felt there is more room for talking instead of pointing the finger when people do not follow religious rules. The contemporary society played a role in the (anti-)vaccination reasoning of the participants in different ways. Participants emphasized that times have changed. Vaccines became more and more normal, as a part of the society they live in.

"Vaccinations are simply integrated into our society, so the contemporary society has a big influence on my choice. You are not an exception when you vaccinate your child. It's more like you're an exception if you don't do it. So that's definitely a factor" – Tessa, 26.

Some participants referred to the fact that vaccination became normal and it was just part of the contemporary society. These participants saw vaccination not mere as an individual interest but also referred to the importance of public health. They also believed in the wisdom and knowledge of doctors – which is given to them by God –, their medical background and the scientific research that has been done revolving vaccines.

5.4.1 Research

However, the participants pointed out that contemporary society also gives the opportunity to explore and do your own research:

"You have access. You are going to investigate. If you have any doubts, you will investigate […] With us, it is dominated by the possibility of looking up all kinds of things via the internet, and that was not possible before." – Sara, 69.

For some participants, their religion did not play the main role in their anti-vaccination reasoning. Many participants talked about doing their own research regarding vaccines. Being critical and doing your own research was something these participants learned in their childhood from their parents. Back then, questions and discussions about faith were stimulated and so was exploring the Bible and finding out what faith means to them. The participants referred to a Biblical verse in Thessalonians 5:21: *'Test everything, hold fast what is good'*.

"I am a gym teacher […] I have delved into nutrition, health and medicine and… all the chemicals and what effect they have on your nervous system and muscle formation. And yes, then I also delve into the history of vaccinations" – Henk, 36.

Some participants did their own research because of their background in health. Therefore, the first objections against vaccination for these participants had to do with health. This objection arose from the belief that your body and mind are a temple, and you must take good care of it. These participants referred to the Bible verse Corinthians 6:19: *'Do you not know that your bodies are temples of the Holy Spirit, who is in you, whom you have received from God?'* They believed that vaccination may affect the spirit of people and next to this, the body is able to regenerate itself after diseases. Hence it is not easy to say that there is just one reason for being against vaccination. The upbringing, faith and health are all reasons that together played a role in their anti-vaccination reasoning.

Most participants pointed out that there was much to find about vaccinations on the internet, especially on social media. They have read about lots of stories, discussions, articles and documentaries in which people tried to convince other people about their anti-vaccination reasoning. They emphasized that there is access to much more information than back in the days, and this resulted in the possibility of doing their own research.

"Forty years ago, it was normal [vaccination], you were not thinking about it too much. And I think that there was a lot less opposition than now… People can do research, ask questions: What are those vaccinations precisely? What is in it? What do we put in our children?" – Lieke, 41.

Some participants started their own research because of their background in health, others were triggered by loved ones and therefore started to search for information on the internet. Friends and family of some

participants started sending articles, websites and documentaries to them. There were lots of videos and documentaries that these participants watched:

"After I watched VAXXED, I started to get interested […] With the information you get, you have to do research about it and not just accept something uncritically […] You have to get informed and reflect on that. God has given us wisdom and insight, the ability to distinguish" – Sophie, 70.

Most participants said they started doing their own research because they had questions about health and were critical regarding vaccines. They did not know what the exact ingredients of the vaccines were and realized they just let their children being vaccinated out of habit. They emphasized the role of the internet. It gave access to an enormous amount of information. However, the participants were aware of filtering the right from the wrong. They did not only got answers to the question that revolves around health but also stumbled on information of the government and the pharmaceutical industry:

"I have read a lot about all kinds of subjects and it creates an image. And then, of course, you filter: 'This is logical, this is nonsense… that man has no knowledge about it whatsoever…' So, you are constantly filtering, and then you build a new piece of world-view… And gradually, this has clearly developed in irritation and the way we are manipulated with vaccinations." – Lucas, 69.

5.4.2 The importance of individual liberty

The participants said that they have difficulty with the fact that the National Vaccination Program seems to be some kind of unassailable program that is not to be discussed about:

"Yes, it annoys me, when a kind of unassailable authority speaks and that it cannot be questioned. Actually, the message they [the government] send is: We know how it works, it's good, you must shut up, because it's just good for you and it's proven. End of story." – Henk, 36.

