

Parental care preferences for children diagnosed as having ADHD attending a Waldorf School



A thesis committed for the degree of MSc Communication Health
and Life Sciences, Specialization: Health & Society
Chair group: Sociology of Consumption and Households (SCH)

Veerle Dijenborgh

940731206090

Dr. H.M. van der Horst

March 8th, 2019

SCH-80436

Preface

This study has been conducted as part of the Master program of Communication Health and Life Sciences and the Specialization of Health & Society at Wageningen University, it was executed at the chair group of Sociology of Consumption and Household. This study was focused on the care preferences of parents whose child was diagnosed as having Attention-Deficit Hyperactivity Disorder (ADHD) and was attending a Waldorf school. I became familiar with the topic of ADHD when I did care internships during high school. During my bachelor studies, I followed some courses that focused on mental health. This all sparked my interest on ADHD. Furthermore, I attended a Waldorf school myself and therefore found the combination between ADHD diagnosis and treatment and Waldorf school a very interesting topic.

I never considered ADHD to be a social problem and never considered looking into it from a parental care perspective. Therefore, I highly appreciate the opportunity of investigating this and the space that was given to me when combining this with the Anthroposophical philosophy upon which Waldorf school education is build. Therefore, I would like to thank my supervisor dr. Hilje van der Horst, for introducing me to this topic and for guiding me through the process of this research project. I also want to thank the participating Waldorf schools for sharing their information and the internal supervisors interviewed for this research for sharing their insights in the parental care preferences of parents at their school. Moreover, I want to thank the parents interviewed for this research for being open to share their experiences. Finally, I want to thank my friends and family for providing advice and supporting me along the process of this research.

Utrecht, February 2019 Veerle Dijenborgh

Abstract

Attention Deficit Hyperactivity Disorder (ADHD) is the cause of an ongoing debate about its underlying causes and the affectivity and safety of the treatment options. The input of all these debate topics influences parents in their decisions on the diagnosis and treatment for their child showing symptoms of ADHD. Furthermore the Anthroposophical philosophy influences parental care preferences when their child attends a Waldorf school, for perception of health and lifestyle are factors these parents value when making such a decision. The aim of this study is therefore to examine the factors that influence parental care preferences regarding their child diagnosed as having ADHD and attending a Waldorf school. To understand these factors, a perspective of care ethics was used. Care ethics emphasizes moral sentiment, interdependent human relationship and the influence of context, which leaves room for the influence of the Anthroposophical philosophy. Elementary Waldorf schools in the Netherlands have been asked for their data on the amount of children diagnosed as having ADHD and the type of treatment these children are using while attending their school. Internal supervisors have been interviewed using a semi-structured interview method on the parental care preferences of parents whose child or children show symptoms of ADHD and attend that Waldorf school. Parents that have a child, or children diagnosed as having ADHD and are attending a Waldorf school have been interviewed by applying the Biographic Narrative Interpretative Method (BNIM). The results indicate that less children than average in the Netherlands have been diagnosed as having ADHD when attending Waldorf school (1,28%). Of these diagnosed children, the majority 61,7% used medicinal treatment. The factors influencing parental care preferences leading to these outcomes were the beliefs and values of these parents, the institutional factors of Waldorf schools and social factors. Despite a number of shortcomings in this study, related to the questioning of the quantitative data, the selection process and interviewing of participant and the procedure of interpreting the data, the findings of this study are valuable for generating an idea about the factors influencing parental care preferences regarding children diagnosed as-, or showing symptoms of ADHD and attending a Waldorf school.

Table of Contents

1. Introduction.....	1
2. Literature review.....	4
2.1 Debate about ADHD	4
2.1.a ADHD as a neurodevelopmental disorder	4
2.1.b ADHD exists but is over-diagnosed	6
2.1.c ADHD due to medicalization	6
2.2 Parents, Waldorf school and ADHD.....	8
2.3 Knowledge gap	10
3. Conceptual framework.....	11
4. Methods	13
4.1 Research questions.....	13
4.2 Study design	13
4.3 Data collection	14
4.4 Sampling plans	15
4.5 Data analysis.....	15
5. Findings	17
5.1 Quantitative study.....	17
5.1.a Numbers and percentage of children at Waldorf Schools with an ADHD diagnosis	17
5.1.b Numbers and percentages of children at Waldorf schools with an ADHD diagnosis and using medication.....	19
5.1.c Numbers and percentages of children at Waldorf schools with an ADHD diagnosis and using different therapies	20
5.2 Qualitative study.....	24
5.2.a Beliefs and Values	24
5.2.b Institutional factors	27
5.2.c Social factors	32
6. Conclusion	34
6.1 Parental care decisions.....	34
6.2 Factors influencing parental care decisions.....	35
6.3 Integration of the theoretical and empirical factors.....	37

7. Discussion.....	45
8. List of references	49
9. Appendices.....	53

1. Introduction

This research will give an insight into the parental care preferences of parents whose children are diagnosed as having ADHD and are attending a Waldorf School. Waldorf schools are selected for this research as they are based on the Anthroposophical philosophy founded by Rudolf Steiner. This philosophy views health as a matter of body, soul and spirit and the balance between these three. This philosophy influences the beliefs of Anthroposophical parents when it comes to vaccinating their children (Harmsen, Ruiters, Paulussen, Mollema, Kok & de Melker, 2012). The aim of this research is to find out whether or not these beliefs are also reflected on the care preferences parents have for their children diagnosed as having ADHD.

On the 21 of April of 2011 the House of Representatives had a round table conversation concerning the rapid rise of the use of ADHD medication among children living in the Netherlands (Batstra, 2012). The number of children diagnosed as having attention deficit/hyperactivity disorder (ADHD) has increased over the years. ADHD is recognized and treated since the second half of the 20th century (Polanczyk, Willcutt, Salum, Kieling & Rohde, 2014). Since then, ADHD is one of the most researched disorders in medicine (Polanczyk, de Lima, Horta, Biederman & Rohde, 2007). According to the fifth Diagnostics and Statistical Manual of Mental Disorders (DSM-5) ADHD is characterized as a pervasive pattern of inattention and/or hyperactivity and impulsivity (American Psychiatric Association, 2013).

There are many concerns about the increase of prevalence and the validity of the diagnosis of ADHD. Furthermore, the rate in which the diagnosis and treatment of ADHD are increasing is a reason for concern (Polanczyk, Willcutt, Salum, Kieling & Rohde, 2014). According to Batstra, over-diagnosis and overtreatment of ADHD are also of concern to the DSM-IV and DSM-5 task groups (Batstra, 2012).

Several meta-analysis show the estimated prevalence of ADHD in children. These different researches show the worldwide prevalence of ADHD in children is estimated at 5% (Willcutt, 2012; Polanczyk, de Lima, Horta, Biederman & Rohde, 2007; Bachmann, et al., 2017; American Psychiatric Association, 2013). The estimated prevalence has increased over the years according to the use of different diagnostic criteria. In general, studies that use the DSM-IV criteria to estimate the prevalence of childhood ADHD show a higher prevalence than those that use the older ICD 10 equivalent of ADHD

(Bachmann, et al., 2017). Furthermore, European studies show a lower estimated prevalence of ADHD in children in comparison to US studies, which show a higher estimated prevalence (Bachmann, et al., 2017). However, the increase of diagnosis and treatment are not only due to the increase of the estimated prevalence. This increase is believed to be also due to the increasing awareness of ADHD (Polanzyc, Willcutt, Salum, Kieling & Rohde, 2014).

In the Netherlands the prevalence of the use of ADHD medication among children aged 0 to 19 has increased since 2005 to 2012 from 1,8 percent to 3,9 percent. This growth is believed to originate from the increasing prevalence and the increasing awareness of ADHD (Bachmann, et al., 2017). The form of medication mostly used is methylphenidate under the names Ritalin, Concerta, Equasym and Medikinet (Bachmann, et al., 2017; Batstra, 2012; Pereira, Kooij & Buitelaar, 2011; Wilson, 2013). However, the use of methylphenidate based medication among children aged 6 till 15 has been decreasing since 2013 (SFK, 2019). Furthermore, there are some concerns about the duration of the effectiveness and the side effects of the drugs (Bachmann, et al., 2017; Batstra, 2012). Therefore, non-medicine based treatments could also be used when a child is diagnosed as having ADHD. These treatments include behavioral therapy and parenting advice and are believed to be effective (Pelham, 1999; Pereira, Kooij & Buitelaar, 2011).

When administering treatment to children diagnosed as having ADHD, it is important to examine parental care preferences. According to the research of Brinkman et al. parents struggle to find a balance between the benefits and concerns they have with the different treatments of ADHD. The research mentioned that these treatment preferences are influenced by a variety of factors (Brinkman, et al., 2009).

When looking at the reasons Waldorf school parents take into account not to vaccinate their children, it became clear that for them, lifestyle and their perception of health are important factors influencing their decision-making. These parents indicated lifestyle to be important in their daily life. For, they made sure their children were growing up in a healthy and peaceful environment. They believe this to have a positive effect on the health of their children. Furthermore, perception of health plays a big part in their decision-making. Parents of children attending a Waldorf school have a lot of confidence in the health of their child and their own healing powers. They do not want to intervene in these healing powers (Harmsen, Ruiters, Paulussen, Mollema, Kok & de

Melker, 2012).

Therefore, this thesis is dedicated to examining how those factors affect parental care preferences for children diagnosed as having ADHD and attending a Waldorf school in their decision on either medicinal or non-medicinal treatments. Accordingly, the following research question will be addressed in this research: “How do parents care for their child diagnosed as having ADHD attending a Waldorf school?” To establish a foundation towards answering this research question, the literature will first be analyzed. This chapter contains a literature review, which is relevant to the problem of this research. Furthermore, the conceptual framework highlights the underlying theoretical assumptions of this study. Additionally, a chapter will be dedicated to explaining the research methods of this study. In this chapter, the sub-questions supporting the main research question are presented as well. In the following chapter, the results of this research will be discussed. In the conclusion chapter the main question of this study will be answered by integrating the theoretical and empirical findings. Lastly, in the discussion chapter a critical evaluation of the entire research process will be discussed.

2. Literature review

2.1 Debate about ADHD

In our society there are different ways in which there is reacted to symptoms called ADHD. As a result, in recent years there has been a debate about the origin and existence of ADHD. In this debate there are three main standpoints in which the extreme opponents believe ADHD to be a neurodevelopmental disorder or believe it is normal childhood behavior. The third standpoint takes its place more or less in the middle of these extremes (Tait, 2005). These three theories about the origin of ADHD will be explained in this chapter.

2.1.a ADHD as a neurodevelopmental disorder

The first group is that of the ones that truly believe ADHD exists and that it is a neurological disorder that causes children to behave more hyperactively, impulsively and inattentively than their peers who do not have the neurological disorder. Much literature on different disciplines such as, neurobiology, psychology, medicine and pedagogy, state for this group that this is the truth (Tait, 2005). Also, people part of this group state that the growing amount of children diagnosed as having ADHD is due to the growing amount of knowledge and ways to treat it. They say that the notion of overtreatment of ADHD is false, for the prevalence of ADHD in children is 5% and the children using the medication for ADHD is far lower than the prevalence of ADHD, for 37,5% of these diagnosed children use medication as a treatment (Pereira, Kooij & Buitelaar, 2011). In the Netherlands the health care is principally based on biomedicine and is widely accepted by the medical and lay population (Barry & Yuill, 2016). Therefore, the majority of the Dutch population is part of this group. Below is an explanation of what their beliefs have been based on.

ADHD is a neurodevelopmental disorder based on the shortage of dopamine and noradrenaline (del Campo, Chamberlain, Sahakian & Robbins, 2011). ADHD is characterized by a persistent pattern of inattention and/or hyperactivity-impulsivity that is interfering with the development or academic and social functioning of the one diagnosed as having ADHD (Polanzyc, Willcutt, Salum, Kieling & Rohde, 2014; American Psychiatric Association, 2013).

