MASTER THESIS

The health of children and their parents living in poverty in Twente

The effects of the intervention "Healthy Children in Low-income Families" on the six dimensions of positive health

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Preface

In front of you lies the report of my master thesis entitled: “The health of children and their parents living in poverty in Twente”. This thesis was written as part of the master Health Sciences at the University of Twente. I have finished the specialization track Optimization and Innovation of Healthcare Processes. Now the master thesis has come to an end, I have learned a lot about doing research and I am interested in doing research more than ever!

First of all, I would like to thank my supervisors from the University of Twente, Magda Boere-Boonekamp and Ariana Need, for their assistance, great support and enthusiasm for introducing me into the field of research. Their extensive feedback and support during times when I was struggling.

Second, I would like to thank my external supervisor Astrid Altena from the Academic Collaborative Centre Youth Twente. She has supported and guided me through the data analysis phase. I also would like to thank the other researchers from the Academic Collaborative Centre Youth for their enthusiasm about the study “Healthy Children in Low-income Families” and introducing me into the field of practical research.

Finally, I would like to thank my family, friends and fellow (master) students for their support, advice, and trust in me. They helped me to relax during stressful times.

I hope you enjoy reading this thesis

Lena Grevinga
Enschede, August 2019

Abstract

Introduction: Poverty and health are closely related. Poverty has a negative impact on the health of individuals, especially on children. Since May 2018, the Academic Collaborative Centre Youth Twente has piloted an intervention called "Healthy Children in Low-income Families". The intervention is focussed on families in Twente living on or below the minimum income threshold. This master thesis is part of a larger study of the Academic Collaborative Centre Youth Twente and is focussed on the effects of poverty on the health of children and their parents living in Twente. The effects of the intervention on the health of the parents and children were determined via the six dimensions of positive health. The parents participated in the intervention, not the children.

Methods: The study is designed according to a mixed-method design. First, quantitative data was collected via two questionnaires. The questionnaire contained eight validated measures of which six were used within this study; EMPO, MHC-SF, the CBS health survey-overall health, Kiddy-KINDL, Kid-& Kiddo-KINDL and the SDQ. The independent sample T-Test and the paired sample T-Test were performed. Second, qualitative data was collected via semi-structured interviews with five participants out of the intervention group about two dimensions: social and societal participation and meaningfulness.

Results: At baseline, no significant differences were found between the parents in the intervention and control group. Eight weeks after baseline, a significant difference was found between the parents in the intervention group (1.32) and control group (1.49) (daily functioning). No significant differences were found between baseline and eight weeks afterwards among the parents in the intervention group. In the control group there was a significant difference found for daily functioning. At baseline, the parents had a better score (1.32) compared to the score eight weeks afterwards (1.50). Furthermore, at baseline, there was a significant difference found for mental well-being between the children in the intervention (12.67) and control group (10.12) for the SDQ. Eight weeks after baseline, a significant difference was found between the children in the intervention (67.14) and the children in the control group (73.91) for bodily functions. Moreover, significant differences were shown between the children in the intervention (70.89) and the control group (80.17) for emotional well-being (mental well-being). There was also a significant difference found between the children in the intervention (12.19) and the control group (9.87) for the SDQ (mental well-being). Furthermore, a significant difference was found between the outcomes of physical well-being at baseline (72.88) and eight weeks afterwards (67.44) among the children in the intervention group (bodily functions). Also, the children scored at baseline (74.73) significantly better for emotional well-being compared to the score eight weeks after baseline (70.89) (mental well-being). The semi-structured interviews showed that four of five parents had experienced positive changes for social and societal participation. Positive changes for meaningfulness were found as well. Moreover, the parents have answered questions about the experiences of the children on the social and societal participation and meaningfulness. Parents reported no changes in both dimensions for their children. Parents mentioned that the intervention did not bring their children anything, since no child was directly involved in the intervention.

Conclusion: It can be concluded that the intervention had the most effects for the parents, by the reason that they had participated in the intervention instead of the children. The intervention had the most effect on the social and social participation compared to meaningfulness, which have changed less compared to the situation after the intervention. Recommended is to include children in the study to have more impact on the health of children.

Table of contents

1. Introduction

The study that is described is focussed on the relationship between poverty and the health of children and their parents in Twente. Poverty and health are closely related; poverty has a negative impact on health, especially on the health of children. Poor children are more at risk to become ill and when they are ill, they get sicker compared to non-poor children (Starfield, 1992). Furthermore, poverty influences the social health of children. Approximately half a million children in the Netherlands are not participating in any kind of activities, like scouting, music clubs or sports (Jehoel-Gijsberg, 2009). Poverty can lead to exclusion from activities, which can result in social isolation (Nederlandse Jeugdinstituut, 2015). Social isolation is associated with an increased risk of developing health problems (Shankar, McMunn, Banks, & Steptoe, 2011). It is a vicious circle that is difficult to break, especially for poor families. This chapter starts with the explanation of poverty and numbers that are related to poverty in the Netherlands. Next to that, the definition of health and its determinants are explained. Furthermore, national and international poverty interventions are described and in the final paragraph the two research question are introduced.

1.1 Poverty in the Netherlands

Poverty is defined as "When people do not have enough (financial) resources to participate in the community that is minimal necessary to participate" (Netherlands Institute for Social Research, 2018, par. 1). Someone is considered as poor when he or she does not have enough financial resources to buy necessities for example food or clothes (SER, 2017). Poverty can arise on the micro, meso and also on the macro level. Poverty can arise on an individual level through personal circumstances for example illness or divorce (micro) (SER, 2017). Poverty can arise on the meso-level, where difficulties arise through institutes or stigmas for example media or inaccessible rules and regulations. Moreover, poverty can arise through circumstances in a community, for example an economic crisis (macro) (SER, 2017). Per household, the poverty limit varies. In 2018, the Central Bureau for Statistics determined that a single person with an income of 1030 euros or less is considered as poor (Central Bureau for Statistics, 2018b). A couple should have a minimum income of 1410 euros per month. A couple with two children should have at least a minimum income of 1940 euros per month compared to a single person with two children where the threshold is 1560 euros per month (Central Bureau for Statistics, 2018b). The numbers are presented in the figure below.

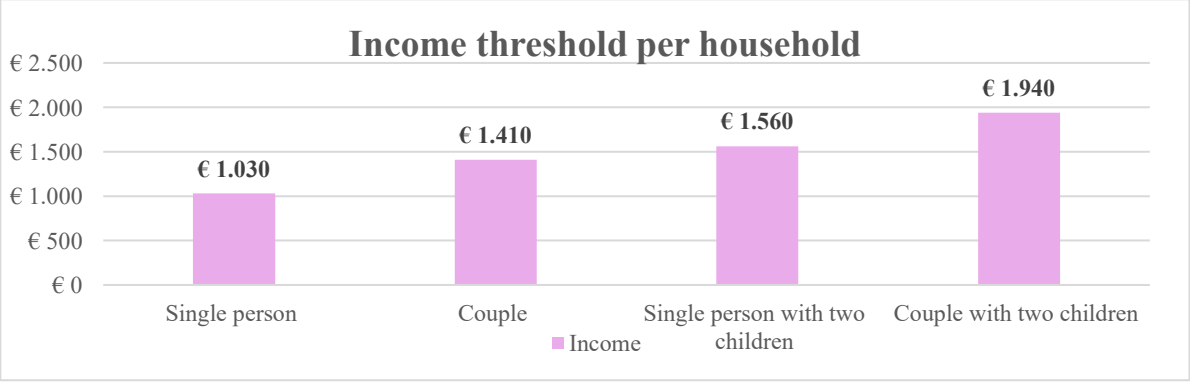

Figure 1: The income threshold for single persons or couples with or without children in 2018 (Central Bureau for Statistics, 2018b).

In 2017, more than 277 thousand underaged children lived in a household with an income lower than the minimum threshold, which is 8.5% of all underaged children in the Netherlands (NJI, 2018). Approximately 3.5% of the underaged children lives in poverty for four years or longer (NJI, 2018). Children who grow up in a single parent household are more at risk to live in poverty (Maldonado & Nieuwenhuis, 2015; SER, 2017). In 2018, almost 25% of the single parent households in the Netherlands had an income lower than the minimum threshold (NJI, 2018).

1.1.1 Poverty in Twente

The region of Twente consists of fourteen municipalities, which are Almelo, Borne, Dinkelland, Enschede, Haaksbergen, Hellendoorn, Hengelo, Hof van Twente, Losser, Oldenzaal, Rijssen-Holten, Tubbergen, Twenterand and Wierden. The largest municipalities are Enschede, Hengelo and Almelo (Databank Overijssel, n.d.). In 2017, there were 97,248 households with children, included single parents and couples (Central Bureau of Statistics, 2018). In Twente, 10.4% of the households with children had to live with an income below or less than the minimum threshold. The percentage of poor households in Twente is comparable to the average in the Netherlands (10.1%) (Central Bureau of Statistics, 2016).

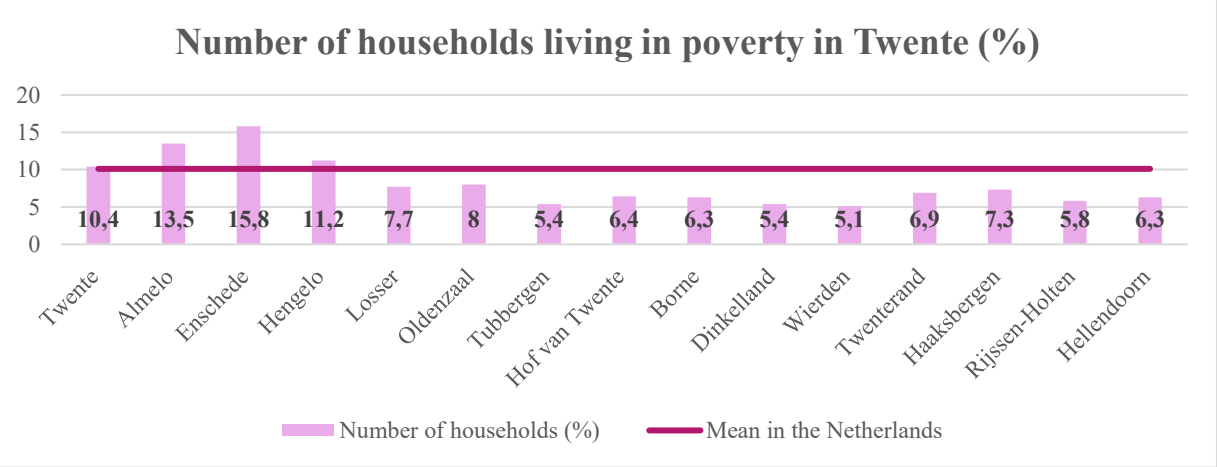

Figure 2: Visual representation of the households with children living in poverty. Comparison of the average poverty rate in the Netherlands to the region of Twente and the fourteen municipalities in Twente (Central Bureau of Statistics, 2016).

Among the fourteen municipalities within the region of Twente, the three larger municipalities are scoring above the average rate of 10.1% of households with children living in poverty in the Netherlands (Central Bureau of Statistics, 2016). Enschede has the highest percentage of underaged children living in poverty (18.2%) while Tubbergen has the lowest percentage of children living in poverty (5.5%) (Central Bureau of Statistics, 2016). Within the ranking of the ten poorest municipalities in the Netherlands, Enschede was ranked at the seventh place in 2013 (Netherlands Institute for Social Research, 2016b).

1.2 What is health?

The World Health Organisation (WHO) defined in 1948 health as "A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (World Health Organization 2016, par. 1, Huber, et al. 2011, p. 1). There are limitations about the health definition of the WHO. One of the limitations is that the WHO definition does not provide the possibility to be adapted to an individual's situation (M. Huber et al., 2011).

In 2009 a new health definition was formulated, called positive health (M. Huber, van Vliet, Giezenberg, et al., 2016). Positive health is defined as "The ability to adapt and to self-manage, in face of social, physical and emotional challenge" (Huber, van Vliet et al. 2016, p. 1). Positive health takes the physical, mental and social factors into account. Moreover, positive health takes the positive features of an individual into consideration instead of the negative features that are visible (M. Huber, van Vliet, & Boers, 2016). Positive health is determined via six dimensions, which are; bodily functions, mental well-being, meaningfulness, quality of life, social and societal participation and daily functioning (M. Huber et al., 2011).

1.2.1 Effects of poverty on health

Poverty and social inequality have direct and indirect effects on the physical, mental and social health of humans (Murali & Oyebode, 2004). The physical and mental health are well-known, but social health is often an unknown definition. Social determinants of health are described as "Circumstances where people grow up, live, work and the systems pull in place to deal with illness" (Preda & Voigt, 2015). The WHO distinguishes health in three determinants, which are the social and economic (socio-economic) environment, physical environment, and the person's individual characteristics and behaviour (World Health Organization, 2010). According to the WHO, factors of influence on the socio-economic environment are income and social status, education, and social support and networks (World Health Organization, 2010). Poor families experience restrictions due to their incomes that influence the availability of material and immaterial resources (Banovcinova, Levicka, & Veres, 2014). Families who experience unemployment or are employed at low wages experience difficulties with food security and lack of access to healthcare (Orthner et al., 2004). A higher income is linked to a better health by the reason that the family is able to gather resources they need (Central Bureau for Statistics, 2018). Another factor that influences the socio-economic environment is social support. If an individual has a strong support from family, friends or community the individual has a higher chance to have better health outcomes compared to an individual that lacks social support (Ansari, Carson, Ackland, Vaughan, & Serraglio, 2003). Poor families experience barriers to have social contacts and obtaining social services (Orthner, Jones-Sanpei, & Williamson, 2004). Furthermore, poverty can increase the feeling to be ashamed (Roelen, 2017), which makes it more difficult to find social contacts. Next to the influence of poverty on the socio-economic environment, poverty influences the physical environment. Poor housing effects the physical environment of individuals (World Health Organization, 2010). Poor housing can lead to serious health problems for example airway problems (Brooks-Gunn & Duncan, 1997). Moreover, poor families are living in less safe environments compared to non-poor families (SER, 2017). Furthermore, the person's genetics and behaviour are important factors for health. Low-income is associated with poor healthy behaviour (Michie, Jochelson, Markham, & Bridle, 2009). Choices for a healthy lifestyle are associated with better health outcomes, for example good nutrition (World Health Organization, 2010). Nevertheless, poverty and stress are closely related. Stress has a negative impact on one's health (Janicki-Deverts, Cohen, Matthews, & Cullen, 2008).

1.2.2 Effects of poverty on children

Despite influence of poverty on health of adults, poverty has the most effect on the health of children (Adler & Ostrove, 1999; Brooks-Gunn & Duncan, 1997; Siddiqi, Irwin, & Hertzman, 2007). Children who are growing up in poverty are more at risk to develop both psychical and mental illnesses during adulthood (Siddiqi et al., 2007). According to Wood (2013), poor children have higher incidence rates of disability days, hospital admissions and death rates. In America, poor children have inadequate access to preventive, curative and emergency care and are

more affected by poor nutrition and poor housing (Wood, 2003). Furthermore, most of the poor children grow up single-parent families and dysfunctional families (Chaudry & Wimer, 2016). Furthermore, children who live in poverty are more at risk to be obese, to develop a chronic illness, to experience mental illness or to die from an accident compared to children who grow up in non-poor families (Aber, Bennett, Conley, & Li, 1997; Chaudry & Wimer, 2016; Lancet, 2019). As mentioned before, poverty influences the mental health as well. The prevalence of mental illnesses of children in poor households is three times higher than children in non-poor households (Murali & Oyebode, 2004). Not only does poverty influence health of children but also the early child development. There is a possible relationship found between psychosocial development and poverty; the brain of poor children is less developed compared to non-poor children (SER, 2017). However, children living in poverty are more at risk to develop a learning disability (Brooks-Gunn & Duncan, 1997). To conclude poverty has a negative effect on the health of children, because the effects are not only noticeable during childhood but the effects are lifelong. Poverty does not merely influence the physical and mental health, but also the social health. Poverty increases the risk of social isolation (Nederlandse Jeugdinstituut, 2015).

1.3 Interventions

The Dutch government and the municipalities in the Netherlands are trying to prevent poverty as much as possible (Rijksoverheid, 2019). In 2018, the Dutch government spent one hundred million euros extra on policies, which are aimed on poverty and debts. Municipalities received ninety percent of this budget respectively (Rijksoverheid, 2019). To limit the effects of poverty, municipalities can choose to implement interventions. Interventions are developed to guide human's behaviour and to stimulate good qualities. Interventions can reduce risks for negative outcomes or they can improve positive outcomes on humans behaviour or health (Nederlandse Jeugdinstituut, 2015). Child interventions can be focussed on families, children, environment of children or on a larger system (de Graaf & Meij, 2011). In the Netherlands, a child-focussed intervention is developed called "Armoede en Gezondheid" (de Graaf & Meij, 2011). The intervention "Armoede en Gezondheid" is aimed on children in the age of four till twelve years old who were at risk to develop an health issue related to a lack of financial resources (de Graaf & Meij, 2011; Nederlandse Jeugdinstituut, 2015). The parents received a financial incentive to lower the threshold for healthcare. Not only were poverty interventions developed for the child itself but also interventions that are focussed on the family. The "Legacy for Children" is a family-focussed intervention, developed in America. The program was a group based intervention with a public health approach to improve child development and child health through positive parenting among low-income mothers (Morris et al., 2017). A group meeting was planned every week, which were led by one or two group leaders and a supervisor. The "Legacy for Children" was especially for mothers who were approximately seven months pregnant untill the child was three years old (Perou et al., 2012). In Twente (the Netherlands), an intervention called "Healthy Children in Low-income Families" (Dutch: "Gezonde kinderen in krappe tijden") is being studied since 2018. The intervention was developed based on the intervention "Armoede en Gezondheid" but distinguishes itself from "Armoede en Gezondheid" by providing tools and skills to parents instead of providing financial incentives to improve health of the children. Furthermore, just like the "Legacy for Children" intervention, "Healthy Children in Low-income Families" is a family-focussed intervention, but the intervention in Twente included a larger range of children compared to the American intervention. "Healthy Children in Low-income Families" aims to improve the health of children by improving the health of parents. An elaborate explanation about the intervention is provided in

chapter 2. The intervention is tested in eight municipalities. If the intervention is evaluated and proven to be effective, the municipalities can continue to proceed with the intervention.

1.4 Knowledge gap

In the literature, there is evidence about the negative impact of poverty on health. As mentioned in paragraph 1.2.2, children who grow up in poverty are more at risk to develop physical and mental illnesses compared to non-poor children (Siddiqi et al., 2007). On the other hand, there is less evidence about the effectiveness of poverty interventions in literature. No research was done about the intervention "Armoede en Gezondheid" whether the intervention is effective or not (Nederlandse Jeugdinstituut, n.d.). "Armoede en Gezondheid" is the only Dutch poverty intervention that is acknowledged by the Dutch Youth institute. Therefore, this study was conducted to provide evidence about the effects of the intervention "Healthy Children in Low-income Families". Since 2018, the intervention has been piloted. Hence, the effects on the health of poor families is unknown. However, it is difficult to determine whether an intervention is or will be successful (Nederlandse Jeugdinstituut, 2015). Therefore, the Academic Collaborative Centre Youth Twente (Academische Werkplaats Jeugd in Twente) has developed a longitudinal study to measure the effects of the intervention on the health of children and their parents living in poverty in Twente. The Academic Collaborative Centre Youth Twente is a collaboration between the fourteen municipalities in Twente, GGD Twente, Saxion University of Applied Science and University Twente.

1.5 Research question

The aim of this study is to determine the effects of the intervention "Healthy Children in Low-income Families" on the health of children and their parents living in poverty in Twente. The health definition that is used, is positive health. The outcomes of the intervention were based on the six dimensions of positive health. The six dimensions are bodily functions, mental well-being, meaningfulness, quality of life, social and societal participation, and daily functioning (M. Huber, van Vliet, Giezenberg, et al., 2016). In order to determine the effects on health of children and their parents, a mixed method design was used. A mixed method design provides the opportunity to go more in depth on subjects in a study (Burke Johnson & Onwuegbuzie, 2004). A quantitative research was done by collecting questionnaires that participants have completed for themselves and for their oldest child in primary school. The participants had completed two questionnaires. Next to that a qualitative research was done. Data was collected via semi-structured interviews about social and societal participation, and meaningfulness. This was done in order to go more in depth on the experiences and the received returns on both dimensions. Received returns are factors that parents had experienced after completing the intervention. In order to determine the effects of "Healthy Children in Low-income Families" on the health of children and their parents, two research questions were determined. These questions are:

1. What are the effects of the intervention "Healthy Children in Low-income Families", compared to care-as-usual, applied to parents who live in poverty in the region of Twente, on the positive health of children ranged from four till twelve years old and their parents, eight weeks after the intervention was started?
2. How do parents of the intervention group experience the received returns for the social and societal participation and meaningfulness for their oldest child at primary school and themselves?

2. Healthy Children in Low-income Families

This chapter starts with an explanation about the intervention "Healthy Children in Low-income Families". First the background of the intervention is described. Next to that, the content of the intervention is described. The intervention contains five meetings; per meeting the theme and activities are described.

2.1 The intervention

Background

The intervention "Healthy Children in Low-income Families" was developed by the Academic Collaborative Centre Youth Twente and has been piloted from May 2018 till December 2019. The development and implementation of the intervention was financed by ZonMW. ZonMW is a scientific institute, which finances healthcare researches and stimulates to use gathered knowledge to improve health and healthcare (ZonMW, n.d.). The intervention "Healthy Children in Low-income Families" was developed in collaboration with experience experts, healthcare professionals, the project group of Academic Collaborative Centre Youth Twente and focus groups with parents living in poverty in Twente. An experience expert is a parent who has lived or is living in poverty. The primary goal of "Healthy Children in Low-income Families" is to improve the health of children in the age of four till twelve years old living in poverty in Twente. During the development process, parents discommended the proposal that children had to participate in the intervention. Therefore, no child has directly participated in the intervention. Hence, the study was targeted on the parents of low-income families. The second goal is to improve the health of the parents who live in poverty (Jacobs-Ooink, Van Kampen, Hoitinga, Braun, & Rouwette-Witting, 2018). The idea is that an improved health of the parent has a positive effect on the health of the child. Furthermore, "Healthy Children in Low-income Families" was based on the principles of empowerment (Dutch: "Eigen kracht") and positive health. The project team of Academic Collaborative Centre Youth Twente had spoken with different policy makers of the municipalities in Twente to see whether the municipality was interested to participate in the study. Not all the fourteen municipalities in Twente were participating in the larger study. In total thirteen municipalities have been approached to participate. Merely, eight municipalities have agreed to participate, which are Enschede, Almelo, Losser, Oldenzaal, Hof van Twente, Tubbergen, Hellendoorn and Dinkelland. Hengelo was not approached by the project team of the Academic Collaboratice Centre Youth Twente, because at the start of the larger study of the Academic Collaborative Centre Youth Twente another poverty intervention was started already.

Intervention

The intervention "Healthy Children in Low-income Families" consists of five meetings and lasts 120 minutes per meeting. The parents participated in the intervention, not the children. The meetings were organised and prepared by a tandem. This is a combination of a healthcare professional (for example: social worker) and an experience expert. The tandem followed a training in which both learned about the intervention and how to organise the meetings. The intervention is a participatory intervention. It is required that the participant is motivated to improve their own health and the health of his or her child. Furthermore, "Healthy Children in Low-income Families" is a group intervention. An intervention group required a minimum of eight participants to start. However, the group had a maximum of twelve participants to maintain a close and tight relationship between the tandem and the participants. It is important to create a safe environment for the participants, because the group can share sensitive

and personal information. Through contact with fellow poor parents, participants can support and advise each other. During the intervention participants formulate goal(s) for themselves and for their child(ren) related to one of the six dimensions of positive health. As mentioned participants were asked to participate in five meetings. In each meeting, another dimension of positive health is discussed. A handbook was provided to the tandems how meetings should be guided, also attention should be paid on subjects that were not mentioned in the handbook. This should be based on the needs of the participants. Table 1 provides an overview with information about the content of the five meetings.