Most participants talked about the National Vaccination Program as an infringement of their individual liberty. And this too, is something that is reflected in Biblical verses. Even though vaccinations are not (yet) an obligation, the participants felt that they are already obligated to participate in the National Vaccination Program. The moral pressure of vaccinating their children seemed to be very great. These participants made the conscious choice of not vaccinating but they still had the feeling that they must justify that. They said that faith is a personal choice, and vaccination seems not to be a personal one.

"I think it is scandalous, by the way. You should be able to decide about your own body and not that the government does that in any way. I think it… it goes too far […] It's about your physical sovereignty." – Anne, 53.

However, this infringement of individual liberty did not only relate to the fact that people should decide over their own body but it had also to do with freedom of religion. Most participants did not feel that they can believe what they want to believe. They mentioned that they believe that if they do not follow the prevailing opinion, it will have consequences. These participants hereby referred to Exodus 23:2: *'Do not follow the crowd in doing wrong'* but Thessalonians 5:21: *'Test everything, hold fast what is good'*. They mentioned that religious people always seem to be the scapegoat and this annoys and hurts them.

"In fact, if you look very closely, we no longer have freedom of religion. Because we are actually not allowed to decide anything ourselves. Because if we decide that, there is always a consequence: your child cannot go to day-care.. or you will be called, well, 'those black

stockings who do not vaccinate'… You will always be put in a certain box.. And then you will follow the direction that you have to." – Emma, 34.

The other side of this story was the concern about the pharmaceutical industry and their collaboration with and influence on the government. Some participants were afraid that the pharmaceutical industry is becoming more and more commercial and they are only there for the money. They were afraid that the government has a double agenda.

"We are against the power of the pharmaceutical industry and the manipulation of the government… That is something we have difficulty with." – Lucas, 69.

For some participants, this was the straw that broke the camel's back and stopped vaccinating their children. For others, the perceived power of the government and the pharmaceutical industry is an issue, despite of that, they still vaccinate because they believed in the knowledge of the doctors – that is given to them by God – and prioritize public health.

Talking about COVID-19 in the first wave, the participants referred to God and the Bible. Some were not referring to the deceit of the government but stressed the importance of prayer and having faith in God in this period.

"The Lord has something to say about this [COVID-19] too. It is a call to turn to Him […] The Lord halts, a call to conversion […] We should not forget to ask the Lord, that our children will not get it [child-diseases]... Also, now with the Corona virus" – Guusje, 66.

Others believed that the virus is something the Bible had predicted already and are afraid of the power of the government.

"What the Bible says about the end of time, the end of the world. Things like this [COVID-19] are predicted. The last book of the Bible also says there will be wars, natural disasters, other disasters that will affect mankind. I could never have imagined that his could have been something like this [COVID-19]. It can be as simple as a virus… But, the great influence that the government has in this, that really scares me. Yes. And that it goes so easy, that we are all like sheep… Not all by the way, there are plenty of people who do not do that… But the vast majority follow like sheep." – Lieke, 41.

The opinion about the power of the government and the pharmaceutical industry is widely shared among the participants and also relates to COVID-19. The participants felt that the government scares the people through the news with certain numbers about the number of infections and deaths. Next to this, some participants indicated that it affects their mental health too. Those participants were also sceptical about a COVID-19 vaccination and were not willing to take it, also because the vaccines appeared to be reaching the market too quickly.

"As it is portrayed right now… There is a big difference if someone who has cancer, Alzheimer's or cardiovascular disease – which are the three biggest killers in The Netherlands – when that person dies and is also tested positive and gets it final push with Corona… Well, I find it misleading not to include the others [illnesses] in the figures." – Henk, 36.