Over the years, ADHD has been one of the most researched disorders in medicine (Polanczyk, de Lima, Horta, Biederman & Rohde, 2007). This research is the reason for

some diagnostic changes over the years. Where the DSM-IV identified children as having ADHD when they had symptoms before they are seven years old, the DSM-5 identifies children as having ADHD when they show six out of nine symptoms before they are twelve years old (American Psychiatric Association, 2013). Since the DSM-IV there are three different subtypes of ADHD that can be defined: the predominately hyperactive-impulsive subtype (ADHD-H), the predominately inattentive subtype (ADHD-I) and the combined type (ADHD-C) (Willcutt, 2012). Before the DSM-IV there was no such distinction in types. In the DSM-5 both categories (ADHD-H and ADHD-I) consist of nine symptoms of which the child will have to have at least six to get diagnosed as having ADHD. These behavioral symptoms are such as “often does not seem to listen when spoken to directly” or “ Often fidgets or taps hands or feet or squirms in a chair”. For ADHD-C the children can be diagnosed as having ADHD when they show behavioral symptoms from both ADHD-I and ADHD-H. These symptoms have to be present at two or more settings such as school and at home, they have to interfere with the social, academic and occupational function of the child and are not to be explained by another mental disorder or during the course of schizophrenia (American Psychiatric Association, 2013).

The treatment of ADHD can be either medication or non-medicinal therapies such as behavioral therapies. The goal of these treatments is to reduce the symptoms of ADHD. Worldwide, the most used medication is methylphenidate, which is better known under the names Ritalin, Concerta, Equasym and Medikinet (Bachmann, et al., 2017; Batstra, 2012; Pereira, Kooij & Buitelaar, 2011; Wilson, 2013; King et al., 2009). This drug lowers the reabsorption of dopamine and noradrenaline in the brain and by doing so, makes sure these neurotransmitters are increasing in the brain (Fusar-Poli, Rubia, Rossi, Sartori & Balottin, 2012). Thereby, it significantly decreases the hyperactivity, impulsivity and inattentiveness of two-thirds of the children diagnosed as having ADHD using the medication. However, the drug does not seem to have an effect on increasing the pro-social behavior of the children (King et al., 2009). Furthermore, the medication can cause side effects such as insomnia, the loss of appetite, headache and abdominal pain (Barkley, McMurray, Edelbrock, Robbins, 1990). Moreover, the drugs can cause an increase of cardiovascular diseases by persistently increasing the heart rate and changing the blood-pressure (Nissen, 2006).

The metastudy of Pelham shows that parents and teachers favor medication over behavioral therapy when it comes to improving the hyperactivity of the child diagnosed as having ADHD. However, the article shows behavioral therapy to be mostly favored by parents and teachers when it comes to social skills, classroom observed behavior, parent-child relationships and the academic achievements of the child. Pelham's study proves that the use of medication gives better results than the use of behavioral therapies. However, it shows that the combined treatment of medication and other non-medicinal therapies work best (Pelham, 1999).

2.1.b ADHD exists but is over-diagnosed

The second group in the discussion of ADHD believes ADHD exists. However, they believe it is over-diagnosed. The main ideas they state are the subjectivity of the diagnosis of ADHD and the absence of individual signs that can be tested such as neurological scans, blood tests or a chemical imbalance that state a child has ADHD (Tait, 2005). One of the people stating this is Laura Batstra, in her book: "How to prevent ADHD, by not diagnosing it". She mentions the subjectivity of the diagnostic criteria of ADHD, for they are almost all described as behavior shown *often* by the child that is surveyed. Often it is a very subjective term and can be interpreted differently by each making the diagnosis. Furthermore, she states that many of the criteria are overlapping which will make it easier to find six out of nine criteria and form the ADHD diagnosis. Lastly, she states that comorbidity plays a big role. Two thirds of the children diagnosed as having ADHD have other psychiatric diseases such as behavioral disorders, fears and depressions. Many psychiatric disorders are accompanied by hyperactivity and attention problems (Batstra, 2012). Therefore, careful diagnosis and treatment is of great importance to this group. Batstra explains that most parents choose to give their children medicinal treatment, for ADHD has been made known to them as a brain problem to be solved by medication. She pleads to use less medicinal treatments and more non-medicinal treatments for they have the same effect and no side effects (Batstra, 2012).

2.1.c ADHD due to medicalization

The third group believes ADHD does not exist. They substantiate this with three different statements. The first is: ADHD is a fraud for it is made up by the medical industry, the biotechnical industry, insurers, health consumers and the pharmaceutical industry (Tait, 2005; Keane, 2013). This statement is part of the medicalization

framework, which criticizes the expansion of medical authority beyond its legitimate terrain in every day life. For example, the expansion of ADHD as a lifespan disorder made for an enormous increase in the market of ADHD medication. Therefore, it is believed medication is overprescribed (Keane, 2013).

The second statement is: ADHD does not exist for it is simply normal childhood behavior and therefore, ADHD is an unreal invention (Tait, 2005; Keane, 2013). The increase in the amount of ADHD diagnoses is believed to be due to teachers and parents who want to manage unruly behavior. Therefore, they state that medicalization makes nonmedical problems medical problems, which is usually done in the state of disorders such as ADHD. The behavior of a child that was once known as rambling or naughtiness is now a treatable disease with as quick fix medication. Therefore, children are medicated so they succeed in the norms of the classroom and society. Furthermore, parents who want the best for their child in the present and future turn to medication for this has become compatible with the hopes of parents for their children. However, parents still see ADHD as not merely the effect of a neurodevelopmental disorder but see it as part of their child's authentic self and therefore sometimes withhold this medication (Keane, 2013).

The third statement is: the change in government is the cause of ADHD and therefore it sub-divides the population into more groups so certain behavior can be regulated more easily (Tait, 2005; Tait, 2001).

These three different standpoints on ADHD make it hard for parents to consider the standpoint closest to their own ideology and find their way in all the input that is given to them. Everyone around them will influence them on what to do, whether or not to get a diagnosis or to use a certain treatment. Diagnosis and medicinal treatment are widely accepted in the medicinal and non-medicinal world (Pereira, Kooij & Buitelaar, 2011). Therefore, people believe that when symptoms of ADHD are shown, diagnosis and medicinal treatment are appropriate. When parents have another opinion about this, it might be even harder for them to follow their opinion and not to follow the biomedical world. However, the medical world is not as powerful as it once was. Various challenges are influencing its power.

One of these challenges influencing the medical world is alternative medicine. Alternative medicine questions the effectiveness and side effects of the conventional

medicine (Barry & Yuill, 2016). This is more in line with the people from the second and third group: ADHD is over-diagnosed due to medicalization. All these influences make it difficult for parents to have a care preference for their child.

First and foremost, this study is focused on the ideas of parents on the diagnosis and treatment of ADHD, but as a researcher, I find the opinion about looking for more than just medication and seeking other treatments and not going for the quickest solution most convincing. Therefore, I would say I fit in more with the second group: the over-diagnosis of ADHD. I believe a diagnosis should be done consciously and precisely for it could also harm children when it influences the way teachers, peers and their parents see them. However, I do also believe that in some cases not having a diagnosis and medicinal treatment is also not beneficial for children. It could harm their confidence because people do not understand them and they are often corrected by their parents and teachers. Above all, this study is focused on parents and an attempt has been made to primarily look at what these parents indicated as being important during the analysis of the data.

2.2 Parents, Waldorf school and ADHD

ADHD affects multiple aspects of a child's life. Parents notice a child's behavioral problems at home and teachers notice it at school. When a child is in preschool, hyperactivity, inattention and impulsiveness are age specific behavior. Close supervision is therefore the norm. During elementary school years, close supervision is not as easily done as it was before. Especially in schools where the classes are getting bigger and there is only one teacher who has to take into account all children in that class (Harpin, 2005). Furthermore, difficulties at home could play a role in influencing the relationship between child and parent (Harpin, 2005, Batstra, 2012).

The previously mentioned public debate can be challenging for parents to decide on whether or not to let their child be diagnosed as having ADHD. Next to that, it is a hard task for parents to make a treatment decision for their child. Parents might feel that their child's behavior is not tolerated and therefore feel they have to get their child diagnosed or give them a certain treatment (Hawthorne, 2010). An ADHD diagnosis is necessary to get a psychiatric treatment and medication. However, it is not necessary to get a diagnosis when behavioral treatment or other non-medicinal treatments can be

used (Batstra, 2012). When no diagnosis is made, these treatments will mostly not be reimbursed by health care insurance (Batstra, Nieweg & Hadders-Algra. 2014).

As mentioned before in the study of Brinkman et al., (2009), parents struggle to find a balance between the benefits and concerns they have with the different treatments for ADHD. A variety of factors influences the outcome of their struggle (Brinkman, et al., 2009).

It has to be noted that for parents of children attending a Waldorf school lifestyle and their perception on health are important factors influencing their decision-making on what treatment to give their children (Harmsen, Ruiter, Paulussen, Mollema, Kok & de Melker, 2012). Various countries have found that children attending a Waldorf School have a lower participation in the National Immunization Program. One of these countries is the Netherlands. This is due to the parental care preferences. These care preferences are influenced by the social environment these parents live in (Harmsen et al., 2012).

Anthroposophy is a spiritual movement that is founded by Rudolf Steiner. It is the basis on which the education of Waldorf Schools is built. This philosophy views human beings, and therefore children, as a fourfold structure of constituent elements, which together form an unique human being. This fourfold structure is based on the (1) physical body, (2) the etheric body, (3) the astral body and the (4) ego organization. The fourfold structure is the basis of a threefold structure in which these elements interact. This threefold organization is consists of the nerve-sense system, the metabolic-limb system and the rhythmic system. An imbalance in these systems is, according to Anthroposophical medicine, the origin of illness (Längler & Seifert 2012). These illnesses are treated in Anthroposophical medical centers and general practices where qualified, conventional physicians with an extended Antroposophical medicine degree practice medicine (Harmsen et al., 2012; Längler & Seifert 2012). The starting point of Anthroposophical medicine is salutogenesis. Anthroposophical medicine views salutogenesis as primarily aiming to stimulate the body in curing itself rather than using medication to stop or take over from a possible error in the body (Längler & Seifert 2012). Furthermore, specific Anthroposophical treatments can be used by children diagnosed as having ADHD and have been suggested to be effective (Hamre, et al., 2010). Therefore, based on perception on health and lifestyle, parents of children diagnosed as

having ADHD attending a Waldorf school could make the decision to give their children Anthroposophical treatment. These treatments could be eurhythm therapy, art therapy, rhythmic massage therapy and medication based on substances from minerals, plants or animals (Hamre, et al., 2010; Längler & Seifert, 2012).

2.3 Knowledge gap

Taking the influence of lifestyle and the view on health as the base on which parents of children attending a Waldorf school involve a care decision for their children. The effect of these two on parental care preferences for children diagnosed as having ADHD attending Waldorf schools has not been researched yet. Next to that, no research has yet been done on examining the effect of other factors influencing parental care decisions of parents whose child is diagnosed as having ADHD and attending a Waldorf school. Furthermore, the prevalence as well as the difference in prevalence of children diagnosed as having ADHD attending Waldorf schools taking regular medicinal treatment or other non-medicinal treatments or Anthroposophical treatments has to date not been investigated.

This highlights the importance of investigating the care preferences of parents in regards to children diagnosed as having ADHD and attending a Waldorf school. In the following chapter the conceptual framework of this study will be presented, in which the position of parents as decision makers of the care for their children will be further discussed.

3. Conceptual framework

For this research, a theory is needed to understand the position of parents as decision makers in the care process of their children. This theory should leave room for their perception on health and lifestyle for this is known to be important for parents whose children are attending a Waldorf School.

A theory giving more room to the perception of health and lifestyle of parents is care ethics or Ethics of Care. Care ethics emphasizes moral sentiment, interdependent human relationship and the influence of context. Thereby, it is applied in many different fields, but mostly in medicine for in this field the aim is to care for others (Held, 2006).

There is a distinction between care ethics and the better-known bioethics. Bioethics focuses more on the rational and idealized thoughts and gives less thought on social and cultural factors (Hedgecoe, 2004). Whereas care ethics pays more attention to social and cultural factors. According to the Internet encyclopedia of Philosophy “care ethics seeks to maintain relationships by contextualizing and promoting the well-being of care-givers and care-receivers in a network of social relations (Sander-Staudt, nd.)” Therefore, it values people’s relational, and thus social, status over being self-sufficient individuals (Held, 2006).