Table 1: Content of the five meetings of the intervention "Healthy Children in Low-income Families"

Theme of the meeting	**Explanation**
Meeting 1 Here and now	**Goal**: Meeting participants, explaining expectations, exploring needs and ideas of the participants. The needs are for themselves and also for their oldest child in primary school. **Method**: Introduction games are played so that participants and the tandem get to know each other. Also rules and agreements are made by the groups. Positive health and the six dimensions of positive health are explained. The kidstool will be explained. The participant will complete the kidstool for his or hers oldest child at primary school. Depending on the outcomes, the parents will set up goals to improve their health and the health of their child(ren). **Homework**: Filling in the kidstool with the child, for whom the parent had completed the kidstool during the meeting, and determining goal or aim based on one of the six dimensions of positive health.
Meeting 2 Body, feelings and thoughts	**Goal**: Raising awareness of different health expects (body, feelings and thought) and being able to improve health and well-being by using guidelines. **Method**: Explanation of the brain and its functions, by a healthcare professional for example psychologist. Explanation of the effects of stress on the body and mind. Therefore, stress-reducing exercises are given to participants (for example "Relaxklets" or "Stilzitten als een kikker"). Last, the completed kidstool is discussed. Depending on these outcomes, the participant will determine a goal to improve one of the dimensions of positive health. **Homework**: The participant is asked to discuss his or her goal with the family. Furthermore, the participant should think about the steps that need to be taken to reach the goal(s).
Meeting 3 Participation and daily life	**Goal**: Participants know which facilities and regulations are available for example "Stichting leergeld". The participants decide how they want to be informed about these facilities. Moreover, the participants will discuss what they value as important in their daily lives. **Method**: The participants will talk about the improvements they have made so far (meeting 1 till meeting 3). In small groups, participants will discuss the themes social participation and daily life. The groups will identify needs and questions they have that need to be answered, so that the participants can participate in the community. The tandem makes an overview of funds or organisations which can help to reach the goal or the needs that were identified. At

	the end, participants will discuss what social participation means to them and will talk about the importance of social contacts. **Homework**: The participants determine family activities. Furthermore, the participants determine the changes they want to make in daily life.
Meeting 4 Now and later	**Goal**: Creating a vision of the (near) future of the participant, but also creating a clear vision of the future of the child. Furthermore, the participants are aware of their influence on the future of their children. **Method:** Attention is paid to the future of the participants and their children. Especially, attention is paid to future goals, meaning of life and life story. This meeting goes more in depth compared to the first three meetings, which are more practical. **Homework:** Participants are asked to talk about the topics, which are discussed during the meeting, with their families. Also, the participants are asked to complete the kidstool again.
Meeting 5 Feeling good!	**Goal**: Participants are aware of factors of influence on their health and the health of their children. They know what is needed to change their own health and the health of their children. **Method:** Participants are asked to describe factors that have a positive or negative effect on their health. The participants will learn how to find a balance between these factors. The kidstool is discussed and compared to the kidstool completed during the first meeting, to find similarities or differences. Successes will be discussed and tools will be mentioned to maintain these successes. **Homework:** No homework. **Extra**: The participant can bring the child or children to the last meeting. The intervention is concluded in a festive manner.

Note: Jacobs-Ooink, Van Kampen et al. 2018.

3. Theoretical framework

Several definitions which are important for this study are explained. First, the definition of poverty and health are explained since these definitions are an overall theme in this study. Furthermore, empowerment, low literacy and the vulnerability of the study population are explained. Second, the determinants of health and two frameworks are discussed: TEAM-ECD and the Social Determinants of Health and the Pathways to Health and Illness.

3.1 Poverty

The definition of poverty differs between Western countries and Third World countries. In Western countries, poverty is about participating in the society. In contrast to Third World Countries, poverty is about surviving physically (Central Bureau for Statistics, 2018). In the Netherlands, it is declared that everyone should have shelter, food, the opportunity to get dressed and have access to medical care (Central Bureau for Statistics, 2018). According to the Netherlands Institute for Social Research poverty is defined as "When people do not have enough (financial) resources to participate in the community that is minimal necessary to participate" (Netherlands Institute for Social Research, 2018, par. 1). Furthermore, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) distinguishes poverty in income poverty, absolute poverty and relative poverty (UNESCO, 2017). Income poverty is when a family's income fails to meet the minimum threshold. The threshold is calculated per household, not on individual basis. Absolute poverty measures poverty in relation to the amount of money that is necessary to meet basic needs for example nutrition and clothing (UNESCO, 2017). Absolute poverty does not take the quality of life into account. The cultural and social needs of individuals are not recognised by absolute poverty. Relative poverty is defined as poverty in relation to the economic status of other members of the society; Individuals are poor if they fall below the standards of living in a given social context (UNESCO, 2017). In this study, the definition income poverty is used, due to the inclusion criteria of the larger study "Healthy Children in Low-income Families". Participants were eligible to participate if the family's income was on or below the minimum Dutch threshold.

3.2 Health and well-being

This study is focussed on the health of children and their parents living in poverty. There are different concepts to define health. The definitions of the WHO and of Huber were previous mentioned in chapter 1 to introduce the concept of health in this study. According to the WHO, health is defined as "A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (World Health Organization, 2016, p.1; Haverkamp, Verweij etl.al, 2017). Huber et.al defined health as "The ability to adapt and to self-manage, in face of social, physical and emotional challenges" (Huber, van Vliet et al. 2016; p. 1, Haverkamp, Verweij et al. 2017). Boorse formulated health as a range of typical functions of species and the involving threshold, where a disease is an abnormal function of that individual (Haverkamp, Verweij, & Stronks, 2017; Venkatapuram, 2013). Nordenfelt stated that someone is in health if he or she has the ability to realize his vital goals in certain circumstances (Haverkamp et al., 2017; Venkatapuram, 2013). What Nordenfelt meant with the vital goals is unknown. According to Venkatapuram health can be defined as "The individual's ability should be understood to achieve a basic cluster of beings and doings or having the overarching capability, a met capability, to achieve a set of central or vital inter-related capabilities and functionings" (Venkatapuram 2013, p. 273; Haverkamp, Verweij et al. 2017). Health and well-being are closely related. The relationship between health and well-being depends on the concept

of health that is used (Haverkamp et al., 2017). Health and well-being can be equivalent or health can be a necessity for well-being. According to the WHO, well-being and health are equal to each other, where Nordenfelt and Venkatapuram state that health is a precondition for well-being (Haverkamp et al., 2017). Huber states that well-being is an indicator of health. According to Haverkamp et.al, well-being is defined as "A factor that can support an individual during difficult times" (Haverkamp et al., 2017). It can be concluded that health can be defined in different ways depending on the scope of the definition. By the reason that the six dimensions of positive health are used to determine the outcomes in this study, both the definition of health and well-being according to Huber are used in this study.

3.3 Positive Health

Positive health takes the physical, mental and social health of individuals into account (M. Huber, van Vliet, Giezenberg, et al., 2016). Positive health points out the chance to be or to become healthy even though the presence of illness (M. Huber, van Vliet, Giezenberg, et al., 2016). Positive health takes the whole person into account rather than decide that a person is healthy when no illness is present, which is the case when the definition by the WHO is used. The definition of positive health was defined via interviews and focus groups, where 556 health and well-being indicators were found (M. Huber, van Vliet, & Boers, 2016). The 556 indicators were merged to 32 health aspects, which were divided over six overall themes (dimensions). The six dimensions are bodily functions, mental functions and experiences, the spiritual/existential dimension, quality of life, social-societal participation and daily functioning (Machteld Huber & Jung, 2015). Table 2 provides an overview of the six dimensions and the 32 covering health aspects.

Table 2: The six dimensions of positive health covering 32 aspects of health.

Bodily functions	**Mental functions & perception**	**Spiritual/ existential dimension**	**Quality of life**	**Social and societal participation**	**Daily functioning**
Medical facts	Cognitive functioning	Meaning/ meaningfulness	Quality of life/ well-being	Social and communicative skills	Basic ADL (activities of daily living)
Medical observations	Emotional state	Striving for aims/ ideals	Experiencing happiness	Meaningful relationship	Instrumental ADL
Physical functioning	Esteem/ self-respect	Acceptance	Enjoyment	Social contacts	Ability to work
Complaints and plan	Experiencing to be in charge/ manageability		Perceived health	Experiencing to be accepted	Health literacy
Energy	Self-management		Flourishing	Community involvement	
	Resilience, SOC (Sense of coherence)		Zest for life	Meaningful work	

Note: Huber, van Vliet et al. 2016, p.4.

The concept of positive health is visualized in a (spider web) diagram, which is shown in Figure 3. This tool was developed after the definition of positive health was created. The spider web visualizes the level of health of an individual. Besides the tool, a digital test is available. The participant is asked to score 42 statements on a scale of 0 to 10 (0 means totally disagree, 10 means totally agree), seven statements per dimension. A total calculation per dimension is made. In a quick overview it is visible whether a dimension is scoring well or that there is space to improve. It is recommended to complete the tool at least two times, with a time interval (for example one month), to see whether change has occurred (Machteld Huber & Jung, 2015). Also a kidstool was made. For the kidstool, the positive health tool was adapted to children in the age of eight till eighteen years. The kidstool works the same way as the tool for the adults, but children can score the statements with smileys. Furthermore, the kidstool contains fewer statements than the tool for adults (39 instead of 42). The kidstool is also available online. However, the positive health tool has not been validated yet since the tool is a conversation and not a measurement instrument (Flinterman et al., 2019). Therefore, a collaboration between insurance company VGZ and Knowledge Center Measurement Instruments VUmc (Kenniscentrum Meetinstrumenten VUmc) has started to develop a validated instrument in addition to the spider web diagram (van Steekelenburg, Kersten, & Huber, 2016). During the intervention, the participants were asked to complete the kidstool for their oldest child in primary school. The participant was asked to formulate a goal for the dimension with the lowest score. Moreover, the participant was asked to complete the tool with the child for whom the participant had completed the kidstool to find similarities or differences.

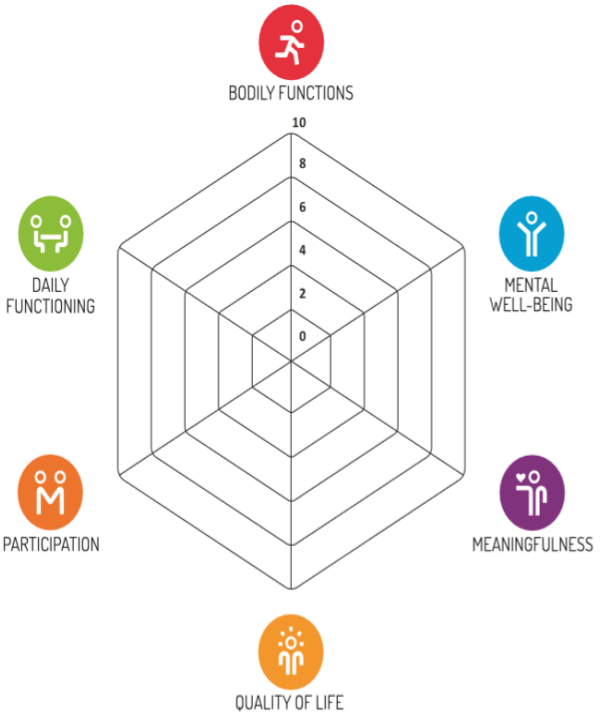

Figure 3: The six dimensions of positive health (Bazhina, 2019)

3.4 Empowerment (“Eigen kracht”)

The intervention is based on the concept of “Eigen kracht”. “Eigen kracht” is used in healthcare in the Netherlands, mostly youth care. “Eigen kracht” is closely related to the English concept of empowerment. The questionnaire of “Healthy Children in Low-income Families” contained the EMPO (empowerment) questionnaire. Therefore, empowerment is explained. Empowerment is an active and participatory process in which individuals or groups gain greater control over issues that are important to them (Damen et al., 2016; Peterson, 2014). This approach is strength-based and non-expert driven, where participants will become able to face difficulties in circumstances that occur in daily life or events that occur in their community (Peterson, 2014). Empowerment focusses on “What

can an individual do?" instead of "What is the individual unable to do?". Furthermore, empowerment promotes to strengthen the relationship with social contacts and growth of the social network. The social network will be there after an intervention is finished (Jacobs-Ooink et al., 2018; Nederlandse Jeugdinstituut, 2018). The intervention "Healthy Children in Low-income Families" aims to strengthen the social network of participants by providing activities during the intervention where the participants had to work closely together, for example discussion in duos about future goals. Furthermore, the intervention tries to motivate participants to think positively and use their strengths instead to focus on the negative features that are there.

3.5 Low literacy and vulnerability

An interview scheme was conducted to answer the second research question. While the scheme was conducted, low literacy and vulnerability of the participants were taken into account. Low literacy was taken into account since a large part of the study population has not finished any kind of education or has finished only primary school. Furthermore, a part of the study population has a foreign background, for example Iran or Turkey. Hence, it was considered that the study population had a higher chance of being low literate. Moreover, poverty and low literacy are closely related (Pignone, DeWalt, Sheridan, Berkman, & Lohr, 2005). Literacy is referred to the ability to read and write (Pander Maat, Essink-Bot, Leenaars, & Fransen, 2014). On the basic level it is considered that an individual is able to read fluently and has word recognition (Pander Maat et al., 2014). If an individual is not able to master both criteria, the individual is considered as low-literate. Literacy can be divided in three domains: financial literacy, media literacy and health literacy (Pander Maat et al., 2014). Since the aim of "Healthy Children in Low-income Families" is to improve health, the definition health literacy was considered. Health literacy is defined as being able to understand, to assess and to apply health-related information (Pander Maat et al., 2014).. Second, vulnerability of the study population was considered during the development of the interview scheme. Vulnerable participants are participants that might be more sensitive compared to the average population and are harder to reach (Dempsey, Dowling, Larkin, & Murphy, 2016). Furthermore, a vulnerable population is a subgroup that have shared social characteristics. Due to their social strata the population is exposed to conditions that distinguishes them from the rest of the population (Frohlich & Potvin, 2008). The vulnerable participants have less control over their autonomy due to personal circumstances for example authorities taking over the finances. An important factor is to build trust in the relationship between the vulnerable participant and the researcher (Dempsey et al., 2016). Trust can be built by letting the participant feel at ease by the researcher, for example planning an interview at a location based on the preference of the participant. For the reason that the participants in the intervention have to cope with financial tightness and therefore are less in control over their autonomy, the study population is considered as a vulnerable population.

3.6 Determinants of health

The level of health is depending on multiple factors like work, education level, income, living conditions, physical environment and the early childhood development (Canadian Council on Social Determinants of Health, 2015). In order to better understand the determinants of health, frameworks were developed. The Canadian Council on Social Determinants of Health had conducted a report where the counsel had analysed and compared 36 different frameworks focussed on the determinants of health. This review is a range of frameworks from different sectors, that all can be implemented to improve health and its determinants (Canadian Council on Social Determinants of Health, 2015). The frameworks are categorized as explanatory, interactive, action-oriented or a combination of

two or three of these types. Moreover, the frameworks are categorized by primary focus area. These areas are policy development and decision-making, practice approach, issue focus, population focus and broad focus (Canadian Council on Social Determinants of Health, 2015). According to Canadian Council on Social Determinants of Health, the framework of the Total Environment Assessment Model for Early Child Development is most applicable for studies that are focussed on health of children (Canadian Council on Social Determinants of Health, 2015). The Total Environment Assessment Model for Early Child Development is applied in this study and the framework is explained in paragraph 3.6.1. The intervention aims to minimize the negative effects of poverty on the environments mentioned in the Total Environment Assessment Model for Early Child Development. For the participants it was found that the most applicable framework, from the report of the Canadian Council, is the Social Determinants of Health and the Pathways to Health and Illness (Canadian Council on Social Determinants of Health, 2015). The framework for the participants is explained in paragraph 3.6.2. Furthermore, the intervention wants to improve the factors of influence mentioned in the Social Determinants of Health and the Pathways to Health and Illness framework to improve the health of the participants. The assumption was made that the participants who have participated in "Healthy Children in Low-income Families" have better results in the factors that are mentioned in the Social Determinants of Health and the Pathways to Health and Illness framework compared to participants who have not participated in the intervention (control group) based on the six dimensions of positive health. Furthermore, it is assumed that children of whom the parents were in the intervention group have better results in the layers of the TEAM-ECD compared to children of whom the parents were placed in the control group. In Appendix A: Hypotheses is an overview of the hypotheses presented.

3.6.1 Determinants of health - Children

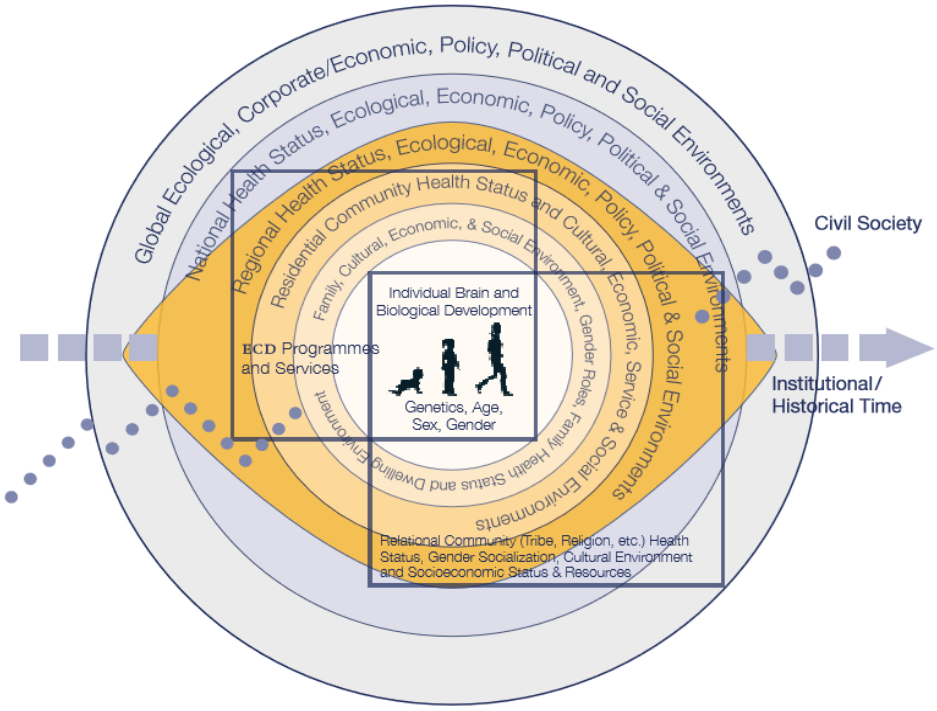

Figure 4: The Total Environment Assessment Model for Early Child Development (TEAM-ECD) (Siddiqi et al., 2007)

The Total Environment Assessment Model for Early Child Development (TEAM-ECD) shows which environments (layers) have the most influence on the development of children. The layers are assigned to the individual child, the family, residential and relational communities, and the regional, national and global environment (Siddiqi et al., 2007). The TEAM-ECD is developed to highlight environments and experiences that influence the early child development (Canadian Council on Social Determinants of Health, 2015), shown in Figure 4. Moreover, the model frames the important environments for children and highlights each environment that provides nurturing conditions. Furthermore, the model identifies the relationships between the different environments and links them to the biological process of children (Siddiqi et al., 2007). If this process went well, it will result in a successful early childhood development. In the report of Siddiqi, Irwin and Hertzman it is stated that the environmental conditions to which children are exposed in their earliest years during development are determining over the entire life course (Siddiqi et al., 2007). Experiences during child development influences basic learning, school successes, economic participation, social participation and the health status throughout entire life (Siddiqi et al., 2007). The larger study of "Healthy Children in Low-income Families" aims on reducing the negative impact of poverty or low income on the development of children. The intervention wants to make an improvement on the level of the individual child and on the level of the family, which are in line with the following environments: the individual child and the family. The intervention wants to minimize the effects of poverty on the health of children so that these children experience no limitations though the family lives on a small budget. The hypothesis that was tested in this study is; "The children, of whom the parents are, in the intervention group of "Healthy Children in Low-income Families" score better at the six dimensions according to positive health compared to the children, of whom the parents are in the control group".

3.6.2 Determinants of health - Adults

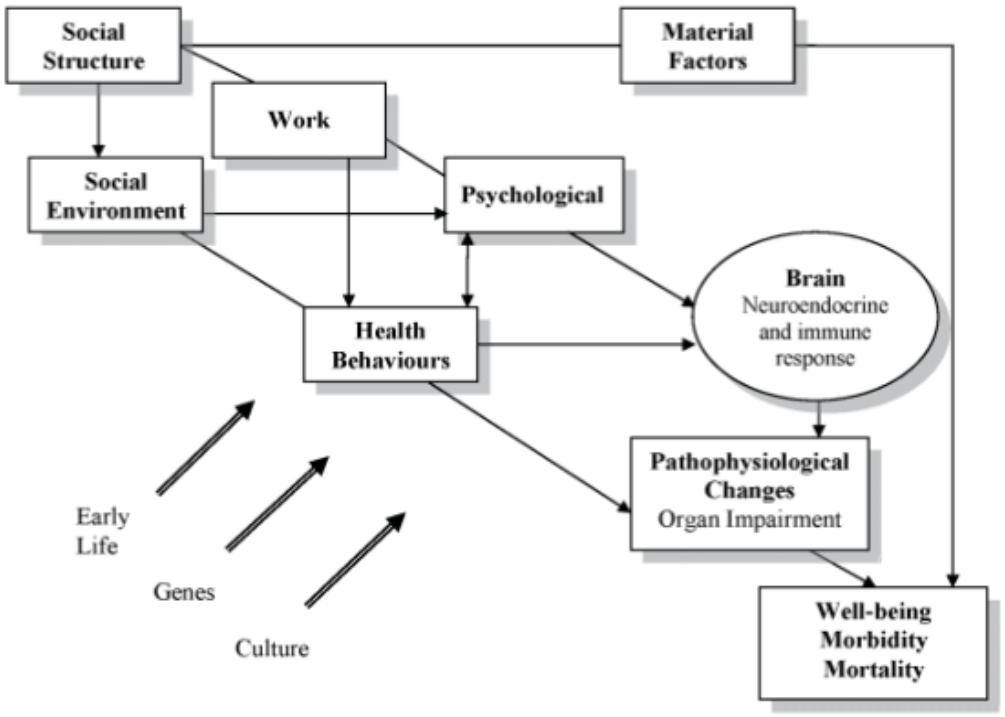

Figure 5: Social Determinants of Health and the Pathways to Health and Illness (Mikkonen & Raphael, 2010).

The Social Determinants of Health and the Pathways to Health and Illness framework is focussed on the impact of living and working conditions on health (Canadian Council on Social Determinants of Health, 2015). The framework, provided in Figure 5, shows the influence of the organization of society on the living and working conditions that individuals experience (Mikkonen & Raphael, 2010). The living and working conditions have an influencing character on the physical and mental health. The processes, shown in the framework, take place through the material, psychological and behavioural pathways (Mikkonen & Raphael, 2010). Moreover, the framework shows that the early life, genetics and cultural factors influence an individual's health. The framework is applicable for this study, since the framework shows that multiple factors have influence on the health behaviour of individuals. If an individual has a healthy early life development, he or she is less at risk to have unhealthy behaviour in adulthood (Mikkonen & Raphael, 2010). Furthermore, the framework shows that factors like work and social environment play a role in a person's health. The intervention focusses on social environment of individuals by bringing participants together and providing tools and guidelines, which can support them in daily life. The social environment can be found in the top left of the framework, which indicates that the social environment is one of the starting states to reach health. The hypothesis that is tested in this study for the parents, is as follows: "The parents in the intervention group of "Healthy Children in Low-income Families" have better scores for the six dimensions according to positive health compared to the parents in the control group".

4. Method

This study is part of a larger study of the Academic Collaborative Centre Youth Twente. The chapter starts with a description of the study design, study procedure and the study population. For the first research question data is collected via a questionnaire at baseline and a questionnaire eight weeks after baseline. For the second research question data is collected via semi-structured interviews with five participants of the intervention group. The master thesis was conducted from February till August 2019.

