

UNIVERSITY OF TWENTE.

Faculty of Behavioral, Management and Social Sciences

Autonomy, Competence and Relatedness as Elements of Well-Being in Elementary School Children

Hannah Jung B.Sc. Thesis June 2017

Supervisors:

J.M. Goldberg, MSc

Dr. M. Radstaak

Abstract

The goal of positive psychology is to ensure mental health in individuals. Therefore, it is necessary to maintain and foster well-being. Since children experience developmental challenges which influence their well-being, it is advisable to have an extensive understanding of children's well-being. Existing research proposes mental fitness, comprised of the needs for autonomy, competence and relatedness, as an indication of well-being in children. The present study discovered what children find important to their well-being by analyzing 106 positive future projections of children from five elementary schools in the Netherlands. At first, a content analysis was executed to provide an overview of what constitutes the children's positive future projections. Subsequently, the data was analyzed for the three elements of well-being. The findings revealed that the vast majority of the elementary school children described their future projections in a positive light. While relatedness was the most common element followed closely by competence, autonomy was found in markedly fewer statements of the future projections. Additionally, various sub-elements were discovered which provide a deeper inside into the essence of children's well-being. The future projections seem to be a good method to discover competence and relatedness as indicators of well-being in children. Against expectations, autonomy was not part of all future projections for reasons either relating to the children's development or to limitations in the task description. The results further revealed the possibility of a fourth element, which may be defined as "personal happiness", as an important indicator of well-being in the children's future projections. Regarding the limitations and the potential of this study, adaptations as well as opportunities for further research are proposed. The present study discloses new information on the well-being of children which broadens current understanding in this field.

Introduction

Positive psychology is a promising branch in clinical psychology. It proposes a shift in focus from the mentally weak individual who needs to be repaired to the individual as a functioning entity with strengths and a potential that should be used. Seligman and Csikszentmihalyi (2000) explained that traditional clinical psychology views human functioning in terms of a disease model, meaning its emphasis lies on how to treat an individual's negative features, such as weaknesses, mental problems and undesired behaviors. However, it is found that this traditional psychology cannot always increase mental health, since mental health requires not only the absence of mental problems, but also a state of well-being (Keyes, 2002). In response to this, positive psychology has emerged, which is primarily concerned with enhancing an individual's strengths and talents, rather than trying to eliminate inevitable negative features (Seligman & Csikszentmihalyi, 2000). In a positive psychology context individuals focus their attention on their positive qualities, whereby the perceived impact of their negative qualities reduces (Beevers, Clasen, Enock, & Schnyer, 2015). The core idea behind this shift in focus is that strengths work like a buffer against weaknesses and prevent a person from developing psychological problems when experiencing difficulties in life. This view directly leads away from the question of how to repair an individual's worst problems to the question of how to build and foster positive "defense" qualities in an individual (Seligman & Csikszentmihalyi, 2000).

Although positive psychology focuses on individuals of all ages, Carter et al. (2016) propose that a particular opportunity for exerting its preventative function lies in research on children, since their cognitive, emotional and behavioral development is still malleable. By drawing on this opportunity, positive psychology research could build a basis on which a mentally healthy development can be fostered at an early age.

Accounts on Well-Being

Officially, mental health is defined as "a state of well-being in which an individual can realize his or her own potential, cope with the normal stresses of life, work productively and make a contribution to the community" (WHO Regional Committee for Europe, 2013). In accordance with this definition, Keyes (2002) proposed that flourishing is an important aspect of mental health. Flourishing describes a state of optimal functioning, in which an individual experiences meaning in life. A flourishing individual is productive, can effectively cope with challenges and hardships and experiences personal growth. Therefore, flourishing is interlinked with positive affect, the experience of positive emotions (Fredrickson & Losada, 2005). These

features of flourishing relate directly to current accounts on well-being.

In existent literature well-being is approached from two perspectives (Ryan & Deci, 2001). One is the hedonistic perspective, which emphasizes a person's overall happiness or general life satisfaction. This subjective well-being (SWB) is determined by pleasure and pain experiences and can therefore be estimated by balancing out a person's experienced positive and negative affect (Keyes, Shmotkin, & Ryff, 2002). The second perspective is concerned with eudaimonic or psychological well-being (PWB) and describes an individual's personal growth or thrive to fulfill one's purpose in life. In contrast to SWB, PWB does not account for an overall evaluation of one's life satisfaction. Rather, it describes the extent to which a person is functioning by looking at how that person handles important and challenging life events (Ryan & Deci, 2001; Keyes, et al., 2002). Ryff and Singer (1996) claim that PWB consists of six constructs, which are self-acceptance, autonomy, environmental mastery, purpose in life, personal growth and positive interpersonal relations. Besides, Ryff and Singer found differences in age and gender for adults regarding some of these elements. In their study, positive relations with others and personal growth yielded higher scores for women than for men. Additionally, personal growth and purpose in life decreased, in particular from midlife to old age, while autonomy and environmental mastery increased, especially during the transition from adulthood to midlife.

Since well-being is as an important factor of mental health and the promotion of wellbeing in children may be of particular preventative value, the present research focuses on the essence of well-being in children.

Well-Being in Children

As 10-20% of young people experience mental disorders before they reach adulthood (World Health Organisation [WHO], n.d.), a need exists to promote children's well-being in order to prevent the establishment of mental disorders in childhood. An extensive understanding of the factors that influence children's well-being would provide a basis on which well-being can be fostered. The hedonistic account on well-being may be easily applied to individuals of all ages, as it indicates an overall life satisfaction (Singh & Junnarkar, 2015). Eudaimonic wellbeing, however, is sensitive to (changing) social contexts and developmental changes (Ryff & Singer, 1996).

When considering the development of children, it is useful to acknowledge that the everyday life experiences of children differ from those of adults, since children spend a substantial amount of time at school. Especially from middle childhood onwards, the school

becomes a place where children learn and develop on a personal and social level. Besides experiencing achievement and success on an academic level, they can also practice and improve their social and emotional skills by interacting with peers and teachers. Therefore, schools play an essential role in children's well-being and have the potential to exert a protective influence. Next to school, also the home is a potential protective factor in children's well-being. Additionally, when children reach adolescence, community-based activities receive more importance and thereby also play a role in the protection of their well-being (Morrison & Peterson, 2013).

A child's well-being is further affected by developmental challenges, such as the development of emotional intelligence (EQ; Ross, Powell, & Elias, 2002). In socio-emotional learning children progressively acquire skills, knowledge and attitudes which enable them to effectively cope with interpersonal and emotional challenges, thereby developing their EQ. Such challenges under more include the abilities of building and maintaining relationships with significant others, dealing with and controlling emotions, solving interpersonal problems, working cooperatively, communicating effectively, establishing and pursuing goals and respecting oneself and other people when making choices (Ross, et al., 2002).

Another challenge, which lies at the heart of positive psychology, is the detection and development of strengths during childhood. Bendtro, Brokenleg, and Van Bockern (2005) introduced the Circle of Courage which focuses on children's need for opportunities to express and execute personal strengths and talents. This need is assumed to be satisfied when the following four conditions are met: 1) Belonging, which is the feeling of being loved or important to someone else. This condition is met when a child has the opportunity to form trusting relationships. 2) Mastery, which describes the feeling of being able to succeed and calls for opportunities to achieve goals and solve problems. 3) Independence, which holds the feeling of making autonomous decisions. Opportunities in which a child receives responsibilities and can learn to control him- or herself are needed to meet this condition. 4) Generosity, which involves the feeling that at least someone else is even more important than oneself. This condition needs opportunities in which a child can express respect and altruism. If all four conditions are met, children are assumed to view challenges no longer as obstacles, but rather as opportunities to learn and increase their potential. Consequently, fulfillment of the four conditions leads to an increase in children's resilience, which is the ability to flourish, despite experiencing difficulties in life (Brendtro, et al., 2005). On the other hand, it also leads to successful socialization that enables a child to develop into a productive member of the society (Jackson, 2014). Considering the developmental challenges emerging in childhood, it is presumable that PWB is manifested differently in children than in adults.