Furthermore, it takes into account the motivation to care for the dependent and vulnerable. For instance, parents taking care of their children. Care ethics perceive care motivation, the moral emotion of the caregiver, their moral deliberation when making care choices and their reasoning about particular situations as being important (Sander-Staudt, nd.). Thereby, it takes into account the needs of the child and the responsibility parents feel to respond to the needs of their child (Held, 2006).

Lastly, Care ethics reject the dominant moral views and questions the universally accepted rules of dominant theories. Therefore, it questions the set rules and questions the priority that is given to them (Held, 2006).

This is where the perception on health and lifestyle of parents of children attending a Waldorf school get the space they need. From a care ethics perspective parents are given the freedom to form their own view on the appropriate care for their children according to their own ideologies, whilst consulting professional care. Taking into account the caring motivation the parents feel for their children. And, it does not overlook the

influence of the social network of the parents, such as their family and friends. Furthermore, it gives space to the perception of health these parents have and their perception of what lifestyle is most optimal for their child to flourish in. This is done by breaking away from the set rules of the dominant theory and taking into account other theories that might also be beneficial to the parent and child.

4. Methods

4.1 Research questions

The debate regarding the origin, diagnosis and the treatment of ADHD has been ongoing. Parents struggle to find a balance between the benefits and concerns they have with the diagnosis and different treatments of ADHD (Brinkman, et al., 2009). Thereby, parental care preferences for children attending a Waldorf school seemed different than those of parents whose children did not attend a Waldorf school (Harmsen et al., 2012). Therefore, the aim of this research was to examine whether or not Anthroposophical beliefs contribute to parental care preferences of parents whose child was diagnosed as having ADHD and was attending a Waldorf school.

The main research question for this research is as follows: “How do parents care for their child diagnosed as having ADHD attending a Waldorf school?”

The sub- research questions that contributed to answering the main research questions are:

- 1) “What percentage of children diagnosed as having ADHD and attending a Waldorf school receive medication based treatments?”
- 2) “What percentage of children diagnosed as having ADHD and attending a Waldorf school receive non-medicinal treatments?”
- 3) “How do beliefs and values influence parental care preferences when it comes to their child diagnosed as having ADHD and attending a Waldorf school?”
- 4) “How do institutional factors influence parental care preferences when it comes to their child diagnosed as having ADHD and attending a Waldorf school?”
- 5) “How do social factors influence parental care preferences when it comes to their child diagnosed as having ADHD and attending a Waldorf school?”

4.2 Study design

The study design that has been used for this research was a mixed method study using qualitative and quantitative data. The cohort used for this data collection were parents whose children were diagnosed as having ADHD and were attending an elementary Waldorf school. The diagnosis of ADHD was often done at elementary school age; hence this age cohort was chosen for this research. This study was done using one data collection wave, meaning the data was collected at one point in time. The reference period of the research was both past and present for it examined the parental care

preferences since the appearance of the ADHD symptoms of their child until present. Therefore, it was also retrospective. Furthermore, the qualitative data collected was from the present.

4.3 Data collection

Both qualitative data and quantitative data were collected. For both methods, the obtained information was anonymously processed. The recordings obtained from the qualitative research were deleted and participants were asked to sign an informed consent.

First, qualitative data was collected via interviews with four parents. All of these parents had a child diagnosed as having ADHD. From these selected parents, some had medication as a care preference and others preferred non-medicinal treatment. The focus of this research was not the generalization of the data obtained through the interviews. Therefore, the amount of parents interviewed was of no importance. Four parents were interviewed to gain a more complete view on parental care preferences of parents whose child was diagnosed as having ADHD and attending a Waldorf school. The interviews were held with each parent individually or in pairs in case parents of one child wanted to do the interview together. These interviews were conducted by using the Biographic Narrative Interpretive Method (BNIM). This method was based on two stages. The first stage was a simple formulated single narrative question. This question was: "Please tell me the story of the care decisions you made for your child (or children) diagnosed as having ADHD. Include all the events and experiences that have been important to you personally and how these have developed up till now. You may begin where you would like. I will not interrupt. I will take some notes for follow-up questions". Subsequently, the follow-up questions were used while sticking to the chronology and wording of the participants to stimulate them to explain their experiences. The BNIM method is mostly used in psychological and social studies. BNIM has been used to understand historically evolving persons in historically evolving situations by a narrative expression of conscious concerns and unconscious cultural, social and individual presumptions and processes (Wengraf & Chamberlayne, 2006). This method was a great fit for this part of the research for its orientation and exploration of personal meaning and their socio-historical context. Furthermore, the attention it gives to the complexity and specificity of experiences was very valuable for this part of the research. By asking parents about their care decisions for their child

diagnosed as having ADHD acquiring a sense of what was experienced without forcing them in a certain direction was very desirable for this research.

Furthermore, three intermediate supervisors from three Waldorf schools were interviewed on what influences parental care preference practices for their children diagnosed as having ADHD attending that Waldorf school. Intermediate supervisors are supervisors in schools who support children with behavioral problems or learning problems. These interviews were held in order to get an even broader view on the influences of parental care preferences for their children. These interviews were done individually with each intermediate supervisor. The interviews were held at one point in time and were semi-structured interviews (see Appendix 1). Therefore, the topics of the interviews were planned. However, the order of the questions depended on the answers of the intermediate supervisors.

Lastly, the obtained qualitative data accompanying the quantitative data from the Waldorf schools participating in the quantitative research was used for the qualitative part of this research. Twenty-four internal supervisors from these schools gave extra information explaining the data from their schools.

Secondly, quantitative data collection was done by attaining information from the 88 elementary Waldorf Schools in the Netherlands on the amount of children diagnosed as having ADHD and the amount of children diagnosed as having ADHD receiving regular medication or receiving non-medicinal therapies. Therefore, these two groups were compared with each other. This research was done in a one-time measurement.

4.4 Sampling plans

The sampling plans for the two qualitative researches were different from each other and the quantitative research. The parents of elementary school children diagnosed as having ADHD were interviewed for the qualitative research and were selected through intermediate supervisors and teachers of Waldorf schools in the Netherlands. The intermediate supervisors were selected through random sampling of schools. For the quantitative research, The 88 elementary Waldorf Schools in the Netherlands were asked to participate in this research by sharing their data. Therefore, no sampling occurred in this part of the study.

4.5 Data analysis

The data analysis of this mixed method study was done in two parts. First the qualitative data was analyzed by transcribing the interviews after they had been recorded. This

transcription was done non-verbatim, which meant the transcript was formed by the fundamental meaning of the interview. Repetition, false starts and grammatical errors were tidied up. Then, the analysis of the transcribed interviews and the qualitative information given by internal supervisors accompanying the quantitative data was done by coding these. This was done in three stages. The first stage was open coding, the second is axial coding and the third was selective coding.

During open coding labels were attached to different fragments of the interview. These labels were compared to the other openly coded transcripts. When compared, the same labels were put in each transcript, this stage was called axial coding. Finally, selective coding would help elaborate concepts to build a theory in which different relationships and connections were made between the data of the interviews.

As for the quantitative data analysis, the amounts and the percentages were calculated per group. This means the amounts and percentages of children at Waldorf schools with an ADHD diagnosis were calculated. Also, the amounts and percentages of the children with an ADHD diagnosis and using medicinal, non-medicinal or no treatments were calculated. These amounts and percentages were compared with the average in the Netherlands.

5. Findings

5.1 Quantitative study

Of the 88 Dutch elementary Waldorf schools contacted through calls and emails 55 Waldorf schools replied. Of these 55 Waldorf schools, 36 elementary schools replied with their data and/or an explanation of their data. Therefore, there were 33 Waldorf schools that did not respond to the question to participate in this research, nineteen schools replied they had no time or were just not interested in participating in this research. The data of the participating elementary Waldorf schools gave an insight into the amount of children attending these schools who were diagnosed as having ADHD and whether these children used medicinal or non-medicinal treatments. The overall amount of children attending these Waldorf schools was different per school. Also, the number of children diagnosed as having ADHD using medication or other non-medicinal treatments differed per school. This part of the results will show the amount and percentage of children at these Waldorf schools diagnosed as having ADHD. It will also give an insight into the amount of children using medication and non-medicinal treatments within these schools.

5.1.a Numbers and percentage of children at Waldorf Schools with an ADHD diagnosis

Of the 36 Waldorf schools replying with data, 34 schools gave their data in numbers. These 34 schools were different in size. The other two schools gave their information without numbers. Therefore, the information of these two schools was not shown in the table below but used as qualitative data. In total, 6657 children were attending these 34 schools. Of these 6657 children 76 children were diagnosed as having ADHD.

Table 1: Amount and percentages of children diagnosed as having, and showing symptoms of ADHD.

Number of the school	Amount of children attending the Waldorf Schools	Amount of children diagnosed as having ADHD	Percentage of children diagnosed as having ADHD within that school	Amount of children showing symptoms of ADHD	Total percentage of children showing symptoms of ADHD and those having an ADHD diagnosis
1	216	1	0,46%	A few	
2	185	1	0,54%	2	1,62%
3	140	2	1,43%		
4	313	3	0,96%		
5	170	0	0%	A few	
6	250	1	0,40%	A few	
7	254	1	0,39%		
8	65	4	6,15%		
9	200	3	1,50%	5	4%
10	102	3	2,92%		
11	250	0	0%		
12	105	0	0%		
13	201	0	0%		
14	200	4	2%		
15	25	0	0%		
16	80	0	0%		
17	200	1	0,50%		
18	70	0	0%		
19	280	2	0,71%	7	3,21%
20	150	1	0,67%		
21	100	1	1%		
22	140	0	0%	9	6,43%
23	200	1	0,50%	A few	
24	200	7	3,50%		
25	191	9	4,70%		
26	85	4	4,70%		
27	240	2	0,83%	2	1,67%
28	170	2	1,17%	2	2,35%
29	308	3	0,97%	4	2,27%
30	232	1	0,43%		
31	210	1	0,48%		
32	200	1	0,50%	2	1,50%
33	75	2	2,67%	6	10,67%
34	370	8	2,16%	4	3,24%
35	480	7	1,46%	6	3,13%

As seen in table 1, the percentage of diagnosed children at the Waldorf schools that participated in this research is far below the average prevalence of 5% in the

Netherlands. The average percentage in Waldorf school children with an ADHD diagnosis as seen in this study was 1,28%. When the children showing ADHD symptoms were added to the diagnosed children a total percentage of 1,99% was found. This percentage was still below the Dutch average of 5%. However, this amount has to be higher, for, the information of the schools where a few children were showing symptoms of ADHD was not added in this calculation for this data was not measurable. Furthermore, the information about the children showing symptoms of ADHD was not specifically asked in the research. Therefore, it is probable that there are a lot more children who are showing symptoms of ADHD attending these Waldorf schools.

5.1.b Numbers and percentages of children at Waldorf schools with an ADHD diagnosis and using medication

This part of the chapter will give an insight in the amount of children diagnosed as having ADHD and using medication as a treatment. Lastly, the percentage of the diagnosed children using medication was calculated. An overview of this is given in chart 1.

Not all schools participating in this research had children attending their school diagnosed as having ADHD. This resulted in 27 schools where children diagnosed as having ADHD were attending. The overall amount of children diagnosed as having ADHD attending these schools was 76 as was mentioned above. Of these 76 children, 42 used medication as a treatment. Five of the participating Waldorf schools did not have any children diagnosed as having ADHD who used medication as a treatment. There was one exception, namely school 34, as named in the table above (table 1), which did not mention whether the children diagnosed as having ADHD attending their school used medicinal or non-medicinal treatment.