4.1 Study design

The larger study of the Academic Collaborative Centre Youth Twente started after the first ten participants were placed in the intervention group. The other participants were placed in the control group. Therefore, the larger study of the Academic Collaborative Centre Youth Twente was conducted according to a prospective comparative intervention design. This design provides the opportunity to compare the effects of the intervention between the intervention and control group in a direct way (Thiese, 2014). In this study, the control group received usual care, which can be support from a local multidisciplinary social neighbourhood team (Hilverink, 2013). Usual care is defined as the best current therapy that is available at that time (Thompson & Schoenfeld, 2007). The intervention group received, next to the usual care, the intervention. Besides the prospective comparative intervention design, this study was designed according to the mixed method design. A quantitative and qualitative research were performed to determine the effects of the larger study of "Healthy Children in Low-income Families" on the health of children and parents measured via the six dimensions of positive health. The quantitative research was based on the questionnaires that the participants of the intervention and control group had completed. The qualitative research went more in depth than the questionnaire on the experiences of the participants in the intervention group about meaningfulness and social and societal participation. Meaningfulness is a difficult dimension to measure quantitatively. Moreover, meaningfulness was not fully expressed in the questionnaire and not measured at all via one of the measures of the children. Therefore, the interview was conducted to identify the effects on the intervention on the meaningfulness of participants and their children. However, in literature it was found that interventions have a positive effect on the social network size of individuals (Howarth, Morris, Newlin, & Webber, 2016). Therefore, the qualitative parts wanted to identify what the impact of the intervention was on the social and societal participation.

4.2 Study procedure

A family was included in the larger study of the Academic Collaborative Centre Youth Twente if the participating parent was at least eighteen years old, the family had at least one child in primary school in the age between four and twelve years old, and the family lived of an income on or below the minimum threshold. The exclusion criteria was that the parent did not master the Dutch language at B2 level. However, one parent per family was allowed to attend the five meetings of the intervention. Different approaches were used to recruit participants. Flyers were handed out to possible participants and spread among places were possible participants often visits for example Food Bank ("Voedselbank"). Moreover, local initiatives were contacted to recruit participants and social media was used. However, the control group did not contain enough participants. Therefore, the Academic Collaborative Centre Youth Twente had recruited extra participants from the eight participating municipalities, but also participants from two not participating municipalities in Twente and participants from two municipalities outside

Twente were asked to participate in order to reach the minimum number that was necessary. The participants completed a questionnaire at baseline of the intervention (T0), eight weeks after the baseline questionnaire (T1) and twelve weeks after the baseline (T2). The questionnaires were collected between May 2018 and December 2019. The completed questionnaires were collected and ordered to the office of the lectorate Social Work at Saxion University of Applied Science in Enschede. At the end of this study, August 2019, the project group of the Academic Collaborative Centre Youth Twente is still collecting T1 and T2 questionnaires. By the reason that the amount of collected T2 questionnaires was low when this master thesis was finished, the T2 questionnaires were not included in this study. Moreover, the participants in the intervention and control group received a financial incentive for participation, worth 75 euros for filling out the three questionnaires (Jacobs-Ooink et al., 2018). Financial incentives is the most effective manner to increase the response rate, especially for participants in poor circumstances (Hsieh & Kocielnik, 2016).

4.3 Study population

The participants were selected from the municipalities of Almelo, Dinkelland, Enschede, Hof van Twente, Oldenzaal, Losser, Tubbergen and Hellendoorn. The participants of the intervention group were recruited from Enschede, Almelo, Losser, Tubbergen, Oldenzaal, Hof van Twente and Dinkelland. The participants from the control group were recruited from Almelo, Oldenzaal, Enschede, Hof van Twente, Dinkelland, Losser, Hellendoorn, Deventer, Borne, Arnhem and Hengelo. The municipalities of Deventer and Arnhem are outside the region of Twente but the usual-care in these municipalities is comparable to the usual-care in the region of Twente. Participants from these municipalities were selected based on the same inclusion- and exclusion criteria as the participants from the region of Twente.

Table 3: An overview of the number of participants per municipality at the baseline (T0).

Municipality	**Intervention group (N)**	**Control Group (N)**
Almelo	19	13
Dinkelland	5	1
Enschede	10	35
Hof van Twente	4	3
Losser	21	1
Oldenzaal	11	11
Tubbergen	6	-
Hellendoorn	-	5
Extra recruitment *(Deventer, Borne, Hengelo and Arnhem)*	-	6
Total number of participants	**75**	**75**

Besides participation in the quantitative research, six participants from the intervention group of "Healthy Children in Low-income Families" were asked to participate in the semi-structured interviews, one participant per tandem.

Since the municipalities of Dinkelland and Tubbergen had the same tandem, it was chosen to ask one participant from one of these municipalities. Six participants were assumed to be enough, because six participants provide sufficient information power for a clear description of the intervention (Malterud, Siersma, & Guassora, 2016). Moreover, interviewing participants from different municipalities give a better description of the experiences of the intervention compared to interviewing participants from the same municipality, since tandems have organised the intervention based on the needs of the participants. The participants were selected based on the convenience sampling method. In total five participants had participated in the semi-structured interviews. The participants were from Enschede, Almelo, Losser, Oldenzaal and Tubbergen, and the five participants were all female.

4.4 Data collection

In the quantitative part of this study data was collected via questionnaires. The outcomes were determined via the six domains of positive health, which are bodily functions, mental well-being, meaningfulness, quality of life, social and societal participation, and daily functioning (M. Huber et al., 2011). The data in the qualitative part of this study was collected via semi-structured interviews with five participants of the intervention group.

4.4.1 Quantitative research

4.4.1.1 Questionnaire

The questionnaire of "Healthy Children in Low-income Families" consisted of two parts. The first part contained questions about the background characteristics of the participants. The questions used in this study were gender, age, country of birth, coupled, education, work situation, income status, spendable income, children living in house, and the average age of all the children in house. Next to the questions about the background characteristics of the participants, the questionnaire contained questions about the background characteristics of the children. The questions that were used were gender-daughter, age, groep in primary school and living situation. Per variable it is described by which question the variable was computed. Furthermore, the response categories are described. Before the background characteristics were computed, two other variables were conducted. The new variables are group and questionnaire, which were conducted to combine the two datasets (results of T0 and T1).

Group

This variable was based on the group in which the participant was placed; the intervention or control group. The variable was coded as follows: (0) control group and (1) intervention group. The variable was used as a nominal variable.

Questionnaire

The variable was conducted for determining the moment the participants completed the questionnaire. The variable is coded as follows: (0) T0 and (1) T1. The variable is conducted as a nominal variable.

Questionnaire part 1

Gender

Measured with the question: "The questionnaire is completed by…" Based on the participant who had completed the questionnaire. The variable Gender is computed as a nominal variable with the following scores: (0) Male and (1) Female.

Country of birth

Measured with the question: "In which country were you born?" The variable was based on the country were the participant, who had completed the questionnaire, was born. The variable was a nominal variable with the following scores: (0) Not in the Netherlands and (1) Netherlands.

Coupled

Measured with the question: "What is your marital status?" Based on the marital status of the participant in the civil code, the variable was computed. The variable was computed on a nominal variable as follows: (0) Single and (1) Together.

Education

Measured with the question: "What is your highest level of education that you have completed with a diploma?" Based on the years of schooling minimally required to achieve the participant's reported education level. The variable was computed on a scale, which was coded as follows: (0) No education, (1) Primary education, (2) Lower secondary education, (3) Higher secondary education, (4) Tertiary education and (5) other. The variable was used as an interval variable.

Work situation

Measured with the question: "How would you describe your current situation?" The question was based on the current work situation of the participant. The variable work situation was computed as a nominal variable: (1) Paid work and (0) No paid job.

Income 1

Measured with the question: "How is the income in your family obtained?" The participants had the option to tick one or two options for this question. The first answer is income 1 and the second answer is income 2. The scale that was used was as follows: (0) Paid job, (1) Benefits/Allowance shorter than three years, (2) Benefits/ Allowance longer than three years and (3) other.

Income 2

Not every participant had a second income. Therefore, income 2 was computed as a nominal variable as follows: (0) Second income and (1) No second income.

Children living in house- always

The number of children that are permanently living in the household. The variable was computed as an ordinal scale with the following scores: (0) No children, (1) One child, (2) Two children, (3) Three children and (4) Four children or more.

Children living in house- part-time

The number of children living part-time in the household. The child lives partly at the household of the participant who had completed the questionnaire and also at the household of the other parent. The variable was computed as an ordinal scale, as follows: (0) No children, (1) One child, (2) Two children and (3) Three children or more.

Spendable income per month

Measured with the question: "Do you know how much money you have to spend after the fixed costs have been paid?" Based on the spendable income of the family after bills and other fixed costs have been paid. The participant was allowed to fill in the family's spendable income per month or per week. Spendable income was based on two variables, namely the amount of money and week/month. First the variable spendable income was determined whether the spendable income was per month or per week. Then the spendable income per month was calculated.

If the participant filled in the spendable income per month no calculation was made. If the participant filled in the spendable income per week, the income was multiplied by 52 and divided by twelve.

Age parent

Measured with the question: "What is your birthdate?" The variable was computed by the function DATEIFF in SPSS statistics. The age was based on the date that the participant had completed the questionnaire and the birthdate of the participant.

Mean age of all the children

Measured with the question: "What are the ages of your children?" The participant was asked to fill in the ages of all the children in the household. Then the mean was taken to compute the variable.

Gender: Daughter

Measured with the question: "My child is a …" Based on the gender of the child about whom the questionnaire was completed by the participant. The variable was based on a nominal variable, this is: (0) No and (1) Yes. The answer no indicates that the child for whom the questionnaire was completed is a boy.

Groep in primary school

Measured with the question: "In which group is your child in school?" Based on the school groep of the child for whom the questionnaire was completed. The groep was based on the Dutch education system, where the primary school starts with groep 1 and finishes with groep 8. The scale that was used was an interval scale. The scale was as follows: (1) Groep 1, (2) Groep 2, (3) Groep 3, (4) Groep 4, (5) Groep 5, (6) Groep 6, (7) Groep 7, (8) Groep 8 and (9) other.

Living situation of the child

Measured with the question: "With whom does your child life?" Based on the living situation of the child for whom the questionnaire was completed. The living situation of the child can differ from the living situation of the participant. The scale was as follows: (1) Father and Mother, (2) Mother, (3) Partly with father and partly with mother, and (4) other situation. The scale was based on an interval scale.

Age child

Measured with the question: "What is the birthdate of your child?" Based on the birthdate of the child for whom the questionnaire was completed by the participant. Computed by the function DATEIFF. As well as by the participant, the age of the child was based on the date of completion. By the reason that the study of "Healthy Children in Low-income Families" was developed for children in the age of four till twelve years old, children were excluded if they were older than 13 years or younger than four years. Participants were eligible if they had one child in primary school who was not older than twelve years old (Jacobs-Ooink et al., 2018).

A chi-square test was performed to check the presence of significant differences between background characteristics of the participants and the children in the intervention and control group. Between the participants in the intervention and control group, there was a significant difference found for the variable Gender. The intervention group contained more women (N=71) than the control group (N=66). There were no significant differences found between the background characteristics of the children in the intervention and control group.

Questionnaire part 2

The second part of the questionnaire included eight validated measures intended to measure the six dimensions of positive health. These measures were the CBS health survey-overall health, MHC-SF, Financial Hardship Scale, EMPO, Kid- & Kiddo-KINDL, Kiddy-KINDL, SDQ, and Material Deprivation and Social Participation (Bartels, 2018). In this study, the CBS health survey-overall health, MHC-SF, EMPO, Kid- & Kiddy-KINDL, Kiddy-KINDL and the SDQ were used to measure the outcomes of the six dimensions of positive health. The CBS health survey-overall health, EMPO and MHC-SF were used to measure the outcomes for the parents. The CBS health survey was used to measure the outcomes for the dimensions bodily functions and daily functioning (Central Bureau for Statistics, 2016). The CBS health survey-overall health is part of a larger questionnaire of Central Bureau of Statistics. The item, CBS health survey-overall health, contains three questions; General health, long-term illness and limitations in daily life (Central Bureau for Statistics, 2016). The three questions were based on different response rates, shown in Table 6. The variable overall health was rated on a five point Likert scale. The closer to five, the higher the level of overall health (Central Bureau for Statistics, 2016). The variable long-term illness indicated whether a long-term illness was present or not. The last variable, limitations in daily life, measured the level of the experienced limitations in daily life caused by illnesses or disabilities. This variable was scored on a three point scale (Central Bureau for Statistics, 2016). The internal validity and reliability was checked for the total CBS health survey every year, but for the item overall health was the validity and Cronbach alpha unknown (Central Bureau for Statistics, 2016). The EMPO questionnaire was considered to measure the outcome for meaningfulness. EMPO is an abbreviation for Empowerment Questionnaire and consists of three subscales: intrapersonal, interpersonal and behaviour control (Damen et al., 2016). The complete measure contains twelve questions divided over the three subscales. The twelve questions were scored on a five point scale (Damen et al., 2016). The higher the score, the higher the level of empowerment. The overall construct validity and reliability of the EMPO was valued as sufficient to good (α= 0.86) (Damen et al., 2016). The MHC-SF was considered to measure the outcomes for meaningfulness, quality of life and social and societal participation. MHC-SF is an abbreviation for Mental Health Continuum Short form that includes fourteen questions divided over three subscales. The participants scored the questions on a six point Likert scale (Lamers, Westerhof, Bohlmeijer, ten Klooster, & Keyes, 2011). The MHC-SF was considered as a valid instrument and each subscale had a sufficient level of reliability. The Cronbach alpha's of the subscales were as follows: emotional well-being (α= 0.83), social well-being (α=0.74) and psychological well-being (α= 0.83) (Lamers et al., 2011). A high score on the MHC-SF indicates a high level of positive mental health. Next to the measure for the participants, the questionnaire contains three measures that were considered to measure health outcomes for children. These measures were the Kiddy-KINDL, Kid- & Kiddo-KINDL and the SDQ. First, both KINDL measures are described. It is considered that both the Kiddy-KINDL and the Kid- & Kiddo-KINDL measured the outcomes for bodily functions, mental well-being, quality of life, social and societal participation and daily functioning. The Kiddy-KINDL was a measure for children in the age between four and six years old (Ravens-Sieberer & Bullinger, 2000). The Kid- & Kiddo-KINDL was completed by participants if the child, for whom the questionnaire was completed, was seven years or older (Ravens-Sieberer & Bullinger, 2000). Both measures contain six subscales, which are: physical well-being, mental well-being, self-esteem, family, friends and everyday functioning (Ravens-Sieberer, Ellert, & Erhart, 2007). Each subscale contains four questions that participants scored via the five point Likert scale (Ravens-Sieberer & Bullinger, 2000). Furthermore, the validity of both KINDL was valued as sufficient (Ravens-Sieberer

& Bullinger, 1998). The reliability of the six subscales were valued as sufficient; physical well-being (α= 0.69), mental well-being (α= 0.58), self-esteem (α= 0.61), family (α= 0.63), friends (α= 0.65) and everyday functioning (α= 0.65) (Ravens-Sieberer et al., 2007). The questions were answered based on a five point Likert-scale and transformed to a score between zero and one hundred, with respect to the manual of the KINDL (Ravens-Sieberer & Bullinger, 2000). A high score indicates a better health related quality of life (HRQOL) (Hullmann, Ryan, Ramsey, Chaney, & Mullins, 2011). Next to the KINDL measures, the SDQ was considered to measure the outcomes for the children. In this study, the SDQ measures the outcome for mental well-being. The SDQ stands for Strengths and Difficulties Questionnaire (Muris, Meesters, & van den Berg, 2003). The SDQ contains five subscales, namely: emotional symptoms, conduct problems, hyperactivity, peer problems and prosocial behaviour (van Widenfelt, Goedhart, Treffers, & Goodman, 2003). Each subscale contains five items, where the questions were scored on a three point scale (Muris et al., 2003). A high score on one of the subscales indicates a difficulty, except the prosocial behaviour. A high score on the prosocial behaviours scale indicates a strength (Muris et al., 2003). The total difficulties score for the SDQ was calculated by summing up the scores of the emotional symptoms, conduct problems, hyperactivity and peer problems. The total score had a reliability of α = 0.88 and was considered as a valid instrument (Muris et al., 2003).

In paragraph 4.5.1, the Cronbach alphas in this study were compared to the alphas found in literature, mentioned in the paragraph above.

4.4.1.2 Procedure

The participants were asked to complete three questionnaires; the first questionnaire was completed at baseline, the second questionnaire was completed eight weeks after baseline and the third questionnaire was completed twelve weeks after the second questionnaire. In this study, the first and second questionnaire were used. Table 4 provides an overview of the time schedule when the questionnaires were completed. The difference between the control and intervention group is that the participants in the control group completed all the questionnaires at a private place (for example at home). The participants in the intervention group completed T0 during the first meeting and T1 during the fifth meeting of the intervention.

Table 4: Time schedule for both the intervention and control group.

Time (in weeks)	**Week 1**	**Week 3**	**Week 5**	**Week 7**	**Week 9**
Meeting	**Meeting 1** **Here and now**	**Meeting 2** **My body, feelings and thoughts**	**Meeting 3** **Participation & daily life**	**Meeting 4** **Now and the future**	**Meeting 5** **Feeling good**
	First questionnaire (T0)				Second questionnaire (T1)

Note: M. Rouwette-Witting, personal communication, 8 March 2019.

4.4.2 Qualitative research

For the qualitative research, data was collected via semi-structured interviews in order to answer the second research question. Semi-structured interviews provide the opportunity to explore ideas or recommendations of the

participant (Sabee, 2018). Besides that, it provides flexibility to customize questions to the participant (Doyle, 2004). With semi-structured interviews the interviewer has the opportunity to replace words in case the participant has difficulties with understanding the question (Marshall & While, 1994). In total eight questions were formulated to collect data about meaningfulness and social and societal participation, provided in Table 5. The complete interview scheme is provided in Appendix B: Interview scheme. During the interview, the vulnerability of the participants and low literacy was taken into account. Low literacy was taken into account by using simple definitions of terms. Furthermore, interviews were held via telephone. It was considered that a telephone conversation was not too intensive for the participants, to cover the vulnerability of the participants.

Table 5: Questions of the semi-structured interview

Dimension	Question
Social and societal participation	In what kind of social activities did you participate before participating in "Healthy Children in Low-income Families"?
	In what kind of social activities did you participate after "Healthy Children in Low-income Families" has finished?
	In what kind of social activities did your oldest child in primary school participate before participating in "Healthy Children in Low-income Families"?
	In what kind of social activities did your oldest child in primary school participate after "Healthy Children in Low-income Families" has finished?
Meaningfulness	What is the reason that you have participated in the intervention "Healthy Children in Low-income Families"?
	Which goal have you made with [professional] and [experience expert] during the meetings of "Healthy Children in Low-income Families"?
	What did the five meetings bring you?
	What did the five meetings bring to your child?

4.5 Data analysis

For both the quantitative and qualitative research it is described how data was analysed in order to answer the research questions.

4.5.1 Quantitative research

The data was analysed in IBM SPSS Statistics 24. In Appendix C: SPSS-syntax, the syntax of this study is provided. The variables were translated to English of which an overview is provided in Appendix D: Translation of the variables. The background characteristics were analysed by using the descriptive statistics. The continuous variables were checked on normality by using the Shapiro Wilk test (Ghasemi & Zahediasl, 2012). These variables were age of the parent, age of the child, average age of children and the spendable income per month. In this study, the significance level of 0.05 was used. Per dimension it is described how the measures were analysed in order to determine the outcomes. For all the six dimensions the mean, range and standard deviation were calculated and shown in chapter 5.

Bodily functions

"Bodily functions of the participants" was measured via two questions of the CBS health survey-overall health (Central Bureau of Statistics, 2016). Two separate variables were conducted, which determined the outcome for the dimension. Since the "bodily functions of the participants" was based on two separate variables, no alpha was determined. "Bodily functions of the children" was measured via the subscale physical well-being of the Kiddy-KINDL and Kid- & Kiddo-KINDL (Ravens-Sieberer et al., 2007). First, the four variables were combined to scale physical well-being by summing up the variables. Then the sum of the scale was transformed to a score between zero and one hundred (Ravens-Sieberer & Bullinger, 2000). The transformed sum score had an alpha of 0.76.

Mental well-being

"Mental well-being of the participants" was measured via the EMPO (Damen et al., 2016). The total score of the measure was used to determine the level of empowerment of the participants. First, the three subscales intrapersonal, interpersonal and behaviour control were created by summing up the variables per subscale. Second, the mean of the subscales were taken separately. Third, the total score was determined by summing up the sum of the intrapersonal, interpersonal and behaviour control scale. Last, the mean of the total score was taken (α =0.59). "Mental well-being of the children" was measured via the emotional well-being subscale of the Kiddy-KINDL and the Kiddo-& Kid- KINDL (Ravens-Sieberer et al., 2007). First, the four variables were combined to subscale emotional well-being by summing up the variables. Next, the sum of the emotional well-being scale was transformed to a score between zero and one hundred (Ravens-Sieberer & Bullinger, 2000). In this study, the emotional well-being had a Cronbach alpha of 0.78. Moreover, the "Mental well-being of the children" was measured via the SDQ (van Widenfelt et al., 2003). First, the scores of the subscales emotional symptoms, conduct problems, hyperactivity, peer problems and prosocial behaviour were calculated by summing up the variables per subscale (Muris et al., 2003). Second, the total difficulties score was computed by summing up the emotional symptoms, conduct problems, hyperactivity and peer problems (Muris et al., 2003). Within this study, the total difficulties score had an alpha of 0.86.

Meaningfulness

"Meaningfulness of the participants" was measured via the emotional well-being of the MHC-SF (Lamers et al., 2011). The score of the subscale was taken by summing up the scores of the three variables. Then the mean of the emotional well-being scale was taken (α =0.71). "Meaningfulness of the children" was not measured via the questionnaire. It was considered that the questionnaire did not contain a suitable measurement instrument.

Quality of life

"Quality of life for the participants" was measured via the psychological well-being of the MHC-SF (Lamers et al., 2011). The scale psychological well-being was determined by summing up the scores of the four variables. Then the mean of the four variables was taken to conduct the score of the psychological well-being (α =0.71). "Quality of life of the children" was measured via the subscale self-esteem of the Kiddy-KINDL and Kid- & Kiddo-KINDL (Ravens-Sieberer et al., 2007). First, the variables of the subscale self-esteem were summed up. Next, the sum score of the subscale self-esteem was transformed to a score between zero and one hundred (Ravens-Sieberer & Bullinger, 2000). Within this study, the transformed score of the subscale self-esteem had a Cronbach alpha of 0.80.

Social and societal participation

"Social and societal participation of the participants" was measured via the social well-being scale of the MHC-SF (Lamers et al., 2011). The social well-being scale was determined by summing up the five variables. Then the mean of the five variables was taken (α =0.73). "Social and societal participation of the children" was measured via the scale friends of the Kiddy-KINDL and Kid- & Kiddo-KINDL (Ravens-Sieberer et al., 2007). The sum of the friends scale was computed by summing up the four variables. Last, the score was transformed to a score between zero and one hundred (Ravens-Sieberer & Bullinger, 2000). In this study, the subscale friends had an alpha of 0.78.

Daily functioning

"Daily functioning of the participants" is the last outcome for the participants. The outcome was determined via one question of the CBS health survey-overall health (Central Bureau of Statistics, 2016). One variable was conducted to measure the outcome for "Daily functioning of the participants". Therefore, no alpha was determined. "Daily functioning of the children" was measured via two subscales of the Kiddy-KINDL and Kid- & Kiddo-KINDL, which are: family and everyday functioning (Ravens-Sieberer et al., 2007). The four variables of the scale family and the four variables of the everyday functioning scale were summed up. Next, the sum scores of the family and everyday functioning were transformed to a score between zero and one hundred (Ravens-Sieberer & Bullinger, 2000). In this study, the subscale family had a Cronbach alpha of 0.64 and the subscale everyday functioning had an alpha of 0.82.

The outcomes of the participants and the children were tested on normality by performing the Shapiro Wilk Test (Ghasemi & Zahediasl, 2012). First, the Independent sample T-Test was performed to compare the outcomes between the intervention and control group at baseline (T0) for significant differences (McCrum-Gardner, 2008). Second, the Independent T-Test was performed to compare the outcomes between the intervention and control group for significant differences at T1. Third, the paired sample was performed to determine significant differences between the outcomes at T0 and T1 between the groups, as well children and participants (McCrum-Gardner, 2008). The null hypothesis that was tested was: "The parents and the children in the intervention group of "Healthy Children in Low-income Families" score better than the control group on the six dimensions of positive health".