Mental Fitness as an Indicator of Well-Being in Children

Morrison and Peterson (2013) claim that an important aspect of PWB in children is mental fitness. Mental fitness is determined by children's self-perceptions about satisfaction of the needs autonomy, competence and relatedness. These elements of mental fitness represent the three basic psychological needs introduced by the self-determination theory (Ryan & Deci, 2000). According to this theory, well-being and productive adaption to one's social environment are dependent on the fulfillment of those needs, since this promotes self-motivation, as well as positive personality development and integration. Social contexts may foster or hinder the fulfillment of the three needs and thereby interfere with one's well-being and productive integration in society. As the needs are proposed to be universal and persistent across an individual's life-span this theory also relates to children (Ryan & Deci, 2000). Morrison and Peterson argue that autonomy is present in children who make decisions in a respectful manner towards others but also oneself. Autonomy reflects the desire to be free in making own choices and decisions. Competence, on the other hand, is based on a need for recognition and found in children who use their talents and strengths when working towards the achievement of a certain goal. A competent child believes that it can generally accomplish tasks and challenges lying ahead. Furthermore, relatedness is based on the need to be close and connected to family members, friends and important groups. It includes the feeling of belonging to groups and interacting with significant others, who provide encouragement and support (Morrison & Peterson, 2013).

When considering the nature of the three needs or "elements of mental fitness" these seem to be included in the Circle of Courage (Brendtro, et al., 2005). Furthermore, they can also be found within other aspects relating to children's well-being, including resilience, self-efficacy, connectedness or the acknowledgment of diversity. Resilient children hold a feeling of self-worth and feel valued for their unique talents, which relates to the needs of competence and autonomy. Regarding the need of relatedness, resilient children actively seek and receive support from significant others, when needed. As a result, they possess problem-solving skills and coping strategies that they effectively apply when facing challenges or difficulties (Meichenbaum, 2015). Mental fitness, especially the need for competence, can also be found in relation to self-efficacy. Children high in self-efficacy feel they can master any situation. Therefore, they actively seek challenges, do not easily give up and apply efficient strategies to master those challenges (Bandura, 1997). Moreover, the need for relatedness shows up in

children's connectedness not only to family members and friends, but also to the school or the community in general (Juvonen, 2007; Monahan, Oesterle, & Hawkins, 2010). The elements of mental fitness are also stressed by external factors which influencing children's well-being, such as the acknowledgment of diversity. In a school context this may, under more, refer to differences in mental and cognitive abilities (Bartolo, 2010), ethnic backgrounds (Pagani, Robustelli, & Martinelli, 2011) or sexual orientations (Diaz, Kosciw, & Greytak, 2010).

It is further argued that fulfillment of the three needs correlates positively with PWB as well as resilience in children. Additionally, a higher self-determination is associated with the establishment of goals, problem-solving strategies and positive behavior changes (Morrison & Peterson, 2013). Moreover, other evidence suggests that mental fitness correlates positively with positive affect, competitive physical activity, a feeling of school-connectedness and prosocial attitudes and behavior, while it correlates negatively with anti-social or self-destructive behaviors like smoking (Health and Education Research Group [HERG], 2010). Since the elements of mental fitness adequately represent important aspects of well-being in children, in the present study it is decided to operationalize well-being in children with the term mental fitness.

Research Focus of the Present Study

Future projections. An option to investigate well-being in children from a positive psychological account is to make use of possible selves. These are imaginations of oneself in the future, which means they do not describe who one is at the current time, but who one hopes and desires (not) to be in some future time. A person may have several possible selves (Markus & Nurius, 1986). Researchers in the field of positive psychology believe that narratives, such as possible selves, reflect a person's past life and provide people with a sense of identity, which in turn shapes their expectations of the future (McAdams, 1996; Whitty, 2002). A research conducted by Whitty (2002) on possible selves of older adolescents and young adults revealed that possible selves cover future descriptions on a wide array of life areas. Some of these, including relationships, occupations, finances, free time and travel may be related to the three elements of mental fitness discussed by Morrison and Peterson (2013). While the need for relatedness involves relationships, the need for competence relates to occupations, which for children may rather be school-related. Autonomy may be a need represented in the areas of finances, free time and travel.

Considering that possible selves provide a deep insight into the identity, dreams and hopes of individuals and regard life areas that are related to the needs of autonomy, competence

and relatedness, the current study will investigate whether best possible selves (BPS) are a suitable method for providing a future projection of well-being in children. The BPS is the future self-image a person describes that is most positive and desirable (Owens & Patterson, 2013).

Research Question. Subsequently, in order to give information on the essence of the well-being in elementary school children, and to account for the need of research regarding an extensive understanding of children's well-being, the following research question will be investigated:

To what extent can the elements of mental fitness, as an indication of well-being, be found in future projections of elementary school children?

Exploratory Research. Additionally, exploratory research on gender differences will be conducted, since existent research indicates the possibility of gender differences in children's future projections with regard to their well-being. For one, Whitty (2002) discovered gender differences in possible selves for older adolescents and young adults. On the other hand, Ryff and Singer (1996) discovered gender differences in PWB for adults and Chaplin (2009) found gender differences in what children perceive to be important to their happiness. The exploratory research therefore aims at answering the following question:

Which gender differences can be found regarding the elements of mental fitness, as an indication of well-being, in future projections of elementary school children?

Methods

Design and Participants

This research used a qualitative multiple case study design. The 106 children who participated in this research were derived from five elementary schools in the Netherlands which practice regular education. Of these participants, 45.28% were girls and 52.83% boys, with an age range from 8 to 13 years. For two children (1.89%) the gender was not ascribable, because neither their names indicated a specific gender nor did fill their gender in.

Procedure

The teachers of the five participating school classes subscribed for the research. Before introducing the research to the participants, the ethical commission approved the research design. In October and November 2016 the data was collected. For this, the writing task, named

"Mijn beste toekomstige ik" (see Appendix A) was provided to the teachers. They introduced the task to the children and monitored the children while executing the task. The task required the children to write down how they imagined their BPS one year in the future. In the description of this task, the children were asked to think carefully about themselves in one year time and to imagine doing all those things they dream of. Additionally, the children were prompted to think about life areas like school, home, their family and friends.

Data Analysis

For this study, the collected data was transcribed. Thereafter, the transcribed data was uploaded into the program Atlas.ti. In collaboration with two fellow students a coding scheme was established in order to analyze the content of the data. For this, a bottom-up process was chosen. During this process 27 codes emerged, for which the inter-rater agreement was calculated with the formula of Cohen's kappa. An "almost perfect" agreement (k = .88) was discovered for the established coding scheme. The coding scheme, which is further described as "coding-scheme for content", includes the following ten categories: school, home, family, friends, self, free time, sports, material, gender and other. For a description of these categories Table 1 can be considered. Except for the categories gender and other, all categories were split into three codes by attaching the values positive, negative and neutral to them. An example of the codes for the category school is: "school-positive", "school-negative" and "school-neutral". The category gender was split into the three codes female, male and neutral. A neutral code for gender exists to take the children into account who did not indicate their gender. No values were given to the category "other", since all statements, which did not fit into another category and which were therefore irrelevant to the content of the BPS, were given the label other. The content analysis was carried out in order to provide an overview on the number and types of future desires that constitute the BPS of the children.

After having coded the content of the data with this first coding scheme, a top-down approach was used in order to establish a coding scheme with which the elements of well-being found in the data can be analyzed. For this second coding scheme, the elements of mental fitness – autonomy, competence and relatedness – were used as codes. A description of these codes can be found in Table 2. In the following, this coding-scheme is referred to as "coding-scheme for well-being" in order to differentiate between both coding-schemes. Inter-rater agreement was calculated for the discovered elements and showed a "substantial" agreement (k = .73). Subsequently, the data was coded with the coding scheme for well-being.