5.4.3 Critical thinking and individual liberty

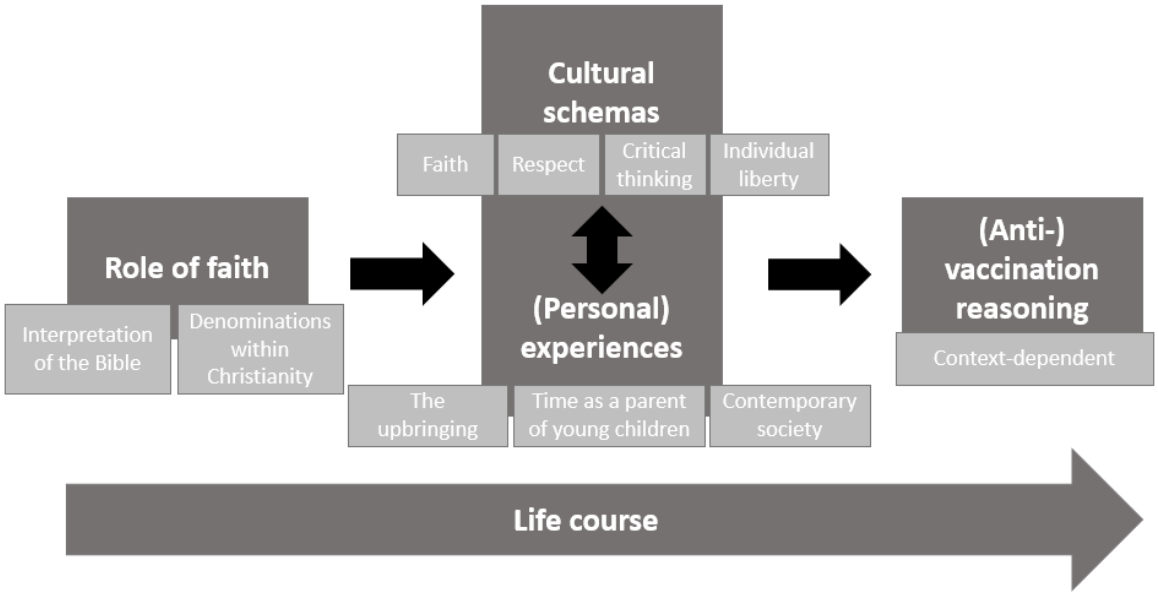
The critical thinking continued in contemporary life of the participants. Improved technology over the years gave people the opportunity to do their own research. So next to the upbringing and the time as a parent of young children, the fact that they were now able to do their own research on the internet also reinforced their critical thinking. This cultural schema is thus prevalent during their whole life. Next to this, the importance of individual liberty played a great role too in present-day life cultural schemas of

the participants. Being critical towards the government and the pharmaceutical industry underly this cultural schema. Bodily autonomy and freedom of religion were two great factors of this individual liberty. Even though participating in the National Vaccination Program was a voluntary choice, some participants still felt the societal pressure. This was something they experienced throughout the life course and emphasized the importance of individual liberty as a prevalent cultural schema.

6. Conclusion and discussion

Based on the findings of this research and previous literature, this chapter focusses on the answer to the question: *'What is the reasoning behind (anti-)vaccination decisions of Dutch Christian families?*' Figure 5 shows an illustrative answer to the research question emerged through applying grounded theory during analyses of the data.

Figure 5: Illustrative answer to the research question



The research question is not easily answered as it is not possible to apply one single measure to all Dutch Christian families. The participants agreed on the fact that their faith is part of who they are, and that it certainly plays a role in their (anti-)vaccination reasoning, whether it is direct or indirect. But this shared schema is internalised differently and therefore plays a different role in their reasoning. The role of faith was mostly dependent on their *interpretation of the Bible* and their *denomination within Christianity.* There were some other cultural schemas that are shared by all participants. The (anti-)vaccination reasoning of the participants was supported by *faith, respect, critical thinking,* and *individual liberty.* But the way these cultural schemas were internalised and thus interpreted is different. (Personal) experiences in the life course, especially in their *upbringing*, their *time as a parent of young children* and in *contemporary society* led to differences in how individuals have internalised cultural schemas. On the other hand, the schemas of the participants played a role in how certain (personal) experiences were perceived. Altogether, the (anti-)vaccination reasoning was not only based on faith, but was context-dependent and therefore intensely personal.

As is also supported in literature, it is important to conclude that it is not possible to apply one single measure to all Christian people (Moberg, 2005). Shared cultural schemas were internalised differently and therefore may result in different behaviours by different people (Garro, 2000; De Haas, 2017). The Christian families in this study shared schemas but the way these schemas were interpreted is different because of personal experiences throughout their life course. As confirmed in literature, religion can be closely associated with the resistance to vaccination (Hobson-West, 2003). For some participants it meant that they are anti-vaccination because they believe in God's divine providence. Literature does also suggest that Christian families are against vaccination because they believe they received God's perfect immune system (Kata, 2010). This was not something the participants in this research agreed on. On the contrary, they believed that every single person was born with sin. Literature also showed that religion can be associated with the acceptance of vaccination as people may see immunization as a gift from God, to be used with gratitude (Grabenstein, 2013). Some participants did indeed believe in

the fact that God has given our doctors knowledge and see vaccines as a gift from God. These participants see vaccination not merely as an individual interest but also refer to the importance of public health.