Table 6 provides an overview of the six dimensions of positive health. Within this study, the Cronbach alphas were determined per measurement instrument. For the dimension bodily functions and daily functioning of the parents was no alpha determined since the outcomes of these dimensions were determined via one or two single variables. First, the Cronbach alphas of the measures of the participants are discussed. An alpha between 0.70 and 0.90 was considered as acceptable to use (Tavakol & Dennick, 2011). The total score of the EMPO in this study (α =0.59), which was lower than the alpha that is found in literature (α= 0.86) (Damen et al., 2016). The low alpha can be due to low correlation between the questions. Since no other measurement instrument of the questionnaire was found suitable for the mental well-being, the outcomes of the EMPO were used even though the alpha was low. An alpha lower than 0.50 was considered as not reliable (Tilburg University, n.d.) Next to that, meaningfulness had an alpha of 0.56, while in literature it was found that the subscale emotional well-being of the MHC-SF had an alpha of 0.83. Within this study, it can be that the alpha is low since the subscale is based on four questions. The subscale psychical well-being (α =0.71) and social well-being (α =0.73) were considered as sufficient within

this study. Moreover, the Cronbach alphas of the outcomes of the children were determined. All the alphas of the six subscales within this study were considered as sufficient; physical well-being (α= 0.76), mental well-being (α= 0.78), self-esteem (α= 0.80), family (α= 0.78), friends (α= 0.64) and everyday functioning (α= 0.82). These alphas were better compared to the alphas in literature (Ravens-Sieberer et al., 2007). The total difficulties score was used to determine the outcome for the dimension mental well-being of the children (α= 0.86).

Furthermore, all the questions that were used in this study are shown in Table 6, an extensive version of the questionnaire can be obtained via the Academic Collaborative Centre Youth Twente. Table 6 shows the response categories per measure. Some questions were computed on a reserved response scale, which is indicated in Table 6. There were some exceptions when it comes to the Kiddy-KINDL and Kid- & Kiddo-KINDL. Some variables of the Kiddy-KINDL and Kid- & Kiddo-KINDL have a different response category. This depends whether the question was answered on the Kiddy-KINDL or on the Kid- & Kiddo-KINDL (Ravens-Sieberer et al., 2007). The reliability of the measures within this study were determined and provided in the table below.

Table 6: Overview of the outcomes, response categories and questions of the questionnaire "Healthy Children in Low-income Families".

Outcome	Response categories	Questions
Bodily functions		
Parent level (CBS health survey-Overall health)		
General Health	0 = Very bad 1 = Bad 2 = Oke 3 = Good 4 =Very Good	How is your health in general?
Long-term illness	0 = No 1 = Yes	Do you have one or more long-term illnesses or disabilities? (six months or longer)
Child level (KINDL)		
Physical well-being α =0.76	1= Never 2= Rarely 3= Sometimes 4= Often 5= All the time	My child had felt ill* My child had a headache or tummy-ache* My child was tired and worn-out* My child felt strong and full of energy
Mental well-being		
Parent level (EMPO)		
Total score α =0.59	1= Strongly disagree 2= Disagree 3= No disagree, no agree 4= Agree 5= Strongly agree	I do not worry very much I have trust in my future I am in control of my life I make use of my social network if necessary I have self-control I search for solutions for my child by myself I have control about my child's behaviour I am in control of the upbringing of my child My child behaves the way I would like him or her to behave.

			I intervene immediately when my child has problems I control my child's behaviour when needed I fight for things that I value as important
Child level(KINDL)			
Emotional well-being α =0.78	1= Never 2= Rarely 3= Sometimes	4= Often 5= All the time	My child didn't feel much like doing anything* My child felt alone* My child felt scared or unsure of itself* My child had fun and laughed a lot
Child level (SDQ)			
Total difficulties score α =0.86	0= Not true 1= Somewhat true 2= Certainly true		Often complains of headaches, stomach-aches or sickness Many worries or often seems worried Often unhappy, depressed or tearful Nervous or clingy in new situations, easily loses confidence Many fears, easily scared Often fights with other children or bullies them Often lies or cheats Steals from home, school or elsewhere Restless, overactive, cannot stay still for long Constantly fidgeting or squirming Easily distracted, concentration wanders Shares readily with other children, for example toys, treats, pencils Considerate of other people's feelings Kind to younger children Often volunteers to help others (parents, teachers, other children) Helpful if someone is hurt, upset or feeling ill Rather solitary, prefers to play alone

		Picked on or bullied by other children Gets along better with adults than with other children Generally well behaved, usually does what adults request* Good attention span, sees chores or homework through to the end* Thinks things out before acting* Has at least one good friend* Generally liked by other children*
Meaningfulness		
Parent level (MHC-SF)		
Emotional well-being α =0.56	0= Never 3= Two or three times a week 1= Once or Twice 4= Almost every day 2= Approximately once a week 5= Every day	Happy Interested in life Satisfied with life
Quality of life		
Parent level (MHC-SF)		
Psychological well-being α =0.71	0= Never 3= Two or three times a week 1= Once or Twice 4= Almost every day 2= Approximately once a week 5= Every day	Good managing the responsibilities of your daily life That you had warm and trusting relationships with others That you had experiences that challenged you to grow and become a better person Confident to think or express your own ideas and opinions That you liked most parts of you personality. That your life has a sense of direction or meaning to it.
Child level (KINDL)		
Self-esteem α =0.80	1= Never 4= Often 2= Rarely 5= All the time 3= Sometimes	My child was proud of him-/herself My child felt on top of the world (Kiddy-KINDL) My child felt on top of the world (Kid- & Kiddo-KINDL)* My child pleased with him-/herself

		My child had lot of good ideas
Social and societal participation		
Parent level (MHC-SF)		
Social well-being α =0.73	0= Never 1= Once or Twice 2= Approximately once a week 3= Two or three times a week 4= Almost every day 5= Every day	That you had something important to contribute to society That you belonged to a community That our society is a good place, or is becoming a better place, for all people That people are basically good That the way our society works makes sense to you
Child level (KINDL)		
Friends α =0.78	1= Never 2= Rarely 3= Sometimes 4= Often 5= All the time	My child did things together with friends My child was liked by other kids My child got along well with his or her friends My child felt different from other children*
Daily functioning		
Parent level (CBS health survey-Overall health)		
Limitations in daily life	0 = No limitations 1 = Limited dysfunctions 2 = Serious limited	To what extent have you been limited in activities that people usually do due to health problems for 6 months?
Child level (KINDL)		
Family α =0.64	1= Never 2= Rarely 3= Sometimes 4= Often 5= All the time	We quarrelled at home* My child felt that I was bossing him around* My child got on well with us as parents My child felt fine at home
Everyday functioning α =0.82	1= Never 2= Rarely 4= Often 5= All the time	My child worried about his future (Kid- & Kiddo-KINDL)* My child looked forward to nursery school (Kiddy-KINDL)

	3= Sometimes	My child was afraid of bad marks or grades* My child easily coped with schoolwork My child enjoyed the school lessons

* Reversed score

4.5.2 Qualitative research

The audiotapes were verbatim transcribed in software programme Amberscript. The conducted transcripts were analysed in Atlasti 8. In order to increase the validity and the reliability of the study, another student helped with the analysis and coding process of one of the transcripts. The students coded the transcript independently. Differences in coding were discussed until consensus was reached. The transcripts were coded according to the coding scheme provided in Table 7. First, the experiences were categorized according to the experiences of the participant or the experience of the child. Thereafter, the experiences were categorized between the situation before the intervention and the situation after the intervention. At last, the dimension was determined whether the experience belonged to meaningfulness or to social and societal participation. After this study was completed the audiotapes were deleted. The transcripts were stocked in the archives of the University of Twente.

Table 7: Coding scheme of the semi-structured interviews.

Code	Explanation	Explanation
1.	**Outcome**	
1.1	Outcome_Parent	Experience according to the participating parent.
1.2	Outcome_Child	Experience according to the child of whom the questionnaire is completed.
2.	**Time**	
2.1	Time_T0	Experience of the situation before the intervention "Healthy Children in Low-income Families".
2.2	Time_T2	Experience of the situation after the intervention "Healthy Children in Low-income Families".
3.	**Dimension according to positive health**	
3.1	Dimension_Meaningfulness	Experience belonging to the dimension meaningfulness
3.2	Dimension_Social	Experience belonging to the dimension social and societal participation.

4.6 Ethical approval

Since this study involved humans in a direct way, the study needed to be approved by the ethical committee of the University of Twente. The committee assessed that the study was conform the ethical standards of the University of Twente. The approval can be found via the application number 190411. Besides the approval of the committee of Behavioural, Management and Social Sciences (BMS), approval was given by the participants for participation in this study. For the quantitative research, the participants had given their approval via informed consent to the Academic Collaborative Centre Youth Twente. The participants of the qualitative research had given their approval to participate by providing information beforehand. The approval is recorded on tape and documented in the transcripts.

5. Results

5.1 Background characteristics

The background characteristics of the parents and the children were analysed in order to determine whether the intervention and control group were similar to each other. Table 8 shows the p-values in the last column. There was a significant difference found between the parents in the intervention and control group for the variable Gender. Moreover, the Shapiro Wilk test showed that all the continuous variables were significant. Therefore the median and range were shown (Ghasemi & Zahediasl, 2012).

Table 8: Overview of the background characteristics of the parents (N= 150). The nominal and ordinal variables are presented with the number of results and the percentage. The median and range are shown of the continuous variables.

		Intervention group (N =75)		**Control group (N =75)**		
Variable	Value	N or median	% or range	N or median	% or range	P-value
Gender*	Female	71	94.7	66	88.0	0.01
	Male	1	1.3	9	12.0	
	Missing	3	4.0			
Born in the Netherlands	Yes	58	77.3	57	76.0	0.73
	No	16	21.3	18	24.0	
	Missing	1	1.3			
Coupled	Single	44	58.7	36	48.0	0.16
	Together	30	40.0	39	52.0	
	Missing	1	1.3			
Education	No education	9	12.0	8	10.7	0.42
	Primary school	3	4.0	5	6.7	
	VMBO/LBO/MAVO	27	36.0	19	25.3	
	HAVO/VWO/MBO	30	40.0	35	46.7	
	HBO/University	4	5.3	2	2.7	
	Other	2	2.7	6	8.0	
Working situation	Paid work	10	13.3	16	21.3	0.20
	No paid work	65	86.7	59	78.7	
Income status 1	Through a paid job	21	28.0	19	25.3	0.07
	Through benefits and allowances for **less** than three years	26	34.7	14	18.7	
	Through benefits and allowances for **more** than three years	23	30.7	31	41.3	
	Other	5	6.7	11	14.7	
Income status 2	Second income	11	14.7	5	6.7	0.11
	No second income	64	85.3	70	93.3	
Children in living in household – Always	No children	2	2.7	3	4.0	0.26
	One child	24	32.0	14	18.7	
	Two children	26	34.7	26	34.7	
	Three children	12	12	21	28.0	
	Four children or more	11	14.7	11	14.7	
Children in living in household – Part-time	No children	60	80.0	51	68.0	0.32
	One child	7	9.3	8	10.7	
	Two children	4	5.3	9	12.0	
	Three children or more	4	5.3	7	9.3	
Age		37	24-51	37	20-65	0.39

Spendable income per month	303.33	130-1423	346.67	195-650	0.20
Age of all children	7.00	2.25-25.75	7.50	2.00-19.50	0.28

* Sign.

The intervention group contained more women than the control group. In the intervention group, there were 71 women and 66 women in the control group. In both groups, most parents were born in the Netherlands. Countries that were frequently mentioned if the parent was not born in the Netherlands were Turkey, Germany, Iraq and Syria. Furthermore, most parents in the intervention group (58.7%) and control group (48%) were single. Twelve parents in the intervention group and thirteen parents in the control group have not finished any education or only finished primary school. Moreover, most parents in the intervention group (86.7%) and control group (78.7%) do not have work or have work that is not paid for (voluntary work). The parents in the control group had a higher amount to spend per month compared to the parents in the intervention group. The spendable income is the amount of money the family has left after bills and other fixed costs were paid. Most parents, as well in the intervention as in the control group, received their main income through benefits and allowances that the families received three years or longer. Furthermore, most parents have two children with them all the time and zero children with them part-time. The median age of the parents in the intervention and control group is 37 years.

Table 9: Overview of the characteristics of the children (N=150). The nominal and ordinal variables are presented with the number of results and the percentage. The median and range are shown of the continuous variables.

		Intervention group (N =75)		**Control group (N =75)**		
Variable	Value	N or median	% or range	N or median	% and range	p-value
Gender-Daughter	No	36	48.0	43	57.3	0.18
	Yes	39	52.0	30	40.0	
	Missing			2	2.7	
Groep in primary school	1	8	10.7	8	10.7	0.77
	2	12	16.0	10	13.3	
	3	8	10.7	8	10.7	
	4	9	12.0	3	4.0	
	5	7	9.3	11	14.7	
	6	6	8.0	7	9.3	
	7	11	14.7	10	13.3	
	8	10	13.3	14	18.7	
	Other	4	5.3	4	5.3	
Living situation	With father and mother	25	33.3	33	44.0	0.34
	With mother	39	52.0	32	42.7	
	Partly with father and partly with mother	10	13.3	7	9.3	
	Other	1	1.3	3	4.0	
Age		8.00	4.00-13.00	9.00	4.00-13.00	0.50

The children about whom the questionnaire was completed had a median age of eight years in the intervention group. In the control group, the children had a median age of nine years. The intervention group contained more

girls (52.0%) than the control group (40%). All "groepen" were represented in this study. Most children in the intervention group were in groep 2 and in the control group in groep 8. More children in the intervention group (52%) were living with their mother than the children in the control group (42.7%). Most children in the control group were living with both parents.

5.2 Outcomes quantitative research

In this paragraph are the results from the first research question presented. The first research question is; "What are the effects of the intervention "Healthy Children in Low-income Families", compared to care-as-usual, applied to parents who live in poverty in the region of Twente, on the positive health of children ranged from four till twelve years old and their parents, eight weeks after the intervention was started?" The first and second questionnaire were used to determine the outcomes for six dimensions of positive health. First the outcomes of the parents are discussed. Thereafter the outcomes of the children are presented.

5.2.1 The parent outcomes

The outcomes of the first questionnaire of the parents in the intervention and control group were compared to see whether both groups had similar outcomes at baseline. The results are shown in Table 10. Per group the mean, the standard deviation (SD) and range are presented. In the last column, the p-value and the average of both the intervention and control group are provided.

Table 10: Comparison of the outcome measures of the parents in the intervention and control groups at the baseline (T0)

Dimensions & measures		**Intervention group (N= 75)**			**Control group (N= 75)**				
		Mean	**SD**	**Range**	**Mean**	**SD**	**Range**	**p-value**	**Average**
Bodily functions *CBS Health survey*	Overall health	2.48	0.92	0.00-4.00	2.51	0.78	1.00-4.00	*0.81*	2.50
	Long-term illness	0.51	0.50	0.00-1.00	0.44	0.50	0.00-1.00	*0.41*	0.47
Mental well-being *EMPO*	Total score	14.89	2.09	7.00-19.33	15.05	1.89	9.67-20.00	*0.64*	14.97
Meaningfulness *MHC-SF*	Emotional well-being	3.36	1.09	0.67-5.00	3.30	1.10	0.00-5.00	*0.73*	3.33
Quality of life *MHC-SF*	Psychological well-being	3.44	1.04	0.83-5.00	3.23	1.02	1.00-5.00	*0.22*	3.34
Social and societal participation *MHC-SF*	Social well-being	2.57	1.12	0.00-5.00	2.38	1.16	0.20-5.00	*0.33*	2.48
Daily functioning *CBS Health survey*	Limitations in daily life	1.24	0.72	0.00-2.00	1.29	0.74	0.00-2.00	*0.71*	1.27

At T0, no significant differences were found between the outcomes of the six dimensions between the parents in the intervention and control group. Parents in both the intervention and control group have comparable outcomes at baseline.

Next to the outcomes at T0, the outcomes of the six dimensions at T1 were determined. The outcomes at T1 were determined via the second questionnaire that the parents had completed. Not all the parents had completed both questionnaires. Therefore, the outcomes in Table 11 were based on a smaller sample size than the outcomes at T0.

Table 11: Comparison of the outcome measures of the parents in the intervention and control groups eight weeks after the baseline (T1)

Dimensions & measures		**Intervention group (N= 66)**			**Control group (N= 57)**				
		Mean	**SD**	**Range**	**Mean**	**SD**	**Range**	**p-value**	**Average**
Bodily functions *CBS Health survey*	Overall health	2.40	0.89	1.00-4.00	2.64	0.76	1.00-4.00	0.12	2.50
	Long-term illness	0.51	0.50	0.00-1.00	0.34	0.48	0.00-1.00	0.06	0.44
Mental well-being *EMPO*	Total score	14.41	2.11	7.67-20.00	15.06	2.02	8.67-18.67	0.09	14.69
Meaningfulness *MHC-SF*	Emotional well-being	3.43	1.23	0.00 - 5.00	3.71	0.92	1.67-5.00	0.17	3.55
Quality of life *MHC-SF*	Psychological well-being	3.42	1.13	0.83-5.00	3.41	1.03	0.83 - 5.00	0.98	3.42
Social and societal participation *MHC-SF*	Social well-being	2.77	1.09	0.00-5.00	2.53	1.22	0.20-5.00	0.25	2.67
Daily functioning *CBS Health survey*	Limitations in daily life*	1.19	0.67	0.00-2.00	1.49	0.58	0.00-2.00	0.01	1.32

* Sign.

No significant differences were found between the outcomes of the parents in the intervention and control group for bodily functions, mental well-being, meaningfulness, quality of life, and social and societal participation at T1. There was a significant difference found between the parents for daily functioning (p=0.01). The parents in the intervention group (1.19) had a better outcome for the variable limitations in daily life than the parents in the control group (1.49). The higher the score of the variable limitations in daily life, the more limitations in daily life are experienced.

Besides the comparison between the outcomes at T0 and T1 between the parents in the intervention and control ground, a paired sample T-Test was performed. The paired sample T-Test was performed to show the differences among the parents in the intervention group and among the parents in the control group between the first and second questionnaire. The outcomes of the paired sample T-Test are shown in Table 12. For the reason that not all the parents had completed the first and second questionnaire, the mean in Table 12 differs from the mean in Table 10 and Table 11. The mean in Table 12 was based on the parents who have completed both questionnaires. Furthermore, the difference between the outcome at T0 and T1 is shown, whether the group improved or did not improved their outcome.

Table 12: Mean values of the outcome measures of the six dimensions of positive health measured at baseline (T0), eight weeks after the baseline (T1) and change over time (Δ T1-T0), for parents in the intervention and control group

Dimensions & measures		**Intervention (T0-T1)**				**Control (T0-T1)**			
		Mean T0	Mean T1	Δ T1-T0	P-value	Mean T0	Mean T1	Δ T1-T0	P-value
Bodily functions *CBS Health survey*	Overall health	2.47	2.40	-0.07	0.40	2.58	2.65	+0.07	0.44
	Long-term illness	0.51	0.51	0.00	1.00	0.37	0.33	-0.04	0.49
Mental well-being *EMPO*	Total score	14.78	14.42	-0.36	0.18	14.90	15.04	+0.14	0.60
Meaningfulness *MHC-SF*	Emotional well-being	3.31	3.43	+0.12	0.37	3.40	3.71	+0.31	0.96
Quality of life *MHC-SF*	Psychological well-being	3.40	3.42	+0.02	0.85	3.29	3.40	+0.11	0.47
Social and societal participation *MHC-SF*	Social well-/being	2.54	2.77	+0.23	0.08	2.41	2.51	+0.10	0.54
Daily functioning *CBS Health survey*	Limitations in daily life	1.19	1.18	-0.01	0.81	1.31	1.50	+0.19	0.02*

* Sign.

No significant differences were found between the outcomes at T0 and T1 among the parents in the intervention group for the six dimensions. The parents in the intervention group improved their outcomes for meaningfulness, quality of life, social and societal participation and daily functioning. The parents did not improve their outcome for bodily functions and mental well-being; the outcome was lower at T1 compared to T0 and the outcome of the variable long-term illness did not change. There was a significant difference found between the outcomes at T0 and T1 among the parents in the control group for daily functioning (p=0.02).

To conclude, there were no significant differences between the parents in the intervention and control group for the six dimensions of positive health at T0. There was a significant difference found between the parents in the intervention and control group for daily functioning (p=0.01) at T1. Furthermore, among the parents in the intervention group were no significant differences found between the outcomes at T0 and T1. However, there was a significant difference found among the parents in the control group for daily functioning (p=0.02) between the outcomes at T0 and T1. The control group had a higher score at T1 compared to T0, which indicates more difficulties in daily life.

5.2.2 The child outcomes

An independent T-Test was performed for the outcomes of the first questionnaire for the children in the intervention and control group, provided in the table below.

Table 13: Comparison of the outcome measures of the children in the intervention and control groups at the baseline (T0)

Dimensions & measures		**Intervention group (N=75)**			**Control group (N=75)**				
		Mean	**SD**	**Range**	**Mean**	**SD**	**Range**	**p-value**	**Average**
Bodily functions *KINDL*	Physical well-being	72.50	18.83	25.00-100.00	70.57	17.88	6.25-100.00	0.53	71.56

Mental well-being *KINDL*	Emotional well-being	75.08	19.40	31.25-100.00	79.54	15.21	18.75-100.00	0.12	77.28
SDQ	Total difficulties score*	12.67	7.07	3.00-29.00	10.12	5.73	1.00-28.00	0.02	11.40
Meaningfulness									
Quality of life *KINDL*	Self-esteem	73.67	15.18	31.25-100.00	75.34	14.43	25.00-100.00	0.49	74.49
Social and societal participation *KINDL*	Friends	70.50	18.40	18.75-100.00	71.15	18.18	0.00-100.00	0.83	70.82
Daily functioning *KINDL*	Family	75.42	14.79	31.25-100.00	76.97	12.88	37.50-100.00	0.50	76.18
	Everyday functioning	74.85	17.20	6.25-100.00	77.40	13.08	37.50-100.00	0.27	75.97

* Sign.

There was a significant difference found between the children in the intervention and control group for one item that had measured mental well-being (p=0.02). The score of the children in the intervention group (12.67) was higher compared to the score of the children in the control group (10.12) for the item total difficulties score SDQ. The higher the score, the more difficulties are experienced.

Moreover, the outcomes of the six dimensions were compared at T1. The second questionnaire was used to determine the outcomes at T1. By the reason that not all the parents had completed the first and second questionnaire, Table 14 was based on a smaller sample size than Table 13 was based on.

Table 14: Comparison of the outcome measures of the children in the intervention and control groups eight weeks after the baseline (T1)

Dimensions & measures		**Intervention group (N=66)**			**Control group (N=59)**				
		Mean	**SD**	**Range**	**Mean**	**SD**	**Range**	**p-value**	**Average**
Bodily functions *KINDL*	Physical well-being*	67.14	17.83	25.00-93.75	73.91	17.49	31.25-100.00	0.04	70.03
Mental well-being *KINDL*	Emotional well-being*	70.89	18.94	25.00-100.00	80.17	12.96	50.00-100.00	0.03	74.85
SDQ	Total difficulties score*	12.19	7.09	2.00-33.00	9.87	5.61	3.00-24.00	0.05	11.19
Meaningfulness									
Quality of life *KINDL*	Self-esteem	73.10	14.27	31.25-100.00	73.67	14.18	37.50-100.00	0.83	73.35
Social and societal participation *KINDL*	Friends	68.03	19.52	0.00-100.00	72.72	14.17	31.25-100.00	0.15	70.04
Daily functioning *KINDL*	Family	72.73	14.06	31.25-100.00	75.96	14.19	43.75-100.00	0.22	74.12
	Everyday functioning	73.19	18.78	6.25-100.00	75.24	14.90	43.75-100.00	0.52	74.07

* Sign.

Table 14 shows significant differences between the children in the intervention and control group for bodily functions and mental well-being. For bodily functions (p=0.04), the children in the intervention group (67.14) had a lower average score compared to the children in the control group. The higher the score, the higher the health

related quality of life according to the subscale of physical well-being. Mental well-being was measured via two items; emotional well-being (p=0.03) and total difficulties score SDQ (p=0.05). The score of the children in the intervention group (70.89) was lower compared to the score of the children in the control group (80.17) for the subscale emotional well-being of the KINDL questionnaires. Furthermore, the children in the intervention group (12.19) had a higher outcome compared to the children in the control group (9.87) for the total difficulties score of the SDQ. The higher the outcome for the SDQ, the more difficulties are experienced.