Table 1

Coding-Scheme for Content

Category	Description
School	This code includes sentences in which participants write about school and things that help to build up a career or in which they write about learning new things (that are not related to sport and other hobbies) like having or getting a side-job.
Friends	This code is given to sentences in which the word friend(s) is explicitly mentioned or in which the relationship with specific friends or groups of friends is described, for example "I will still meet up with friends from my old class".
Family	To this code belong sentences in which family members get named either individually (like grandma, niece) or in which the family is mentioned as a 'group'.
Home	This code includes sentences in which the word 'home' is mentioned explicitly or which are written under a heading that includes this word. Sentences which mention a house moving and statements related to the feeling of being "home" or related to the house itself which are not materialistic in nature fall under this code as well.
Sports	This code includes statements in which the word sports or a certain sport is mentioned as well as statements which include the desire to improve in (a certain) sport or to become a professional or champion in this sport, as long as this desire is not materialistic in nature.
Free Time	Sentences in which 'free time' is mentioned explicitly or in which free time activities or hobbies are mentioned, such as playing the guitar, acting, singing or playing outside.
Self	This code includes statements about self-development or changes in the self (- concept/-image) of a participant.
Material	This code covers statements about (materialistic) items that a participant wishes to have, as long as these things are materialistic in nature and therefore not ascribable to other codes. An example for a statement including a materialistic thing but belonging to another code (in this case to the code 'family') would be "I want a phone, so that I can talk to my sister more often".
Gender	This code is applied for demographic purposes.
Other	This code includes all sentences that do not fall under any other code. Examples are 'next year my dog is bigger' or 'next year I am 12 years old'.

Table 2

Coding-Scheme for Well-being

Code	Description
Autonomy	This code includes statements in which a participant describes or desires opportunities and abilities to make free choices and decisions. Rules and responsibilities, prohibitions and allowances fall under this code as well as activities and hobbies that are freely chosen and do not relate to competence- building. Statements on materialistic items that make a child more autonomous, such as a computer, money or a phone are also included in this code. Statements, in which the wish for free-time in general is expressed, as well as statements that reveal a desire for a side-job, also received this code.
Competence	This code incorporates statements in which a participant describes opportunities and abilities to achieve and accomplish things related to school, sports and other hobbies of perceived importance. Statements, including the desire to engage or improve in school- or sport-related areas received this code, as well as statements indicating some career- or job-preference or merely the wish to work. Also, statements involving some sort of self-improvement, like improvement in certain hobbies, such as acting or playing an instrument also fall under this code.
Relatedness	This code includes statements on a participant's relationships to significant others in his/her life and on his/her perceived membership in important groups. Statements, in which the relationship to (a) friend(s) or group of friends, specific family-members or the family as a 'group' is described, fall under this code, as well as statements including wishes for significant others or describing relationships between significant others. Also, statements on the relationship to the participant's house or feeling of being 'home' fall are included in this code. Additionally, statements in which the participant describes his feeling of membership to 'school' as an important group, such as statements referring to a feeling of belonging or relatedness to school as a group, to teachers or the class, fall under this code. An example is "at school I will meet new teachers and children".
Well-being- other	This code includes statements about the child's personal well-being that do not fall under any of the other codes in this coding scheme.

Next, in order to gain a deeper insight into the meaning conveyed by the elements of mental fitness for elementary school-children, the nature of the three codes from the coding-scheme for well-being was examined to discover sub-elements contained in the codes.

For the exploratory part of this research, the data of girls and boys was viewed separately and the frequency with which the coded elements of well-being and the discovered subelements were found in the BPS of girls and boys was compared. The comparison of both groups was made in a qualitative manner.

Results

Content

For an overview on the absolute and relative frequencies with which the various codes occurred, including the allocation of the values see Table 3.

The category family was applied 16.27% of the times, while 83.67% of the statements were positively, 14.51% neutrally and 1.61% negatively coded. The statements mainly included changes and continuities in the lives of family members or the child's life in relation to family members. An example for a statement coded as family-positive is: "It is well with my family, they are very healthy and happy" (D93), while the code family-neutral includes statements, such as: "My sister will then be in group 7" (D67).

The category friends included 21.13% of the codes. Of these 93.17% were given a positive, 4.35% a neutral and 2.48% a negative value. Statements of this code referred to a concern about the quantity and quality, as well as maintenance of friendships. Oftentimes, the children related such concerns to their upcoming school transition. An example for a statement coded as friends-positive is: "I hope that when I go to secondary school I will make a lot of new friends" (D88).

The category school was attached 31.89% of the times, with a positive value being applied to 79.84%, a neutral value to 18.52% and a negative value to 1.65% of the statements. The codes mainly referred to desires for being good or improving at school and also include statements on school-subjects. Codes with the label school-positive included statements like: "I hope that I will receive a good advice" (D6), while an example for the code school-neutral is: "Then I go to secondary school" (D51).

The category home was found in 6.96% of the statements, with 67.92% of the statements being positive, 28.3% neutral and 3.78% negative. The statements of this category included changes and continuities referring to descriptions of the situation or daily procedures at home.

An example for the code home-positive is: "Over one year at home there is less fighting and it is better" (D45), while the code home-neutral received statements like: "I still live in the same house" (D72).

The category sports was applied to 2.89% of the statements, while 86.36% received a positive value and 13.64% a neutral value. No negative value was attached to any of the statements. In general the statements included the desire to engage in sports or improve in a certain sport. This desire is expressed through statements, like "I will still be swimming but in one year I will have become better at swimming" (D73), which is an example of the code sports-positive, while sports-neutral was applied to statements, such as: "I also play football" (D70).

The category free time was attached to 4.2% of the statements. To these statements the value positive was given 81.25% of the times, while the value neutral and negative were both attached 9.38% of the times. Free time was relevant to children especially when thinking about extracurricular activities and about their transition to secondary school. An example of a statement coded as free time-positive is: "Over one year I have my diploma in playing the piano" (D120).

The category self was applied 6.96% of the times. A positive value was given to 88.68% of these statements, while a neutral value was applied to 9.43% and negative value to 1.89% of the statements. All (anticipated) changes a child found personally relevant fall under this category. An example for the code self-positive is: "Later I want a good future, I want to stay healthy/fit" (D15).

The category materialism was attached to 9.71% of the statements, while of these 97.3% were coded positively, none neutrally and 2.7% negatively. The statements consisted of materialistic desires that are either realistic or unrealistic and may refer to items or status. "I want to buy a gamepc" (D61) is an example for the code materialism-positive.

The category other was applied to everything that children wrote down but which did not belong to any other category or was irrelevant for a best possible self. This includes parts of BPS in which a child wrote "Yourself:" (D4; D9) without adding more information, incomplete statements, like "following a new" (D89), irrelevant statements (about the future), such as "further we will see what happens" (D5), descriptions or factual changes: "next year I am 10" (D97) and irrelevant opening or closing statements, like"[t]hat was my future me" (D86).

To conclude, the vast majority of statements received a positive (85.04%). A neutral code was applied to markedly fewer statements (12.86%), but merely 16 negative statements (2.1% of the codes) were discovered.

Table 3

		Code		
Category	Positive	Neutral	Negative	Total
Family	104 (83.67)	18 (14.51%)	2 (1.61%)	124 (16.27%)
Friends	150 (93.17%)	7 (4.35%)	4 (2.48%)	161 (21.13%)
School	194 (79.84%)	45 (18.52%)	4 (1.65%)	243 (31.89%)
Home	36 (67.92%)	15 (28.3%)	2 (3.78%)	53 (6.96%)
Sports	19 (86.36%)	3 (13.64%)	-	22 (2.89%)
Free Time	26 (81.25%)	3 (9.38%)	3 (9.38%)	32 (4.2%)
Self	47 (88.68%)	5 (9.43%)	1 (1.89%)	53 (6.96%)
Materialism	72 (97.3%)	-	2 (2.7%)	74 (9.71%)
Total	648 (85.04%)	98 (12.86%)	16 (2.1%)	762 (100%)

Results Content Analysis

Note. The absolute frequency and relative frequency of the codes. 'Positive', 'neutral' and 'negative' refer to the values given to the categories. A 'code' consists of a category plus value.

