LAUREA

Contextualising the Salutogenic Perspective on Adolescent Health and the Sense of Coherence in Families - A study among adolescents and their families in the Swedish speaking Finland

Mosley-Hänninen, Pamela

2009 Laurea Otaniemi

Laurea University of Applied Sciences
Laurea Otaniemi

CONTEXTUALIZING THE SALUTOGENIC PERSPECTIVE ON ADOLESCENT HEALTH AND SENSE OF COHERENCE IN FAMILIES
- A study among adolescents and their families in the Swedish speaking Finland

Pamela Mosley-Hänninen
Degree Programme in Health Promotion
Thesis
May 2009

Laurea University of Applied Sciences
Laurea Otanniemi
Master of Healthcare
Degree Programme in Health Promotion

Abstract

Pamela Mosley-Hänninen

Contextualising the Salutogenic Perspective on Adolescent Health and the Sense of Coherence in Families – A study among adolescents and their families in the Swedish speaking Finland

Year 2009 Pages 83

Background: The core of the Sense of Coherence concept (SOC) is to perceive the world as predictable, manageable and meaningful. An adolescent with a strong SOC successfully engages in the diverse developmental tasks of adolescence, applies healthy behaviours, possesses the capacity to thrive despite stressors in life and perceives good health, experiences a sense of wholeness in relation to themselves, others and the community. The Family Sense of Coherence is a significant factor in determining and transforming family members' individual SOC and is a resource for the development of health in adolescence. The evidence on the relationship between Sense of Coherence and Health in the family context in Finnish adolescents is scarce.

Aim: The aims are to measure and to describe the Sense of Coherence among adolescents that have just started secondary school; gain insight into the adolescent Sense of Coherence within a family context; investigate the collective Sense of Coherence in the family. Further aims are to view how adolescents perceive health; explore the distribution of health promoting resources; investigate potential relationships with adolescents' Sense of Coherence.

Method: A cross-sectional study design is adopted. The study is descriptive using correlations as an analysis of the data. The respondents are 60 schoolchildren (grade 7) and their families from the Swedish-speaking area in southern Finland. The SOC-13 items questionnaire is used for the measurement of adolescents' SOC and the Family Sense of Coherence.

Results: The mean SOC for adolescents was 69 points (*SD* 12). Girls reported a lower mean SOC (67 points, *SD* 11) compared with boys (73 points, *SD* 13). Both mothers and fathers displayed a high Sense of Coherence mean score, resulting in the Family Sense of Coherence mean score being high (72 points, *SD* 8). The adolescents' Sense of Coherence and Family Sense of Coherence were significantly related to each other. The adolescents' SOC was strongly related to fathers SOC but not to mothers SOC. Strong correlation was found between adolescents SOC and perceived good health. The perception of having General Resistance Resources at ones disposal significantly correlated with adolescents' SOC. A strong association was found between adolescents' SOC and General Resistance Resources found in both the Social and Mental dimension of health.

Keywords: Sense of Coherence, Health, Adolescence, Families

Laurea Amattikorkeakoulu
Laurea Otanniemi
Master of Healthcare
Degree Programme in Health Promotion

Tiivistelmä

Pamela Mosley-Hänninen

Salutogeeninen näkökulma nuorten terveydestä ja perheen koherenssin tunteesta
- tutkimus suomenruotsalaisten nuorista ja heidän perheistään.

Vuosi 2009 Sivut 83

Ihmisen koherenssin tunteen ydin on kyky hahmottaa maailmaa ennakoitavana, tarkoituksen mukaisena ja hallittavana. Nuorilla joilla on vahva koherenssin tunne menestyksekkäästi harjoittavat monenlaisia nuoruusiän kehitystehtäviä, kykenevät hahmottamaan hyvän terveyden, omistavat kapasiteetti menestyä elämän stressistä huolimatta ja kokea eheyden tunteen suhteessa itseensä, toisiin ja yhteisöön. Perheen koherenssin tunne on merkityksellinen tekijä perheen jäsenten yksilöllisten koherenssi tunteen määrittämisessä ja muuttumisessa. Lisäksi se on resurssi nuoruusiän terveyden kehittämisessä. On hyvin vähän tutkimustietoa suomalaisten nuorten koherenssin tunteen ja terveyden välisestä yhteydestä perhekontekstissa.

Tutkimuksen tavoitteet ovat mitata ja kuvailla yläasteen aloittelevien nuorten koherenssin tunne; saada ymmärrystä nuorten koherenssin tunteesta perhekontekstissa; tutkia perheen kollektiivisen koherenssin tunnetta. Lisäksi tavoitteena on tarkastella miten nuoret hahmottavat terveytensä, tutkia terveyden edistämisen resurssien jakaminen sekä selvittää mahdollisia yhteyksiä nuorten koherenssin tunteeseen.