Table 15 presents the outcomes of the paired sample T-Test of the Kiddy-KINDL, Kid-& Kiddo-KINDL and the SDQ. For the same reason as with the parents, the mean in Table 15 differs from the mean in Table 13 and Table 14 since not all the parents had completed the first and second questionnaire. Therefore, the mean in Table 15 is based on the results of the children of whom the parents had completed both questionnaires. Also the difference between the outcomes at T0 and T1 for the six dimensions are presented, whether a dimension had improved or not.

Table 15: Mean values of the outcome measures of the six dimensions of positive health measured at baseline (T0), eight weeks after the baseline (T1) and change over time (Δ T1-T0), for the children in the intervention and control group

Dimensions & measures		**Intervention group (T0-T1)**				**Control group (T0-T1)**			
		Mean T0	Mean T1	Δ T1-T0	P-value.	Mean T0	Mean T1	Δ T1-T0	p-value
Bodily functions *KINDL*	Physical well-being	72.88	67.14	-5.74	0.01*	71.20	73.65	+2.45	0.24
Mental well-being *KINDL*	Emotional well-being	74.73	70.89	-3.84	0.03*	78.06	80.27	+2.21	0.30
SDQ	Total score	12.69	12.19	-0.5	0.41	10.60	10.00	-0.60	0.32
Meaningfulness									
Quality of life *KINDL*	Self-esteem	73.28	73.10	-0.18	0.89	73.65	73.65	0.00	1.00
Social and societal participation *KINDL*	Friends	70.56	68.03	-2.53	0.17	69.98	72.67	+2.69	0.21
Daily functioning *KINDL*	Family	75.00	72.74	-2.26	0.17	76.10	76.10	0.00	1.00
	Everyday functioning	74.82	73.19	-1.63	0.36	76.23	74.88	-1.35	0.36

* Sign.

Table 15 shows significant differences among the children in the intervention group for bodily functions (p=0.01) and the emotional well-being subscale (p=0.03) for mental well-being. Both scores were lower at T1 compared to the scores at T0. Further, the outcomes of the children in the intervention group for all the six dimensions were lower at T1 compared to the outcomes at T0. There was no significant difference found between the outcomes at T0 and T1 for the children in the control group.

To conclude, there was a significant difference found between the children in the intervention and control group for the total difficulties score of the SDQ (p=0.02) for the dimension mental well-being at T0. The children in the intervention group had a higher outcome compared to the children in the control group. A higher score indicates more difficulties. There was a significant difference found between the children in the intervention and control group for the dimension bodily functions (p=0.04). The children in the intervention group had a lower score compared to the children in the control group. Moreover, there were significant differences found between the

groups for both items via which the dimension mental well-being is measured. The children in the intervention group had a lower score compared to the children in the control group for the subscale emotional well-being (p=0.03). Further, the children in the intervention group had a higher score compared to the children in the control group for the total difficulties score of the SDQ (p=0.05). Furthermore, there were significant differences found among the children in the intervention group for the dimension bodily functions (p=0.01) and mental well-being, item emotional well-being (p=0.03). Both scores were lower at T1 compared to T0. There were no significant differences found among the children in the control group for the six dimensions of positive health.

5.3 Outcomes qualitative research

In order to answer the second research question "How do parents of the intervention group experience the received returns for the social and societal participation and meaningfulness for their oldest child at primary school and themselves?" interview transcripts were analysed. Received returns are the factors that parents had experienced after completing the intervention. The received returns can be positive but also negative. In total five participants of the intervention group were interviewed, of which all were female. The experiences that were discussed during the interviews were structured to one of the following codes; outcome for parent or child, time and dimension.

5.3.1 The parent experience of the intervention

Social and societal participation

Three parents reported that they did not participate in social activities at T0, because they did not know which activities were available in their municipality. One of them mentioned that although she knew about activities, she did not participated in these social activities due to financial tightness. *"No, I did not participate in any activity, no […] No everything costs money which I do not have".* [Interview D, line 26 -28]. Moreover, parents mentioned that they did not participate in social activities, because the parents felt ashamed of their (financial) situation. Parents mentioned that they had the feeling to be alone and that no one understands them. *"They will always ask: what is your profession? Well I am just a stay at home mom that is something I do not want to tell".* [Interview D, line50-51]. *"I want to find motivation to do activities. I think you have to do something and not spending your time on the couch, but I find it quite difficult to do so".* [Interview E, line 83-84]. Two parents mentioned that they did participate in social activities at T0. The parents went to social events organised by local healthcare- or voluntary organisations. *"At the meeting group […] we talk about things that are important for the upbringing of our children* [Interview E, line 15 & 17]. *"[Organisation x] organises activities you can go to. I go there sometimes, if I want to do something".* [Interview A, line 21-22].

One parent reported that, at T1 she had changed her social activities compared to the situation at T0. She had found voluntary work *"I do voluntary work approximately for an hour and a half per week. Also, I babysit once a week".* [Interview E, line 23]. The other four parents mentioned that their social activities, in terms of sports or clubs, did not differ from the situation before the intervention. Three parents mentioned that they have enlarged their social network *"Yes, the meetings have helped me to find new contacts. I maintained one good friend".* [Interview A, line 79]. *"After the intervention we still meet each other to drink coffee. We do this every week".* [Interview C, line 31-32]. The parent reported that the relationships with the new social contacts are tight. The parent mentioned that participants in her municipality meet each other on a regular basis. Then they share tips and experiences with

each other, just like they did during the intervention. "*Then you see each other in the village. We talk about things, like we have tried this and I have done that. Or we ask each other: What would you do in this situation?"* [Interview C, line 179-180]. Two parents mentioned that they had not found new social contacts due to the intervention at T1. Both parents explained that they had the feeling they did not belong to the group *"No not really, I did not fit in the group. There were some ladies in the group with a strong voice. I am not like that. […] I hoped to find new social contacts thanks to the group".* [Interview E, line – 28-30].

To conclude, most parents did not participate in any kind of social activities before the intervention. After the intervention, four out of five parents reported to have changed their social activities; one parent had found voluntary work, three parents had found new social contacts. One parent experienced no change for social and societal participation between the situation at T0 and T1.

Meaningfulness

Parents found it difficult to mention their experiences about meaningfulness. Parents were asked about the goals they had developed during the intervention. One parent could remember her goal, the other four parents not because the intervention was a while ago. Two parents mentioned they had developed a goal for themselves and three parents mentioned they had developed a goal for their child. Parents reported that they had conducted a goal with the results of the kidstool (completed in the first meeting: Here and now). Parents mentioned that the tool was very helpful and that the outcome of the tool was an eye-opener. *"I was completely impressed by myself. I never thought that a result like that came out my test".* [Interview C, line 116-117]. The parent that did remember her goal had reached it at T1. The goal was mentioned in the previous paragraph (voluntary work).

Four parents reported that the intervention had brought them positive experiences. The parents explained that they have gained knowledge about being creative with their small budget. *"During the meetings we have shared tips about how we can spend money. Someone told me that she goes shopping at the end of the day, because groceries are cheaper at the end of the day. The tip saves a lot of money".* [Interview C, line 19-22]. One parent mentioned that the intervention had brought her nothing at T1. The parent was negative about the other parents. She explained that she had learned tips from the professional and experience expert, not from the other parents in her group. *"The intervention had brought me little to nothing. I had the feeling that I did not fit in the group".* [Interview B, line 80 & line 82].

To conclude, most parents mentioned that they had developed a goal for their children. The parents could not specify the goal by the reason that the intervention was some time ago. Four out of five parents mentioned that the intervention had brought positive results for example new social contacts and tools to cope with a small budget. One parent was negative about the intervention. She explained that the intervention had brought her nothing because she had the feeling that she did not fit in the intervention group.

5.3.2 The child experience of the intervention

Social and societal participation

Parents found it hard to answer questions about the received returns of their children about social and societal participation. The parents reported that all the children were participating in social activities at T0, like sports or clubs. Activities that were mentioned are kickboxing, gymnastics, swimming lessons, horse riding and football.

Four parents mentioned that these social activities did not changed at T1 compared to the situation before the intervention. One parent reported that her child had changed her activities, due to other interests. The parent explained that she found the activity thanks to the voluntary organisation in her community, not via the intervention. *"She has stopped with gymnastics, because she thought she was not longer fitting in the group. She will also stop with the aqua club classes. But soon she will start with art class"* [Interview E, line 41-42]. Besides the sport and club activities, the parents answered questions about the social activities of their children in their neighbourhood and activities with friends. Four parents mentioned that their children were participating in social activities with friends or children in their neighbourhood at T0. These social activities were not changed at T1. One parent mentioned that her children were not participating in social activities in their neighbourhood or with friends. This is due to the long distance between school and home address. The participant explained that her children do not have friends close by. *"My oldest daughter does not have friends in the town where we live. My youngest daughter has one good friend."* [Interview D, line 69-70]. The social situation at T1 did not differ from the social situation at T0. Parents reported that they were spending more time with their children at T1 compared to the situation at T0. Parents became more aware of things that their children do. One parent mentioned that she had bought board games at the local thrift shop to spend more (quality) time with her child. *"After dinner I did the shores and we both grabbed our mobile phones. […] Now we do the shores together and afterwards we play a game".* [Interview C, line 158-160].

To conclude four parents mentioned no change between the social situation before the intervention and after the intervention. One parent mentioned change of the social situation of her child, because she had changed her sport clubs. The change occurred due to other interests of the child. The parents experienced no change of the social network of their children due to the intervention.

Meaningfulness

Parents found it also difficult to mention the experiences of their children regarding to meaningfulness. Parents were hesitating while answering the last question of the interview about what the intervention had brought their children. At first, parents reported no change between the situation at T0 and T1. While more questions were answered, the parents mentioned differences between the situation T0 and the situation at T1. Four parents mentioned that they experience that they are spending more time with their child at T1 compared to T0 *"Due to the intervention, I think that my daughter and I can talk better with each other. We talk more often and I also spend more time with her".* [Interview E, line 65-66].

To conclude parents mentioned no change for the dimension meaningfulness. Parents do mention small differences between the situation before and after the intervention, for example more quality time with the child.

6 Conclusion and discussion

In this chapter are the answers provided of the two research questions. The results are combined with the literature that is described in the theoretical framework. Next, two strengths and three limitations within this study are described. Lastly, three recommendations are mentioned for further research.

6.1 Conclusion

The study that is described answers two questions. The first question in this study was: "What are the effects of the intervention "Healthy Children in Low-income Families", compared to care-as-usual, applied to parents who live in poverty in the region of Twente, on the positive health of children ranged from four till twelve years old and their parents eight weeks after the intervention was started?" The answer is that the parents in the intervention group have improved their outcomes for meaningfulness, quality of life, social and societal participation and daily functioning, but these improvements were not significant. The parents in the intervention group have the same outcome for the item long-term illness, but have not improved their outcome for the other variable overall health via which bodily functions is measured. However, it was found that the parents in the control group, who received care-as-usual, have a significant difference for daily functioning ($p=0.01$) between the baseline and eight weeks afterwards. The parents in the control group have lowered their score eight weeks after baseline compared to the outcome at baseline. Therefore, it can be concluded that the intervention had a positive effect on the parents who have participated in the intervention. Besides the effects of the intervention on the parents, the effects of the intervention on the health of children were determined. The answer on the first research question is that the effects of the intervention on the children is that the children in the intervention group had lower outcomes eight weeks after baseline compared to the outcomes at baseline for all the six dimensions. The children in the intervention group had significant differences between the outcomes at baseline and eight weeks afterwards for bodily functions ($p=0.01$) and the item emotional well-being ($p=0.03$) via which mental well-being was measured. There were no significant differences found between the outcomes at baseline and eight weeks afterwards for the children in the control group. Therefore, it can be concluded that the intervention had less effect on the children compared to the parents who had participated in the intervention.

The reason that the changes between the outcomes at baseline and eight weeks after baseline for the intervention group were not significant can be that the period between the two questionnaires was too short. The parents had completed a third questionnaire that was completed twenty weeks after baseline, but the third questionnaire was not used in this study since the number of completed questionnaires was low. It might be that more changes have occurred between the first and third questionnaire and that these changes are significant, since the parents have improved their outcomes for four dimensions eight weeks after baseline compared to the score at baseline. Contradictory, the outcomes of the children did not improve eight weeks after baseline. The reason can be that the parents became more aware of factors that are important for the health of their children. Moreover, the children did not participate in this study. This can also be the reason that the children did not improved their outcomes, since the outcomes were not directly measured via the children.

The second research question that is answered is: "How do parents of the intervention group experience the received returns for the social and societal participation and meaningfulness for their oldest child at primary school and themselves?" The answer is that parents in the intervention group reported the intervention as valuable for

social and societal participation. From the five interviews it appeared that most parents did not participated in any kind of social activities before the intervention. Four out of five parents reported to have changed their social activities; One parent had found voluntary work and three parents had improved their social network. One parents experienced no change for social and societal participation between the situation before and after the intervention. Moreover, the parents reported their experiences to meaningfulness. Most parents had developed a goal for their child during the intervention. Four out of five parents experienced positive results thanks to the intervention for example tools to cope with financial tightness. One parent was negative about the intervention. She explained that the intervention had brought her nothing since she had the feeling that she did not fit in the group. Besides their own experiences, the parents reported experiences of the intervention for their children. The parents experienced no difference in the social network of the children. Four parents mentioned no change between the social situation before the intervention and after the intervention. One parent mentioned change of the social situation of her child because she had changed her social activities for example sports. The change occurred due to other interests of the child. Parents reported also their experiences about meaningfulness. Parents mentioned small differences between the situation before and after the intervention for example more quality time with the child and better understanding of the child. Parents mentioned more about their own experiences than about the experiences for their children. This can be since no child was directly involved in this study. Parents were informed about healthy behaviour for children and how their behaviour is influencing the behaviour of their children. However, it can be stated that the effects of the intervention are depending on the experiences of the parents. For example one parent was negative about the effects of the intervention since she was negative about the intervention. Therefore, she had valued the intervention as not effective. The parents who were positive about the intervention explained that they have learned from the intervention and valued the intervention as effective. Therefore, experiences of an individual are depending whether an intervention is effective or not on an individual level.

The results in this study can be linked to the theoretical frameworks and other literature that is mentioned in the master thesis. The outcomes of the parents can be linked to the framework Social Determinants of Health and Pathways to Health and illness (Mikkonen & Raphael, 2010). The framework shows different pathways to reach a healthy state (Mikkonen & Raphael, 2010). From the semi-structured interviews it appeared that change occurred in the social environment of parents, which is in line with the social environment mentioned in the framework. Literature confirms that participation in interventions have a positive effect on the social network of individuals (Howarth et al., 2016). However, the conducted quantitative study did not provide significant results to support the effects of the intervention on all the six dimensions of positive health for the parents. The second framework that was discussed is the TEAM-ECD (Siddiqi et al., 2007). The TEAM-ECD distinguishes several layers (the individual child, the family, residential and relational communities, and the regional, national and global environment), which are influencing during the early childhood development (Siddiqi et al., 2007). The results in this study did not support the importance of the layers that are mentioned in the TEAM-ECD. There were significant differences found for bodily functions and mental well-being. Both dimensions had a lower score eight weeks after baseline compared to the outcome at baseline. Bodily functions and mental well-being can be linked to the layer “Individual child” of the TEAM-ECD. The children in the intervention group did not improve their outcomes for the six dimensions of positive health. The reason can be that the parents became more aware of factors that are important for their children. Another reason can be that the children were not included in the study and that the intervention paid more attention to health of the parents instead of the children. Overall, it can be

concluded that further research is necessary to support the impact of the intervention on the health of the children. The effects of the intervention for the parents are clearer compared to the effects of the children. At this moment, it seems that the intervention has no effect on the children in the intervention group. Also, further research about the effects of the intervention of the parents should be done. Therefore, the results of the third questionnaire should be combined with the results found in this study to draw better conclusions.

6.2 Strengths and limitations

Several strengths and limitations can be defined of the master thesis. The two most important strengths and the three most important limitations are described.

Since this study was designed according to the mixed method design, the study design is a strength. The mixed method design provides the opportunity to go more in depth on subjects (Burke Johnson & Onwuegbuzie, 2004). The questionnaire that was conducted in the study did not fully express all the six dimension of positive health. Therefore, the qualitative research was a more in depth exploration of two dimension that were measured in this study: meaningfulness and social and societal participation. Thanks to the mixed method design, more results of the intervention were described than only using the results of the quantitative study with the questionnaires. Additionally, the background characteristics of the parents are a strength. The study population could not be divided in equal groups since an intervention group had to start as soon as possible. Although, the most suitable study design should be a randomised controlled trail (Thiese, 2014), but division of the parents was not based on randomisation. Hence, the background characteristics of the parents in the intervention and control group were comparable and therefore the characteristics in the intervention and control group were equally divided. The only difference between the intervention and control group was receiving the intervention or not.

This study has some limitations that constraint the outcomes of this study. The first limitation concerns the questionnaire that was conducted for the study “Healthy Children in Low-income Families”. The questionnaire included eight measures, which are the CBS health survey, Financial hardship scale, EMPO, MHC-SF, Kiddy-KINDL, Kid- & Kiddo-KINDL, SDQ and the material deprivation and social participation questionnaire (Bartels, 2018). These measures did not cover all the six dimensions of positive health. Moreover, some measures were covered but did not fully express the dimension, for example bodily functions of the parents was measured via two separate variables. Therefore, some alphas were low in this study for example the EMPO had an alpha of 0.59. It might seem that the intervention had no effect on the health of children and their parents, while the intervention might have proven to be effective when other measures were used. Within this study, it was tried to minimize the impact of the chosen measures to exclude the financial hardship scale, and the material deprivation and social participation questionnaire. Moreover, measures were only used if $\alpha > 0.50$. None of the measures was excluded since all the alphas were larger than 0.50. Another limitation concerns the data collection of the semi-structured interviews. It was deliberated that the parents in this study were a vulnerable study population due to their financial situation. Therefore, telephone interviews were considered as the most suitable manner to interview participants in this study, because participants did not had to travel if they participated in telephone interviews (Ward-King, Cohen, Penning, & Holden, 2010). Some parents were open during the telephone conversation, others were reserved. A disadvantage of telephone interviews is the lack of visual cues (Novick, 2008). Body language can be used as an extra information source (Opdenakker, 2006). Moreover, face-to-face contact can improve the relationship between the interviewer and the participant, which can lead to more trust in the relationship between

the participant and the interviewer (Opdenakker, 2006). If the semi-structured interviews were held face-to-face, more information could have been gathered from the parents. Hence, it was tried to minimize the consequences of telephone conversations by letting one researcher performing the interviews (Ward-King et al., 2010) and to let the parents feel at ease so that they felt free to share information. The final limitation concerns the quantitative data analysis. In this study, the independent T-Test and paired sample T-Test were used to determine the outcomes. These T-Tests can be used when data is normally distributed (McCrum-Gardner, 2008). Other tests that were applicable in this study are the Mann-Whitney U-test and the Wilcoxon signed rank test (McCrum-Gardner, 2008). These tests can be performed when data is not normally distributed. The continuous variables of the background characteristics were tested on normality by performing the Shapiro Wilk test while the outcomes of the six dimensions were not tested. If the outcomes of the six dimensions were tested on normality, the most suitable tests could have been performed in order to determine the outcomes of the dimensions more precisely. Using the most suitable tests can increase the validity and reliability of this study, even though the study had already a sufficient level of (internal) validity and reliability.

6.3 Recommendations

It is recommended if a similar study like the study "Healthy Children in Low-income Families" is developed to develop the study as a randomised controlled trail. The randomised controlled trail takes a homogenous group and randomly divides the participants in two separate group; the intervention and control group (Thiese, 2014). A strength of this design is that the only difference between the intervention and control group is receiving the intervention or not. Another recommendation is to use measurement instruments that are more in line with the outcomes that are intended to be measured. It is recommended to conduct a new measurement instrument within the study with sufficient level of reliability ($\alpha \geq 0.70$). Moreover, it is recommend when a study is focussed on children, to include children in a direct way. In this study, parents were reluctant about the fact that their child had to participate in a study. This can partly be solved by including the family, both parent and child. It was found that family interventions were more effective compared to interventions that were focussed on only adults to improve health of children (van Sluijs, McMinn, & Griffin, 2007). Another solution can be to develop an intervention focussed on primary schools. De Graaf & Meij state that child-interventions can be focused on the child itself, but also on a larger system like primary schools (de Graaf & Meij, 2011). Moreover, parents might be more open for the idea that their child is participating in a study since other children are participating too. Furthermore, it is recommended to measure health, or gather data about health, via the chill itself. Parents can be critical when they share information about their children. In some cases, children share more information about themselves which provide a better view of the situation than the parents do (McDonald & Rosier, 2011). The age of the child is important to take into account. Research suggests that children aged eight years or older are capable of completing a written survey (Rebok et al., 2001). It is recommended to use characters and pictures to make it more attractive to complete the survey (McDonald & Rosier, 2011). Furthermore, children six years and older are able to participate in interviews or focus group to explain their experiences (McDonald & Rosier, 2011). Therefore, it is important to find a suitable method to include children when the primary focus is to improve health of children.

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Appendix A: Hypotheses

Validation of the hypotheses is based on the differences shown in Table 12, Table 15 and paragraph 5.3.

Table A1: Overview of the six dimensions of positive health and the method that is used to test the hypotheses of the parents.

Hypotheses (H_0)	**Dimension**	**Quantitative research**	**Qualitative research**	**True or false**
The **parents** in the intervention group of "Healthy Children in Low-income Families" score better than the control group on the dimension…	Bodily functions	**X**		False
	Mental well-being	**X**		False
	Meaningfulness	**X**	**X**	True
	Quality of life	**X**		True
	Social and societal participation	**X**	**X**	True
	Daily functioning	**X**		True

Table A2: Overview of the six dimensions of positive health and the method that is used to test the hypotheses of the children.

Hypotheses (H_0)	**Dimension**	**Quantitative research**	**Qualitative research**	**True or false**
The **children** of parents in the intervention group of "Healthy Children in Low-income Families" score better than the control group on the dimension…	Bodily functions	**X**		False
	Mental well-being	**X**		False
	Meaningfulness		**X**	Unknown, there is no comparison between the children in the intervention and control group.
	Quality of life	**X**		False
	Social and societal participation	**X**	**X**	False
	Daily functioning	**X**		False

Appendix B: Interview scheme

Hoofdthema: De ervaren opbrengsten bij meedoen en zingeving bij de deelnemers van "Healthy Children in Low-income Families" in de interventiegroep.
Interview methode: Telefonisch

Inleiding

Mijn naam is Lena Grevinga en ik studeer Gezondheidswetenshappen aan de Universiteit van Twente in Enschede. Voor deze studie doe ik een onderzoek naar de bijeenkomsten van "Healthy Children in Low-income Families" waaraan u heeft mee gedaan. Dit onderzoek is in samenwerking met Saxion. Tijdens deze bijeenkomsten heeft u drie vragenlijsten ingevuld. In de vragenlijsten heeft u vragen beantwoord over uw algemene gezondheid. Gedurende de bijeenkomsten is het besproken dat gezondheid een lastig onderwerp is om te omschrijven en daarom is het ook lastig om te meten. Vandaar dat ik dit graag door middel van een interview met u wil bespreken.

Om geen informatie te missen, zou ik het interview graag willen opnemen. Gaat u hiermee akkoord?

- **Akkoord**
  - **Opname starten**
- **Niet akkoord**
  - **Start met notuleren**

Voordat we gaan starten met het interview zal ik een aantal voorwaarden voor het interview benoemen. Als u er mee eens bent, mag u akkoord geven nadat ik de voorwaarden heb benoemd.
U doet vrijwillig mee aan dit onderzoek. Vandaar dat ik u erop wil wijzen dat u te allen tijde de mogelijkheid heeft om te stoppen met dit interview zonder reden. Ook ben u vrij in het wel of niet beantwoorden van vragen als u deze bijvoorbeeld te persoonlijk vindt.

- **Akkoord**
  - **Ga verder met interview**
- **Niet akkoord**
  - **Vragen van deelnemer toelichten**

Opnames en uitgeschreven interviews worden bewaard op de Universiteit van Twente. Het interview zal ongeveer **10 minuten** duren.