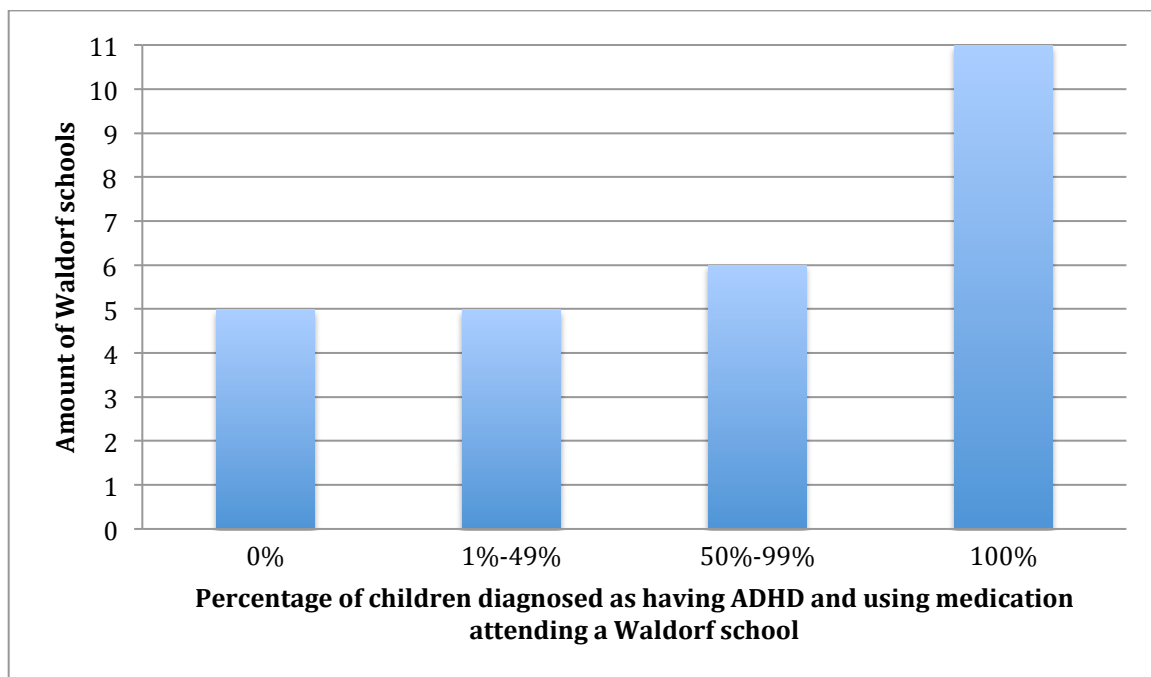


Chart 1: Percentage of children diagnosed as having ADHD using medication as a treatment and attending Waldorf schools.

Taking into account the percentages shown in chart 1. It is seen that most of the children attending Waldorf schools with an ADHD diagnosis used medication. Of the 27 schools, eleven schools had children diagnosed as having ADHD and all of them used medication as a treatment. At six schools, 50% up to 85,7% of the children diagnosed as having ADH were using medication. Therefore, the average of children diagnosed as having ADHD and using medication was found to be 61,7% (school 34 not included for their data on medicinal treatment was not known).

The types of medicinal treatment that were mostly used by these children are forms of methylphenidate and occasionally dexamphetamine.

5.1.c Numbers and percentages of children at Waldorf schools with an ADHD diagnosis and using different therapies

As seen in chart 1, the majority (61,7%) of the children diagnosed as having ADHD and attending Waldorf schools use a form of medication. Therefore, fewer children diagnosed as having ADHD and attending a Waldorf school use non-medicinal treatments. There were many non-medicinal and alternative treatments mentioned by internal supervisors as being used by children attending their school. Four intermediate

supervisors mentioned food adjustments, for example gluten free, sugar free and lactose free were used as a non-medicinal treatment. This included two children who followed a particular food program at Wageningen University or Radboud University. Another treatment mentioned by the intermediate supervisors was a treatment with a child psychologist based on the processing of different stimuli. Moreover, LTO3 was an alternative medication mentioned by an intermediate supervisor as being used by some children. LTO3 is a natural form of Ritalin and in the experience of the internal supervisor effective for the children using it. Other children had psycho-education therapy and sometimes parents had specific training. Other non-medicinal treatments prescribed to children were treatments focused on their executive functioning. Some children received extra support at home or from other professionals to help them with their ADHD symptoms. Play therapy and Anthroposophical eurythmic therapy were also often used. Some used homeopathic medicine. Others used Anthroposophical massage therapies and homeopathic massages. Schools use in class methods to improve the focus of the children diagnosed as having ADHD or those expected of having ADHD, for example art therapy. Furthermore, children often received an in-group psychophysical training that was also given at school called rock and water training.

Seventeen children diagnosed as having ADHD and using these non-medicinal therapies were attending twelve different Waldorf schools. The exception was school 34 (table 1), which was still left out for there was no information about the amount of children attending this school who used non-medicinal treatments. Eight schools had one child attending their school who was diagnosed as having ADHD and using non-medicinal treatment. The four other schools had two to three children attending who were diagnosed as having ADHD and used non-medicinal therapies. Chart 2 shows the percentages of children diagnosed as having ADHD and using non-medicinal treatment attending the Waldorf schools participating in this study.

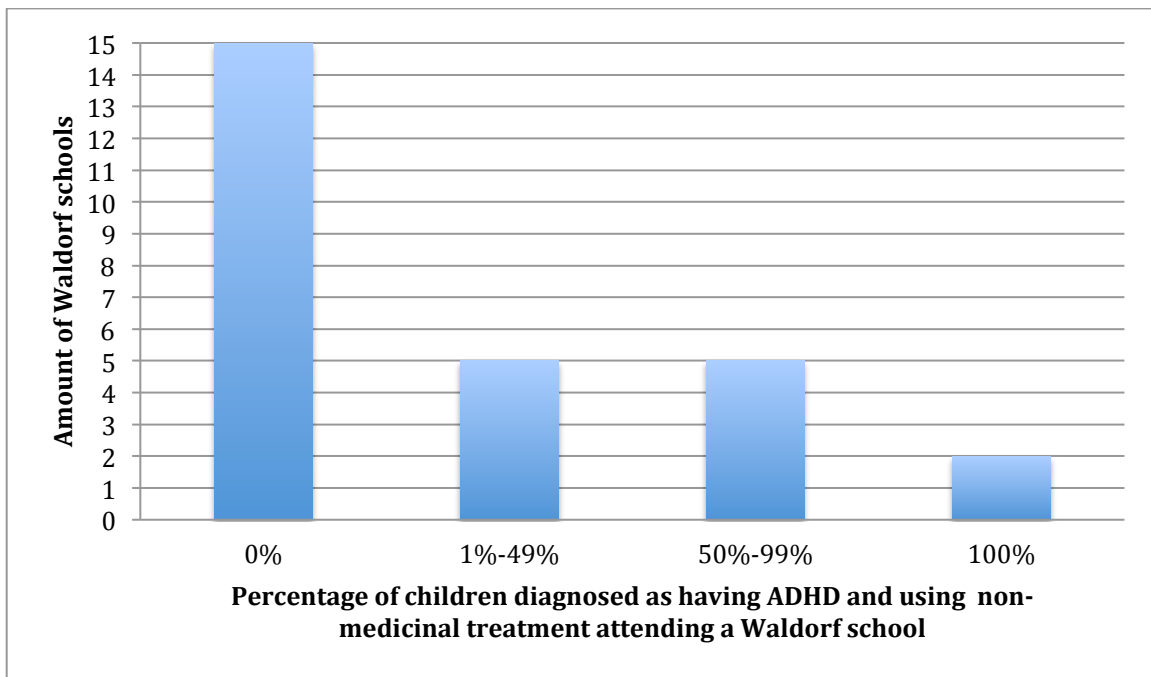


Chart 2: Percentages of children diagnosed as having ADHD and using non-medical treatment attending Waldorf schools.

When comparing chart 1 and 2 it was seen that less children diagnosed as having ADHD used non-medical treatments than those using medication. Only two Waldorf schools had a full 100% when it came to children diagnosed as having ADHD and using non-medical treatment. In five schools 50% or more of the children diagnosed of having ADHD were using non-medical treatment. In five schools, less than 50% of the children diagnosed as having ADHD used non-medical treatments. The majority of fifteen schools had children diagnosed as having ADHD who did not use a form of non-medical treatment. Therefore, the overall percentage of children using non-medical treatment was 25%. What was striking was that the average percentage of children using medicinal treatments (61,7%) and those using non-medical treatments (25%) did not add up to 100%. The explanation was that at some schools children diagnosed as having ADHD did not use any form of treatment. Chart 3 was made to give a clearer overview of this.

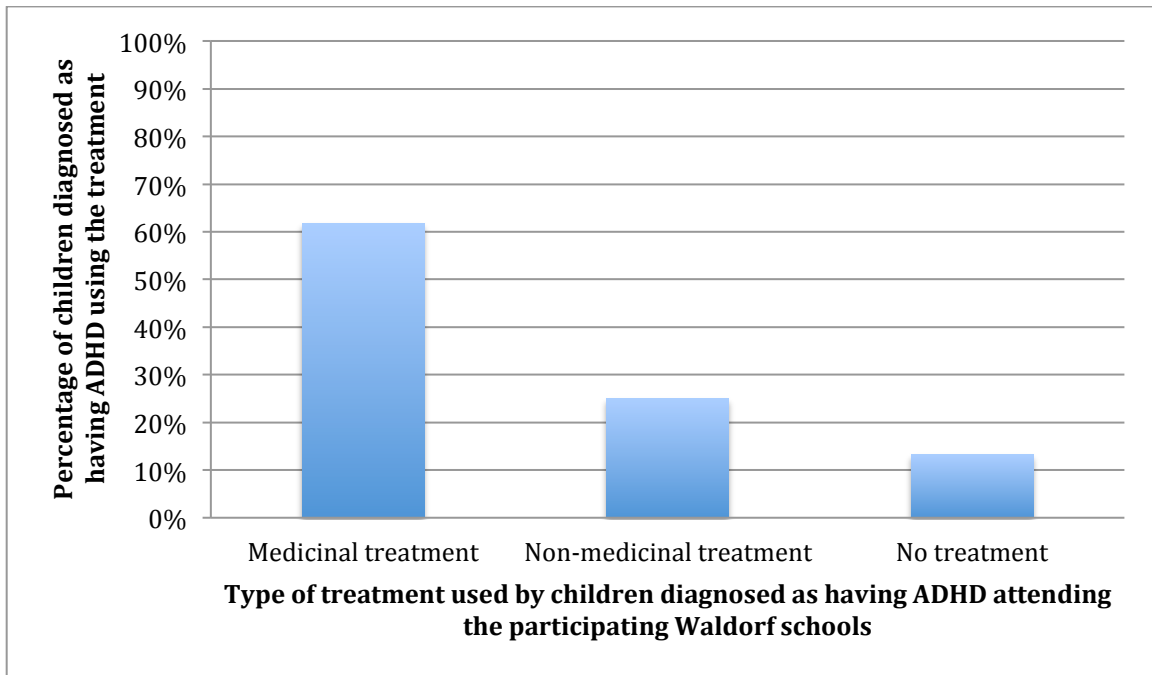


Chart 3: Percentages of children diagnosed as having ADHD and using medicinal, non-medicinal and no treatment attending the participating Waldorf schools.

Chart 3 showed the overall data of the schools. At six schools, children were attending who were diagnosed as having ADHD and did not use any form of treatment. Of these six schools, four schools mentioned children attended their schools diagnosed as having ADHD but used neither a form of medicinal nor non-medicinal treatment. Two Waldorf schools had children attending their school who were diagnosed as having ADHD and were using medicinal, non-medicinal and no treatment. This time also, school 34 was eliminated from this study for their data was not precise. This made for an overall 13,3% of children attending the participating Waldorf schools, diagnosed as having ADHD and using no form of treatment.

5.2 Qualitative study

The information about the amount and percentages of children diagnosed as having ADHD and using medicinal or other non-medicinal treatment when attending Waldorf schools was found to be different from the amounts and percentages of children diagnosed as having ADHD and using either medicinal or non-medicinal treatments in average in the Netherlands. The qualitative data outcomes showed how these differences came to be and what influenced parents to make the diagnosis and treatment decisions for their children. The qualitative data explaining this was placed in three different chapters to shine more light on the topic. These were the beliefs and values, the institutional factors and the social factors.

5.2.a Beliefs and Values

This chapter describes the beliefs and values of parents that influenced them to make a diagnosis and treatment decision for their children showing symptoms of-, or diagnosed as having ADHD. Therefore, this chapter sheds more light on what moved parents to make certain care decisions. It gives information on how the percentages described in the quantitative data results came to be. The data analyzed in this chapter was placed in two different parts. The first part was about the beliefs and values of parents when making a diagnosis decision. The second part of the chapter was about the beliefs and values of parents when making a treatment decision.