Elements of Well-Being

An analysis of the three codes of autonomy, relatedness and competence revealed subelements, which provide a deeper insight into the nature three main elements of well-being. Table 4 provides an overview on the occurrence of the various elements of well-being.

Autonomy. Autonomy was found in 9% of all statements coded. The sub-elements which were discovered within this code are discussed in the following.

Self-expression was found in several of codes on autonomy. This need is illustrated by statements, such as "Luckily I still have one year to do what I want" (D63). This sub-element is further divided into statements referring to the expression of one's individual interests, as illustrated by statements like: "I will have a youtube channel named the [name of participant] Show" (D73) and to the self-actualization of a child, like "I want to do something with drawing" (D3).

Self-responsibility was discovered as a further sub-element of autonomy. On the one

hand, it was mentioned in terms of need satisfaction regarding self-expression. Such statements included fewer rules and prohibitions and more allowances, expressed through statements, like: "I hope that I am allowed to game longer and more often" (D88). On the other hand, self-responsibility related to the ability to spend money on own purposes and to care for oneself, either through the possession of items, like "[...] an own debit card" (D59) or, as for three children, the engagement in side-jobs, like "a side-job at the Lidl or so" (D94).

The desire for self-identification as a sub-element of autonomy was expressed by only one child through the statement: "I want to go to a Muslim-school" (D5).

Table 4

Results Well-being Analysis

	37	
Code	Ν	
Autonomy	55	(9%)
Competence	242	(39.61%)
Relatedness	291	(47.63%)
Well-being – other	23	(3.76%)
Total	611	(100%)

Note. The absolute frequency and relative frequency with

which each code of the coding-scheme for well-being was coded.

Competence. During the analysis on the elements of well-being 39.61% of the statements were coded as competence. Statements on competence regarded either the school, sports or hobbies.

Statements on competence included the sub-element engagement, expressed through statements, such as "I do the sports dancing and gymnastics" (D72) in relation to sports or "wrapping books also seems nice to me" (D60) in relation to school activities.

A further sub-element was identified as competent attitude, illustrated by statements, in which children expressed a general belief of being able to execute a task or achieve something, such as in the statement: "Then I will do everything to accomplish what I want to accomplish. A sport talent, youtube star, [...]" (D78).

Achievement was found to be another sub-element of competence. In relation to school,

statements on achievements referred to desires for certain (good) grades and school-level advises or the wish to pass. Such codes included statements, like "I will get good grades" (D48). Other statements referred to desires for achievements on a sportive level, like "later I want to become a professional football-player" (D124). Moreover, some children expressed a desire for reputation or status through achievements, like "I hope that I become famous" (D95).

Another sub-element of competence was defined as improvement, expressed by statements, like "I want to become better at playing the guitar" (D97) in relation to hobbies or "[] I can play volleyball even better" (D104), in relation to sports. Additionally, improvement in school related activities was desired, like the statement: "I will listen even better" (D40) illustrates.

Another sub-element was identified as orientation towards competence-based activities. For example, one child indicated to have a role model which gives him orientation in school related activities, expressed through the statement: "my biggest school-example is my sister" (D9). Statements on desired careers, such as "I do my extra best because later in Utrecht I want to study to become an animal doctor" (D63), also fall under this sub-element, as imagined careers may help children to direct their efforts towards a set future goal.

Increase in intellectual competence emerged as another sub-element of competence. An example for such a statement is: "I want to become very bright" (D122).

Ease of work also seemed to constitute a sub-element of competence. Statements, expressing for example, the wish for "nice homework" (D123) fall hereunder.

Relatedness. The well-being element relatedness applied as a code to 47.63% of all statements. Relatedness was expressed especially for friends and the family and to a lesser extent for the home and school.

One sub-element of relatedness was identified as quantity of friendships. Such statements included a concern of having a certain or increasing amount of friends, like the statement: "I hope that I have a lot of friends" (D87).

Maintaining and fostering friendships emerged as another sub-element of relatedness. Especially in relation to the transition from elementary to secondary school that lied ahead for the majority of the children, statements involved a desire to keep in touch with friends from elementary school or an explanation on how existent relationships will be nurtured. An example for this sub-element is the statement: "After my elementary school, I want to meet up with friends. Because when I go to another school, I cannot see my old school-mates or friends anymore." (D18).

Additionally, fostering relationships with family members was a sub-element of relatedness. Such statements mainly referred to visiting family members or undertaking activities with them, as expressed in the statement: "And of course I also want to do nice things with my family. I will also visit my family then." (D85).

Satisfaction of existent relationships constituted another sub-element of relatedness. Some statements referred to satisfaction with (certain) family members, through statements such as: "My father does not need to change" (D119). However, others wished for relationships to improve, as illustrated by statements, like: "That at home it will be a bit better between me and [name] (my brother)" (D111).

Another sub-element of relatedness was identified as positive attachment to friends and family members. This desire was frequently illustrated by the expression of emotions such as loyalty, concern or liking or love. An example for this is: "I love all of them. [...] I am there for them, if I need something they are there for me" (D2). More practical examples to express positive attachment include: "I will help my mother and father with everything and my brother" (D43). Also descriptions of shared joy, such as: "Having fun together" (D5) expressed positive attachment.

Respect for significant others was discovered as another sub-element. One girl knew that in order to sustain a good relationship to her sister, she has to take her needs into account. This is illustrated by the statement: "At home I cannot make a lot of noise because my oldest sister is in her examination year, if I make too much noise she becomes mad" (D63).

Dependence on significant others emerged as a further sub-element of relatedness. Missing old friends, feelings of grief or loneliness and the fear of losing loved ones all relate to emotional dependence on these people. A statement clarifying this account is the following: "Without my family I cannot live because they stand at number 1. And if I don't see them then I am sad" (D12). A concern about to the health and happiness of loved ones, like in the statement: "With my family it is well, they are healthy, we are all happy" (D6), also expressed this dependence.

Another sub-element of relatedness was identified as the atmosphere at home or school. Statements referring to this included desires for improvement in relationships which currently affect this atmosphere negatively, as well as hopes for yet unknown circumstances. For example, one girl made the following statement about her future school: "I hope to get a good school. Where I feel home [...]. That there are no bullies at that school. The teachers should not be too strict" (D10).

Acknowledgment from significant others was found back twice as a sub-element of

relatedness and related to school achievements. One of such statements was: "I hope [...] that my parents may be proud of me" (D88).

Besides, another sub-element could be described as connection to pets, although this came forth only once the BPS. The statement referring to this was the following: "I still play with my pets everyday" (D117).

Well-being – other. The code well-being-other was applied to 3.76% of all statements. Statements belonging to this code referred to the well-being of the child itself but did not fall under the elements relatedness, competence and autonomy. Through a careful analysis of the nature of these statements, it was found that they indicated no relation to other people, self-development or competence-building.

Some of these statements referred directly to desires about the children's own happiness and health, as expressed through statements, such as: "I [...] hope that I am happy and healthy" (D93). In other statements satisfaction with one's life, illustrated by statements, like: "further I am not short of anything" (D88) was expressed.

Additionally, some statements referred to changes in the children's homes that are perceived as important. An example for such statements is: "I hope that I will then have an own room" (D47).

Yet other statements coded as well-being-other regarded preferences in school subjects. An example for this is the following statement: "Now at elementary school my favorite subject is drawing I think that that will also stay this way. I am not so good in it but that doesn't matter to me as long as I like it" (D60).

Moreover, one of these statement related to a desired change in appearance in the upcoming yea, as is stated. She states: "I will look the same but then I get lenses and I have no glasses any more" (D62).