Doel

Het doel van dit interview is om erachter te komen welke invloed de deelname aan de vijf bijeenkomsten hebben gehad op de dimensie **meedoen** en **zingeving** voor uzelf en dat van uw oudste kind op de basisschool, waarvoor u de drie vragenlijsten heeft ingevuld.

Interview

Tijdens de vijf bijeenkomsten heeft u gewerkt met het spinnenweb van Positieve Gezondheid. Ik ga u nu een paar vragen stellen over de dimensie **meedoen** en **zingeving**. Met dit onderwerp bespreken we de sociale contacten van u en uw kind. Ook bespreken we welke doelen u had tijdens de bijeenkomsten en hoe u hieraan hebt gewerkt.

Onderwerp: Meedoen

Eerst zullen we beginnen met het domein meedoen.

Aan welke sociale activiteiten nam u deel voordat u meedeed met de bijeenkomsten? Hierbij kunt u bijvoorbeeld denken aan sport, clubs of vrijwilligerswerk.

Zijn deze activiteiten voor u veranderd tijdens of na de bijeenkomsten? Zo ja, wat is er veranderd? Zo nee, waarom?

Aan welke sociale activiteiten nam uw oudste kind op de basisschool deel voordat u meedeed met de bijeenkomsten? Hierbij kunt u denken aan sport, muzieklessen of andere clubs.

Is dit veranderd tijdens of na de bijeenkomsten? Zo ja, wat is er veranderd? Zo nee, waarom?

Onderwerp: Zingeving

Nu komen er vragen over het domein zingeving. Bij zingeving kunt u denken aan het hebben van levenslust, het kunnen accepteren en willen blijven leren.

Wat is de reden dat u heeft meegedaan met de vijfbijeenkomsten?

- *Doorvragen of het doel voor deelnemer was of voor het kind?*

Tijdens de vijf bijeenkomsten bent u aan de slag gegaan met het spinnenweb van positieve gezondheid. Het doel van het invullen van dit spinnenweb was om aan de hand van de scores een doel op te stellen.

Welk doel heeft u samen met … en … opgesteld tijdens de bijeenkomsten?

- *Voornamen van desbetreffende tandem noemen.*

Hebt u dit doel bereikt na het afronden van de vijf bijeenkomsten?

De vijf bijeenkomsten hebben samen het doel dat er verandering plaats gaat vinden in de gezondheid van de ouder en het kind. Aan het eind, van alle bijeenkomsten, kan er verandering plaats hebben gevonden, maar het kan ook zijn dat uw situatie niet is veranderd.

Vandaar de vraag: Wat hebben de vijf bijeenkomsten u opgeleverd?

Wat hebben de vijf bijeenkomsten uw kind opgeleverd?

Wij zijn bij het einde gekomen van het interview.

Zijn er nog zaken die u zou willen toevoegen aan ons gesprek?

Ik wil u hartelijk danken voor deelname aan het interview.

Appendix C: SPSS-syntax

```
* Encoding: UTF-8.
* Ophalen van de twee databestanden: T0-resultaten en T1-resultaten*.
*Tevens worden de bestanden gesorteerd op persoonlijke code*.
GET  /FILE='C:\Users\Lena\Documents\VragenlijstenT0.sav'.
   DATASET NAME DataSet1 WINDOW=FRONT.
sort cases by PersCode.
SAVE OUTFILE= 'C:\Users\Lena\Documents\VragenlijstenT0.sav'.

GET  /FILE='C:\Users\Lena\Documents\VragenlijstenT1.sav'.
   DATASET NAME DataSet2 WINDOW=FRONT.
sort cases by PersCode.
SAVE OUTFILE= 'C:\Users\Lena\Documents\VragenlijstenT1.sav'.

* Bestanden koppelen*.
MATCH FILES file='C:\Users\Lena\Documents\VragenlijstenT0.sav'
/TABLE = 'C:\Users\Lena\Documents\VragenlijstenT1.sav'
/BY PersCode.
EXECUTE.

DATASET CLOSE DataSet1.
DATASET CLOSE DataSet2.
Save outfile='C:\Users\Lena\Documents\VragenlijstenT0+T1.sav'.
EXECUTE.

** Deel 1 van de vragenlijst**.
RECODE GroepInv_T0 ('Interventie'=1) ('Controle'=0)  INTO GroepInv_T0Num.
EXECUTE.
VALUE LABELS GroepInv_T0Num 0 'Controle' 1 'Interventie'.
EXECUTE.
FREQUENCIES GroepInv_T0Num.
RECODE GroepInv_T1 ('Interventie'=1) ('Controle'=0)  INTO GroepInv_T1Num.
EXECUTE.
VALUE LABELS GroepInv_T1Num 0 'Controle' 1 'Interventie'.
EXECUTE.
FREQUENCIES GroepInv_T1Num.

* karakteristieken van de deelnemers*
* leeftijd ouder*.
```

```
COMPUTE LeeftijdOuder=DATEDIFF(Invuldatum_T0,Geboortedatum,"years").
EXECUTE.
fre LeeftijdOuder.
*Omdat leeftijd een continue variabele is, wordt de mean en de range weergegeven*.
FREQUENCIES VARIABLES=LeeftijdOuder
  /STATISTICS=MINIMUM MAXIMUM MEAN
  /ORDER=ANALYSIS.

*Leeftijd alle kinderen per deelnemer*
COMPUTE LftAlleKinderenGem= MEAN(LftKind1, LftKind2, LftKind3, LftKind4, LftKind5, LftKind6,
LftKind7).
EXECUTE.
fre LftAlleKinderenGem.
FREQUENCIES VARIABLES=LftAlleKinderenGem
  /STATISTICS=MINIMUM MAXIMUM MEAN
  /ORDER=ANALYSIS.

*Het aantal kinderen per deelnemer, deeltijd of altijd*.
fre KinderenAltijd.
* De groep die altijd vijf kinderen in huis heeft is klein. Deze gecombineerd met vier kinderen. Hierdoor
ontstaan de volgende categorieën*.
RECODE Kinderenaltijd (0=0) (1=1) (2=2) (3=3) (4 5=4) INTO KinderenAltijd1.
EXECUTE.
VALUE LABELS KinderenAltijd1 0 'Geen kinderen' 1 ' Een kind' 2 '2 kinderen' 3 '3 kinderen' 4 '4 kinderen of
meer'.
EXECUTE.
fre KinderenAltijd1.

fre KinderenDeels.
* De aantallen bij drie kinderen of meer zijn vrij laag. Drie kinderen of meer met elkaar gecombineerd*.
RECODE KinderenDeels (0 SYSMIS=0) (1=1) (2=2) (3 4 5=3) INTO KinderenDeels1.
EXECUTE.
VALUE LABELS KinderenDeels1 0 'Geen kinderen' 1 'Een kind' 2 '2 kinderen' 3 ' 3 kinderen of meer'.
EXECUTE.
fre KinderenDeels1.

*Ouder niveau*
* Ingevuld door wie, Geboorteland, woonsituatie, burgerlijke staat, diploma, huidige situatie, beroep, inkomen*.
RECODE Ingevuld ('Moeder'=1) ('Vader'=0) ('Anders, namelijk'=2) INTO IngevuldNum.
EXECUTE.
Fre IngevuldNum.
```

```
Fre IngevuldAnders.

* Indeling gemaakt op basis van geslacht. Beide antwoorden anders zijn vrouwen (oma en dochter), daarom deze gecodeerd tot vrouw*.

RECODE IngevuldNum (1 2 =1) (0= 0) INTO IngevuldNum1.

EXECUTE.

VALUE LABELS IngevuldNum1 1 'Vrouw' 0 'Man'.

EXECUTE.

fre IngevuldNum1.


RECODE Geboorteland ('Nederland'=0) ('Suriname'=1) ('Nederlandse Antillen/Aruba'=2)

   ('Marokko'=3) ('Turkije'=4) ('Anders, namelijk'=5) INTO GeboortelandNum.

EXECUTE.

FREQUENCIES GeboortelandNum.

* Omdat er veel landen zijn met weinig respondenten worden de groepen opgesplitst in Nederland geboren of niet in Nederland geboren*.

RECODE GeboortelandNum (0= 1) (1 2 3 4 5= 0) INTO GeboortelandNum1.

EXECUTE.

FREQUENCIES GeboortelandNum1.

VALUE LABELS GeboortelandNum1 1 'Nederland' 0 'Niet in Nederland'.

EXECUTE.

fre GeboortelandNum1


RECODE BurgStaat ('Ongehuwd'=0) ('Gehuwd'=1) ('Gescheiden'=2) ('Samenwonend'=3) ('Anders, '+
'namelijk'=4) INTO BurgStaatNum.

EXECUTE.

FREQUENCIES BurgStaatNum.

fre BurgStaatAnders.

*Bij anders hebben veel deelnemers ingevoerd alleenstaand te zijn. Deze antwoorden aangepast naar ongehuwd*.

* Categorieën samengevoegd. Er blijft een antwoord over bij anders: weduwe. Deze gecategoriseerd bij alleenstaand *.

RECODE BurgStaatNum  (0 2 4=0) (1 3=1) INTO BurgStaatNum1.

EXECUTE.

VALUE LABELS BurgStaatNum1 0 'Alleenstaand' 1 'Samen'.

EXECUTE.

fre BurgStaatNum1.


RECODE Opleiding ('Geen opleiding'=0) ('Lagere school/Basisonderwijs'=1) ('VMBO/LBO/MAVO'=2)

   ('HAVO/VWO/MBO'=3) ('HBO/Universiteit'=4) ('Anders, namelijk'=5) INTO OpleidingNum.

EXECUTE.

fre OpleidingNum.
```

```
RECODE WerkSituatie ('Ik werk full time'=0) ('Ik werk part time'=1) ('Ik heb geen betaald werk'=2)
   ('Anders, namelijk'=3) INTO WerkSituatieNum.
EXECUTE.
fre WerkSituatieNum.
*Ingedeeld op basis van betaald werk of geen betaald werk*.
Recode WerksituatieNum (0 1 =1) (2 3 =0) (SYSMIS= 3) INTO WerkSituatieNum1.
EXECUTE.
VALUE LABELS WerksituatieNum1 1 "Betaald werk" 0 "Geen betaald werk".
EXECUTE.
Fre WerkSituatieNum1.

* Deelnemers kunnen bij de vraag Inkomsten meerdere antwoorden aangeven. Inkomsten1 en Inkomsten2 zijn gebaseerd op dezelfde vraag*.
RECODE Inkomsten1 ('Via een betaalde baan'=0) ('Via een uitkering die uw gezin korter dan drie jaar ontvangt'=1)
   ('Via een uitkering die uw gezin langer dan drie jaar ontvangt'=2)
   ('Anders, namelijk'=3) INTO Inkomsten1Num.
EXECUTE.
Fre Inkomsten1Num.

RECODE  Inkomsten2 ('Via een betaalde baan'=0) ('Via een uitkering die uw gezin korter dan drie jaar ontvangt'=1)
   ('Via een uitkering die uw gezin langer dan drie jaar ontvangt'=2)
   ('Anders, namelijk'=3) INTO Inkomsten2Num.
EXECUTE.
fre Inkomsten2Num.
* Niet alle deelnemers hebben een tweede inkomen. Dit herkent SPSS als een missing. Inkomsten2 wordt een nominale variabele: Wel tweede inkomen of Geen tweede inkomen*.
Recode Inkomsten2Num (0 1 2 3=1) (SYSMIS =0) INTO Inkomsten2Num1.
EXECUTE.
VALUE LABELS Inkomsten2Num1 1 'Tweede inkomen' 0 'Geen tweede inkomen'.
EXECUTE.
fre Inkomsten2Num1.

*Besteedbaar inkomen*.
*Automatic recode*.
AUTORECODE VARIABLES=InkomenPer
  /INTO InkomenCat
  /BLANK=MISSING
  /PRINT.
```

```
RECODE InkomenCat (2 3 = 1) (4 5= 2) (1= SYSMIS) INTO InkomenCato.
EXECUTE.
FREQUENCIES InkomenCato.
VALUE LABELS InkomenCato 1 "Maand" 2 "Week".
EXECUTE.

COMPUTE BIMaand =0.
IF InkomenCato = 1 BIMaand =BesteedbaarInkomen.
IF InkomenCato = 2 BIMaand =(BesteedbaarInkomen * 52)/12.
EXECUTE.
RECODE BIMaand (0= SYSMIS)(ELSE =COPY).
EXECUTE.
FRE BIMaand.

*Kind niveau*
*Leeftijd, geslacht, groep en woonsituatie*.
COMPUTE LeeftijdKind=DATEDIFF(Invuldatum_T0, GeboortedatumKind,"years").
EXECUTE.
fre LeeftijdKind.
* Een aantal ouders hebben de geboortedatum van een kind ingevoerd die jonger is dan vier jaar of ouder is dan twaalf. Kinderen die buiten de range vallen worden als sysmiss verwerkt*.
*Kinderen mogen alleen deelnemen als ze ouder zijn dan vier jaar*.
IF (LeeftijdKind < 4) LeeftijdKind=$SYSMIS.
EXECUTE.
* Kinderen mogen alleen deelnemen als ze jonger zijn dan twaalf jaar. Een aantal vragenlijsten komen uit 2018, daarom maximum van 14 jaar aangehouden.*.
IF (LeeftijdKind > 13) LeeftijdKind=$SYSMIS.
EXECUTE.
fre LeeftijdKind.

RECODE GeslachtKind ('Jongen'=0) ('Meisje'=1) INTO GeslachtKindNum.
EXECUTE.
VALUE LABELS GeslachtKindNum 0 'Jongen' 1 'Meisje'.
EXECUTE.
fre GeslachtKind.

RECODE WoontBij ('Bij vader en moeder'=0) ('Alleen bij moeder'=1) ('Alleen bij vader'=2)
   ('Afwisselend bij moeder en vader'=3) ('Alleen bij moeder (met eventueel nieuwe partner)'=1)
   ('Alleen bij vader (met eventueel nieuwe partner)'=2) ('Afwisselend bij moeder en vader (met '+
   'eventueel nieuwe partner)'=3) ('Anders, namelijk'=4) INTO WoontBijNum.
EXECUTE.
```

```
Fre WoontbijNum.

fre WoontbijAnders.

* Bij anders hebben een aantal ouders ingevuld dat het kind alleen bij de moeder hoort. Dit antwoord hoor bij een antwoord categorie (Alleen bij moeder(met eventueel nieuwe partner)*.

* Slechts één kind woont bij de vader. Dit antwoord gecategoriseerd tot anders*.

Recode WoontBijNum (0=1) (1=2) (3=3) ( 2 4=4) INTO WoontBijNum1.

EXECUTE.

VALUE LABELS WoontBijNum1 1 'Bij vader en moeder' 2 'Alleen bij moeder' 3 'Afwisselend tussen vader en moeder' 4 'Andere situatie'.

EXECUTE.

fre WoontBijNum1.


RECODE Groep ('1'= 1) ('2'=2) ( '3'=3) ('4'= 4) ('5'=5) ('6'=6)

 ('7'=7) ('8'=8) ('Anders, namelijk'=9) ('Anders,namelijk'=9) INTO GroepNum.

EXECUTE.

VALUE LABELS GroepNum 1 'Groep 1' 2 'Groep 2' 3 'Groep 3' 4 'Groep 4' 5 'Groep 5' 6 'Groep 6' 7 'Groep 7' 8 'Groep 8' 9 'Overig'.

EXECUTE.

Fre GroepNum.


* Continue variabelen testen op normaliteit door middel van de Shapiro wilk test*.

* De continue variabelen zijn BIMaand, LeeftijdKind, LeeftijdOuder, LftAlleKinderenGem*.

EXAMINE VARIABLES= BIMaand LeeftijdKind LeeftijdOuder LftAlleKinderenGem

  /PLOT BOXPLOT  HISTOGRAM NPPLOT

  /COMPARE GROUPS

  /STATISTICS DESCRIPTIVES

  /CINTERVAL 95

  /MISSING LISTWISE

  /NOTOTAL.


* Chi kwadraat toets voor significante verschillen tussen de interventie en controle groep*.

** Ouders**.

CROSSTABS

  /TABLES=Inkomsten2Num1 Inkomsten1Num BIMaand WerkSituatieNum1 BurgStaatNum1 OpleidingNum

    GeboortelandNum1 IngevuldNum1 KinderenAltijd1 KinderenDeels1 LeeftijdOuder LftAlleKinderenGem BY GroepInv_T0

  /FORMAT=AVALUE TABLES

  /STATISTICS=CHISQ

  /CELLS=COUNT

  /COUNT ROUND CELL.
```

```
** Kinderen**.
CROSSTABS
  /TABLES=WoontBijNum1 GroepNum LeeftijdKind GeslachtKindNum BY GroepInv_T0
  /FORMAT=AVALUE TABLES
  /STATISTICS=CHISQ
  /CELLS=COUNT
  /COUNT ROUND CELL.

** Deel 2 van de vragenlijst**.
* Omdat de databestanden zijn samengevoegd, moet per vragenlijst de schalen en variabelen worden berekend waardoor handelingen dubbel uitgevoerd worden.*
*** Bodily functions***.
* CBS health survey*.
RECODE AlgGezo ('Zeer slecht'=0) ('Slecht'=1) ('Gaat wel'=2) ('Goed'=3) ('Zeer goed'=4) INTO
    AlgGezoNum.
EXECUTE.
RECODE AlgGezo_T1 ('Zeer slecht'=0) ('Slecht'=1) ('Gaat wel'=2) ('Goed'=3) ('Zeer goed'=4) INTO
    AlgGezoNum_T1.
EXECUTE.
RECODE LangdAo ('Nee'=0) ('Ja'=1) INTO LangdAoNum.
EXECUTE.
RECODE LangdAo_T1 ('Nee'=0) ('Ja'=1) INTO LangdAoNum_T1.
EXECUTE.
Fre AlgGezo AlgGezo_T1 LangdAo LangdAo_T1.

* KINDL*
* Subschaal Physical well-being*.
RECODE KINDL_LW_Ziek_T0 KINDL_LW_HoofdBuikpijn_T0 KINDL_LW_Moe_T0 ('5'=1) ('4'=2) ('3'=3)
('2'=4) ('1'=5)
INTO KINDL_LW_Ziek_T0N KINDL_LW_HoofdBuikpijn_T0N KINDL_LW_Moe_T0N.
EXECUTE.
Recode KINDL_LW_Kracht_T0 ('1'=1) ('2'=2) ('3'=3) ('4'=4) ('5'=5) INTO KINDL_LW_Kracht_T0N.
EXECUTE.

RECODE KINDL_LW_Ziek_T1 KINDL_LW_HoofdBuikpijn_T1 KINDL_LW_Moe_T1 ('5'=1) ('4'=2) ('3'=3)
('2'=4) ('1'=5)
INTO KINDL_LW_Ziek_T1N KINDL_LW_HoofdBuikpijn_T1N KINDL_LW_Moe_T1N.
EXECUTE.
Recode KINDL_LW_Kracht_T1 ('1'=1) ('2'=2) ('3'=3) ('4'=4) ('5'=5) INTO KINDL_LW_Kracht_T1N.
EXECUTE.
```

** Construeren schaal physical well-being**.

COMPUTE KINDL_Schaal_LichamelijkWelbevinden_Sum_T0=SUM(KINDL_LW_Ziek_T0N, KINDL_LW_HoofdBuikpijn_T0N, KINDL_LW_Moe_T0N, KINDL_LW_Kracht_T0N).

EXECUTE.

COMPUTE KINDL_Schaal_LichamelijkWelbevinden_Trans_T0=((KINDL_Schaal_LichamelijkWelbevinden_Sum_T0 - 4)/16) * 100.

EXECUTE.

COMPUTE KINDL_Schaal_LichamelijkWelbevinden_Sum_T1=SUM(KINDL_LW_Ziek_T1N, KINDL_LW_HoofdBuikpijn_T1N, KINDL_LW_Moe_T1N, KINDL_LW_Kracht_T1N).

EXECUTE.

COMPUTE KINDL_Schaal_LichamelijkWelbevinden_Trans_T1=((KINDL_Schaal_LichamelijkWelbevinden_Sum_T1 - 4)/16) * 100.

EXECUTE.

Fre KINDL_Schaal_LichamelijkWelbevinden_Trans_T0 KINDL_Schaal_LichamelijkWelbevinden_Trans_T1.

Mental well-being.

* EMPO questionnaire*.

RECODE EMPO_Steun_T0 EMPO_Druk_T0 EMPO_Vertouwen_T0 EMPO_LevenHand_T0 EMPO_ControleZelf_T0 EMPO_Oplossingen_T0

EMPO_ControleKind_T0 EMPO_OpvoedingHand_T0 EMPO_GedragKind_T0 EMPO_StuurtKind_T0 EMPO_Ingrijpen_T0 EMPO_Vecht_T0

('1'=1)('2'=2)('3'=3)('4'=4)('5'=5) INTO EMPO_Steun_Num_T0 EMPO_Druk_Num_T0

EMPO_Vertrouwen_Num_T0 EMPO_LevenHand_Num_T0 EMPO_ControleZelf_Num_T0 EMPO_Oplossingen_Num_T0

EMPO_ControleKind_Num_T0 EMPO_OpvoedingHand_Num_T0 EMPO_GedragKind_Num_T0 EMPO_StuurtKind_Num_T0

EMPO_Ingrijpen_Num_T0 EMPO_Vecht_Num_T0.

EXECUTE.

RECODE EMPO_Steun_T1 EMPO_Druk_T1 EMPO_Vertouwen_T1 EMPO_LevenHand_T1 EMPO_ControleZelf_T1 EMPO_Oplossingen_T1

EMPO_ControleKind_T1 EMPO_OpvoedingHand_T1 EMPO_GedragKind_T1 EMPO_StuurtKind_T1 EMPO_Ingrijpen_T1 EMPO_Vecht_T1

('1'=1) ('2'=2) ('3'=3) ('4'=4) ('5'=5) INTO EMPO_Steun_Num_T1 EMPO_Druk_Num_T1

EMPO_Vertrouwen_Num_T1 EMPO_LevenHand_Num_T1 EMPO_ControleZelf_Num_T1 EMPO_Oplossingen_Num_T1

EMPO_ControleKind_Num_T1 EMPO_OpvoedingHand_Num_T1 EMPO_GedragKind_Num_T1 EMPO_StuurtKind_Num_T1

EMPO_Ingrijpen_Num_T1 EMPO_Vecht_Num_T1.

EXECUTE.

** Schalen construeren**.

Intrapersoonlijk.

COMPUTE EMPO_IntrapersoonlijkRuw_T0=SUM(EMPO_Druk_Num_T0, EMPO_Vertrouwen_Num_T0, EMPO_LevenHand_Num_T0,

EMPO_ControleZelf_Num_T0).

EXECUTE.

COMPUTE EMPO_IntrapersoonlijkRuw_T1=SUM(EMPO_Druk_Num_T1, EMPO_Vertrouwen_Num_T1, EMPO_LevenHand_Num_T1,

EMPO_ControleZelf_Num_T1).

EXECUTE.

fre EMPO_IntrapersoonlijkRuw_T0 EMPO_IntrapersoonlijkRuw_T1.

* Interactioneel*.

COMTE EMPO_InteractioneelRuw_T0=SUM(EMPO_Steun_Num_T0, EMPO_Vecht_Num_T0, EMPO_Oplossingen_Num_T0,

EMPPUO_StuurtKind_Num_T0, EMPO_Ingrijpen_Num_T0).

EXECUTE.

COMPUTE EMPO_InteractioneelRuw_T1=SUM(EMPO_Steun_Num_T1, EMPO_Vecht_Num_T1, EMPO_Oplossingen_Num_T1,

EMPO_StuurtKind_Num_T1, EMPO_Ingrijpen_Num_T1).

EXECUTE.

fre EMPO_InteractioneelRuw_T0 EMPO_InteractioneelRuw_T1.

Behaviour control.

COMPUTE EMPO_GedragscontroleRuw_T0=SUM (EMPO_ControleKind_Num_T0, EMPO_OpvoedingHand_Num_T0, EMPO_GedragKind_Num_T0).

EXECUTE.

COMPUTE EMPO_GedragscontroleRuw_T1=SUM (EMPO_ControleKind_Num_T1, EMPO_OpvoedingHand_Num_T1, EMPO_GedragKind_Num_T1).

EXECUTE.

fre EMPO_GedragscontroleRuw_T0 EMPO_GedragscontroleRuw_T1.