However, (anti-)vaccination reasoning is not merely based on religion, as the context in which people live is very important too (d'Andrade, 1992). The results showed that this was not only the case in contemporary life but also in the youth of the participants. The participants agreed that their upbringing (unconsciously) was a great part of who they are in present-day life. Literature agrees on the fact that individuals may unintentionally obtain habits from practiced patterns of behaviour (Strauss & Quinn, 1997). So, not only religious objection should be considered, but being brought up in a religious society was also a great aspect in the (anti-)vaccination reasoning of Dutch Christian families.

(Anti-)vaccination reasoning was also shaped through personal experiences, observations and conversations with friends and relatives (Krijnen, 2014; Streefland et al., 1999). Negative personal experiences with vaccination during the participants' time as young parents brought about their critical thinking. Literature showed that questions and critical thought have a central place in churches and religious education (Anderson, 2017). Conversations with loved ones turned out to be a trigger for some participants to do research about vaccines and therefore these conversations played a role in their reasoning. Literature showed that safety, risks, effectiveness, and alternative meanings of health can also be factors that play a role in (anti-)vaccination reasoning (Kata, 2010; Hobson-West, 2003). Stories about these factors were widespread on the internet and participants talked about doing their own research online. This new incoming information raised emotions and confirmed or affected cultural schemas (De Haas, 2017). The objection that arose from the own research of the participants had to do with the ingredients of the vaccines and alternative meanings of health, as they believed that the body is able to regenerate itself and therefore vaccines were not necessary. Some of them postponed the vaccination of their children to a later age. However, it did not convince these participants to stop vaccinating at all, as the importance of public health and the fear for their children to become ill was prevalent.

There seemed to be a tension between the importance of public health and individual liberty. Many participants acknowledged the importance of public health but were afraid that their individual liberty is being threatened by the societal pressure to vaccinate. Being anti-vaccination or not, the Christian families in this study valued individual liberty and bodily autonomy most definitely. The fact that Christians are a minority group may make the participants feel stronger in their feelings about the importance of individual liberty. This importance was also confirmed in literature. It was already prevalent in the 19th century, when Dutch Christian people protested against the compulsory nature of vaccinations (Blume, 2006). The participants mentioned that they respected and accepted others regardless of their choices or decisions. As is also supported in literature, mutual respect and acceptance is shared by several religions, also shared by Christians (Saleem, 2019). However, they were concerned that the government did not value the same respect and acceptance and that frightened them. As also supported in the literature, the perception of mistrust in the government is found to be prevalent (Yancey et al., 2006). The participants knew that they are a minority and mention that religious people always seemed to be the scapegoat which annoyed and hurt them. They believed that the National Vaccination Program is so much intertwined with the contemporary society, that it is not up for discussion. This was also prevalent in literature. The founders of the NVKP felt that the societal and medical pressure to participate in the National Vaccination Program was too high (NVKP, 2019). The participants saw this program as an infringement of their individual liberty and therefore were sceptical about the political agenda behind it.

6.1 Recommendations for policy practice and future research

Scepticism about vaccines may come with real consequences such as losing herd-immunity and resurgence of illnesses (Motta et al., 2018). Understanding peoples' reasoning is important for ensuring herd immunization (Grabenstein, 2013). The findings of this research showed *how* religion can operate as a reason. The findings showed there are diverse perceptions about vaccination of which the infringement of individual liberty is one. Most participants acknowledge the importance of public health but they felt like their individual liberty and bodily autonomy is being threatened by the societal and moral pressure to vaccinate. This infringement of individual liberty also applies to freedom of religion. This research showed that several Dutch Christian families feel like they are the scapegoat of society and are not taken seriously. They lack trust in society and the government. Policy makers can implement the findings of this research in the response to Christian families and their (anti-)vaccination reasoning, also in relation to the COVID-19 vaccine. Safe and open dialogue between faith-based communities and policy makers in a familiar and trusted setting is important to (re)gain trust (Lahijani et al., 2020).

Even though this research showed *how* religion can operate as a reason in (anti-)vaccination reasoning, the study population of the research was very broad, and therefore very distinguished information was obtained about several denominations within Christianity. This shows that it is not accurate to apply one measure to all people who believe in the same God. Focusing on one particular denomination and their interpretation of faith can gain more in-depth information of this specific denomination. Future research is therefore recommended to obtain more in-depth data about particular denominations within Christianity.