Tämä tutkimus on poikkileikkaus tutkimus. Tutkimus on kuvaileva käyttäen korrelaatiota analyysimenetelmänä. Vastaajina ovat 60 suomenruotsinlaista koululasta (7. luokka) ja heidän perheensä. Nuorten ja perheen koherenssi tunnetta mitataan SOC-13 kyselyn avulla.

Nuorten koherenssin tunteen keskiarvo oli 69 pistettä (*SP* 12). Tyttöjen koherenssin tunteen keskiarvo (67 pistettä, *SP* 11) oli matalampi kuin poikien (73 pistettä, *SP* 13). Vanhempien koherenssin tunteen keskiarvo oli korkea, sillä seurauksella että perheen koherenssin tunteen keskiarvo oli korkea (72 pistettä, *SP* 8). Nuorten koherenssin tunteella sekä perheen koherenssin tunteella oli merkityksellinen yhteys toisiinsa. Nuorten koherenssin tunteella oli vahva yhteys isien koherenssin tunteeseen, muttei äitien. Vahva korrelaatio löytyi nuorten koherenssi tunteen ja hyväksi koetun terveyden välillä. Nuorten koherenssi tunne korreloituu merkittävästi ympäristön yleisten voimavarojen kokemiseen. Voimakas yhteys löytyi nuorten koherenssin tunteesta ja ympäristön yleisistä voimavaroista jotka löytyivät sosiaalisen ja psyykkisen terveyden ulottavuudesta.

Avainsanoja: Koherenssin tunne, Terveys, Nuoret, Perheet

Acknowledgements

I would like to thank my family for showing patience with me during this intense period of my life. Juggling family and work is never easy and doing it while studying and writing a thesis is actually quite hard, but we survived.

A big thank you to Raili who shared my enthusiasm over the subject and helped me hold my own in Laurea.

I also want to thank Bengt for giving me the chance of turning my dreams into reality, my Quality of Life has improved after meeting you.

And last but definitely not least, thank you Monica for being the wind beneath my wings. You have been with me every step of the way and I just couldn't have accomplished this without you.

Pamela

Table of contents

Table of tables

Table of figures

1. Introduction

1.1 Personal views

In 2008 I was offered a position as a researcher at Folkhälsans research centre, in the Health Promotion Research Programme. For me this was a dream come true as it gave me the possibility to carry out my life long ambition of one day being able to continue my studies towards a PhD. I believe that when doing research with human beings it is of extreme importance that the researcher has knowledge of theories but also an understanding for the complexity of human nature and how minor incidents in our daily existence can have major impact on our present lives and the future. This understanding I believe can be made possible only through having extensively interacted with humans, in my case through my clinical work.

For the last 5 years I have worked, as a nurse and family therapist, with adolescents and their families at the Folkhälsan outpatient clinic for adolescents in Helsinki. I have also worked with families in child protective services, in community nursing service, in hospital wards, maternity wards and in day care centres. I have seen, interacted with and cared for people, both healthy and sick, throughout the human life-span. I have seen individuals who despite major disease have felt they have a good life and I have seen healthy individuals who feel as though their life is not worth living. As a nurse and family therapist I have met clients, families and health care personnel that I felt have had an unfavourable outlook on health and wellbeing, focusing too much on the care and prevention of disease and neglecting already existing health factors in their lives.

Adolescence is a time of change, growth and development. Working with adolescents and their families is both challenging and rewarding and I have come to notice that certain clients, despite extreme stressors in life tend to "bounce back" better than others. To me it seems that what these adolescents seem to have in common, is a sense of being able to look at their problems as a "temporary setback" in a life that they otherwise consider to be quite meaningful and filled with functioning relationships. Furthermore it seems that these adolescents have had, for the majority, parents that have a positive outlook on life, that believe in the possibility of the recovery of their child and that have a strong commitment to their family.

Looking at these families makes me wonder if there could be a common factor that they share and if that factor is, as I suspect, that the family has a strong Sense of Coherence.

Together with these families we have tried to focus on and foster healthy dimensions of the individual and family while simultaneously caring for the ill family member.

Adolescence is often seen as time of breaking loose from your family and finding your own path in life. It seems only logical that the family we come from has an impact on the way we view life. We are born into diverse families, some are blessed with loving parents or riches, and others face adversity from the day they are born but despite this consider their life as good. A strong Sense of Coherence could provide the adolescent with the resources needed to make choices in life that will help them lead a life they themselves feel is worth living and that gives them satisfaction. Taking responsibility, making your own choices and standing by them are major tasks of adolescence.