Exploratory Research on Gender

Generally, there were no apparent gender differences in the frequency with which the three elements of well-being occurred in the BPS of elementary school children. However, for some of the sub-elements of the three needs differences were found. Table 5 provides an overview of the results.

Autonomy. For autonomy salient group differences were found with regard to the subelement self-responsibility. Girls seemed to focus more than boys on changes in rules and responsibilities that would increase their self-responsibility. This is illustrated by statements, such as: "When I am 12 I have different rules and responsibilities" (D59). Instead of rules, boys more frequently than girls described increases in allowances, expressed by statements, like: "I [...] will game every day" (D121). Additionally, boys seemed to be more concerned with the possession of items like a computer or a phone, which would increase their self-responsibility, as illustrated by the statement: "I hope [...] that I have a mobile phone and my own computer." (D65). Furthermore, only boys expressed a desire to engage in side-jobs, like: "[] I already want to work at the Albert Heijn" (D85).

Considering the sub-element self-identification, it is not possible to draw conclusions on whether it holds gender differences, because it came forth in only one BPS, which however, was written by a female participant.

Competence. Considering competence, gender differences were observed with regard to the sub-element orientation. More girls than boys indicated career preferences which motivate them to direct their effort to school-related activities. This is illustrated by statements, like: "I see myself as a girl who tries to accomplish her goal, becoming an English teacher" (D52). However, more boys than girls indicated orientation through career preferences related to competence in sports. An example for such a statement is: "Later over one year, I am a great sport-talent with gymnastics" (D78).

On top of that, regarding the sub-element improvement, only girls proposed solutions which would help them to improve at school. This is reflected by statements, like: "Everyday one hour counting and grammar" (D102). However, improvement in hobbies was more important to boys than to girls. An example for this is the statement: "Over one year I am very good in programming" (D114).

Moreover, referring to the sub-element ease of work, some girls rather than boys expressed the hope that circumstances related to school will promote their competence. An example for such statements is: "That the teachers are normal, not too strict []. And that the homework is not too difficult and not too much" (D98).

Furthermore, the sub-element competence on an intellectual level came forth solely in statements made by boys. For example one boy noted: "I think that when I am one year older I will learn interesting things" (D76).

Relatedness. Regarding relatedness, an apparent difference was discovered with regard to the sub-element positive attachment. Girls rather than boys described their desire for high quality relationships, in which trust, loyalty, reliance and support play a great role. A statement illustrating this finding is: "[...] And I want friends who I with whom I can share everything. And friends who do not forsake me" (D5).

Considering the sub-element improvement of relationships, girls expressed more frequently a desire for improvement in the quality of relationships than boys. The following rhetorical questions illustrate this concern: "Would my brother recommence to care about me?" (D79).

Another difference was found regarding the sub-element atmosphere, as girls were more often concerned with a pleasant atmosphere at school or at home than boys. Statements, such as: "a good school and nice teachers and friends, [...]. And I hope that there are no bullies", illustrate this.

Moreover, only boys expressed a desire for recognition from significant others. The statement: "Not only my mother but my whole family will then be proud of me!" (D8), illustrates this desire.

Table 5

Gender differences	in	sub-elements	of	^c well-being
--------------------	----	--------------	----	-------------------------

	Differences	
Element	Girls	Boys
Autonomy	Changes in rules and responsibilities	Increases in allowances Possession of items Side job
Competence	School-related	Sport-related
	Strategies for improvement	Intellectual competence in general
	Circumstances at school	
Relatedness	Improvement in quality of relationships	Recognition from significant others
	High quality relationships	
	Atmosphere	

Discussion

The results illustrate that the great majority of participating children wrote a positive account on their future projections, while substantially fewer neutral statements and even fewer negative statements were integrated. The BPS of the participating children revealed insight into the essence of the three elements of mental fitness, thereby indicating what these children perceived to be important for their well-being. Regarding relatedness, the children expressed desires for positive relationships and proposals of how to maintain and foster these. Additionally, the children communicated a desire for emotionally bonding relationships and a good atmosphere at important places like the home or the school, as well as a desire for well-being of significant others. Competence was mainly related to achieving and accomplishing schoolor sport-related challenges. Expressions of career-preferences or the desire for improvement in certain areas indicated a sense of goal-directness. Although autonomy was not found to be a necessary element in the future projections of elementary school children, it found expression in some BPS. In relation to autonomy the children mainly discussed rules, responsibilities and allowances, as well as the use of items, like phones or computers and free time in a selfdetermined manner. These findings provide new information to the tool of research on the three basic psychological introduced by the self-determination theory.

Several researchers have found substantial support for associations between one of the three elements of mental fitness – autonomy, relatedness or competence – with measures of well-being in children (e.g. Ryan & Grolnick, 1986; Noom, Dekovic, & Meeus, 1999; Cole, Martin, & Powers, 1997; Toth & Cicchetti, 1996). The analysis of the children's future projections in this study supports such research, although it suggests stronger associations of well-being with relatedness and competence than with autonomy. Therefore, in general BPS seem to be a suitable method of detecting elements that are important to children's well-being.

The future projections suggest that the most important elements of children's mental fitness are relatedness and to a slightly less extent competence. The indication that relatedness was more important to the well-being of the elementary school children than competence is contrary to existing literature on the three elements, in which competence was found to be the most crucial element predicting well-being (Véronneau, et al., 2005). However, Chaplin (2009) discovered that children of this age related achievements less to their happiness than older adolescents, but children of all ages perceived their relationships to family and friends of great importance to their happiness. Therefore, Chaplin's study provides support to the finding that

relatedness rather than competence was important to the children's well-being.

Ryan and Deci (2000) argue that all three basic psychological needs are innate and therefore necessarily related to well-being at all life-spans. However, the current study does not fully support this argument, since autonomy was not found to be part of all future projections of elementary school children. In contrast to Ryan and Deci (2000), the findings of the present study therefore suggest, that autonomy does not play a vital role for well-being in middle childhood to early adolescence. Rather, they indicate that autonomy for this life span is a non-universal need.

The exploratory research indicates no salient gender differences in the frequency with which the three elements of well-being occurred in the BPS of elementary school children. Yet, when taking an insight into the nature of the sub-elements, some differences were found. Girls, rather than boys, showed more concern with rules and responsibilities when expressing a need for autonomy, whereas boys more frequently than girls wished for increased allowances, sidejobs or for items that increase their self-responsibility. Existing research revealed no such gender differences, except for the finding that boys were more concerned with materialistic items. This is confirmed by existing research on gratitude (Gordon, et al., 2004), but disconfirmed by a research on happiness, in which girls seemed to express more concern for materialistic things (Chaplin, 2009). Furthermore, in the present study girls rather than boys seemed to focus on atmosphere, positive attachment and improvements in the quality of relationships when referring to their need of relatedness. Existent research on gratitude, wherein girls expressed more gratitude for existing relationships is in accordance with these findings (Gordon, et al., 2004). Recognition from significant others was not mentioned by girls and by merely 1.89% of the boys, which does not allow for conclusions to be drawn. Additionally, girls were more concerned with competence in school-related areas, whereas boys focused stronger on competence in relation to sports and hobbies. This finding is in line with Chaplin's (2009) study, in which boys gave more importance to sports when describing what made them happy, whereas girls prioritized school related achievements. The results of the exploratory research indicate gender differences in the sub-elements of mental fitness. Therefore, future research should further investigate these differences.

Limitations and Recommendations

Since the self-determination theory is a well-established theory, the finding that autonomy is included to a much lesser extent than the other two elements in the future projections of the participants, may reflect a limitation of this study. Considering the description on the task (see Appendix A), it may be argued that the children were primed to focus more on relatedness- and competence-related aspects of their BPS, because prompts, such as "family", "friends" and "school", were provided. Except for the prompt "home", the prompts given did not direct the children's thinking towards autonomy-related life areas. From the findings it cannot be known with certainty, whether the task description accounted for the low frequency of autonomy-related statements or whether the children do not (yet) find autonomy as important for their well-being as the other two elements. Subsequently, a recommendation for future research is to include explicit prompts in the BPS-task, which lead the child's thinking towards autonomy. Thereby, it would be ensured that the children do not merely forget to think about autonomy-related life issues as a result of being prompted to think about relatedness and competence.