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8. Appendices

8.1 Interview guide

Introductievraag

1. Kunt u me het een en ander over uzelf vertellen?

Wat is de *life course*?

Aspecten	**Vragen**
Vroeger – keuzes van de ouders	1. Kunt u mij een omschrijving geven van de tijd waarin u bent opgegroeid als kind? 2. Kunt u iets vertellen over de rol van geloof binnen de opvoeding van uw ouders? 3. Met welke normen en waarden bent u opgegroeid? Wat voor regels waren volgens uw ouders belangrijk in het leven? 4. Wat voor een invloed had het geloof in deze tijd op vaccinatiekeuzes die uw ouders maakten? 5. Op welke manier hebben de keuzes van uw ouders invloed gehad op de keuzes die u nu maakt?
Ervaringen met betrekking tot vaccineren	1. Welke persoonlijke ervaringen heeft u met vaccineren? 2. Heeft u gehoord over ervaringen van anderen met betrekking tot vaccineren? 3. Wat vond u daarvan? 4. Hoe heeft dit invloed gehad op uw beslissing? 5. Zijn er persoonlijke ervaringen die ervoor zorgen dat u blijft geloven?

Wat zijn de *cultural schemas*? - In hoeverre speelt religie een rol?

Aspecten	**Vragen**
Religie	1. Wat kunt u mij vertellen over uw religie? 2. Kunt u mij vertellen hoe belangrijk religie is in uw leven? 3. Wat is het belangrijkste principe binnen uw geloof? 4. Zijn er ook aspecten van uw geloof waarmee u het niet eens bent? Welke en waarom?
Invloed van de omgeving	1. Kunt u mij wat vertellen over de plaats waarin u woont? 2. Wat zijn de karakteristieken van deze woonplaats? 3. Weet u wat de keuzes zijn van uw buren/naasten met betrekking tot (anti-)vaccinatie? 4. Maakt het u uit of uw buren/naasten voor of tegen vaccinatie zijn? 5. Hoe beïnvloedt de hedendaagse maatschappij uw beslissing? 6. Wat is er hierdoor veranderd in uw mening met betrekking tot vaccinatiekeuzes? 7. Heeft u gesprekken gevoerd met de school van uw kinderen over vaccinatie? Wat vond u daarvan? 8. Heeft u gesprekken gevoerd met de huisarts over vaccinatie? Wat vond u daarvan? 9. Heeft u gesprekken gevoerd met de kerk over vaccinatie? Wat vond u daarvan?
Vaccinatie	1. Hoe denkt u over het vaccineren van uw kinderen? 2. Kunt u mij vertellen waarom? 3. In hoeverre heeft het geloof een rol gespeeld in het maken van vaccinatie keuze?

	4. Welke factoren hebben nog meer meegespeeld in deze beslissing?

Afrondingsvraag

1. Wat zou u nog graag willen vertellen over dit onderwerp dat belangrijk is voor mij om te weten?

8.2 Informed consent

Vaccinatiekeuzes en religie

Het begrijpen van (anti)-vaccinatie keuzes binnen Christelijke families in Nederland.

Introductie

Doordat het onderwerp vaccinatie de laatste tijd ontzettend veel in het nieuws en op sociale media voorkomt, ben ik mij gaan verdiepen in het onderwerp. Er is weinig kwalitatief onderzoek gedaan naar (anti)-vaccinaties keuzes en religie. Door deze redenen ben ik mij gaan interesseren voor het onderwerp en ben ik nieuwsgierig wat het verhaal is achter vaccinatie keuzes van christelijke families in Nederland.

Samenvatting

Het hoofddoel van dit onderzoek is om een beter begrip te krijgen van de motivaties van keuzes die betrekking hebben op immunisatie binnen Nederlandse christelijke gezinnen. Met gebruik van de life course approach en cultural schema theory zal ik in staat zijn om uit te zoeken wat de motieven van deze families zijn en waarom bepaald gedrag wordt uitgevoerd. Om dit doel te realiseren, worden interviews met Nederlandse ouders gehouden. Met deze kwalitatieve manier van gegevens verzamelen, zal meer diepgaande informatie worden verzameld. Diepte-interviews zullen het verhaal achter (anti)-vaccinatiemotieven van christelijke families kenbaar maken. Hierdoor hoop ik op deze manier bij te kunnen dragen aan een complete discussie en daarnaast begrip te kweken voor de keuzes die deze families maken.