I strongly believe that families are important in the development of the adolescents' Sense of Coherence. I also think that if the adolescents perceive their family as a resource, it can be seen in the strength of the adolescents Sense of Coherence. I believe that a salutogenic (health orientated) approach is useful in clinical work to invite families in to treating health as a process and focusing on the development of health related resources rather than only on identifying and preventing problems. Adopting a salutogenic focus changes how one views issues related to health and wellbeing. Instead of focusing on developing solutions based on decreasing health related risks, one should find ways to promote health behaviours that increase people's sense of wellbeing and therefore their Sense of Coherence. A salutogenic approach to health can and should be applied on all levels of health care and health promotion.

To reach a common understanding of health and wellness, Antonovskys theory of salutogenesis will be used in this thesis as a basis for discussion. Using salutogenesis allows us to focus on factors that support and increase wellbeing rather than on factors that merely prevents disease. The term salutogenesis is derived from the Latin *salus* (= health) and the Greek *genesis* (= origin). Health can be perceived as movement on a continuum between total ill health (dis-ease) and total health (ease).

Salutogenesis offers a paradigm for thinking about resilience, illness and health that stands in contrast to the dominant pathogenic paradigm of health and medicine, resulting in people being and interacting with others in a health promoting way (Eriksson 2007).

According to Eriksson (2007, 17)

" The salutogenic perception focuses on three features. To begin with, it focuses on solving problems and finding solutions. Secondly it recognizes Generalized Resistance Resources (GRRs) that facilitate people to move in the direction of positive health. Finally, it acknowledges universal and comprehensive awareness in individuals, groups, populations or systems that serve in developing the process of sense of coherence".

Eriksson & Lindström (2009) have suggested salutogenesis to be used as an umbrella concept where Sense of Coherence is one concept among many that contributes to the explanation of health and well-being. Other well known concepts that are closely related to SOC are *Quality of Life* (Lindström), *Resilience* (Werner), *Hardiness* (Kobasa) and *Self-Efficacy* (Bandura).

The development of Sense of Coherence in adolescents and the relation to Family Sense of Coherence is a relatively little researched area. One of the aims of this study is to gather information that will be used in further research leading to a doctoral dissertation.

1.2 Health and Health promotion

1.2.1 Health

Health has been defined (1946) by the World Health Organization (WHO) as

"…a state of complete physical, mental and social well-being, and not merely the absence of disease and infirmity".

This definition is still widely recognized and referenced, but is often supplemented by other WHO reports such as the Ottawa Charter for Health Promotion (1986) that stated that health can be seen as

"…a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy life-styles to well-being".

At present spiritual wellbeing is recognised (Nutbeam 1998) alongside physical, mental and social wellbeing as one of the four dimensions of health (table 1).

Table 1. Dimensions of health

Physical Health	The ability of the human body to function properly and to maintain a healthy quality of life
Mental Health	The ability to process information, think clearly, reason objectively, act coherently, cope, adjust and adapt appropriately with life's challenges
Social Health	The ability to relate to and connect with others and to adapt to different social situations
Spiritual Health	The ability to establish peace and harmony in our lives, may be either religious beliefs or personal values/beliefs

The concept Quality of Life (QoL) is often mentioned in connection to the salutogenic theory and health. QoL has often been defined as personal wellbeing or satisfaction with life. By using a salutogenic model, the Lindström model, one approaches life as a whole by means of conceptualizing four dimensions for QoL. The dimensions are the global, the external, the interpersonal and the personal resources on an individual, group or societal level (Eriksson & Lindström 2007). Using these four dimensions Lindström (1994, 43) has formed a holistic definition of QoL based on the salutogenic theory.

"Quality of Life is the total existence of an individual, a group or a society describing the essence of existence as measured objectively and perceived subjectively by the individual, group or society."

1.2.2 Family Health

Viewing the family from the family systems theory perspective we presume that family health is not only just more than the sum of its parts, but also superior to and more diverse than the individual components it consists of. Family health is complex as both a concept and a construct as it consists of numerous significant variables that are influenced by individual differences, family interaction and communication patterns that in turn are influenced by both the social and cultural context the family is situated in. There is strong evidence that health factors are learned and experienced within the family context (Denham 1999). The family is also the main source of influence on health beliefs and attitudes as well as health

related behaviour patterns (Doherty 1991). Family health is systematic and process-based. There are interactive processes such as family communication, developmental processes that relate to family transitions, coping processes such as adaptation to life stressors, integrity processes such as family meaning and beliefs and health processes that include health-specific areas such as family health beliefs, the health status of family members, health responses and practices, lifestyle practices, and health care provision during illness and wellness (Anderson 2000). Family structure influences family health. In comparing groups of married, single and widowed, to divorced and newly separated families one finds direct negative health consequences as a pattern of general increase in morbidity and mortality among the divorced and separated (Lindström 1992).