The comments accompanying the quantitative data given by 24 internal supervisors showed that parents were reserved when it came to an ADHD diagnosis for their children. Six internal supervisors mentioned this in different ways. This was also mentioned by the internal supervisors in the interviews that were held to get more insight into ADHD diagnosis at Waldorf schools. It was mentioned that children who showed symptoms of ADHD were not being diagnosed as having ADHD because the school and the parents did not think this was necessary or did not believe in an ADHD diagnosis. The first value observed that showed the reserved attitude of parents to an ADHD diagnosis was the promoting of the wellbeing of their child. The three internal supervisors mentioned that parents at their school were fearful of an ADHD diagnosis for their child. A quote by one of these internal supervisors on parents in general who did not want to have their child diagnosed of having ADHD was:

Fear, fear of stamps. Fear of it being in his passport. With it, he probably cannot go to university. All kinds of fears.

This quote shows that parents felt the fear of a diagnosis. This was strongly underlined by this internal supervisor for she mentioned it four times. This quote demonstrated the fear of the unknown of a diagnosis that could possibly harm their child's wellbeing. Parents want to do the best for their child; they want to promote their child's happiness and wellbeing. To do so, they make constant considerations on what the care for their child should be. The second value was the autonomy of parental care. Internal supervisors believed many parents thought an ADHD diagnosis for their child would automatically result in having to give their child medication:

Parents rarely go for a diagnosis out of fear that medication cannot be avoided.

This quote explained the quantitative data as seen in Table 1, which showed that a lower percentage of ADHD diagnosed children attend Waldorf schools than average in the Netherlands. This quote again stated the fear of parents. This fear was based on their belief that an ADHD diagnosis would strip them of their autonomy of care and therefore of their decision not to give their child medicinal treatment. According to this internal supervisor, these parents feared that when they are in contact with the psychiatric world for a diagnosis, they have to follow the path of these psychiatrists, which in their eyes is medication as a treatment. To prevent that from happening, they would not have their child be diagnosed as having ADHD. The third value of the diagnosis was in contrast to the first two. This value was that each child has the right of educate care. One parent pointed out in the interview she was the one mentioning the possibility of a diagnosis to the school and making the decision to have her children diagnosed. This mother voiced her concerns about the low amount of diagnosed children at Waldorf schools:

I see many children walking around school without a diagnosis and I find that very sad and poignant to see. Furthermore, I see that many children have problems and that their parents do not see those.

This mother used the words sad and poignant to underline her concern for the children who were not diagnosed and showed symptoms of ADHD. She saw it as children's right to be diagnosed as having ADHD when they showed these symptoms. The right of educate care as a value therefore meant that every child should be able to receive the

care they deserve. This parent saw this as a value for her own children but also for the ones she saw who did not receive this care.

When looking into the diagnosis and treatment decisions parents made at Waldorf schools the quantitative data showed that when parents decided to have their child diagnosed as having ADHD the majority of them also opted for medicinal treatment. However, as was described above, many parents did not want to have their child diagnosed out of fear they would lose their autonomy of care and had to give their child medication. Furthermore, seven internal supervisors mentioned parents wanted to use non-medicinal treatment before they would opt for medication. Medication was therefore, for them, the last resort. Medication is often avoided because parents felt it was harmful for their child. Purity is the value of some parents, observed in this quote, regarding the health of their child. A quote by one internal supervisor that stated this was:

Not choosing medication is mainly when they think that this is against the development of the child. Or if they have read that it has side effects that influence their child badly. They also find it difficult if they have to give medication to a growing child.

This quote showed that parents highly value the safety of their children and the purity of its body. Medication was seen as impure and unnatural and this was believed to be bad for their child. It could harm their child's development and the side effects could have a bad influence on all that is natural and good in their child. Having to give their child chemical medication would, therefore be against everything they believe in. Purity therefore stands for the cleanliness and safeness valued by parents for their child. Another quote by another supervisor emphasized this even more:

Most parents do not want unknown substances in their child.

These parents, mentioned by the internal supervisor, were afraid of the side effects of medication on their child and the effect it will have in the long run. Purity, in this case, stands for the healthiness of the children and the maintenance of their health. When parents believe that the health of their children will be endangered with the use of medication, they would not want to give their child medication.

Internal supervisors mentioned the preference of parents for non-medicinal treatment, however, the quantitative data showed that the majority of the children with an ADHD diagnosis used medication. Therefore, it was not surprising that three of the four

parents interviewed for this research had children who used medication. These parents mentioned they decided to give their children medication because this helped their children the most and made it possible for them to reach their potential. Therefore, the value these parents valued the most was quality of life. One parent mentioned the benefits of the medication for her son:

We see that the medication helps him to have a clearer mind, have fewer associations and be less full.

This parent saw the medication as assistance for her child so that he would be able to have an easier day and could focus more. Therefore, she believed the quality of life of her child had improved when he used medication compared to when he did not. Parents want the best for their children and want them to live a carefree life and experience as little hindrance as possible. Therefore, if medication could make that possible, parents are more prone to letting their child use it.

Over all, the values that were mentioned by parents when making a diagnosis decision were promoting the wellbeing of their child, the autonomy of parents to decide what care is best for their child and the right of educate care for each child. The values that emerged most strongly from interviews when looking at the parental treatment decision were purity and quality of life. This information gave more insight on the beliefs and values of parents when making a diagnosis and treatment decision for their children. And, these beliefs and values explained the quantitative data of diagnosis and treatment use among children attending Waldorf schools.

5.2.b Institutional factors

This chapter of the results described the institutional factors of Waldorf schools influencing parental care decisions on the diagnosis and treatment of ADHD as was mentioned by the internal supervisors. First, the institutional factors of Waldorf schools influencing parental care decision on diagnosis as mentioned by internal supervisors were described. Secondly, the institutional factors of Waldorf Schools influencing parental care decisions on treatment as mentioned by internal supervisors were evaluated.

The extra information the internal supervisors gave with the quantitative data for this research provided an understanding of the institutional factors of Waldorf Schools

influencing the parental care decisions. Four internal supervisors mentioned that at their schools, they did not give the advice to parents to let their children be diagnosed as having ADHD. Furthermore, they mentioned that the way of teaching at their school resulted in less diagnosed children for there was more space for them to breath and move in the courses which resulted in more focus. Therefore, the first institutional factor was the teaching method of Waldorf schools. A quote of one internal supervisor stated this clearly:

Children get relatively more room to move at this school, also within courses such as math and language. They are not just learning from a book. There is also a lot of movement integrated into these courses. I am convinced that children who are diagnosed as having ADHD have much more need for exercise, space, variety and also stimulation. Even though they often have too many internal stimuli. But I think they thrive when they are also stimulated. Especially in those different sensory ways.

This quote gave an insight into the teaching method of Waldorf schools. This teaching method focuses on movement, creativity and variety as tools for cognitive learning. Waldorf schools are convinced that movement, variety and creativity give children more space to develop themselves. In this quote, the teaching method is mentioned as stimulating children diagnosed as having ADHD. This internal supervisor mentioned that it is beneficial for children to be externally stimulated with movement and creativity during the lessons, for it helps them to cope with their internal stimuli and helps them to focus during the lessons. Therefore, external stimulation helps them to thrive in school. Moreover, the other internal supervisors mentioned this teaching method as one of the reasons there were less diagnosed children at their schools. The second institutional factor, mentioned by the three internal supervisors interviewed for this study, resulting in fewer children with diagnosed ADHD at their schools was their discretion in mentioning an ADHD diagnosis. All three internal supervisors mentioned that their schools were not against an ADHD diagnosis. They mentioned that the severity of the ADHD symptoms played a big role in their actions. Not all children showing symptoms of ADHD were being diagnosed at these schools. A quote by one of these internal supervisors showed what really influenced her actions:

If the problem behavior is of such a nature that it seems to influence the development of the child, then I recommend parents to look into a diagnosis.

This quote showed the discretion of this internal supervisor when mentioning an ADHD diagnosis. She mentioned that she looked at the severity of the symptoms of ADHD and took that into consideration before mentioning the diagnosis to parents. The other supervisors mentioned something of the same nature. Therefore, it could be said that only the parents of children with severe ADHD symptoms would get advised to look into an ADHD diagnosis at these schools. The third institutional factor the internal supervisors mentioned with the quantitative data, but also when interviewed, was the Anthroposophical view on ADHD. This study showed there were Waldorf schools where no child was diagnosed as having ADHD for these schools did not believe in an ADHD diagnosis. Two different reasons were given for this by internal supervisors working at Waldorf schools where this belief did not withhold them from advising parents to look into an ADHD diagnosis. Therefore, they mentioned this about other Waldorf schools in the Netherlands. The first reason, mentioned by one of these internal supervisors interviewed for this study was:

Some think that from the Anthroposophical point of view you look at ADHD differently: ADHD is only seen as a regular fashion phenomenon and that you simply have more energetic and quieter children. This has been said for a long time Waldorf schools, this child is a dreamer and still has to wake up.

This quote showed that at some Waldorf schools the Anthroposophical view on children was that all children were different. Some were more energetic and others were quieter. This was not believed to be a reason to intervene or to let them be diagnosed. For, ADHD was a new label given to children who were a little different than others. Therefore, at Waldorf schools these children were given the time and space to develop themselves. The second Anthroposophical view that resulted in no ADHD diagnosed children at different Waldorf schools was:

ADHD is, in a certain way, an immaturity of the brain. This could lead to an imbalance between what a child could do cognitively and what he could do movement wise, which could make it look like ADHD because the brain is not completely matured yet.

This quote showed another Anthroposophical view on ADHD. This time it was mentioned that ADHD was merely the term given to the disparity in maturation between the motorical and cognitive functioning of the child. These two terms are used in the Anthroposophical view on human beings. The Anthroposophical view on human beings

mentions a threefold structure in which the nerve-sense system, which is linked to the cognitive functioning, and the metabolic-limb system which is linked to movement, are part of two different levels. Therefore, according to the Anthroposophical view on human beings, it seems that when a disparity in maturation occurs between those levels, certain symptoms will show. A child should be given more time to mature these levels to overcome this disparity. Especially at the Waldorf schools where ADHD is seen as a disparity in maturation between the nerve-sense system and the metabolic-limb system, this maturation process is mentioned to parents.

The opinions of internal supervisors and Waldorf schools were diverse when it came to the treatment of ADHD. As seen in the quantitative data, the majority of the diagnosed children used medication as a treatment. Most internal supervisors did not say anything about the opinion of their school on medication. One internal supervisor from the quantitative research mentioned her school was critical about medication. The internal supervisors interviewed for this research mentioned that, on the whole, Waldorf schools were somewhat reserved when it came to medication as a treatment for ADHD. This was based on the Anthroposophical philosophy of Waldorf schools where they believe medication influences the child and muffles its feelings. Therefore, the first institutional factor observed that influenced parental care preferences was the Anthroposophical philosophy on medication. One internal supervisor mentioned the reason some internal supervisors and Waldorf schools really do not want children to use medication. In this quote, the internal supervisor said you a few times during her explanation. This you stood for the Waldorf schools and the internal supervisors of these schools:

You refer to the Anthroposophical image of the child in which you assume that a child has a physical, ether powers, an astral body and an I. And if you use medication those four will be very much influenced. The life forces of the child. A child's feelings will be muffled. You will influence the individuality of the child. You very much want to preserve the individuality of the child.

This quote shows the vision of the Anthroposophical view on human beings. The fourfold forming the human being are the physical body, the ether body, the astral body and the ego or I organization. These terms are specific for the Anthroposophical philosophy. Thereby, this fourfold forms an unique and individual human being. The administration of medication will harm the fourfold forming of the human being and

thereby the individuality of the child. Therefore, there are internal supervisors at Waldorf schools who would never advise parents to make the decision for their child to use medication as a treatment. According to the Anthroposophical philosophy, children should not be given ADHD medication. The second institutional factor influencing parental care decisions was according to this study the wellbeing of the children. Promoting the wellbeing of children was mentioned as a value of parents when they decided not to let their child be diagnosed as having ADHD. However, it can also be seen as a value of internal supervisors and Waldorf schools for they also highly value the wellbeing of children. The three internal supervisors interviewed for this research were not against medication for they saw the positive effects it had on children, especially the children with severe ADHD. One internal supervisor mentioned that a child who used medication once told her:

I am completely calm now. I can finally do something.