Het interview

De eerst set vragen zullen gaan over hoe uw leven invloed heeft gehad op de keuze die u heeft gemaakt als het gaan om vaccineren. Het tweede onderdeel zal gaan over uw keuzes en motivaties in een bredere (sociaal-culturele) context. Wat is bijvoorbeeld de rol van uw omgeving (vrienden, kennissen, buren, familie) in de keuzes die u maakt? Uiteindelijk moet blijken in hoeverre en op welke manier, religie een rol speelt als het gaat om vaccinatie keuzes.

Tijdsindicatie

Het interview zal naar inschatting ongeveer een uur tot anderhalf uur duren.

Deelnemersrechten

Op elke moment heeft u het recht om vragen te stellen over het interview. U mag beslissen te stoppen bij te dragen aan het onderzoek op elk moment van het interview zonder verdere uitleg. Het onderzoek is voor educatieve doeleinden (schrijven Masterscriptie) en er wordt vertrouwelijk omgegaan met persoonlijke gegevens en de verzamelde informatie.

Geïnformeerde toestemming

- Ik heb het formulier gelezen en begrijp het doel van dit onderzoek.
- Ik kreeg de kans om vragen te stellen en ben tevreden met de gegeven antwoorden.

- Ik begrijp dat deelname aan dit onderzoek vrijwillig is. Ik weet dat ik kan stoppen met deelname op elk moment. Daarnaast heb ik het recht om vragen niet te beantwoorden.
- Ik begrijp dat deelname aan het onderzoek vertrouwelijk is. Zonder mijn toestemming mag verzamelde informatie niet gebruikt worden.
- Ik begrijp dat dit onderzoek voor educatieve doeleinden is.
- Ik begrijp dat er vertrouwelijk met mijn persoonlijke informatie wordt omgegaan.

Omcirkel uw antwoord

Het interview mag opgenomen worden Ja / nee

Als u 'ja' heeft gekozen:

Mijn voornaam mag gebruikt worden in het onderzoek Ja / nee

Óf

Een zelfgekozen pseudoniem mag gebruikt worden in het onderzoek. Ja / nee

Wilt u het transcript van het interview inzien en indien nodig aanpassen? Ja / nee

Als u 'ja' heeft gekozen, vul dan hier uw e-mailadres in:

……

"Ik neem deel aan dit interview. Ik bevestig dat ik een kopie heb ontvangen van dit formulier."

Handtekening participant:

Datum:

"**Ik zal de voorschriften van dit formulier naleven. Ik zal de participant met respect behandelen."**

Handtekening onderzoeker:

Datum:

8.3 Original quotes (in Dutch)

- 'Een uitlegger is nodig […] Wij kunnen niet alles zelf bevatten…' – Guusje, 66.
- 'Het gebed is wel de ademtocht van het leven. Dat kun je nooit zonder.' – Guusje, 66.
- 'Ik heb hier m'n twijfels bij… het grondpersoneel van God. Dus de andere christenen die hier op aarde wel eens rondlopen en dingen uitkramen. Ik twijfel niet wat er in de Bijbel staat, maar soms wel aan de uitleg die mensen daaraan kunnen geven en hoe stellig ze daarin zijn. Daar heb ik moeite mee.' – Lieke, 41.
- 'Een christen zijn is een.. ja.. een way of life eigenlijk en meer dan ja, of je bij een specifieke club hoort.' Henk – 36.
- 'De Bijbel… het zijn zinnen en woorden en de interpretatie daarvan: dát maakt de inhoud.' – Tessa, 26.
- 'De ene bijvoorbeeld zegt van je moet alles geloven wat er in de Bijbel staat en de ander zegt sommige dingen kun je als beeldspraak…' – Lieke ,41.
- 'Religie is eigenlijk de interpretatie van de mens, dus mensen hebben bepaalde regels gemaakt die ze dan heel belangrijk vinden en die op dat moment leidend zijn […] Mensen bouwen snel een muurtje

omheen en vullen dat gebouwtje met mensen. En ja, op een gegeven moment staan de mensen weer centraal in plaats van God.' – Henk, 36.