1.2.3 Adolescent Health

Adolescents are generally viewed as a healthy population. The most prominent threats to their health are largely consequences of their own behaviour and it is often only apparent later in life that choices, in regard to health, made as adolescents have influence on their adult lives and adult health. Adolescence is a crucial point in time of assuming responsibilities, making lifestyle choices and developing healthy habits and behaviours that will be carried through to adulthood (Add Health, 2007). Health is concept that is becomes comprehensible during childhood and adolescence. Adolescents perceive medical, psychological, social, and lifestyle factors as being associated with health and define health in a broad and global way (Breidablick & al 2008). Adolescents' perception of their subjective health is not always congruent with the views held by adults that partake in their life. Health concerns in adolescence are unique to their developmental stage and related to their beliefs and knowledge about health, as well as their feelings of invulnerability (Rew 2005).

A healthy adolescent can be seen as an individual who successfully engages in the diverse developmental tasks of adolescence, who applies healthy behaviours that promote a healthy lifestyle, who possesses the capacity to thrive despite stressors in life and who experiences a sense of wholeness and wellbeing in relation to themselves, others and the community. Adolescents are susceptible to both risk and protective factors that may either enhance or threaten their health and wellbeing. These factors may be found at several levels; individual level, interpersonal level, organizational level and community level, and may either buffer against stressors and challenges or support resiliency of youth (Rew 2005).
Good health does not happen without human intervention. Adolescents, as well as children are susceptible to both positive and negative influences in their surroundings and require throughout all developmental stages care, support, understanding and nurturing from family, peers, school and the community to develop into healthy adults (Health Canada 1999).

The family's health related behaviours can affect adolescent wellbeing in several ways including providing role models and facilitating a healthy or unhealthy physical and social environment. Parental habits may influence adolescent health behaviours positively by providing access to healthy foods or negatively by providing easy access to cigarettes and alcohol (Aufseeser 2006).

Family meals provide a forum for adolescents to communicate with and spend time with their parents. Research shows that frequent family meals, a structured family meal environment and a positive atmosphere at mealtimes have been associated with enhanced health, less substance abuse, delinquency, depressive symptoms, and suicide attempts, and a lower likelihood of eating disorders (Eisenberg & al 2004, Neumark-Stzainer et al 2004).

In Finland more than 80 per cent of adolescents regard their own health as good. Poor school performance, often a result of learning difficulties, and poor health are associated with each other. Smoking, binge drinking and poor oral hygiene are all related to poor performance at school. Living in a nuclear family is a protective factor against health problems, whereas children from other types of families tend to have more health problems (Rimpelä 2006).

1.2.4 A salutogenic view on Health Promotion

Eriksson and Lindström (2008) describe in their article, a salutogenic interpretation of the Ottawa charter, how around the same time that the Ottawa Charter was constituted, Aaron Antonovsky developed the salutogenic theory and its core concepts the sense of coherence and Generalized Resistance Resources. According to the authors this has influenced the development of health promotion. Antonovsky presented at a health promotion research seminar held in the WHO regional office in Copenhagen in 1992, his salutogenic model of health as one direction of health promotion, resulting in a paradigm shift focusing on health rather than on disease. When viewing salutogenesis in the context of health promotion development, one can see that the core values of health promotion, equity, participation and empowerment, are also central elements of the salutogenic concept and its perspective on health.

Eriksson and Lindström (2008, 196) give a salutogenic definition of health promotion

"… as the process of enabling individuals, groups or societies to increase control over, and to improve their physical, mental and spiritual health. This could be reached by creating environments where people see themselves as active participating subjects who are able to identify their internal and external resources, use and reuse them to realize aspirations, to satisfy needs, to perceive meaningfulness and to change or cope with the environment in a health promoting manner".

The river has quite often been used as a metaphor to describe health development and health promotion. Traditionally the river is pictured as flowing in a downwards movement, with the riverbank on top and a waterfall at the bottom. The river can also be used as a new analogue indicative of the salutogenic paradigm. The metaphor of the river is now another, Eriksson and Lindström (2008) now talk about Health in the River of Life (see figure 1). Instead of having a downwards flow, the river flows in the direction of life and the waterfall follows the stretch of the river. The river is life that we are dropped into at birth and we float down the river. Some are born close to the waterfall and have to struggle harder to stay afloat in the river while others are born closer to the opposite shore of the waterfall and may float easier because our opportunities for life are greater and they have more resources at their disposal. The river is full of both risks and resources and an individuals outcome is influenced greatly by the ability to recognize and utilize resources that will improve their options for optimal health and a good quality of life.