Another limitation of this study stems from the finding that some BPS-accounts included not more than one or two sentences or a few notes. The reasons for this are unclear. However, as some children struggled with grammar and sentence construction, the fact that a writing task was used may account for such incomplete BPS. It is possible that some children may have wished to write down more aspects about their BPS, but did not possess the skills to do so. Consequently, these children might have provided shorter BPS than they could have provided orally. Existing research on learning difficulties found that children who exhibit symptoms of ADHD struggle to express themselves in writing tasks, including narratives. Subsequently, these children produced shorter narratives with more spelling errors than children without such symptoms (Re, Pedron, & Cornoldi, 2007). In order to allow all children to express everything they wish about their BPS, it is recommended for those children who struggle to express themselves in written, to change the task to an oral one. An oral BPS-task might take the form of interviews. This recommendation stems from existing research on gratitude and BPS of children, in which oral elaboration on BPS was included (Owens & Patterson, 2013). Such a change would also allow for prompting the children directly and giving them the chance and time to think about various aspects of their lives carefully without having to consider their writing skills.

The present study discovered that 3.76% of the statements did not relate to any of the three elements of well-being. This frequency remains relatively low when compared to the frequency with which the three elements of mental fitness occurred. Yet, it is found that those statements reflect some desire for "personal happiness" unrelated to competence, autonomy or relatedness, but only to the child itself. Considering the nature of the statements coded as "well-being other", this personal happiness may be defined as "being happy with oneself as a person

and ones circumstances". Therefore, it might constitute another feature of well-being that incorporates a combination of self-acceptance (Ryff & Singer, 1996) and positive affect (Keyes, 2002), although this cannot be concluded with certainty because of its low reported frequency. A recommendation for future research therefore is to introduce personal happiness as potential element of well-being. A factor analysis should be conducted to investigate whether this construct is significantly distinct from the other three elements of well-being. Depending on the outcome of this analysis a recommendation for further research could be to include prompts in the BPS-task referring to this construct and to investigate in how far this construct is found in the future projections of elementary school children.

Another recommendation for future research is the execution of confirmatory research on the sub-elements of well-being, which were revealed in the present study. It is of interest to disclose the importance of the various sub-elements for well-being in children in order to gain a deeper insight of how these relate to children's well-being. Through such an understanding, theories on the components of well-being in children could be further developed. Therefore, the present study could be replicated, whereby the sub-elements could be used as codes of a codingscheme. By estimating the frequency with which the various sub-elements occur in the BPS, conclusions could be drawn on the importance of these sub-elements for well-being in children. Additionally, for means of theory development it is suggested to examine whether the discovered gender differences in the sub-elements from the exploratory research can be confirmed. Therefore, the confirmatory research could integrate gender comparisons of the frequencies with which the various sub-elements are discovered.

Relevance for Society and Science

The present study may disclose new opportunities to society and science. In relation to society, the findings may help social institutions, especially schools, to better take into account these elements of well-being and to foster them in a more straightforward manner. Institutions in which competence plays a role, such as the school or sport-associations, can develop strategies, on how to promote their need for competence in a healthy manner. Schools or social institutions concerning the family should be strengthened to foster healthy relationships between children, their families and important groups, thereby fulfilling the need of relatedness. Finally, social institutions should focus on providing the children with opportunities for personal development and growth to foster their autonomy. By starting the enhancement of well-being at an early stage of life, children can grow into mentally healthy and fully functioning individuals who can contribute to a prosperous society.

The current study reveals BPS to be a suitable method for discovering the essence of at least two of the elements of mental fitness (relatedness and competence), as an indication of well-being in elementary school children. Therefore, it may be recommended that positive psychology research on well-being in children includes BPS into its tool of methods. Since BPS seem to work well as a method, it may also be of interest to investigate whether they can be utilized as an intervention to promote well-being in children. Existing research, like that of Owens & Patterson (2013) who showed that thinking about BPS increased self-esteem in children, holds promising findings in this regard.

In conclusion, the findings suggest competence and relatedness to be elements of wellbeing found in future projections of elementary school children. More research is needed on the role of autonomy and the potential construct of personal happiness as elements of well-being, embedded in future projections of children. Most importantly, the present study adds new information to the tool of existent research on the basic psychological needs – autonomy, competence and relatedness – trough the discovery of their sub-elements. Thereby, it provides a deeper understanding of how well-being is manifested in children.

References

- Bandura, A. (1997). Self-efficacy: The exercise of control. New York, N.Y.: Freeman.
- Bartolo, P. A. (2010). Why school psychology for diversity? *School Psychology International, 31,* 567-580. doi:10.1177/0143034310386532
- Beevers, C. G., Clasen, P. C., Enock, P. M., & Schnyer, D. M. (2015). Attention bias modification for major depressive disorder: Effects on attention bias, resting state connectivity, and symptom change. *Journal Of Abnormal Psychology*, 124(3), 463-475. doi:10.1037/abn0000049
- Bendtro, L., Brokenleg, M., & Van Bockern, S. (2005). The Circle of Courage and Positive Psychology. *Reclaiming Children and Youth*, 14(3), 130-136. Retrieved from https://ndsslibrary.wikispaces.com/file/view/14_3_Brendtro_Brokenleg_Van_Bockern.pdf/52839 3762/ 14 3 Brendtro Brokenleg Van Bockern.pdf
- Carter, P. J., Hore, B., McGarrigle, L., Edwards, M., Doeg, G., Oakes, R., ... Parkinson, J. A. (2016). Happy thoughts: Enhancing well-being in the classroom with a positive events diary, *The Journal of Positive Psychology*, 1-12. doi:10.1080/17439760.2016.1245770
- Chaplin, L. N. (2009). Please May I Have a Bike? Better Yet, May I Have a Hug? An Examination of Children's and Adolescents' Happiness. *Journal of Happiness Studies*, 10, 541-562. doi:10.1007/s10902-008-9108-3
- Cole, D. A., Martin, J. M., & Powers, B. (1997). A competency–based model of child depression: A longitudinal study of peer, parent, teacher and self–evaluations. *Journal* of Child Psychology and Psychiatry, 38(5), 505–514. doi:10.1111/j.1469-7610.1997.tb01537.x
- Diaz, E. M., Kosciw, J. G. & Greytak, E. A. (2010). School connectedness for lesbian, gay, bisexual, and transgender youth: In-school victimization and institutional supports. *The Prevention Researcher*, 17(3), 15-17. Retrieved from https://usu.instructure.com/courses/400333/files/59828599/download?verifier=Kv1BrJ TvuEhnM8IgkSpPVZtrt8gFOIvu80kkLI42&wrap=1.
- Fredrickson, B. L., & Losada, M. F. (2005). Positive Affect and the Complex Dynamics of Human Flourishing. *The American Psychologist*, 60(7), 678–686. doi:10.1037/0003-066X.60.7.678
- Gordon, A. K., Musher-Eizenman, D. R., Holub, S. C., & Dalrymple, J. (2004). What are children thankful for? An archival analysis of gratitude before and after the attacks of

September 11. *Journal of Applied Developmental Psychology*, *25*, 541–553. doi:10.1016/j.appdev.2004.08.004