- 'Wij geloven dat God het huwelijk heeft ingesteld. Dat je gewoon gemaakt bent voor één partner en dat je dus niet van de één naar de ander hopt… En het HPV virus krijg je voornamelijk van wisselende [seksuele] contacten…' – Lieke, 41.
- '[…] Als je je gaat inenten, dan ga je eigenlijk een soort van vooruitlopen […] Dus je stelt je dan ook helemaal niet afhankelijk op en je bent het eigenlijk van tevoren al niet eens met de weg die God met je voor heeft' – Emma, 34.
- 'Ook al doe je inenten en ook al gebruik je medicijnen – zulke dingen moeten toch gebeuren hè? – Dat het maar niet wegebt dat we eigenlijk helemaal afhankelijk van Hem zijn. We hebben de Here nodig in al die dingen. Hij zegent die middelen en wij vragen [aan God] of dat die middelen mogen helpen.' – Guusje, 66.
- 'Iedereen is welkom, accepteer iedereen, dat je elkaar liefhad en respecteerde… dat was wel de hoofdnorm.' – Tessa, 26.
- 'Dat [de oorlog] heft gewoon een hele lange nasleep gehad […] Als je naar mijn opa ziet, hoe ik hem nog ken, hij was echt nors […] Het was een sombere tijd, heel somber, vreugde mocht je haast niet delen want iedereen had het zwaar.' – Lotte, 33.
- 'Het mocht niet […] Je moest vertrouwen hebben, en als je ziek werd, dan was dat zo […] En de Heer maakt je dan beter, of je gaat ermee heen.' – Klaas, 67.
- '…En daarin moedigde ze (moeder) ons altijd aan. Om zelf daarin te onderzoeken van: kijk zelf wat de waarheid is, kijk zelf wat je gelooft: doe zelf onderzoek. En ja, daarin heb ik altijd het gevoel gehad dat ik heel vrij ben geweest.' – Jasper, 30.
- 'Als je erin opgevoed bent, dan ga je toch die sporen volgen…' – Guusje, 66.
- 'Ja, dat is bij mij ook zo. Ik ga wel een beetje op het straatje van m'n ouders, ga ik wel verder… qua vaccinaties, qua geloof en dat soort dingen. Maar, wel overdacht.' – Emma, 34.
- 'Als je zo'n prik krijgt, dan na die tijd ben je hartstikke hangerig als kind zijn… Of je krijgt een beetje uitslag..' – Anne, 53.
- 'Ja, ik ben wel tegen vaccinaties […] En mijn kleinkinderen hebben we ook kunnen bewerken via onze kinderen… dat een aantal gewoon niet gevaccineerd zijn, dat zij het ook zijn gaan inzien.' – Sara, 69.
- 'Ik wist dat mijn schoonouders inmiddels fel tegen waren [vaccinaties] […] Dus mijn schoonmoeder, die kwam steeds met artikelen en boekjes en zo daarover… Toen ben ik me er wel in gaan verdiepen… En dat heeft geresulteerd dat mijn zoons op latere leeftijd zijn begonnen met vaccinaties.' – Lieke, 41.
- 'Anderen zeiden: Als je in het ziekenhuis aan het bed staat van je zieke kind, kun je dan nog erachter staan dat je niet gevaccineerd hebt? Dat.. dat was voor mij de overtuiging dat ik zei van: nou we gaan wel vaccineren.' – Lieke, 41.
- 'Ik zou er wel goed over nadenken natuurlijk. Maar dan is het een hele simpele rekensom: wat zijn de risico's en wat zijn de voordelen? Als er bijvoorbeeld één op de honderdduizend een bepaalde bijwerking krijgt... maar op het moment dat hij of zij kinkhoest krijgt en daarmee honderden kinderen besmet raken... Dan is het risico van geen vaccinatie groter dan het risico van de eventuele bijwerkingen.' – Jasper, 30.
- 'Vaccinaties zijn gewoon geïntegreerd in onze samenleving, dus dat is natuurlijk een hele grote factor. Het is niet zo dat je een uitzondering bent als je je kind laat vaccineren. Het is meer dat je een uitzondering bent als je het niet doet, dus dat speelt zeker mee.' – Tessa, 26.
- 'Je hebt toegang. Je gaat onderzoeken. Heb je twijfels, dan ga je onderzoeken […] Het is bij ons wel gedomineerd door de mogelijkheid om via het internet van alles op te zoeken, vroeger kon dat niet.' – Sara, 69.
- 'Mijn vak als gymdocent […] Ik heb me verdiept in voeding en gezondheid en medicijngebruik en… alle chemicaliën en wat voor effect die hebben op je zenuwstelsel en spiervorming. En ja, dan ga je je ook verdiepen in de geschiedenis van vaccinaties.' – Henk, 36.
- 'Veertig jaar geleden, dat hoorde gewoon zo en daar dacht je niet zo over na… En ik denk dat er ook veel minder tegengeluid was dan nu… Dat mensen nu zich veel meer er in gaan verdiepen: wat is het nou eigenlijk, die vaccinaties? Wat zit er in ? Wat spuiten we in onze kinderen?' – Lieke, 41.