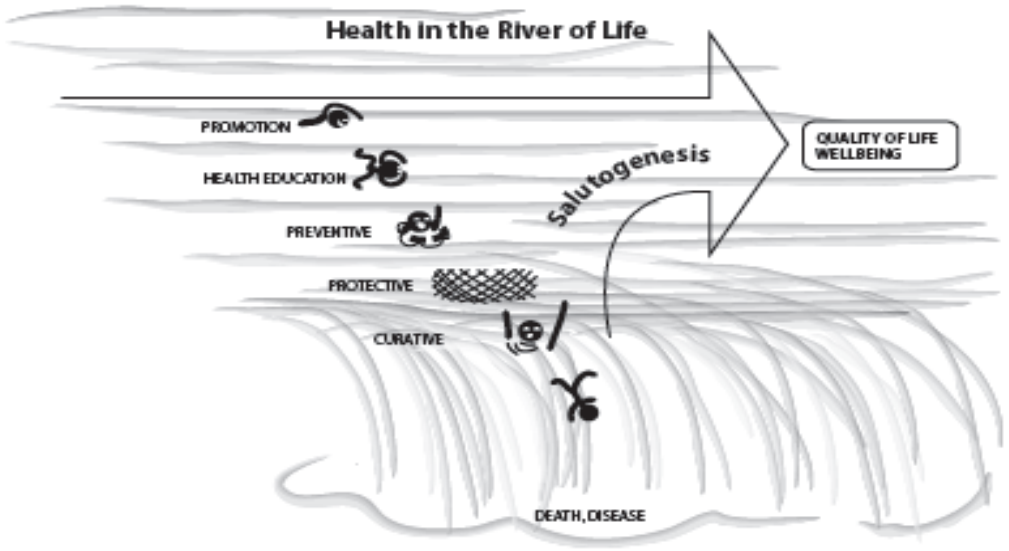


Figure 1. Health in the River of Life

Drawing: Bengt Lindström

Graphics: Jonas Jernström

Historically, health has been described as being on the river bank, and death or disease occurring in the waterfall. The focus has been on cure or treatment of the disease. Higher up the river the focus is on health protection, population directed passive interventions that limit the risk of disease, or disease prevention, empowering active interventions for individual's, that reduce negative effects. Even higher, near the river bank, health education and health promotion can be found. Health education is based on a dialogue between health care professionals and individuals, interventions are directed towards both individuals and groups with improved knowledge of health as a result. Health promotion sees health as a human right and focuses on emphasizing social and personal resources as well as physical capacities.

1.3 The Family Context

1.3.1 Family

Marilyn M. Friedman's definition (1998, 9) of family as being

"…two or more persons who are joined together by bonds of sharing and emotional closeness and who identify themselves as being part of the family"

will be used in this study to both identify relationships as well as define the unit where the collective sense of coherence will be measured.

Common definitions of family are nuclear family (parents/children, husband/wife), family of origin (the family one is born into) and extended family (other persons related by blood, grandparents, cousins etc.). Traditional views of a family as consisting of heterosexual parents with children, are giving way to varied views of contemporary families, such as homosexual couples or cohabitating heterosexuals. A family can be defined in various ways depending on the purpose of the definition. Societal ideologies, our time and place in history, and a multitude of different factors such as ethnicity, sexual orientation, religion, level of education and family values influence our perception of what family or family life is (Goldenberg &Goldenberg, 2004).

In past decades families have, globally, experienced an increase in breakdowns, generally called divorces. There is no single explanation for this. Societies have changed as so have the function of families. Historically families have been the primary group for production, reproduction and socialization. Gradually the traditional sex roles, of man as breadwinner and woman as homemaker, have changed. Today sexuality and reproduction can be separated from each other resulting in a changed meaning of reproduction. The attitudes towards the

foundation of relationships have changed. This can be seen as an increase of demands on the spouses, as well as individual interests having become more important than family values. Issues of economic independence, equality and the quality of the relationship have also become more important. Working life has moved outside the families, with often both parents participating in working life, resulting in socialization of children largely happening within institutions (Lindström 1992).

1.3.2 Family as a system

Adopting a systems perspective outlook means one examines the way separate components of a system interact with one another to form a whole. A systems perspective focuses on the connectedness and the interrelation and interdependence of all the parts, rather than focusing on the separate parts and this facilitates understanding how a change in one component of the system affects the other components of the system, which in turns affects the initial component. Each family can be conceived as being a natural social system that is made up of interdependent but interacting family members. A systems perspective view when researching the family is fitting as families consist of individual members who share a history and have some degree of emotional bonding and the relationships therein can only be understood by viewing the whole family, its shared history and its emotional attachments. Each family is as unique and individual as the individual family members it consists of (Dallos & Draper 2000, Friedman 1998; Norris 2003; Goldenberg & Goldenberg 2004).