- Health and Education Research Group. (2009). Mental fitness (Fact Sheet). New Brunswick Department of Wellness, Culture and Sport. Retrieved from http://www2.gnb.ca/content/dam/gnb/Departments/sd-ds/pdf/Wellness-MieuxEtre/MentalFitness2009-2010.pdf
- Jackson, W. C. (2014). The Circle of Courage: Childhood Socialization in the 21st Century. (Doctoral Dissertation). Retrieved from http://digitalcommons.wayne.edu/oa dissertations/1093/
- Juvonen, J. (2007). Reforming middle schools: focus on continuity, social connectedness, and engagement. *The Educational Psychologist*, 42(4), 197-208. doi:10.1080/00461520701621046
- Keyes, C. L. M. (2002). The mental health continuum: From languishing to flourishing in life. Journal of Health and Social Behavior, 43, 207–222. Retrieved from http://midus.wisc.edu/findings/pdfs/56.pdf
- Keyes, C. L. M., Shmotkin, D., Ryff, C. D. (2002). Optimizing Well-Being: The Empirical Encounter of Two Traditions. *Journal of Personality and Social Psychology*, 82(6), 1007–1022. doi: 10.1037//0022-3514.82.6.1007
- Markus, H., & Nurius, P. (1986). Possible Selves. *American Psychologist, 41*(9), 954-969. doi:10.1037/0003-066X.41.9.954
- Meichenbaum, D. (2015). Understanding Resilience in Children and Adults: Implications for Prevention and Intervention. Retrieved from https://melissainstitute.org/wpcontent/uploads/2015/10/Resilienceinchildren.pdf
- Monahan, K. C., Oesterle, S. and Hawkins, J. D. (2010). Predictors and consequences of school connectedness: The case for prevention. *The Prevention Researcher*, *17*(3), 3-6. Retrieved from http://www2.pitt.edu/~adlab/People%20pics%20and%20links/Publications%20page/P

redictors%20and%20Consequences%20of%20School%20Connectedness.pdf

- McAdams, D. P. (1996). Personality, modernity, and the storied self: A contemporary framework for studying persons. *Psychological Inquiry*, 7(4), 295–321. doi:http://dx.doi.org/10.1207/s15327965pli0704 1
- Morrison, W., & Peterson, P. (2013). Schools as a setting for promoting positive mental health: better practices and perspectives (2nd ed.). Retrieved from http://www.jcshcces.ca/upload/JCSH%20Best%20Practice_Eng_Jan21.pdf.

- Noom, M. J., Dekovic, M., & Meeus, W. H. J. (1999). Autonomy, attachment and psychosocial adjustment during adolescence: A double–edged sword? *Journal of Adolescence, 22*, 771–783. doi:10.1006/jado.1999.0269
- Owens, R. L., & Patterson, M. M. (2013). Positive psychological interventions for children: A comparison of gratitude and best possible selves approaches. *The Journal of Genetic Psychology: Research and Theory On Human Development*, 174(4), 403-428. doi:10.1080/00221325.2012.697496
- Pagani, C., Robustelli, F. and Martinelli, C. (2011). School, cultural diversity, multiculturalism, and contact. *Intercultural Education*, 22(4), 337–349. doi:10.1080/14675986.2011.617427

f students/links/00b7d534fc81194bbe000000.pdf

- Ross, M., Powell, S., & Elias, M. (2002). New roles for school psychologists: Addressing the social and emotional learning needs of students. *School Psychology Review*, *31*(1), 45-52. Retrieved from https://www.researchgate.net/profile/Maurice_Elias/publication/232467597_New_role s_for_school_psychologists_Addressing_the_social_and_emotional_learning_needs_o
- Ryan, R. M., & Deci, E. L. (2000). Self-Determination theory and the Facilitation of Intrinsic Motivation, Social Development and Well-Being. *American Psychologist*, 55(1), 68-78. doi:10.1037110003-066X.55.1.68
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: a review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141–166. doi:10.1146/annurev.psych.52.1.141
- Ryan, R. M., & Grolnick, W. S. (1986). Origins and pawns in the classroom: Self–report and projective assessment of individual differences in children's perceptions. *Journal of Personality and Social Psychology, 50,* 550–558. doi:10.1037/0022-3514.50.3.550
- Ryff, C. D., & Singer, B. (1996). Psychological Well-Being: Meaning, Measurement, and Implications for Psychotherapy Research. *Psychotherapy and Psychosomatics*, 65, 14-23. doi: 10.1159/000289026
- Seligman, M. E. P., & Csikszentmihalyi. M. (2000). Positive Psychology: An Introduction. *American Psychologist*, 55(1), 5-14. doi:10.1037//0003-066X.55.1.5
- Singh, K., & Junnarkar, M. (2015). Correlates and predictors of positive mental health for school going children. *Personality and Individual Differences* 76, 82–87. doi:10.1016/j.paid.2014.11.047

Toth, S. L., & Cicchetti, D. (1996). Patterns of relatedness, depressive symptomatology, and

perceived competence in maltreated children. *Journal of Consulting and Clinical Psychology*, *64*(1), 32–41. doi:10.1037/0022-006X.64.1.32

- Véronneau, M.-H., Koestner, R. F., & Abela, J. R. Z. (2005). Intrinsic Need Satisfaction and Well–Being in Children and Adolescents: An Application of the Self–Determination Theory. *Journal of Social and Clinical Psychology*, 24(2), 280-292. doi:10.1521/jscp.24.2.280.62277
- WHO Regional Committee for Europe. (2013). *Mental Health* (Fact Sheet No. 63). Retrieved from http://www.euro.who.int/__data/assets/pdf_file/0004/215275/RC63-Fact-sheet-MNH- Eng.pdf
- World Health Organization. (n.d.). Mental Health: Child and adolescent mental health. Retrieved from http://www.who.int/mental_health/maternal-child/child_adolescent/en/

Appendix A

Writing Exercise - Best Possible Self

Voornaam:

Geboortedatum:

Mijn beste toekomstige ik

Stel jezelf voor in de toekomst, ongeveer een jaar later dan nu, en je doet allerlei dingen waar je nu alleen nog maar van kan dromen. Neem maar eens een aantal minuten de tijd om echt goed na te denken over hoe jij over een jaar bent en hoe jouw leven er dan uitziet. Denk er over na hoe het dan op school gaat en hoe het thuis gaat. Denk er ook over na hoe het gaat met je familie en met je vrienden.

Als je er goed over nagedacht hebt kan je het vervolgens hieronder opschrijven:

Appendix B

Quotes and Translations for 3.1

Table 6

Quotes and Translations for all codes

Participant	Quote	Translation
D93	"met familie gaat het goed ze zijn heel gezond en gelukkig"	"It is well with my family, they are very healthy and happy"
D67	"Mijn zusje zit dan in groep 7."	"My sister will then be in group 7."
D88	"Ik hoop dat als ik naar de middelbare school ga ik heel veel nieuwe vrienden en vriendinnen maak"	"I hope that when I go to secondary school I will make a lot of new friends"
D51	"Dan ga ik naar de middelbare school."	"Then I go to secondary school."
D6	"ik hoop dat ik een goeie advies ga krijgen"	"I hope that I will receive a good advice"
D45	"Over een jaar thuis is er minder ruzie en het is beter."	"Over one year at home there is less fighting and it is better"
D72	"Ik woon nog in hetzelfde huis"	"I still live in the same house"
D73	Ik zal dan nog steess zwemmen maar over een jaar ben ik beter in zwemmen geworden	"then I will still be swimming but in one year I will have become better at swimming"
D70	"Ik zit ook op voetbal."	"I also play football"
D120	"over een jaar heb ik mijn diploma piano spelen"	"over one year I have my diploma in playing the piano"
D15	"Later wil ik een goede toekomst, ik wil gezond/fit blijven."	"Later I want a good future, I want to stay healthy/fit."
D61	Ik wil een gamepc kopen	"I want to buy a gamepc"
D4	"Jezelf:"	"Yourself:"
D89	"een nieuwe volgen"	"following a new"
D5	"verder zien we wel wat er gebeurt"	"further we will see what happens"
D86	"Dat was mijn toekomstige ik"	"That was my future me"