These children could indicate they had a clearer mind and could finally do their work. Therefore, she mentioned that if this were the case it was better to start medication early, especially because her experience was that if you give children medication at a young age they would not develop a negative self-image. Therefore, the wellbeing of children was also taken into consideration when advising parents on what treatment should be used.

The institutional factors mostly mentioned by internal supervisors when advising parents on diagnosis decision were: the teaching method of Waldorf schools, the discretion of internal supervisors in mentioning the possibility of a diagnosis and the Anthroposophical view on ADHD. The institutional factors mentioned by internal supervisors that influenced parents when making a treatment decision were: the Anthroposophical philosophy on medication and the wellbeing of the children. This information gave more of an insight into the institutional factors of Waldorf schools that influenced parents when making a diagnosis and treatment decision for their children. Although, the Anthroposophical philosophy on medication was mentioned as a reason for the use of less medicinal treatment, the quantitative data showed that the majority of the diagnosed children used medication. Therefore, it was possible that the Anthroposophical philosophy and the use of medication had more to do with the decision of parents not to diagnose their children so they did not have to make the

decision to give their children medication. This would also further explain the beliefs and values chapter of these results. For, the beliefs and values of Waldorf schools could have influenced the beliefs and values on treatment and therefore on the diagnosis of ADHD of parents. Thereby, these institutional factors explained the quantitative data of diagnosis and treatment use among children attending Waldorf schools even further.

5.2.c Social factors

The third chapter of these results was about the social factors influencing parental care decisions regarding the diagnosis and treatment of ADHD. This is a relatively short chapter. The results of the interviews and quantitative data showed little on this subject.

The social aspect of the diagnosis and treatment decisions of parents was not specifically expressed by any of the internal supervisors. Three out of four parents, on the other hand mentioned they sometimes talked about medication and non-medicinal treatment with other parents. One parent mentioned during the interview that she decided to give her child medicinal treatment. This was against the judgment of the people around her. Therefore, the first social factor observed in this study was social pressure. This quote by a parent demonstrates that clearly:

And you have to give your child medication against all people around you who do not understand that because they see such a quiet child.

This quote shows that the parent did not feel supported by the people around her in her decision to give her child medication. Her social network did not approve of her decision. However, according to the mother's experience, this did not influence her decision. She felt she had the autonomy of care for her child and did what she thought was best for her child. She felt she did not let the social pressure get to her and influence her decision. Another mother also talked about medication with others. However, her experience was the opposite from the mother mentioned above. Therefore, the second social factor found in this study was the social support of others on the decision made by the parents. This parent mentioned she talked about alternative medication with another mother:

The only thing I did was talk about it. About medication from Canada. Homeopathic medication. A boy from the class of my daughter started with it and his mother did not see any differences and stopped using that medication.

This quote showed that parents talked about alternative medication and therefore gave each other social support in the medication use of their children. Both parents considered alternative medication. One of the parents gave her child the medication but when they found out the medication did not have the expected effect they both decided not to give their children that medication. Social support strengthens parents in their decisions and, in this case, made this parent feel she made the right decision for her child.

On the whole, this study did not point out many social factors that influenced parent's decision on diagnosis or treatment. The factors that were mentioned were social pressure and social support. Social pressure did not influence this parent but could influence other parents in their diagnosis and treatment decision. Furthermore, it could be said that the social factors were also part of the beliefs and values of parents, for beliefs and values are not individual but group bound. Above all, this research showed that parents did talk to other parents about treatment and diagnosis. Therefore, when internal supervisors mentioned with the quantitative data that parents of their school would not let their child be diagnosed or use medication, the social factor could have contributed in this decision. Hence, the influence of a social factor should not be denied.

6. Conclusion

The aim of this study is to determine the factors that influence parental care decisions regarding the diagnosis and treatment of ADHD for their children attending a Waldorf school. First, a literature review was conducted to find the relevant concepts and theories on this topic. Three perspectives on ADHD were presented and their effect on the parental care decisions was evaluated. Secondly, a conceptual framework was established in which the ethics of care concept was presented explaining how this concept leaves room for parents to care for their child the way they think benefits them best. Subsequently, these insights were subjected to a mixed method research, in which parents of children diagnosed as having ADHD have been interviewed, internal supervisors of Waldorf schools have been interviewed and the data from the Waldorf schools about the amount of children diagnosed as having ADHD using medicinal and non-medicinal treatment was collected. The main question, which is the foundation of this study, is as follows: "How do parents care for their child diagnosed as having ADHD attending a Waldorf school?" To answer this question, the parental care decisions and factors influencing that decision will first be summarized. Afterwards, an inclusive summary is presented in which the empirical findings and the theoretical and conceptual framework of this study are integrated, and the sub-questions and main question of this research are answered.

6.1 Parental care decisions

The quantitative study shows that, of the children attending the 34 Waldorf schools, 1,28% was diagnosed as having ADHD. When adding the amount of children who were mentioned by some of these schools as showing symptoms of ADHD it was seen that this average percentage was 1,99%. This percentage was far below the average percentage of 5% of the children diagnosed as having ADHD in the Netherlands. Secondly, the quantitative data showed that of the 27 Waldorf schools where children were diagnosed as having ADHD, the percentage of these children diagnosed as having ADHD was relatively high when it came to the usage of medicinal treatment. This data showed that 61,7% of the children diagnosed as having ADHD and attending these Waldorf schools used a medicinal treatment in the forms of methylphenidate and occasionally dexamphetamine. Thirdly, given the data found on the children diagnosed as having ADHD and using medication it was suspected that the amount of children attending

Waldorf schools using non-medicinal treatment was lower than those using medicinal treatment. This research showed that the percentage of children diagnosed as having ADHD using a form of non-medicinal treatment and attending the participating Waldorf schools in the Netherlands was 25%. The data of the children diagnosed as having ADHD using medication and non-medicinal treatment did not add up to 100%. This was explained by the fact that not all of the children diagnosed as having ADHD and attending Waldorf schools used a form of treatment, either medicinal or non-medicinal. 13,3% of the diagnosed children attending the participating Waldorf schools did not use any form of treatment at all. Furthermore, this study showed that there are children attending the Waldorf schools who show symptoms of ADHD. This research was not particularly focused on children who show symptoms of ADHD. Therefore, the percentages and amounts of children showing symptoms of ADHD are expected to be much larger than shown in this study.

6.2 Factors influencing parental care decisions

With regard to the beliefs and values of parents when making a diagnosis and treatment decision, first of all, factors on the parental beliefs and values in regards to their care decision on the diagnosis of ADHD can be distinguished. It appeared that parents see the wellbeing of their child as one of their main values when they decide not to let their child be diagnosed as having ADHD. This was based on the unknown that an ADHD diagnosis entails for them and what it would do to their child. Therefore, when parents took this into consideration they decided it was best for their child's wellbeing if he was not diagnosed as having ADHD. Second, parents want to be in control of the care of their children. They believed that when their child was diagnosed as having ADHD this would automatically result in them having to give them medication, which makes them feel like they lose the control to care for their child the way they want. Therefore, in their understanding, it is a form of power struggle between parents and psychiatrists. Psychiatrists should thus find a way to make parents feel they do not lose the control over the care for their child. Parents value their control over the care of their child and take this into account when making the decision not let their child be diagnosed as having ADHD so they do not feel forced into giving their child medication as a treatment. Third, children's right of educate care was mentioned as a contrasting value to the above mentioned ones. This value was based on the right of all children to receive the care they

need. The value children's right of educate care was targeting the low amount of diagnosed children at Waldorf schools and the unfairness of them not receiving the care they need as a result of not being diagnosed as having ADHD.

Secondly, the parental beliefs and values in regard to their care decision on the treatment of ADHD can be distinguished. The values parents take into account when making a treatment decision for their child diagnosed as having ADHD were purity and quality of life. These two values were mentioned as values with an opposite outcome. First of all, purity was mentioned as a value parents had when not opting for medicinal treatment for their child. It was mentioned that medication was seen as impure, chemical and unnatural and therefore, harmful for children. Secondly, quality of life was mentioned by parents seeing this as a value to give their child diagnosed as having ADHD medication for it would improve their quality of life. It was argued that medication helped children to have a more carefree life and made it possible for them to focus more in class, therefore, it could help them towards a more prosperous future.

The second set of factors affecting parental care decisions on diagnosis and treatment as distinguished in this study are related to the institutional context. The institutional factors as mentioned by internal supervisors influencing parental diagnosis decision were: the teaching method at Waldorf schools, the discretion of internal supervisors in mentioning the possibility of a diagnosis and the Anthroposophical view on ADHD. First, the teaching method of Waldorf schools was mentioned to be more stimulating for children showing symptoms of ADHD. The variety, action and creativity on which this teaching method is based, were believed to give children more space to develop themselves and help them cope with their internal stimuli. Therefore, less children were diagnosed as having ADHD due to this teaching method. And, the internal supervisors interviewed for this research mentioned they were somewhat reserved towards the parents in mentioning the option to look into an ADHD diagnosis. The severity of the ADHD symptoms and the hindrances in the development of the child were the factors on which the internal supervisors based their advice to parents. In the third place, the Anthroposophical view regarding human beings and ADHD, supported strongly by an unspecified number of Waldorf schools, resulted in no diagnosed children at these schools. For, the Anthroposophical view at these schools determined that ADHD symptoms were merely the result of a disparity in maturation between the nerve-sense system and the metabolic-limb system. All children are allowed to be different and some

children need more time than others to develop themselves.

The institutional factors mentioned by internal supervisors that influenced parents when making a treatment decision were: the Anthroposophical philosophy on medication and the wellbeing of the children. First, the Anthroposophical philosophy on medication was that this medication was a drug that could change a child completely and was doing the direct opposite of what the Anthroposophical image of the child entailed. And, the wellbeing of the children was highly valued by internal supervisors and schools, therefore, internal supervisors would advise parents to opt for medicinal treatment when necessary to prevent children in developing a negative self-image.

Finally, factors associated with the social context were found to be of influence of the parental care decisions regarding the diagnosis and treatment of ADHD. First, this concerns factors associated with the social pressure parents receive when making a certain care decision. This study showed that social pressure could result in parents having to stand even stronger in their decision to give their child medication. However, it is believed that social pressure could also persuade parents into deciding to give their child a different kind of treatment. Secondly, social support, the opposite of social pressure, which strengthens parents in their treatment decision and makes them feel they made the right decision for their child. Moreover, it has to be taken into account that beliefs and values are group bound. Therefore, the social factor plays a role in the beliefs and values of parents.

6.3 Integration of the theoretical and empirical factors

In this section, the five sub-questions that have been formulated to contribute to answering the main-research question will each be discussed. Subsequently, the final conclusion is stated by answering the main-question of this study.

1) What percentage of children diagnosed as having ADHD and attending a Waldorf school receive medicinal treatments?

It became clear from the theoretical framework that parents and teachers favor medication over behavioral therapy when it comes to improving the hyperactivity of the child diagnosed as having ADHD. However, when it comes to social skills, classroom observed behavior, parent-child relationships and the academic achievements of the child behavioral therapy is favored (Pelham, 1999). According to the research of

Brinkman et al., parents struggle to find a balance between the benefits and concerns they have with the different treatments of ADHD. The research mentioned that these treatment preferences are influenced by a variety of factors (Brinkman, et al., 2009). It therefore, was not surprising that, as mentioned in the introduction of this study, over the years, the use of medicinal treatment among children diagnosed as having ADHD was fluctuating. Methylphenidate-based medication was used the most. The increase of medication use was measured between 2005 and 2012 with a 1,8 till 3,9 percent growth in the Netherlands (Bachmann, et al., 2017). However, recent research showed that the overall use of methylphenidate as ADHD medication among children aged 6 till 15 has been decreasing since 2013. In 2018 this use was seen as 38% of all children diagnosed as having ADHD used methylphenidate as a form of medication. In 2014 this was still at 45%. This study, however, also showed that the use of dexamphetamine was increasing since 2017 (SFK, 2019). Furthermore, the study did not look into the use of other types of medication such as Atomoxetine, Guanfacine and Bupropion. Thus, it can not be firmly concluded that the overall use of medication among children diagnosed as having ADHD is decreasing.