To facilitate comprehension of the individual family members functioning, one must have understanding of the interdependent relationships and multidirectional interaction within the family system throughout the lifespan. Family system theorists suggest that the patterns of relationships that develop within multiple generations of families are maintained when the individual transfers to a larger social system and ventures into new relationships. The individuals' wellbeing is affected by not only relationships within the current nuclear family but is also influenced by the dynamics between parents, siblings, grandparents and the external world (Norris & al 2003).

When viewing the family as a system we try to gain insight into interaction between family members, understand family norms and expectations, see how effectively the members communicate, how the family makes decisions, and how the family attends to both to the needs of the individual and the expectations of the family (Clements, 1983). Apart from each family having its own identity, it also incorporates a nondescript own goal, a particular culture and possesses a value that must be taken into consideration when researching family and family life (Hårtveit & Jensen 2005).

1.3.3 Family Systems Theory

There is no one prevailing theoretical approach in family research, but instead an assortment of theories all focusing on different aspects of family relations and family life. Some theories focus on family functioning, some on how families create shared meanings and others on how families change over time. Family Systems Theory allows one to understand the organizational complexity of families, as well as the interactive patterns that guide family interactions.

Family Systems Theory has emerged as an overall concept that focuses on the relationship between individuals rather than on the individuals themselves (Goldenberg & Goldenberg 2004). It focuses on repetition of patterns of interaction leading to families creating stable identities (Doherty 1991), it also lends itself well to the explanation of familial responses to stressors and the effects those stressors have on the system as a whole by providing an explanation of the processes involved in changing the system over time. When viewed from this perspective, the family can be seen as a self-regulating system in which members are seen as influencing family members and their environment. This framework has provided the basis for theory and methods within the helping professions, especially within the field of family therapy (Olson & Petit 1999; Dallos 1995).

Family Systems Theory is also a theory of communication. Shared belief systems are constructed through continual communication, both verbal and non-verbal. Families, who spend a considerable time interacting and communicating continuously with each other as well as sharing similar experiences, develop over time congruent, but not always unanimous, patterns of beliefs that influence choices and shape patterns of family life (Dallos 1995). Family members contribute to both individual and shared understandings about each other (Dallos & Denford 2008) and it can be stressed from a family systems perspective that families do throughout the course of its development, at least to some extent, create their own versions of reality based upon shared agreements that are created through language (Dallos 1995).

A family's social, cultural and historical experiences give meaning and understanding to events and situations the family may encounter. The narrative a family develops about itself is mostly derived from ancestral history and passed down through generations. This narrative has a powerful impact on the family's functioning. The ways in how families and its individual members contend with their lives are not based on objective or true views of reality, but rather on family social constructions – unchallenged views of reality created and re-created in conversation with one another, possibly for generations. Both language and dialogue play

essential roles in how families and its members experience the world they live in as well as how they understand and make sense of it (Dallos & Draper 2000, Goldenberg & Goldenberg 2004).

Family Development Theory is a useful complement to Family Systems Theory when studying families within a health promoting context. Whereas Family Systems Theory focuses first and foremost on interactional context of health behaviours, Family Development Theory focuses on the family longitudinally during major transitions in life. This theory can facilitate understanding of particular challenges facing families in promoting health at different times in the family life cycle. Families may be positively orientated towards changes in health practices, after the birth of a first child or after the death of a family member. Likewise families, who are in the midst of difficult major family transitions such as divorce or retirement, may find it more difficult to make health promoting and risk reducing choices (Doherty 1991).

For the purpose of the current study, the family systems approach will hopefully provide a means of conceptualizing what effect the family's Sense of Coherence has on the adolescents own Sense of Coherence.

1.3.4 The Adolescent and Adolescence in the family context

Adolescence has often been described as a period in a persons' life when one is no longer a child, but not yet an adult. It is a dynamic period of change, growth and development in all areas of the individuals' life. Adolescence can not be considered as one developmental stage but consists of three developmental stages that can be divided into early adolescence (10-14 years of age), middle adolescence (15-17 years of age) and late adolescence (18-22 years of age).

The idea that adolescence is a transitional period between childhood and adulthood is not a new one. Plato and Aristotle have both written about the turmoil of adolescents 300 to 400 years B.C. Historically the first scientific academic research on adolescence was conducted by psychologist G. Stanly Hall and in his two-volume work entitled *Adolescence* (1904) he described the phase as "storm and stress" as well as a time when great changes in physical, psychological, cognitive, emotional and social areas may occur rapidly. Adolescence can be viewed from several different theoretical perspectives. Theories that comprise biological views (G. Stanly Hall), cultural views (Margaret Mead), psychoanalytic views (Sigmund Freud), Psychosocial views (Erik Erikson) and cognitive views (Jean Piaget) are considered to be the most influential in this past century (Berzonsky 2000).