Appendix C

Quotes & Translations for 3.2

Table 7

Quotes and Translations for: Autonomy

Participant	Quote	Translation
D63	"Gelukkig heb ik nog een jaar om te doen wat ik wil"	"Luckily I still have one year to do what I want"
D3	"ik wil dingen met tekenen doen"	"I want to do something with drawing"
D5	"Ik wil naar een moslimschool gaan"	"I want to go to a Muslim-school"
D77	"ik hoop dat ik nog wel in mijn vrije tijd kan vissen"	"I hope that I can still fish in my free time"
D73	"Ik zal dan een youtube kanaal genaamd de [name van de participan] Show"	"I will have a youtube channel named the [name of participant] Show"
D94	"een bijbaantje bij lidl ofzoiets"	"a side-job at the Lidl or so"
D59	"Ook heb ik als ik 12 ben een eigen pinpas."	"Also, I have, when I am 12, an own debit card"
D88	"Ik hoop ook dat ik langer en vaker mag gamen"	"I hope that I am allowed to game longer and more often"

Table 8

Participant	Quote	Translation
D78	"Dan zet ik alles op alles om te bereiken wat ik wil bereiken. Een sport talent, youtubester, []"	"Then I will do everything to accomplish what I want to accomplish. A sport talent, youtube star, []"
D48	"ik zal goede cijfers halen"	"I will get good grades"
D124	"ik wel later profvollballer worden"	"later I want to become a professional football-player"
D95	"ik hoop dat ik beroemd word"	"I hope that I become famous"
D97	"ik wil beter gitaar spelen"	"I want to become better at playing the guitar"
D40	"ik ga nog beter luisteren."	"I will listen even better"
D140	"En kan ik nog beter voetballen."	"And I can play volleyball even better"
D72	"Ik doe dan de sporten dansen en turnen"	"I do the sports dancing and gymnastics"
D60	"Boeken kaften lijkt me lijkt me ook wel leuk"	"wrapping books also seems nice to me"
D123	"leuk huiswerk"	"nice homework"
D9	"mijn grootste schoolvoorbeeld is mijn zus"	"my biggest school-example is my sister"
D122	"ik wil heel slim worde"	"I want to become very bright"
D63	"Ik doe extra mijn best omdat ik later in Utrecht voor dierenarts wil studeren"	"I do my extra best because later in Utrecht I want to study to become an animal doctor"

Quotes and Translations for: Competence

Table 9

Quotes and Translations for: Relatedness

Participant	Quote	Translation
D87	"ik hoop dat ik veel vrienden heb"	"I hope that I have a lot of friends"
D18	"ik wil na mijn basischool,	"After my elementary school, I want to
	vrienden ontmoeten. Want als ik	meet up with friends. Because when I go
	naar een andere school ga, kan ik	to another school, I cannot see my old
	me oude schoolgenoten of	school-mates or friends anymore."
	vrienden niet meer zien"	
D85	"En natuurlijk wil ik ook leuke dingen doen met mijn familie. Ik ga dan ook naar bezoek bij me familie."	"And of course I also want to do nice things with my family. I will also visit my family then."
D119	"mijn vader moet niet veranderen"	"my father does not need to change"
D111	"dat thuis het wat beter gaat tussen mij en [naam] (mijn broertje)"	"that at home it will be a bit better between me and [name] (my brother)"
D2	ik hou van ze allemaal. [] ik ben er voor ze als ik wat nodig zijn ze voor me	"I love all of them. [] I am there for them, if I need something they are there for me"
D43	"ik ga mijn moeder en vader helpen met alles en mijn broertje."	"I will help my mother and father with everything and my brother"
D5	"lol hebben met elkaar"	"having fun together"
D63	"Thuis kan ik niet veel lawaai maken, omdat mijn oudste zus in het examenjaar zit. Als ik teveel lawaai maak wordt ze pissig."	"At home I cannot make a lot of noise because, my oldest sister is in her examination year. If I make too much noise she becomes mad"
D88	"Ik hoop [] dat mij ouders trots op mij mogen zijn"	"I hope [] that my parents may be proud of me"
D12	"zonder mijn Familie kan ik niet leven want ze staan op nummer 1. en als ik ze niet zie dan ben ik verdrietig."	"Without my family I cannot live because they stand at number 1. And if I don't see them then I am sad."
D6	"met mijn familie is het goed ze zijn gezond we zijn allemaal gelukkig."	"with my family it is well, they are healthy, we are all happy"

D10	"Ik hoop een goeie school te	"I hope to get a good school. Where I feel
	krijgen. Waar ik me thuis voel [].	home []. That there are no bullies at
	Dat er geen pesters op die school	that school. The teachers should not be
	zitten. De leraren moete niet al te	too strict."
	stren zijn."	
D117		

D117 "Ik speel nog iedere dag met onze" "I still play with my pets everyday" huisdieren"

Table 10

Quotes and	Translation	s for: We	ell-being	other
\sim		0	0_	_

Participant	Quote	Translation
D47	"Ik hoop dat ik dan een eigen kamer is."	"I hope that I then have an own room."
D93	"Ik [] hoop dat ik gelukkig ben en gezond"	"I [] hope that I am happy and healthy"
D88	"verder kom ik niks te kort."	"Further I am not short of anything."
D60	"Nu op de basisschool is mijn favorite vak tekenen ik denk dat dat ook wel zo blijft ik ben er niet zo goed in maar dat maakt mij niet uit zolang ik het maar leuk vind."	"Now at elementary school my favorite subject is drawing I think that that will also stay this way. I am not so good in it but that doesn't matter to me as long as I like it."
D62	"Ik zal wel hetzelfde uitzien maar dan krijg ik lenzen en heb ik geen bril meer."	"I will look the same but then I get lenses and I have no glasses anymore."

Appendix D

Quotes and Translations for 3.3

Table 11

Quotes and Translations for all Codes

Participant	Quote	Translation
D52	"Als ik 12 ben dan heb ik andere regels en andere verantwoordelijkheden"	"When I am 12 I have different rules and responsibilities"
D65	"Ik hoop [] dat ik een mobile telefoon heb en mijn eigen computter heb."	"I hope [] that I have a mobile phone and my own computer."
D121	"Ik [] ga iedere dag gamen"	"I [] will game everyday"
D85	"En ik wil ook alvast bij de Albert Heijn werken."	"And I already want to work at the Albert Heijn"
D5	"Ik wil leuke vrienden waar ik geen ruzie mee maak en lief zijn. Waar ik lol mee kan hebben. En te vertrouwen zijn. En ik wil vrienden die ik alles met hun kan delen. En vrienden die me niet in de steek laten."	"I want nice friends with whom I don't fight and being kind. Where I can have fun with. And are trustworthy. And I want friends who I with whom I can share everything. And friends who do not forsake me."
D79	"Zou mijn broer zich weer met mij bemoeien?"	"Would my brother recommence to care about me?"
D16	"een goeie school en leuke leraren en vrienden, []. En ik hoop dat er geen pesters zijn."	"A good school and nice teachers and friends, []. And I hope that there are no bullies. nice teachers"
D8	"Niet alleen me moeder maar heel me familie zal dan trots op me zijn!"	"Not only my mother but my whole family will then be proud of me!"
D52	"Over een jaartje, zie ik mezelf als een meid die probeert haar doel te bereiken, een Engelse lerares worden"	"Over one year, I see myself as a girl who tries to accomplish her goal, becoming an English teacher"
D102	"elke dag 1 uur rekenen en spelling"	"Every day one hour counting and grammar"
D98	"Dat de leerkrachten gewoon zijn niet te streng graag. En dat de huiswerk niet te moeilijk is en niet te veel"	"That the teachers are normal, not too strict gladly. And that the homework is not too difficult and not too much"

D78	"later over een jaar, ben ik een groot sporttalent met turnen."	"later over one year, I am a great sport- talent with gymnastics."
D76	"Ik denk dat als ik een jaar ouder ben ik leuke intressante dingen ga leren"	"I think that when I am one year older I will learn interesting things"
D114	"Over een jaar ben ik heel goed in programmeren"	"over one year I am very good in programming"