As mentioned by Harmsen et al., parents of children attending Waldorf schools take two more factors into account when making a treatment decision. These factors are, lifestyle and perception of health (Harmsen et al., 2012). These findings could be confirmed by this study. Lifestyle and perception on health made parents critical towards a diagnosis and medication. This was seen in the findings, for far less children were diagnosed as having ADHD than the average in the Netherlands: 1,28%. However the data on medicinal treatment showed that of this 1,28%, 61,7% used medication as a treatment for ADHD. For these parents, the benefits and concerns of the treatment were in favor of medicinal treatment. Whether this percentage used to be higher and has also been decreasing over the years is not measured in this research. It has to be taken into account that this 61,7% is for all the types of medicinal treatment and not just the methylphenidate-based medication. However, methylphenidate was mentioned in this study to be the most used medication by the children diagnosed as having ADHD attending the participating Waldorf schools.

On the whole, less children than average in the Netherlands were diagnosed as having ADHD (1,28%). This was due to the beliefs and values of parents, the institutional

factors of the Waldorf schools and the social factors that influenced the perception of health and lifestyle of the parents of these children. Furthermore, the majority of the parents whose children were diagnosed as having ADHD and were attending Waldorf schools had a care preference for medicinal treatment, which resulted in 61,7% of these children using medicinal treatment due to the factors influencing parental care preferences.

2) What percentage of children diagnosed as having ADHD and attending a Waldorf school receive non-medicinal treatments?

It was emphasized by the metastudy of Pelham that parents and teachers favor medication over behavioral therapy when looking at diminishing the hyperactivity of the children diagnosed as having ADHD. However, this study also showed that non-medicinal treatments were favored when looking at the improvement of social skills, classroom observed behavior, parent-child relationships and the academic achievements of the children diagnosed as having ADHD (Pelham, 1999).

Perception of health and lifestyle are considered of great value by parents of Waldorf school children when making a care decision for their child. It was expected that, because of the confidence parents have in the health of their child and their own healing powers, they do not want to intervene in those and therefore more often make the decision to give their children non-medicinal treatment (Harmsen, Ruiters, Paulussen, Mollema, Kok & de Melker, 2012). This could not be confirmed by this study. This study showed that of the 1,28% diagnosed children attending Waldorf schools 32,75% used non-medicinal treatments. Moreover, some children diagnosed as having ADHD used no treatment at all. However, when taking into account that parents of children attending Waldorf schools do not want to intervene in the self-healing powers of their children because of their perception on health, the low amount of diagnosed children could be explained.

3) How do beliefs and values influence parental care preferences when their child is diagnosed as having ADHD and attending a Waldorf school?

The beliefs and values influencing parental care preferences are, as mentioned before, the lifestyle of these parents and their perception on health. Lifestyle is important to these parents for they make sure their children grow up in a healthy and peaceful environment. The parents believe this has a positive effect on their children. Their perception on health is: their children are strong and able to heal themselves. Therefore, they do not want to intervene (Harmsen, Ruiter, Paulussen, Mollema, Kok & de Melker, 2012).

Especially when looking at the perception of health, it was seen in the comments accompanying the quantitative data obtained via internal supervisors and via interviews with parents and internal supervisors that parents did not want their child to be diagnosed as having ADHD. This was seen through their eyes as a hindrance in the wellbeing of their child when diagnosed as having ADHD. Furthermore, parents believed that when their child would be diagnosed as having ADHD their autonomy of care would be taken away from them and they would be forced into giving their child medication as a treatment. Parents' perception of health as mentioned above was concurred in this study, for it was mentioned multiple times by internal supervisors that parents of Waldorf school children saw their child as pure and medication was seen as impure and chemical which would harm their child. They believed the health of their child would be influenced in a bad way when they used medicinal treatment. However, parents made the decision to give their children medicinal treatment when they believed this to be beneficial to their quality of life. All the above mentioned beliefs and values found their place in care ethics as shown in the conceptual framework. Care ethics takes into account the need of the child and the responsibility a parent feels to respond to these needs. Therefore, the reasoning of parents about their care decision is seen as important (Sander-Staudt, nd.). Moreover, care ethics created the space for these parents to follow up on what they believed fit best for their child by not just following the dominant theories and the universally accepted rules (Held, 2006). Therefore, it leaves room for other theories in care.

4) How do institutional factors influence parental care preferences when it comes to their child diagnosed as having ADHD and attending a Waldorf school?

As mentioned in the literature review, the Anthroposophical philosophy founded by Rudolf Steiner is the basis on which the educational program of Waldorf schools is based (Harmsen et al., 2012). The internal supervisors mentioned this teaching method of Waldorf schools as being focused on movement, variety and creativity and therefore, leaving more space to children diagnosed or showing symptoms of ADHD to cope with their internal stimuli. Therefore, according to them, fewer children were diagnosed as having ADHD because the teaching method helped them to cope with their internal stimuli.

In addition, the literature review showed, there are three main views on ADHD. These views were: ADHD as a neurodevelopmental disorder, ADHD exists but is over-diagnosed and ADHD due to medicalization (Tait, 2005). One of the sub-statements of this view was ADHD does not exist for it was simply normal child behavior (Tait, 2005; Keane, 2013). Internal supervisors mentioned that an unknown amount of Waldorf schools concurred with this statement. At these schools ADHD symptoms were seen as a disparity in maturation between cognitive functioning and movement resulting in normal child behavior. These children needed more time to mature to overcome this disparity. ADHD was also seen as an immaturity of the brain, which also needed more time to mature. Therefore, at these schools parents were not given the advice to look into an ADHD diagnosis for their child.

Furthermore, as mentioned in the introduction, the Anthroposophical concept of the human being claims that the human organism is formed by four different levels of forces. These forces are integrated into three major systems in human beings: the nerve-sense system, the motor-metabolic system and the rhythmic system. These forces and systems are taken into account when looking at medication. Anthroposophical medication is based on helping the body to heal itself (Kienle, et al. 2013; Längler & Seifert 2012). Internal supervisors mentioned these forces and that at some Waldorf schools therefore, ADHD medication was not advised to parents for it was believed to alter the child's individuality and muffle its feelings by influencing these forces. However, the internal supervisors also mentioned that at other schools they had experienced the effects of medication and saw what it could do for some children. Therefore, they advised parents to look into medication to prevent their children in developing a negative self-image.

5) How do social factors influence parental care preferences when it comes to their child diagnosed as having ADHD and attending a Waldorf school?

The social network has been proven to be an important influence in parental care decisions when it comes to the diagnosis and treatment of their child. The social relations influence parental care decisions in either pressuring them into making a certain decision or pressuring parents to change their mind about certain topics. Furthermore, social relations influence parental care decisions in the social support they feel of people around them with their care decisions for their child. "Care ethics seek to maintain relationships by contextualizing and promoting the well-being of care-givers and care-receivers in a network of social relations (Sander-Staudt, nd)." Therefore, care ethics values the relations of people, and thus their social status (Held, 2006). The social factors, social pressure and social support have, according to this study, an influence on parental care preferences. Furthermore, these social factors have an influence on the beliefs and values of parents for these are mostly group bound.

How do parents care for their child diagnosed as having ADHD attending a Waldorf school?

Based on the findings, it can be concluded that parents of children showing symptoms of ADHD and attending Waldorf schools mostly withhold from an ADHD diagnosis. The exact number of children showing symptoms of ADHD was not measured in this study but is expected to be much higher than the amount of children diagnosed as having ADHD. When these parents have made the care decision to let their child be diagnosed as having ADHD, the majority made the decision to give their child medicinal treatment. Fewer parents made the decision to give their child diagnosed as having ADHD non-medicinal treatment. Based on these findings, it appears that the factors of main influence on the parental care preferences regarding their children diagnosed as-, or showing symptoms of ADHD are related to the beliefs and values of parents, Waldorf school as an institution and the social relations of parents.

In regard to the beliefs and values, these factors can be attributed to parents valuing the wellbeing of their child, their parental autonomy of care, the right of educate care of children, the purity of their child and the quality of life of their child. The factors

related to the institutional context include the teaching method of Waldorf schools, the discretion of internal supervisors in mentioning the possibility of a diagnosis and the Anthroposophical view on ADHD. Furthermore, the Anthroposophical philosophy on medication and the wellbeing of the children were institutional factors influencing parental care decisions on treatment. Finally, considering the social context the factors social pressure and social support were highlighted.

Following the outcomes of this study that answered the main research question a link will be made with the theory as mentioned in the introduction to further examine these outcomes.

It can be argued that according to the way care is established related to children diagnosed as-, or showing symptoms of ADHD, parents and Waldorf schools can mostly be placed into two visions on ADHD. The first being ADHD exists but is overly diagnosed, therefore, diagnosis and treatment should be carefully considered (Batstra, 2012). This was mentioned by some internal supervisors and can be seen in the quantitative data analysis for a smaller amount of children were diagnosed as having ADHD than average in the Netherlands. Secondly, ADHD is due to medicalization for it is an unreal invention and a label placed on normal child behavior (Tait, 2005; Keane, 2013). In line with these literature sources, internal supervisors mentioned that some Waldorf schools and some parents at these schools support this opinion. The Anthroposophical view on human beings as a fourfold structure followed by the threefold structure and the Anthroposophical view on medication influencing those structures, have contributed to this opinion.

Furthermore, as argued by Held (2006) care ethics emphasizes that the influence of moral sentiment, interdependent human relationship and the influence of context are influencers of care (Held, 2006). This can be related to the beliefs and values, social factors and the influence of Waldorf schools as an institution as influencers of parental care preferences. Care ethics perceive care motivation, the moral emotion of the caregiver, their moral deliberation when making care choices and their reasoning about particular situations as being important factors in care decisions (Sander-Staudt, nd.). The social factors and institutional factors all have an influence on the beliefs and values of parents for these are group bound. Therefore, parents are part of a group when they make the decision for their child to attend a Waldorf school and some of the Waldorf

school institutional factors will influence their beliefs and values. Furthermore, the social factors will also influence parents' moral deliberation to care, their moral emotion and care motivation. Lastly, Care ethics reject the dominant moral views and dominant theories. Therefore, it questions the accepted rules and priority given to them (Held, 2006). This can be related to the Anthroposophical view on human beings and medication and therefore leaves room for these to be taken into account when making an diagnosis and treatment decision.

This study filled the previous mentioned knowledge gap for it indicated the parental care preferences of parents whose child was diagnosed as-, or showed symptoms of ADHD and attended a Waldorf school. Furthermore, it gave an insight into the influencing institutional factors of Waldorf schools on parental care preferences for children diagnosed as-, or showing symptoms of ADHD. Moreover, it showed other factors influencing parental care preferences on diagnosis and treatment of ADHD. Lastly, this study provided an insight into the prevalence as well as the difference in prevalence of children diagnosed as having ADHD and attending Waldorf schools using regular medicinal treatment, other non-medicinal treatments or no treatment.

7. Discussion

This study is aimed at displaying an elaborate perspective on factors influencing parental care preferences regarding their children diagnosed as, or showing symptoms of ADHD and attending Waldorf schools. The main factors concerning this have been attempted to be exposed in this study by doing an elaborate literature review and conceptual understanding as well as an empirical study. However, a few remarks can be placed in this research. This relates to the choices made during the process of this research and the conditions under which these have been carried out. Therefore, this chapter will highlight the important events that affected the obtained quantitative and qualitative results and the conclusion drawn from these results. First, the questioning of the quantitative data will be discussed. Then, the selection process of the internal supervisors and parents for this research will be reflected upon. Thirdly, bias commenced by interviewing is considered. Fourth, the interpretation of the findings will be examined. Finally, the support and complementation of future research to the findings of this study is mentioned.

In this study, all elementary Waldorf schools in the Netherlands were selected for the quantitative data analysis. The internal supervisors of these schools were sent an invitation to participate. These internal supervisors were asked to participate in this study by sending the information of their school on the amount of children diagnosed as having ADHD and using either medicinal or non-medicinal treatment. ADHD was used as the overall term as it is used during diagnosis nowadays. Therefore, according to the DSM-IV and DSM-5 there are three types of ADHD (American Psychiatric Association, 2013 & Willcutt, 2012). One of these types is the ADHD-I type, which is better known under the name ADD, as was used in the earlier DSM-III (Morgan, Hynd, Riccio, & Hall, 1996). This resulted in some misunderstanding with the internal supervisors at the Waldorf schools. Some of the internal supervisors asked whether the information on only ADHD was wanted for this research or if the information on ADD was also intended. Therefore, it is suspected that some internal supervisors might only have given the information of children diagnosed as having ADHD-H and/or C and not on the ADHD-I type. As a result, the outcomes of this study might be inaccurate, for some information might be lost due to terminologies.