Satir (1972, 2-3) defines an individual as

" a person who understands, values and develops his body, finding it beautiful and useful; a person who is real and honest to and about himself and others; a person who is willing to take risks, to be creative, to manifest competence, to change when the situation calls for it, and to find ways to accommodate to what is new and different, keeping that part of old that is still useful and discarding what is not. When you add all this up, you have a physically healthy, mentally alert, feeling, loving, playful, authentic, creative, productive human being; one who can stand on his own two feet, who can love deeply and fight fairly and effectively, who can be on equally good terms with both his tenderness and toughness, know the difference between them, and therefore struggle effectively to achieve his goals".

From a salutogenic viewpoint one could say that this definition is one of an individual who, due to the family context, has most likely attained wellbeing in all dimensions health and possesses a good Sense of Coherence. As adolescence is a time of redefining and developing relationships with friends and family it is important to understand adolescence in the continuum of the lifespan. Looking to the past we see that experiences in childhood most often have significant impact on adolescence, and experiences in adolescence will therefore most likely have an impact in adulthood.

Family therapist Virginia Satir (1988) describes families as being factories where people are made. According to Satir the family is the context where the person develops and it is the adults who through their values, beliefs and actions influence and help form their children's lives.

Adolescence is a time when challenging the family identity is the norm. During this process of separation and identity formation, known as individuation, stress increases, affecting both the adolescent as well as the family system. To maintain homeostasis within the family system and still support growth during adolescence the environment must constantly adjust to stress. The capacity of the family system to tolerate difference internally and externally, handle stress and adapt to change is known as differentiation. Healthy adolescent development can be defined as successful interaction of the process of individuation and differentiation. Despite the importance of differentiation it is also of relevance to remember that adolescents have a continuous need for close relations with their parents, externally to use them as a base for emotional replenishing and internally as a source for regulation of self-esteem and comfort (Marcia 2006).

2. The salutogenic theory

Aaron Antonovsky (1923-1994), a professor of medical sociology and chairperson at the department of Sociology of Health at the Faculty of Health Sciences of the Ben-Gurion University in Israel, is recognized for his contribution in raising the philosophical question of what creates health. He sought after "the origin of health", salutogenesis, instead of looking for causes of disease as the dominating pathogenic orientation to health had done so far (Lindström & Eriksson 2006).

While working on research with menopausal women he noticed that one of the groups, despite having gone through the horrors of concentration camps during World War II, were capable of maintaining good health and living a good life. The findings spurred him to explore the question of what causes health and not the question of what the reasons for disease are. Antonovsky used the narratives of the survivors of the Holocaust to introduce and develop a theory and a research perspective that he called salutogenesis (Eriksson 2007; Lindström & Eriksson 2006).

Salutogenesis focuses on abilities and capacities to deal with potential stressors in conflict situations through its strength of adaptability and universal use and can be perceived as being a major life orientation focusing constantly on problem solving. Salutogenesis, the origins of health, can conceivably be described as a stress resource orientated theory that has its main focus on resources and that hopes to maintain and improve an individuals movement towards health. Salutogenesis applies a dynamic and flexible approach to health that focuses on the individuals' ability and capacity to manage (Lindström & Eriksson 2005).

According to Antonovsky (1990, 74)

"Stressors can be defined as a stimulus which poses a demand to which one has no ready-made, immediately available and adequate response".

Individuals confronting stressors enter a state of tension. Tension can be measured on both a psychological and physiological level. Stressors are no more than potentially pathogenic. If stressors and tension are willingly and resourcefully resolved they can even leave us feeling elated and grateful. It is not so much the question of how little or much stress we are exposed to, but if we have the ability to resolve tension and prevent its transformation into stress (Antonovsky 1990). Good tension management will facilitate movement toward health ease (Antonovsky 1979).

People's health outcomes following stressors are mostly unpredictable and varied. There are stressors that have the potential to destroy human beings, but apart from them one may conclude that the experience of stimuli as stressors is highly individual. Antonovsky hypothesized that an individual with a strong Sense of Coherence is more likely to define stressors as irrelevant, neutral and perhaps even as of a positive nature. They will understand the nature of the stressor, use resources that are at their disposal and they will also be able to modify behaviour if needed as they have been open to reflection of their situation (Antonovsky 1987).

The Sense of Coherence affects health through facilitation of tension management behaviours. Successful tension management behaviours are assumed to influence one's health in a positive way (Antonovsky 1998).

2.1 Sense of Coherence

Antonovsky developed the concept Sense of Coherence as the main component of his salutogenic theory. Antonovsky saw health as a movement on a continuum between total ill health (dis-ease) and total health (ease). He believes that a strong Sense of Coherence, SOC, will lead to improved health. Sense of Coherence can be comprehended as the individual's ability to understand their situation in life and have the capacity to assess and use resources available that will enable to facilitate movement towards a health promoting direction. SOC explains why people in stressful situations stay well and even continue to improve their health (Antonovsky 1979).