* De totale score wordt berekend door alle subschalen te combineren; Total EMPO score*.

COMPUTE EMPO_GemTotaal_T0 = MEAN (EMPO_IntrapersoonlijkRuw_T0, EMPO_InteractioneelRuw_T0, EMPO_GedragscontroleRuw_T0).

EXECUTE.

COMPUTE EMPO_GemTotaal_T1 = MEAN (EMPO_IntrapersoonlijkRuw_T1, EMPO_InteractioneelRuw_T1, EMPO_GedragscontroleRuw_T1).

EXECUTE.

Fre EMPO_GemTotaal_T0 EMPO_GemTotaal_T1.

* KINDL*

** Emotional well-being**.

** Niet alle variabelen van de emotional well-being schaal worden op dezelfde schaal beoordeeld (reversed scale)**.

RECODE KINDL_PW_Zin_T0 KINDL_PW_Eenzaam_T0 KINDL_PW_Onzeker_T0 ('5'=1) ('4'=2) ('3'=3) ('2'=4) ('1'=5) INTO

KINDL_PW_Zin_Num_T0 KINDL_PW_Eenzaam_Num_T0 KINDL_PW_Onzeker_Num_T0.

EXECUTE.

RECODE KINDL_PW_Lachen_T0 ('1'=1) ('2'=2) ('3'=3) ('4'=4) ('5'=5) INTO KINDL_PW_Lachen_Num_T0.

EXECUTE.

RECODE KINDL_PW_Zin_T1 KINDL_PW_Eenzaam_T1 KINDL_PW_Onzeker_T1 ('5'=1) ('4'=2) ('3'=3) ('2'=4) ('1'=5) INTO

KINDL_PW_Zin_Num_T1 KINDL_PW_Eenzaam_Num_T1 KINDL_PW_Onzeker_Num_T1.

EXECUTE.

RECODE KINDL_PW_Lachen_T1 ('1'=1) ('2'=2) ('3'=3) ('4'=4) ('5'=5) INTO KINDL_PW_Lachen_Num_T1.

EXECUTE.

** construeren schaal**.

COMPUTE KINDL_Schaal_PsychischWelbevinden_Sum_T0 =SUM (KINDL_PW_Zin_Num_T0, KINDL_PW_Eenzaam_Num_T0, KINDL_PW_Onzeker_Num_T0, KINDL_PW_Lachen_Num_T0).

EXECUTE.

COMPUTE KINDL_Schaal_PsychischWelbevinden_Trans_T0 = ((KINDL_Schaal_PsychischWelbevinden_Sum_T0 - 4)/16) *100.

EXECUTE.

COMPUTE KINDL_Schaal_PsychischWelbevinden_Sum_T1 =SUM (KINDL_PW_Zin_Num_T1, KINDL_PW_Eenzaam_Num_T1, KINDL_PW_Onzeker_Num_T1, KINDL_PW_Lachen_Num_T1).

EXECUTE.

COMPUTE KINDL_Schaal_PsychischWelbevinden_Trans_T1 = ((KINDL_Schaal_PsychischWelbevinden_Sum_T1 - 4)/16) *100.

EXECUTE.

fre KINDL_Schaal_PsychischWelbevinden_Trans_T0 KINDL_Schaal_PsychischWelbevinden_Trans_T1.

** Vervolgens is mental well-being ook gemeten door middel van de SDQ **.

** Bij de mental well-being horen de volgende subscalen van de SDQ: Emotional problems, Conduct problems en hyperactivity. Daarom worden deze variabelen samen gecodeerd**.

RECODE SDQ_HoofdBuikpijn_T0 SDQ_Zorgen_T0 SDQ_Zenuwachtig_T0 SDQ_Bang_T0 SDQ_Driftbuien_T0

SDQ_Vecht_T0 SDQ_Liegt_T0 SDQ_Pikt_T0 SDQ_Rusteloos_T0 SDQ_Wiebelen_T0 SDQ_Concenteren_T0 SDQ_Ongelukkig_T0 SDQ_Denkt_T0 ('3'=2)('2'=1)('1'=0)

INTO SDQ_HoofdBuikpijn_Num_T0 SDQ_Zorgen_Num_T0 SDQ_Zenuwachtig_Num_T0 SDQ_Bang_Num_T0 SDQ_Driftbuien_Num_T0

SDQ_Vecht_Num_T0 SDQ_Liegt_Num_T0 SDQ_Pikt_Num_T0 SDQ_Rusteloos_Num_T0 SDQ_Wiebelen_Num_T0 SDQ_Concenteren_Num_T0 SDQ_Ongelukkig_Num_T0 SDQ_Denkt_Num_T0.

EXECUTE.

RECODE SDQ_Gehoorzaam_T0 SDQ_Opdrachten_T0 ('3'=0) ('2'=1) ('1'=2) INTO SDQ_Gehoorzaam_Num_T0 SDQ_Opdrachten_Num_T0.

EXECUTE.

RECODE SDQ_HoofdBuikpijn_T1 SDQ_Zorgen_T1 SDQ_Zenuwachtig_T1 SDQ_Bang_T1 SDQ_Driftbuien_T1

SDQ_Vecht_T1 SDQ_Liegt_T1 SDQ_Pikt_T1 SDQ_Rusteloos_T1 SDQ_Wiebelen_T1 SDQ_Concenteren_T1 SDQ_Ongelukkig_T1 SDQ_Denkt_T1('3'=2)('2'=1)('1'=0)

INTO SDQ_HoofdBuikpijn_Num_T1 SDQ_Zorgen_Num_T1 SDQ_Zenuwachtig_Num_T1 SDQ_Bang_Num_T1 SDQ_Driftbuien_Num_T1

SDQ_Vecht_Num_T1 SDQ_Liegt_Num_T1 SDQ_Pikt_Num_T1 SDQ_Rusteloos_Num_T1 SDQ_Wiebelen_Num_T1 SDQ_Concenteren_Num_T1 SDQ_Ongelukkig_Num_T1 SDQ_Denkt_Num_T1.

EXECUTE.

RECODE SDQ_Gehoorzaam_T1 SDQ_Opdrachten_T1 ('3'=0) ('2'=1) ('1'=2) INTO SDQ_Gehoorzaam_Num_T1 SDQ_Opdrachten_Num_T1.

EXECUTE.

RECODE SDQ_OpZichzelf_T0 SDQ_Gepest_T0 SDQ_Volwassenen_T0 SDQ_Rekening_T0 SDQ_Deelt_T0 SDQ_Behulpzaam_T0 SDQ_Hulp_T0 SDQ_JongereKinderen_T0 ('3'=2) ('2'=1) ('1'=0)

INTO SDQ_OpZichzelf_Num_T0 SDQ_Gepest_Num_T0 SDQ_Volwassenen_Num_T0 SDQ_Rekening_Num_T0 SDQ_Deelt_Num_T0 SDQ_Behulpzaam_Num_T0 SDQ_Hulp_Num_T0 SDQ_JongereKinderen_Num_T0.

EXECUTE.

RECODE SDQ_GoedeVriend_T0 SDQ_Aardig_T0 ('3'=0) ('2'=1) ('1'=2) INTO SDQ_GoedeVriend_Num_T0 SDQ_Aardig_Num_T0.

EXECUTE.

RECODE SDQ_OpZichzelf_T1 SDQ_Gepest_T1 SDQ_Volwassenen_T1 SDQ_Rekening_T1 SDQ_Deelt_T1 SDQ_Behulpzaam_T1 SDQ_Hulp_T1 SDQ_JongereKinderen_T1 ('3'=2) ('2'=1) ('1'=0)

INTO SDQ_OpZichzelf_Num_T1 SDQ_Gepest_Num_T1 SDQ_Volwassenen_Num_T1 SDQ_Rekening_Num_T1 SDQ_Deelt_Num_T1 SDQ_Behulpzaam_Num_T1 SDQ_Hulp_Num_T1 SDQ_JongereKinderen_Num_T1.

EXECUTE.

RECODE SDQ_GoedeVriend_T1 SDQ_Aardig_T1 ('3'=0) ('2'=1) ('1'=2) INTO SDQ_GoedeVriend_Num_T1 SDQ_Aardig_Num_T1.

EXECUTE.

construeren van de subschalen.

COMPUTE SDQ_Schaal_EmotioneleProblemen_T0=SUM(SDQ_HoofdBuikpijn_Num_T0, SDQ_Zorgen_Num_T0, SDQ_Ongelukkig_Num_T0, SDQ_Zenuwachtig_Num_T0, SDQ_Bang_Num_T0).

EXECUTE.

COMPUTE SDQ_Schaal_Gedragsproblemen_T0=SUM(SDQ_Driftbuien_Num_T0, SDQ_Gehoorzaam_Num_T0, SDQ_Vecht_Num_T0, SDQ_Liegt_Num_T0, SDQ_Pikt_Num_T0).

EXECUTE.

COMPUTE SDQ_Schaal_Hyperactiviteit_T0=SUM(SDQ_Rusteloos_Num_T0, SDQ_Wiebelen_Num_T0, SDQ_Concenteren_Num_T0, SDQ_Denkt_Num_T0, SDQ_Opdrachten_Num_T0).

EXECUTE.

COMPUTE SDQ_Schaal_Leeftijdsgenoten_T0= SUM (SDQ_OpZichzelf_Num_T0, SDQ_GoedeVriend_Num_T0, SDQ_Aardig_Num_T0, SDQ_Gepest_Num_T0, SDQ_Volwassenen_Num_T0).

EXECUTE.

COMPUTE SDQ_Schaal_Prosociaal_T0 = SUM (SDQ_Rekening_Num_T0, SDQ_Deelt_Num_T0, SDQ_Behulpzaam_Num_T0, SDQ_Hulp_Num_T0, SDQ_JongereKinderen_Num_T0).

EXECUTE.

COMPUTE SDQ_Schaal_EmotioneleProblemen_T1=SUM(SDQ_HoofdBuikpijn_Num_T1, SDQ_Zorgen_Num_T1, SDQ_Ongelukkig_Num_T1, SDQ_Zenuwachtig_Num_T1, SDQ_Bang_Num_T1).

EXECUTE.

COMPUTE SDQ_Schaal_Gedragsproblemen_T1=SUM(SDQ_Driftbuien_Num_T1, SDQ_Gehoorzaam_Num_T1, SDQ_Vecht_Num_T1, SDQ_Liegt_Num_T1, SDQ_Pikt_Num_T1).

EXECUTE.

COMPUTE SDQ_Schaal_Hyperactiviteit_T1=SUM(SDQ_Rusteloos_Num_T1, SDQ_Wiebelen_Num_T1, SDQ_Concenteren_Num_T1, SDQ_Denkt_Num_T1, SDQ_Opdrachten_Num_T1).

EXECUTE.

COMPUTE SDQ_Schaal_Leeftijdsgenoten_T1= SUM (SDQ_OpZichzelf_Num_T1, SDQ_GoedeVriend_Num_T1, SDQ_Aardig_Num_T1, SDQ_Gepest_Num_T1, SDQ_Volwassenen_Num_T1).

EXECUTE.

COMPUTE SDQ_Schaal_Prosociaal_T1 = SUM (SDQ_Rekening_Num_T1, SDQ_Deelt_Num_T1, SDQ_Behulpzaam_Num_T1, SDQ_Hulp_Num_T1, SDQ_JongereKinderen_Num_T1).

EXECUTE.

fre SDQ_Schaal_EmotioneleProblemen_T0 SDQ_Schaal_EmotioneleProblemen_T1 SDQ_Schaal_Gedragsproblemen_T0 SDQ_Schaal_Gedragsproblemen_T1 SDQ_Schaal_Hyperactiviteit_T0 SDQ_Schaal_Hyperactiviteit_T1 SDQ_Schaal_Leeftijdsgenoten_T0 SDQ_Schaal_Leeftijdsgenoten_T1 SDQ_Schaal_Prosociaal_T0 SDQ_Schaal_Prosociaal_T1.

** Totaal score SDQ berekenen**.

COMPUTE SDQ_Totaal_Probleemscore_T0 = SUM (SDQ_Schaal_EmotioneleProblemen_T0, SDQ_Schaal_Gedragsproblemen_T0, SDQ_Schaal_Hyperactiviteit_T0, SDQ_Schaal_Leeftijdsgenoten_T0).

EXECUTE.

COMPUTE SDQ_Totaal_Probleemscore_T1 = SUM (SDQ_Schaal_EmotioneleProblemen_T1, SDQ_Schaal_Gedragsproblemen_T1, SDQ_Schaal_Hyperactiviteit_T1, SDQ_Schaal_Leeftijdsgenoten_T1).

EXECUTE.

** Meaningfulness**.

* MHC-SF - Emotional well-being*.

RECODE MHC_Gelukkig_T0 MHC_Interesse_T0 MHC_Tevreden_T0 ('1'=0) ('2'=1) ('3'=2) ('4'=3) ('5'=4) (‘6’=5) INTO MHC_Gelukkig_Num_T0 MHC_Interesse_Num_T0 MHC_Tevreden_Num_T0.

EXECUTE.

RECODE MHC_Gelukkig_T1 MHC_Interesse_T1 MHC_Tevreden_T1 ('1'=0) ('2'=1) ('3'=2) ('4'=3) ('5'=4) (‘6’=5) INTO MHC_Gelukkig_Num_T1 MHC_Interesse_Num_T1 MHC_Tevreden_Num_T1.

EXECUTE.

COMPUTE MHC_Schaal_EmotioneelWelbevinden_T0=MEAN(MHC_Gelukkig_Num_T0, MHC_Interesse_Num_T0, MHC_Tevreden_Num_T0).

EXECUTE.

COMPUTE MHC_Schaal_EmotioneelWelbevinden_T1=MEAN(MHC_Gelukkig_Num_T1, MHC_Interesse_Num_T1, MHC_Tevreden_Num_T1).

EXECUTE.

fre MHC_Schaal_EmotioneelWelbevinden_T0 MHC_Schaal_EmotioneelWelbevinden_T1.

*** Meaningfulness wordt niet gemeten voor de kinderen via de vragenlijst***.

** Quality of life**.

*MHC-SF- Psychological well-being**.

RECODE MHC_Persoonlijkheid_T0 MHC_Verantwoordelijkheden_T0 MHC_Relaties_T0 MHC_Uitdaging_T0 MHC_Zelfverzekerd_T0 MHC_Zingeving_T0 ('1'=0) ('2'=1) ('3'=2) ('4'=3) ('5'=4) ('6'=5)

INTO MHC_Persoonlijkheid_Num_T0 MHC_Verantwoordelijkheden_Num_T0 MHC_Relaties_Num_T0 MHC_Uitdaging_Num_T0 MHC_Zelfverzekerd_Num_T0 MHC_Zingeving_Num_T0.

EXECUTE.

RECODE MHC_Persoonlijkheid_T1 MHC_Verantwoordelijkheden_T1 MHC_Relaties_T1 MHC_Uitdaging_T1 MHC_Zelfverzekerd_T1 MHC_Zingeving_T1 ('1'=0) ('2'=1) ('3'=2) ('4'=3) ('5'=4) ('6'=5)

INTO MHC_Persoonlijkheid_Num_T1 MHC_Verantwoordelijkheden_Num_T1 MHC_Relaties_Num_T1 MHC_Uitdaging_Num_T1 MHC_Zelfverzekerd_Num_T1 MHC_Zingeving_Num_T1.

EXECUTE.

COMPUTE MHC_Schaal_PsychologischWelbevinden_T0=MEAN(MHC_Persoonlijkheid_Num_T0, MHC_Verantwoordelijkheden_Num_T0, MHC_Relaties_Num_T0, MHC_Uitdaging_Num_T0, MHC_Zelfverzekerd_Num_T0, MHC_Zingeving_Num_T0).

EXECUTE.

COMPUTE MHC_Schaal_PsychologischWelbevinden_T1=MEAN(MHC_Persoonlijkheid_Num_T1, MHC_Verantwoordelijkheden_Num_T1, MHC_Relaties_Num_T1, MHC_Uitdaging_Num_T1, MHC_Zelfverzekerd_Num_T1, MHC_Zingeving_Num_T1).

EXECUTE.

fre MHC_Schaal_PsychologischWelbevinden_T0 MHC_Schaal_PsychologischWelbevinden_T1.

* KINDL*

* Subschaal Eigenwaarde *.

RECODE KINDL_EW_Trots_T0 KINDL_EW_Aardig_T0 KINDL_EW_Ideeen_T0 ('1'=1) ('2'=2) ('3'=3) ('4'=4) ('5'=5) INTO

KINDL_EW_Trots_Num_T0 KINDL_EW_Aardig_Num_T0 KINDL_EW_Ideeen_Num_T0.

EXECUTE.

RECODE KINDL_EW_Trots_T1 KINDL_EW_Aardig_T1 KINDL_EW_Ideeen_T1 ('1'=1) ('2'=2) ('3'=3) ('4'=4) ('5'=5) INTO

KINDL_EW_Trots_Num_T1 KINDL_EW_Aardig_Num_T1 KINDL_EW_Ideeen_Num_T1.

EXECUTE.

KIDDY-KINDL.

DO IF (Versie_T0 = 1).

```
RECODE KINDL_EW_VelPrettig_T0 ('1'=1) ('2'=2) ('3'=3) ('4'=4) ('5'=5)
   INTO KINDL_EW_VelPrettig_Num_T0.
END IF.
EXECUTE.
DO IF (Versie_T1 = 1).
RECODE KINDL_EW_VelPrettig_T1 ('1'=1) ('2'=2) ('3'=3) ('4'=4) ('5'=5)
   INTO KINDL_EW_VelPrettig_Num_T1.
END IF.
EXECUTE.

** Kiddo-KINDL**.
DO IF (Versie_T0 = 2).
RECODE KINDL_EW_VelPrettig_T0 ('5'=1) ('4'=2) ('3'=3) ('2'=4) ('1'=5)
    INTO KINDL_EW_VelPrettig_Num_T0.
 END IF.
EXECUTE.
DO IF (Versie_T1 = 2).
RECODE KINDL_EW_VelPrettig_T1 ('5'=1) ('4'=2) ('3'=3) ('2'=4) ('1'=5)
    INTO KINDL_EW_VelPrettig_Num_T1.
 END IF.
EXECUTE.

** Subschaal construeren**.
COMPUTE KINDL_Schaal_Eigenwaarde_Sum_T0 =SUM (KINDL_EW_Trots_Num_T0,
KINDL_EW_Aardig_Num_T0, KINDL_EW_Ideeen_Num_T0, KINDL_EW_VelPrettig_Num_T0).
EXECUTE.
COMPUTE KINDL_Schaal_Eigenwaarde_Trans_T0 = ((KINDL_Schaal_Eigenwaarde_Sum_T0 - 4)/16) *100.
EXECUTE.
COMPUTE KINDL_Schaal_Eigenwaarde_Sum_T1 =SUM (KINDL_EW_Trots_Num_T1,
KINDL_EW_Aardig_Num_T1, KINDL_EW_Ideeen_Num_T1, KINDL_EW_VelPrettig_Num_T1).
EXECUTE.
COMPUTE KINDL_Schaal_Eigenwaarde_Trans_T1 = ((KINDL_Schaal_Eigenwaarde_Sum_T1 - 4)/16) *100.
EXECUTE.
fre KINDL_Schaal_Eigenwaarde_Trans_T0 KINDL_Schaal_Eigenwaarde_Trans_T1.

**Social and societal participation**.
* MHC-SF- Social well-being*.
RECODE MHC_Bijdrage_T0 MHC_Gemeenschap_T0 MHC_Samenleving_T0 MHC_MensenGoed_T0
MHC_Maatschappij_T0 ('1'=0) ('2'=1) ('3'=2) ('4'=3) ('5'=4) ('6'=5) INTO
MHC_Bijdrage_Num_T0 MHC_Gemeenschap_Num_T0 MHC_Samenleving_Num_T0
MHC_MensenGoed_Num_T0 MHC_Maatschappij_Num_T0.
```

```
EXECUTE.

RECODE MHC_Bijdrage_T1 MHC_Gemeenschap_T1 MHC_Samenleving_T1 MHC_MensenGoed_T1
MHC_Maatschappij_T1 ('1'=0) ('2'=1) ('3'=2) ('4'=3) ('5'=4) ('6'=5) INTO

MHC_Bijdrage_Num_T1 MHC_Gemeenschap_Num_T1 MHC_Samenleving_Num_T1
MHC_MensenGoed_Num_T1 MHC_Maatschappij_Num_T1.

EXECUTE.


* Construeren van de subschaal*.

COMPUTE MHC_Schaal_SociaalWelbevinden_T0=MEAN(MHC_Bijdrage_Num_T0,
MHC_Gemeenschap_Num_T0,

   MHC_Samenleving_Num_T0, MHC_MensenGoed_Num_T0, MHC_Maatschappij_Num_T0).

EXECUTE.

COMPUTE MHC_Schaal_SociaalWelbevinden_T1=MEAN(MHC_Bijdrage_Num_T1,
MHC_Gemeenschap_Num_T1,

   MHC_Samenleving_Num_T1, MHC_MensenGoed_Num_T1, MHC_Maatschappij_Num_T1).

EXECUTE.

fre MHC_Schaal_SociaalWelbevinden_T0 MHC_Schaal_SociaalWelbevinden_T1.


* KINDL*

** Friends**.

RECODE KINDL_VR_Anderen_T0 KINDL_VR_Samen_T0 KINDL_VR_OpschietenContact_T0 ('1'=1)
('2'=2) ('3'=3)

   ('4'=4) ('5'=5) INTO KINDL_VR_Anderen_Num_T0 KINDL_VR_Samen_Num_T0
KINDL_VR_OpschietenContact_Num_T0.

EXECUTE.

RECODE KINDL_VR_Anders_T0 ('5'=1) ('4'=2) ('3'=3) ('2'=4) ('1'=5) INTO KINDL_VR_Anders_Num_T0.

EXECUTE.

RECODE KINDL_VR_Anderen_T1 KINDL_VR_Samen_T1 KINDL_VR_OpschietenContact_T1 ('1'=1)
('2'=2) ('3'=3)

   ('4'=4) ('5'=5) INTO KINDL_VR_Anderen_Num_T1 KINDL_VR_Samen_Num_T1
KINDL_VR_OpschietenContact_Num_T1.

EXECUTE.

RECODE KINDL_VR_Anders_T1 ('5'=1) ('4'=2) ('3'=3) ('2'=4) ('1'=5) INTO KINDL_VR_Anders_Num_T1.

EXECUTE.


*construeren van de subschaal*.

COMPUTE KINDL_Schaal_Vrienden_Sum_T0= SUM(KINDL_VR_Anders_Num_T0,
KINDL_VR_Anderen_Num_T0, KINDL_VR_Samen_Num_T0, KINDL_VR_OpschietenContact_Num_T0).

EXECUTE.

COMPUTE KINDL_Schaal_Vrienden_Trans_T0= ((KINDL_Schaal_Vrienden_Sum_T0 -4)/16)*100.

EXECUTE.
```

COMPUTE KINDL_Schaal_Vrienden_Sum_T1= SUM(KINDL_VR_Anders_Num_T1, KINDL_VR_Anderen_Num_T1, KINDL_VR_Samen_Num_T1, KINDL_VR_OpschietenContact_Num_T1).

EXECUTE.

COMPUTE KINDL_Schaal_Vrienden_Trans_T1= ((KINDL_Schaal_Vrienden_Sum_T1 -4)/16)*100.

EXECUTE.

fre KINDL_Schaal_Vrienden_Trans_T0 KINDL_Schaal_Vrienden_Trans_T1.

Daily functioning.

* CBS health survey*.

RECODE BelemActo ('Ernstig beperkt'=0) ('Wel beperkt maar niet ernstig'=1) ('Helemaal niet '+'beperkt'=2) INTO BelemActoNum.

EXECUTE.

RECODE BelemActo_T1 ('Ernstig beperkt'=0) ('Wel beperkt maar niet ernstig'=1) ('Helemaal niet '+'beperkt'=2) INTO BelemActoNum_T1.

EXECUTE.

Fre BelemActoNum BelemActoNum_T1.

KINDL.

* Twee subschalen van de KINDL worden meegenomen om het domein daily functioning te bepalen. Deze subschalen zijn: Family en Nursery School. Variabelen van de twee subschalen worden samen gecodeerd*.