The parents interviewed for this research can be distinguished as a non-probability sample. This means that a sample is generated to give the best possible

insights into the phenomenon under investigation. This was particularly useful for there was no data yet on this topic (Uprichard, 2013). Convenience sampling was therefore used for this research (Etikan, Musa & Alkassim, 2016). The researcher was not able to access a lot of parents via the internal supervisors. Two internal supervisors were interviewed for they had a child diagnosed as having ADHD. One parent was interviewed with the help of an internal supervisor and the parents of one child were interviewed for they were contacted through a teacher. Many internal supervisors were asked via e-mail, telephone calls and reminders if they knew parents of children diagnosed as having ADHD or showing symptoms of ADHD and using either medicinal, non-medicinal or no treatment at all and interested in participating in this research by telling their story. This question resulted in very little response. That is why convenience sampling occurred. Four parents were willing to share their experience with ADHD diagnosis and treatment. Therefore, these participants did not fully reflect the population due to the small amount of interviews and the un-diversity of participants. For, all parents had children diagnosed as having ADHD who used medicinal treatment except for one who used non-medicinal treatment. However, with the data obtained from the information given by the internal supervisors and via the quantitative part of this study, the overall extent to which these participants are unrepresentative of the total population of this study is limited.

Next to the selection bias, interview bias also occurred during both types of interviews: the semi-structured interviews with internal supervisors and the BNIM interviews with parents (Pannucci & Wilkins, 2010). Interviewer bias is more prone to occur when the interviewer is aware of the status of the interviewee. Therefore, the interviewer is more prone to put an accent on questions he or she expects a certain outcome on. Furthermore, all interviewers have an effect on the interview. This interviewer had an effect on the interview for she used to attend a Waldorf school. Therefore, the interviewer was acquainted with some of the Anthroposophical terms used by the internal supervisors and the teaching method of the Waldorf schools. This could have influenced the outcomes of the results for the interviewer knew the terms and the teaching method and might not have asked enough of an explanation on these. Besides, the interviewer was not a parent, which influenced the interview for bias occurs when interviewer and respondent have different statuses. This produces biased responses (Dohrenwend, Colombotos & Dohrenwend, 1968). Lastly, the interviewer had

her own point of view on ADHD diagnosis and treatment. This could have unconsciously influenced the interview. Little could be done to prevent this from happening. However, the researcher tried as much as possible not to fill in blanks or put words in the participants' mouth. Above all, this study was focused on parents and an attempt has been made to primarily look at what these parents indicated as being important during the analysis of the data.

The quotes of the participants were translated from Dutch to English. This caused some bias in the study. For, when translating the citations into another language, the researcher had to make an interpretation of the citation. The wording of sentences is different in Dutch and English. Therefore, the bias that was already present when interpreting the citation in the same language was extended when translated. The data obtained in this research forming the conclusion was the result of the interpretation and perspective of the researcher. These perspectives and interpretations have been influenced by the research done in the literature study and the conceptual framework. However, the researcher has done as much as possible in a small timeframe to explore this topic.

In short, the questioning of the quantitative data, the selection process of the parents participating in the qualitative study, the interviewer bias and the subjective interpretation of the qualitative data have biased the findings and conclusions of this research. Future research can be focused on improving the shortcomings of this study. First, including a higher number of participating schools in the quantitative study will improve the saturation of the data and improve the generalizability of the obtained data. Second, including a higher number of parents of children diagnosed as having ADHD and using either non-medicinal treatment or no treatment will give more information on this topic. Third, future research should also be focused on parental care preferences for children showing symptoms of ADHD and attending a Waldorf school. This should be researched as an expansion of both the quantitative data research and the qualitative data research of this study and will give more insight on this topic. The knowledge this study has given could be integrated into other studies based on parental care preferences for children diagnosed as having ADHD. The overall knowledge given by this study could result in more effective care strategies and policies. For, the study indicated lifestyles, values and convictions to be influencing parental care preferences on ADHD diagnosis and treatment. This insight makes it possible for care strategies to be adjusted

to these lifestyles, values and convictions. Furthermore, the study helps to understand parents who do not want their child to be diagnosed as having ADHD or do not want their child to use medicinal treatments.

8. List of references

American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5)*. Washington, DC: American Psychiatric Association.

Bachmann, C. J., Wijlaars, L. P., Kalverdijk, L. J., Burcu, M., Glaeske, G., Schuiling-Veninga, C. C., ... & Zito, J. M. (2017). Trends in ADHD medication use in children and adolescents in five western countries, 2005–2012. *European Neuropsychopharmacology*, *27*(5), 484-493.

Barkley, R. A., McMurray, M. B., Edelbrock, C. S., & Robbins, K. (1990). Side effects of methylphenidate in children with attention deficit hyperactivity disorder: a systemic, placebo-controlled evaluation. *Pediatrics*, *86*(2), 184-192.

Batstra, L. (2012). *Hoe voorkom je ADHD? Door de diagnose niet te stellen*. Amsterdam: Uitgeverij Nieuwezijds.

Batstra, L., Nieweg, E. H., & Hadders-Algra, M. (2014). Exploring five common assumptions on Attention Deficit Hyperactivity Disorder. *Acta Paediatrica*, *103*(7), 696-700.

Barry, A. M., & Yuill, C. (2016). *Understanding the sociology of health*. London: Sage.

Brinkman, W. B., Sherman, S. N., Zmitrovich, A. R., Visscher, M. O., Crosby, L. E., Phelan, K. J., & Donovan, E. F. (2009). Parental angst making and revisiting decisions about treatment of attention-deficit/hyperactivity disorder. *Pediatrics*, *124*(2), 580-589.

del Campo, N., Chamberlain, S. R., Sahakian, B. J., & Robbins, T. W. (2011). The roles of dopamine and noradrenaline in the pathophysiology and treatment of attention-deficit/hyperactivity disorder. *Biological psychiatry*, *69*(12), e145-e157.

Dohrenwend, B. S., Colombotos, J., & Dohrenwend, B. P. (1968). Social distance and interviewer effects. *Public Opinion Quarterly*, *32*(3), 410-422.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4.

Fusar-Poli, P., Rubia, K., Rossi, G., Sartori, G., & Balottin, U. (2012). Striatal dopamine transporter alterations in ADHD: pathophysiology or adaptation to psychostimulants? A meta-analysis. *American Journal of Psychiatry*, 169(3), 264-272.

Hamre, H. J., Witt, C. M., Kienle, G. S., Meinecke, C., Glockmann, A., Ziegler, R., ... & Kiene, H. (2010). Anthroposophic therapy for attention deficit hyperactivity: a two-year prospective study in outpatients. *International journal of general medicine*, 3, 239.

Harmsen, I. A., Ruiter, R. A., Paulussen, T. G., Mollema, L., Kok, G., & de Melker, H. E. (2012). Factors that influence vaccination decision-making by parents who visit an anthroposophical child welfare center: a focus group study. *Advances in preventive medicine*, 2012.

Harpin, V. A. (2005). The effect of ADHD on the life of an individual, their family, and community from preschool to adult life. *Archives of disease in childhood*, 90(suppl 1), i2-7.

Hawthorne, S. C. (2010). Institutionalized intolerance of ADHD: sources and consequences. *Hypatia*, 25(3), 504-526.

Hedgecoe, A. M. (2004). Critical bioethics: beyond the social science critique of applied ethics. *Bioethics*, 18(2), 120-143.

Held, V. (2006). *The ethics of care: Personal, political, and global*. Oxford University Press on Demand.

Keane, H. (2013). Medicalization or medicine as culture? The case of attention deficit hyperactivity disorder. In *When Culture Impacts Health: Global Lessons for Effective Health Research*, Elsevier, USA, pp. 57-65.

Kienle, G. S., Albonico, H. U., Baars, E., Hamre, H. J., Zimmermann, P., & Kiene, H. (2013). Anthroposophic medicine: an integrative medical system originating in Europe. *Global advances in health and medicine*, 2(6), 20-31.

King, S., Waschbusch, D. A., Pelham Jr, W. E., Frankland, B. W., Andrade, B. F., Jacques, S., & Corkum, P. V. (2009). Social information processing in elementary-school aged children with ADHD: Medication effects and comparisons with typical children. *Journal of abnormal child psychology*, 37(4), 579-589.

Längler, A., & Seifert, G. (2012). Anthroposophic medicine. *Integrative pediatric oncology* (pp. 29-43). Springer, Berlin, Heidelberg.

Morgan, A. E., Hynd, G. W., Riccio, C. A., & Hall, J. (1996). Validity of DSM-IV ADHD predominantly inattentive and combined types: relationship to previous DSM diagnoses/subtype differences. *Journal of the American Academy of Child & Adolescent Psychiatry*, 35(3), 325-333.

Nissen, S. E. (2006). ADHD drugs and cardiovascular risk. *New England Journal of Medicine*, 354(14), 1445-1448.

Pannucci, C. J., & Wilkins, E. G. (2010). Identifying and avoiding bias in research. *Plastic and reconstructive surgery*, 126(2), 619.

Pelham Jr, W. E. (1999). The NIMH multimodal treatment study for attention-deficit hyperactivity disorder: Just say yes to drugs alone?. *The Canadian Journal of Psychiatry*, 44(10), 981-990.

Pereira, R. R., Kooij, J. J. S., & Buitelaar, J. K. (2011). ADHD zeker geen modegril. *Med Contact*, 66, 130-33.

Polanczyk, G., De Lima, M. S., Horta, B. L., Biederman, J., & Rohde, L. A. (2007). The worldwide prevalence of ADHD: a systematic review and metaregression analysis. *American journal of psychiatry*, *164*(6), 942-948.

Polanczyk, G. V., Willcutt, E. G., Salum, G. A., Kieling, C., & Rohde, L. A. (2014). ADHD prevalence estimates across three decades: an updated systematic review and meta-regression analysis. *International journal of epidemiology*, *43*(2), 434-442.

Sander-Staudt, M. (n.d.). Care ethics. Retrieved September 17, 2018 from <https://www.iep.utm.edu/care-eth/#H10>.

Stichting Farmaceutische Kerngetallen (SFK). (2019, 25 January). Sterkere daling aantal jonge gebruikers methylfenidaat. *Pharmaceutisch weekblad*, *154*(5). Retrieved February 4, 2018 from <https://www.sfk.nl/publicaties/PW/2019/sterkere-daling-aantal-jonge-gebruikers-methylfenidaat>.

Tait, G. (2005). The ADHD debate and the philosophy of truth. *International Journal of Inclusive Education*, *9*(1), 17-38.

Tait, G. (2001). Pathologising difference, governing personality. *Asia-Pacific Journal of Teacher Education*, *29*(1), 93-102.

Uprichard, E. (2013). Sampling: Bridging probability and non-probability designs. *International Journal of Social Research Methodology*, *16*(1), 1-11.

Wengraf, T., & Chamberlayne, P. (2006). Interviewing for life-histories, lived situations and personal experience: The Biographic-Narrative Interpretive Method (BNIM) on its own and as part of a multi-method full spectrum psycho-societal methodology. *Short Guide to BNIM interviewing and interpretation*.

Willcutt, E. G. (2012). The prevalence of DSM-IV attention-deficit/hyperactivity disorder: a meta-analytic review. *Neurotherapeutics*, *9*(3), 490-499.

9. Appendices

Appendix 1 – semi-structured interview questions for the interviews with the internal supervisors.

What is the view of this Waldorf school on ADHD?

Can you tell me something about your personal view on ADHD?

Can you tell me something about what you do when a child shows symptoms of ADHD at this school?

What advice do you give parents when their child is showing symptoms of ADHD? What does that advice depend on?

What considerations do parents have when their child shows symptoms of ADHD? Letting them be diagnosed/ not letting them be diagnosed? What influences their decision?

What types of treatment do children diagnosed as having ADHD and attending this school use?

What are the convictions of parents when they decide to give their child, diagnosed as having ADHD, medicinal treatment? What influences their decision?

What are the convictions of parents when they decide to give their child, diagnosed as having ADHD, non-medicinal treatments? Do you know what influences their decision?