- ‘Nadat ik VAXXED gekeken heb, is mijn interesse erover ontstaan […], Met welke informatie jij ook krijgt, je moet zelf verder zoeken. Je moet niet klakkeloos alles aannemen […] Je moet je laten informeren en dan reflecteren. God heeft ons wijsheid en inzicht gegeven, de mogelijkheid om te onderscheiden.’ – Sophie, 70.
- ‘Ik heb erg veel gelezen over allerlei onderwerpen en dan heb je een beeld. En dan filter je natuurlijk van ja ‘dat is logisch en dit is flauwekul… die man die heeft er geen verstand van.’ Dus je bent zo constant aan het filteren, zo bouw je natuurlijk weer een nieuw stukje wereldbeeld… En gaandeweg heeft dat zich duidelijk ontwikkelt in irritatie en de manier waarop we worden gemanipuleerd met vaccinaties.’ – Lucas, 69.
- ‘Ja, daar kan ik me aan ergeren, op het moment dat vanuit een soort onaantastbare autoriteit gesproken wordt die niet ter discussie gesteld mag worden. Eigenlijk is de boodschap: Wij weten hoe het zit, het is goed, je moet je mond houden, want het is gewoon goed voor je en het is bewezen punt.’ – Henk, 36.
- ‘Ik vind het schandalig trouwens. Dat je zelf over je lichaam zou mogen beslissen en niet dat de overheid dat doet op één of andere manier. Ik vind het.. het gaat echt te ver […] Het gaat om je lichamelijke soevereiniteit.’ – Anne, 53.
- ‘Eígenlijk, als je het goed bekijkt, hebben wij geen godsdienstvrijheid meer. Want we mogen eigenlijk niks zelf beslissen. Want als we dat beslissen, dan is er altijd wel een consequentie. Of je kind kan dus niet naar een kinderdagverblijf… Of je wordt uitgemaakt voor ja.. ‘Die halve zwarte kousen… die inenten niet…’ Je wordt altijd in een bepaald hokje gezet dat je toch.. de kant wordt opgestuurd dat je moet.’ – Emma, 34.
- ‘We zijn wel tegen de macht van de farmaceutische industrie en de manipulatie van de regering… Dat is iets waar wij wel moeite mee hebben.’ – Lucas, 69.
- ‘De Here heeft hier [COVID-19] ook iets mee te zeggen. Het is een roepstem om ons naar hem toe te keren […] De Here roept een halt, een oproep tot bekering […] Dat we toch niet minder aan de Here mochten vragen, of dat het [kinderziektes] aan de kinderen voorbij mochten gaan, zoals nu ook met het corona virus.’ – Guusje, 66.
- ‘Wat er in de Bijbel staat over de eindtijd, het einde van de wereld. Dit soort dingen zijn gewoon voorspeld. In het laatste boek van de Bijbel staat ook: er zullen oorlogen komen, natuurrampen, andere rampen die de mensheid zullen treffen. Ik had nooit kunnen bedenken dat dit ook zoiets had kunnen zijn. Zo simpel kan zijn als een virus.. Maar, wat voor grote invloed een overheid daarin heeft, daar schrik ik heel erg van. JA. En dat het zo makkelijk gaat, dat we allemaal als makke schapen… Niet allemaal trouwens, er zijn genoeg mensen die dat niet hebben. Maar dat het overgrote merendeel wel als makke schapen erachteraan loopt.’ – Lieke, 41.
- ‘Zoals het nu geportretteerd wordt… Er is een groot verschil als iemand die kanker, Alzheimer of hart- en vaatziekten heeft – wat eigenlijk de drie grootste killers zijn in Nederland – op het moment dat diegene sterft en ook positief getest is en krijgt het laatste duwtje met corona. Nou ja, dan vind ik het misleidend om die andere [ziektes] niet in de cijfers mee te nemen.’ – Henk, 36.