RECODE KINDL_GZ_Ruzie_T0 KINDL_GZ_Betutteld_T0 KINDL_BS_Fouten_T0 ('5'=1) ('4'=2) ('3'=3) ('2'=4) ('1'=5) INTO KINDL_GZ_Ruzie_Num_T0 KINDL_GZ_Betutteld_Num_T0 KINDL_FS_Fouten_Num_T0.

EXECUTE.

RECODE KINDL_GZ_OudersMij_T0 KINDL_GZ_GemakTevreden_T0 KINDL_BS_OpdrachtenHuiswerk_T0 KINDL_BS_LeukPlezier_T0 ('1'=1) ('2'=2) ('3'=3)

('4'=4) ('5'=5) INTO KINDL_GZ_OudersMij_Num_T0 KINDL_GZ_GemakTevreden_Num_T0 KINDL_BS_OpdrachtenHuiswerk_Num_T0 KINDL_BS_LeukPlezier_Num_T0N.

EXECUTE.

RECODE KINDL_GZ_Ruzie_T1 KINDL_GZ_Betutteld_T1 KINDL_BS_Fouten_T1 ('5'=1) ('4'=2) ('3'=3) ('2'=4) ('1'=5) INTO KINDL_GZ_Ruzie_Num_T1 KINDL_GZ_Betutteld_Num_T1 KINDL_FS_Fouten_Num_T1.

EXECUTE.

RECODE KINDL_GZ_OudersMij_T1 KINDL_GZ_GemakTevreden_T1 KINDL_BS_OpdrachtenHuiswerk_T1 KINDL_BS_LeukPlezier_T1 ('1'=1) ('2'=2) ('3'=3)

('4'=4) ('5'=5) INTO KINDL_GZ_OudersMij_Num_T1 KINDL_GZ_GemakTevreden_Num_T1 KINDL_BS_OpdrachtenHuiswerk_Num_T1 KINDL_BS_LeukPlezier_Num_T1N.

EXECUTE.

KIDDY-KINDL.

DO IF (Versie_T0 = 1).

RECODE KINDL_BS_VerheugdZorgen_T0 ('1'=1) ('2'=2) ('3'=3) ('4'=4) ('5'=5)

INTO KINDL_BS_VerheugdZorgen_Num_T0.

END IF.

```
EXECUTE.
DO IF (Versie_T1 = 1).
RECODE KINDL_BS_VerheugdZorgen_T1 ('1'=1) ('2'=2) ('3'=3) ('4'=4) ('5'=5)
    INTO KINDL_BS_VerheugdZorgen_Num_T1.
END IF.
EXECUTE.

*Kiddo-KINDL*.
DO IF (Versie_T0 = 2).
RECODE KINDL_BS_VerheugdZorgen_T0 ('5'=1) ('4'=2) ('3'=3) ('2'=4) ('1'=5)
    INTO KINDL_BS_VerheugdZorgen_Num_T0.
END IF.
EXECUTE.

DO IF (Versie_T1 = 2).
RECODE KINDL_BS_VerheugdZorgen_T1 ('5'=1) ('4'=2) ('3'=3) ('2'=4) ('1'=5)
    INTO KINDL_BS_VerheugdZorgen_Num_T1.
END IF.
EXECUTE.

*Schalen construeren*.
*family*.
COMPUTE KINDL_Schaal_Gezin_Sum_T0 = SUM (KINDL_GZ_Ruzie_Num_T0,
KINDL_GZ_Betutteld_Num_T0, KINDL_GZ_OudersMij_Num_T0, KINDL_GZ_GemakTevreden_Num_T0).
EXECUTE.
COMPUTE KINDL_Schaal_Gezin_Trans_T0 = ((KINDL_Schaal_Gezin_Sum_T0 - 4)/16) *100.
EXECUTE.
COMPUTE KINDL_Schaal_Gezin_Sum_T1 = SUM (KINDL_GZ_Ruzie_Num_T1,
KINDL_GZ_Betutteld_Num_T1, KINDL_GZ_OudersMij_Num_T1, KINDL_GZ_GemakTevreden_Num_T1).
EXECUTE.
COMPUTE KINDL_Schaal_Gezin_Trans_T1 = ((KINDL_Schaal_Gezin_Sum_T1 - 4)/16) *100.
EXECUTE.

*School*.
COMPUTE KINDL_Schaal_School_Sum_T0 = SUM (KINDL_FS_Fouten_Num_T0,
KINDL_BS_VerheugdZorgen_Num_T0, KINDL_BS_OpdrachtenHuiswerk_Num_T0,
KINDL_BS_LeukPlezier_Num_T0N).
EXECUTE.
COMPUTE KINDL_Schaal_School_Trans_T0= ((KINDL_Schaal_School_Sum_T0 -4)/16) *100.
EXECUTE.
```

```
COMPUTE KINDL_Schaal_School_Sum_T1 = SUM (KINDL_FS_Fouten_Num_T1,
KINDL_BS_VerheugdZorgen_Num_T1, KINDL_BS_OpdrachtenHuiswerk_Num_T1,
KINDL_BS_LeukPlezier_Num_T1N).
EXECUTE.
COMPUTE KINDL_Schaal_School_Trans_T1= ((KINDL_Schaal_School_Sum_T1 -4)/16) *100.
EXECUTE.
Fre KINDL_Schaal_School_Trans_T0 KINDL_Schaal_School_Trans_T1.

*Reliability test (Cronbach alpha)*.
**Ouders**.
RELIABILITY
  /VARIABLES=AlgGezoNum AlgGezoNum_T1
  /SCALE ('ALL VARIABLES') ALL
  /MODEL=ALPHA.
RELIABILITY
  /VARIABLES=LangdAoNum LangdAoNum_T1
  /SCALE ('ALL VARIABLES') ALL
  /MODEL=ALPHA.
RELIABILITY
  /VARIABLES=BelemActoNum BelemActoNum_T1
  /SCALE ('ALL VARIABLES') ALL
  /MODEL=ALPHA.
RELIABILITY
  /VARIABLES=EMPO_GemTotaal_T0 EMPO_GemTotaal_T1
  /SCALE ('ALL VARIABLES') ALL
  /MODEL=ALPHA.
RELIABILITY
  /VARIABLES=MHC_Schaal_EmotioneelWelbevinden_T0 MHC_Schaal_EmotioneelWelbevinden_T1
  /SCALE ('ALL VARIABLES') ALL
  /MODEL=ALPHA.
RELIABILITY
  /VARIABLES=MHC_Schaal_PsychologischWelbevinden_T0 MHC_Schaal_PsychologischWelbevinden_T1
  /SCALE ('ALL VARIABLES') ALL
  /MODEL=ALPHA.
RELIABILITY
  /VARIABLES= MHC_Schaal_SociaalWelbevinden_T0 MHC_Schaal_SociaalWelbevinden_T1
  /SCALE ('ALL VARIABLES') ALL
  /MODEL=ALPHA.

**Kinderen**.
RELIABILITY
```

```
  /VARIABLES=KINDL_Schaal_LichamelijkWelbevinden_Trans_T0
    KINDL_Schaal_LichamelijkWelbevinden_Trans_T1
  /SCALE('ALL VARIABLES') ALL
  /MODEL=ALPHA.
RELIABILITY
  /VARIABLES= KINDL_Schaal_PsychischWelbevinden_Trans_T0
    KINDL_Schaal_PsychischWelbevinden_Trans_T1
  /SCALE ('ALL VARIABLES') ALL
  /MODEL=ALPHA.
RELIABILITY
  /VARIABLES= KINDL_Schaal_Eigenwaarde_Trans_T0
    KINDL_Schaal_Eigenwaarde_Trans_T1
  /SCALE ('ALL VARIABLES') ALL
  /MODEL=ALPHA.
RELIABILITY
  /VARIABLES=KINDL_Schaal_Vrienden_Trans_T0 KINDL_Schaal_Vrienden_Trans_T1
  /SCALE ('ALL VARIABLES') ALL
  /MODEL=ALPHA.
RELIABILITY
  /VARIABLES= KINDL_Schaal_Gezin_Trans_T0 KINDL_Schaal_Gezin_Trans_T1
  /SCALE ('ALL VARIABLES') ALL
  /MODEL=ALPHA.
RELIABILITY
  /VARIABLES=KINDL_Schaal_School_Trans_T0
    KINDL_Schaal_School_Trans_T1
  /SCALE ('ALL VARIABLES') ALL
  /MODEL=ALPHA.
RELIABILITY
  /VARIABLES=SDQ_Totaal_Probleemscore_T0 SDQ_Totaal_Probleemscore_T1
  /SCALE ('ALL VARIABLES') ALL
  /MODEL=ALPHA.

* Independent t-test om de verschillen tussen de interventie en controle groep op T0 en T1 te bepalen*.
** Ouders**.
* Bodily functions*.
T-TEST GROUPS=GroepInv_T0Num (0 1)
  /MISSING=ANALYSIS
  /VARIABLES=AlgGezoNum AlgGezoNum_T1 LangdAoNum LangdAoNum_T1
  /CRITERIA=CI (.95).
```

```
*Mental well-being*.
T-TEST GROUPS=GroepInv_T0Num (0 1)
  /MISSING=ANALYSIS
  /VARIABLES=EMPO_GemTotaal_T0 EMPO_GemTotaal_T1
  /CRITERIA=CI (.95).
*Meaningfulness*.
T-TEST GROUPS=GroepInv_T0Num (0 1)
  /MISSING=ANALYSIS
  /VARIABLES=MHC_Schaal_EmotioneelWelbevinden_T0 MHC_Schaal_EmotioneelWelbevinden_T1
  /CRITERIA=CI (.95).
*Quality of life*.
T-TEST GROUPS=GroepInv_T0Num (0 1)
  /MISSING=ANALYSIS
  /VARIABLES=MHC_Schaal_PsychologischWelbevinden_T0 MHC_Schaal_PsychologischWelbevinden_T1
  /CRITERIA=CI (.95).
*Social and Societal participation*.
T-TEST GROUPS=GroepInv_T0Num (0 1)
  /MISSING=ANALYSIS
  /VARIABLES=MHC_Schaal_SociaalWelbevinden_T0 MHC_Schaal_SociaalWelbevinden_T1
  /CRITERIA=CI (.95).
*Daily Functioning*.
T-TEST GROUPS=GroepInv_T0Num (0 1)
  /MISSING=ANALYSIS
  /VARIABLES=BelemActoNum BelemActoNum_T1
  /CRITERIA=CI (.95).

**Kinderen**.
*Bodily functions*.
T-TEST GROUPS=GroepInv_T0Num (0 1)
  /MISSING=ANALYSIS
  /VARIABLES=KINDL_Schaal_LichamelijkWelbevinden_Trans_T0
KINDL_Schaal_LichamelijkWelbevinden_Trans_T1
  /CRITERIA=CI(.95).
* Mental well-being*.
T-TEST GROUPS=GroepInv_T0Num (0 1)
  /MISSING=ANALYSIS
  /VARIABLES=KINDL_Schaal_PsychischWelbevinden_Trans_T0
KINDL_Schaal_PsychischWelbevinden_Trans_T1
  /CRITERIA=CI (.95).
T-TEST GROUPS=GroepInv_T0Num (0 1)
  /MISSING=ANALYSIS
```

```
  /VARIABLES=SDQ_Totaal_Probleemscore_T0 SDQ_Totaal_Probleemscore_T1
  /CRITERIA=CI(.95).
* Quality of life*.
T-TEST GROUPS=GroepInv_T0Num (0 1)
  /MISSING=ANALYSIS
  /VARIABLES=KINDL_Schaal_Eigenwaarde_Trans_T0 KINDL_Schaal_Eigenwaarde_Trans_T1
  /CRITERIA=CI (.95).
*Social and societal participation*.
T-TEST GROUPS=GroepInv_T0Num (0 1)
  /MISSING=ANALYSIS
  /VARIABLES=KINDL_Schaal_Vrienden_Trans_T0 KINDL_Schaal_Vrienden_Trans_T1
  /CRITERIA=CI (.95).
* Daily functioning*.
T-TEST GROUPS=GroepInv_T0Num (0 1)
  /MISSING=ANALYSIS
  /VARIABLES=KINDL_Schaal_Gezin_Trans_T0 KINDL_Schaal_Gezin_Trans_T1
    KINDL_Schaal_School_Trans_T0
    KINDL_Schaal_School_Trans_T1
  /CRITERIA=CI(.95).


** Descriptives voor de gemiddelde waardes van de schalen**.
DESCRIPTIVES VARIABLES=AlgGezoNum AlgGezoNum_T1 LangdAoNum LangdAoNum_T1
    KINDL_Schaal_LichamelijkWelbevinden_Trans_T0 KINDL_Schaal_LichamelijkWelbevinden_Trans_T1
    EMPO_GemTotaal_T0 EMPO_GemTotaal_T1 KINDL_Schaal_PsychischWelbevinden_Trans_T0
    KINDL_Schaal_PsychischWelbevinden_Trans_T1 SDQ_Totaal_Probleemscore_T0
SDQ_Totaal_Probleemscore_T1
    MHC_Schaal_EmotioneelWelbevinden_T0 MHC_Schaal_EmotioneelWelbevinden_T1
    MHC_Schaal_PsychologischWelbevinden_T0 MHC_Schaal_PsychologischWelbevinden_T1
    KINDL_Schaal_Eigenwaarde_Trans_T0 KINDL_Schaal_Eigenwaarde_Trans_T1
    MHC_Schaal_SociaalWelbevinden_T0 MHC_Schaal_SociaalWelbevinden_T1
KINDL_Schaal_Vrienden_Trans_T0
    KINDL_Schaal_Vrienden_Trans_T1 BelemActoNum BelemActoNum_T1 KINDL_Schaal_Gezin_Trans_T0
    KINDL_Schaal_Gezin_Trans_T1 KINDL_Schaal_School_Trans_T0 KINDL_Schaal_School_Trans_T1
  /STATISTICS=MEAN STDDEV MIN MAX.


* De gecombineerde dataset gesplitst op basis van interventie en controle groep*.
SORT CASES BY GroepInv_T0.
SPLIT FILE LAYERED BY GroepInv_T0Num.


* Paired sample t-test*.
** Ouders**.
```

```
T-TEST PAIRS=AlgGezoNum LangdAoNum WITH AlgGezoNum_T1 LangdAoNum_T1 (PAIRED)
  /CRITERIA=CI (.9500)
  /MISSING=ANALYSIS.
T-TEST PAIRS=EMPO_GemTotaal_T0 WITH EMPO_GemTotaal_T1 (PAIRED)
  /CRITERIA=CI(.9500)
  /MISSING=ANALYSIS.
T-TEST PAIRS=MHC_Schaal_EmotioneelWelbevinden_T0 MHC_Schaal_PsychologischWelbevinden_T0
    MHC_Schaal_SociaalWelbevinden_T0 WITH MHC_Schaal_EmotioneelWelbevinden_T1
    MHC_Schaal_PsychologischWelbevinden_T1 MHC_Schaal_SociaalWelbevinden_T1 (PAIRED)
  /CRITERIA=CI (.9500)
  /MISSING=ANALYSIS.
T-TEST PAIRS=BelemActoNum WITH BelemActoNum_T1 (PAIRED)
  /CRITERIA=CI(.9500)
  /MISSING=ANALYSIS.


**Kinderen**.
T-TEST PAIRS=KINDL_Schaal_LichamelijkWelbevinden_Trans_T0
    KINDL_Schaal_PsychischWelbevinden_Trans_T0 KINDL_Schaal_Eigenwaarde_Trans_T0
    KINDL_Schaal_Vrienden_Trans_T0 KINDL_Schaal_Gezin_Trans_T0 KINDL_Schaal_School_Trans_T0
WITH
    KINDL_Schaal_LichamelijkWelbevinden_Trans_T1 KINDL_Schaal_PsychischWelbevinden_Trans_T1
    KINDL_Schaal_Eigenwaarde_Trans_T1 KINDL_Schaal_Vrienden_Trans_T1
KINDL_Schaal_Gezin_Trans_T1 KINDL_Schaal_School_Trans_T1 (PAIRED)
  /CRITERIA=CI (.9500)
  /MISSING=ANALYSIS.
T-TEST PAIRS=SDQ_Totaal_Probleemscore_T0 WITH SDQ_Totaal_Probleemscore_T1 (PAIRED)
  /CRITERIA=CI(.9500)
  /MISSING=ANALYSIS.


*Frequencies van de karakteristieken nadat de groepen zijn verdeeld*.
**Ouders**.
FREQUENCIES VARIABLES=IngevuldNum1 GeboortelandNum1 BurgStaatNum1 OpleidingNum
WerkSituatieNum1
    Inkomsten1Num Inkomsten2Num1 KinderenAltijd1 KinderenDeels1
  /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN
  /ORDER=ANALYSIS.
FREQUENCIES VARIABLES=BIMaand LeeftijdOuder LftAlleKinderenGem
  /STATISTICS=STDDEV MINIMUM MAXIMUM MEDIAN
  /ORDER=ANALYSIS.


**Kinderen**.
```

```
FREQUENCIES VARIABLES=GeslachtKindNum WoontBijNum1 GroepNum
  /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN
  /ORDER=ANALYSIS.
FREQUENCIES VARIABLES=LeeftijdKind
  /STATISTICS=STDDEV MINIMUM MAXIMUM MEDIAN
  /ORDER=ANALYSIS.


*Frequencies om de range aan te geven bij de uitkomsten*.

FREQUENCIES VARIABLES=AlgGezoNum AlgGezoNum_T1 LangdAoNum LangdAoNum_T1
KINDL_Schaal_LichamelijkWelbevinden_Trans_T0 KINDL_Schaal_LichamelijkWelbevinden_Trans_T1
EMPO_GemTotaal_T0, EMPO_GemTotaal_T1 KINDL_Schaal_PsychischWelbevinden_Trans_T0
KINDL_Schaal_PsychischWelbevinden_Trans_T1 SDQ_Totaal_Probleemscore_T0
SDQ_Totaal_Probleemscore_T1 MHC_Schaal_EmotioneelWelbevinden_T0
MHC_Schaal_EmotioneelWelbevinden_T1 MHC_Schaal_PsychologischWelbevinden_T0
MHC_Schaal_PsychologischWelbevinden_T1 KINDL_Schaal_Eigenwaarde_Trans_T0
KINDL_Schaal_Eigenwaarde_Trans_T1 MHC_Schaal_SociaalWelbevinden_T0
MHC_Schaal_SociaalWelbevinden_T1 KINDL_Schaal_Vrienden_Trans_T0
KINDL_Schaal_Vrienden_Trans_T1 BelemActoNum BelemActoNum_T1 KINDL_Schaal_Gezin_Trans_T0
KINDL_Schaal_Gezin_Trans_T1 KINDL_Schaal_School_Trans_T0 KINDL_Schaal_School_Trans_T1
 /STATISTICS=STDDEV MINIMUM MAXIMUM MEDIAN MEAN
  /ORDER=ANALYSIS.
```

Appendix D: Translation of the variables

Table D1: Overview of the Dutch variables used in the SPSS syntax and the English translation of the variables.

Dutch variable (Original)	English variable
PersCode	PersCode
GroepInv	GroupInv
Vragenlijst	Questionnaire
Invuldatum	CompDate
Locatie	Location
Ingevuld	Completed
IngevuldAnders	CompletedOther
Geboortedatum	DateBirth
Geboorteland	CountryBirth
GeboortelandAnders	CountryBirthOther
BurgStaat	MarStatus
BurgStaatAnders	MarStatusOther
Opleiding	Education
WerkSituatie	WorkSituation
WerkSituatieAnders	WorkSituationOther
Inkomsten1	Income1
Inkomsten2	Income2
InkomstenAnders	IncomeOther
BesteedbaarInkomen	SpendIncome
InkomenPer	IncomePer
KinderenAltijd	ChildFulltime
KinderenDeeltijd	ChildParttime
LftKind1	AgeChild1
LftKind2	AgeChild2
LftKind3	AgeChild3
LftKind4	AgeChild4
LftKind5	AgeChild5
LftKind6	AgeChild6
LftKind7	AgeChild7
GeslachtKind	GenderChild
GeboortedatumKind	DateBirthChild
Groep	Class
Woontbij	LivesAt
WoontbijAnders	LivesAtOther
AlgGezo	GenHealth
LangAo	LongAo
BelemActo	LimiActo
EMPO_Steun	EMPO_Support
EMPO_Druk	EMPO_Concern
EMPO_Vecht	EMPO_Fight
EMPO_Vertrouwen	EMPO_Trust
EMPO_LevenHand	EMPO_ControlLife
EMPO_ControleZelf	EMPO_SelfControl
EMPO_Oplossingen	EMPO_Solutions
EMPO_ControleKind	EMPO_ControlChild
EMPO_OpvoedingHand	EMPO_NurtureControl
EMPO_GedragKind	EMPO_BehavChild
EMPO_StuurtKind	EMPO_ConBehavChild
EMPO_Ingrijpen	EMPO_Intervene
MHC_Gelukkig	MHC_Happiness
MHC_Interesse	MHC_Interest

MHC_Tevreden	MHC_Satisfied
MHC_Bijdrage	MHC_Contribution
MHC_Gemeenschap	MHC_Community
MHC_Samenleving	MHC_Society
MHC_MensenGoed	MHC_PeopleGood
MHC_Maatschappij	MHC_Company
MHC_Persoonlijkheid	MHC_Personality
MHC_Verantwoordelijkheden	MHC_Responsibilities
MHC_Relaties	MHC_Relationships
MHC_Uitdaging	MHC_Challenges
MHC_Zelfverzekerd	MHC_Confidence
MHC_Zingeving	MHC_Meaning
KINDL_LW_Ziek	KINDL_PW_Ill
KINDL_LW_HoofdBuikpijn	KINDL_PW_HeadTummyAche
KINDL_LW_Kracht	KINDL_PW_Power
KINDL_LW_Moe	KINDL_PW_Tired
KINDL_PW_Lachen	KINDL_EW_Laugh
KINDL_PW_Zin	KINDL_EW_Bored
KINDL_PW_Eenzaam	KINDL_EW_Alone
KINDL_PW_Onzeker	KINDL_EW_Unsure
KINDL_EW_Trots	KINDL_SE_Proud
KINDL_EW_VelPrettig	KINDL_SE_Top
KINDL_EW_Aardig	KINDL_SE_Pleased
KINDL_EW_Ideeen	KINDL_SE_Ideas
KINDL_GZ_OudersMij	KINDL_FA_Parents
KINDL_GZ_GemakTevreden	KINDL_FA_FeltFine
KINDL_GZ_Ruzie	KINDL_FA_Quarrel
KINDL_GZ_Betutteld	KINDL_FA_Restricted
KINDL_VR_Samen	KINDL_FR_Together
KINDL_VR_Anderen	KINDL_FR_Other
KINDL_VR_OpschietenContact	KINDL_FR_Along
KINDL_VR_Anders	KINDL_FR_Different
KINDL_BS_OpdrachtenHuiswerk	KINDL_NS_Schoolwork
KINDL_BS_LeukPlezier	KINDL_NS_Enjoyed
KINDL_BS_VerheugdZorgen	KINDL_NS_Worried
KINDL_BS_Fouten	KINDL_NS_Mistakes
SDQ_Rekening	SDQ_Considerate
SDQ_Rusteloos	SDQ_Restless
SDQ_HoofdBuikpijn	SDQ_HeadStomachAche
SDQ_Deelt	SDQ_Shares
SDQ_Driftbuien	SDQ_Tantrums
SDQ_OpZichzelf	SDQ_Solitary
SDQ_Gehoorzaam	SDQ_Obedient
SDQ_Zorgen	SDQ_Worries
SDQ_Behulpzaam	SDQ_Helpful
SDQ_Wiebelen	SDQ_Fidgeting
SDQ_GoedeVriend	SDQ_GoodFriend
SDQ_Vecht	SDQ_Figths
SDQ_Ongelukkig	SDQ_Unhappy
SDQ_Aardig	SDQ_Liked
SDQ_Concentreren	SDQ_Concentration
SDQ_Zenuwachtig	SDQ_Nervous
SDQ_JongereKinderen	SDQ_YoungChild
SDQ_Liegt	SDQ_Lies
SDQ_Gepest	SDQ_Bullied
SDQ_Hulp	SDQ_Help
SDQ_Denkt	SDQ_Thinks
SDQ_Pikt	SDQ_Steals

SDQ_Volwassenen	SDQ_Adults
SDQ_Bang	SDQ_Fear
SDQ_Opdrachten	SDQ_Tasks