Antonovsky (1987, 19) has defined Sense of Coherence as:

> *"a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges worthy of investment and engagement".*

According to Antonovsky the Sense of Coherence is a property, a characteristic of a person, which reflects the individuals' capability to respond when challenged with stressful situations. A person with a strong Sense of Coherence will attempt to gain insight into the nature of the confronting stressor, perhaps even consider it as a challenge, then choose and use the appropriate coping or resistance resource needed for the specific situation and finally

be receptive and flexible if the situation demands modification of behaviour (Antonovsky 1987; 1992; 1996).

The development of the Sense of Coherence is influenced by several factors. First it is important to take into consideration the impact of generational experiences of historical events such as war, depression and revolutions and how these events shape both families and the individual. Secondly one must recognize the importance of early socialization experiences shaped by the family composition which in turn has been influenced in the societal context. Another crucial aspect is the reality that there are many roads to a strong SOC. Individuals who encompass a set of fundamental principles, or canon, that dictate behaviour in all situations will presumably promote behaviours within its framework and receive rewards that will reinforce such behaviours thus resulting most likely in fostering a strong Sense of Coherence. It is essential that the individual has the freedom to select existing behaviours and resources by justifying them within the framework of the canon. Antonovsky has stated that a person has at the age of thirty a Sense of Coherence that is more or less stabilized; this is due to the fact that most people at this age do not go through major changes in life that will affect the strength of the SOC. (Antonovsky 1979; 1987; 1996).

Examination of longitudinal studies (Eriksson 2007) shows that an individuals' Sense of Coherence seems to be relatively stable over time, at least for people whose SOC was initially high, but not as stable as Antonovsky assumed. Additionally there is research that claims the SOC tends to increase over the whole lifespan.

Sense of Coherence is strongly related to Mental Health as managing stress is about understanding and managing feelings and emotions (Eriksson 2008).

According to Antonovsky (1987) the Sense of Coherence (table 2) consists of Comprehensibility, Manageability and Meaningfulness. Of these three components one could consider Meaningfulness to be the most significant as it provides us with motivation to seek resolution to situations that we consider stressful and challenging, whereas Comprehensibility and Manageability are both important factors needed to instigate the gaining of understanding and availability of resources.

Antonovsky (1987) declares that the dynamics of intercorrelation between the three components of the Sense of Coherence can result in a person having either a strong or weak SOC. If an individual has a high or low score in all three components of the SOC the outcome will most likely result in that person having a high or low perception of their life as being stable and coherent. It is when intercorrelation among the SOC components results in a combination of high scores in some components and low in others that problem may arise.

Table 2.
The components of the Sense of Coherence according to Antonovsky 1987.

Comprehensibility	Refers to whether or not an individual can understand life events and situations as clear, ordered and structured. This is primarily a cognitive dimension and refers to how we make sense of internal and external stimuli. It implies that one finds life momentarily comprehensible and that one expects comprehensibility in the future as well.
Manageability	refers to the sense of feeling that life is "under control". It implies that not only does one welcome life's difficulties, but also that one believes they have the resources to cope with them successfully.
Meaningfulness	is the emotional face of comprehensibility and the motivational component of the concept. Meaningfulness refers to the extent of to which a person feels that life events make sense in an emotional way.

According to Antonovsky (1987) having a strong sense of Manageability does not automatically guarantee that one copes with the situation on hand. One will be motivated to find solutions if the situation is experienced as meaningful and will most likely not give up until one has

found a way to cope. If the individual does not experience the situation as meaningful and is not motivated then he or she will not engage in finding a solution to the problems. Meaningfulness is therefore the motivating factor and influences how we deal with adversity in life.

Meaningfulness is also significant when a person scores high on both the components of Comprehensibility and Manageability. When this is the case the situation may be experienced as orderly and understandable resulting in the individual possessing the required resources needed to cope with the situation. If Meaningfulness is considered slight and the individual conveys no interest in the situation on hand then he or she will not attempt to resolve the situation, this leading to diminished understanding and loss of resource utilization. Perhaps the most interesting combination of intercorrelation between components is according to Antonovsky when an individual scores low on Comprehensibility and Manageability but high on Meaningfulness. This may result in a situation where the individual has difficulties understanding the problem and is clueless to how to manage such a seemingly chaotic situation. The individual confronted with such a situation may be highly motivated to overcome these difficulties and use a great deal of energy to gain insight and find resources to cope with the situation. There is no assurance of succeeding, but the individual is relentless in his attempts to cope with the situation, due to Meaningfulness the individual attaches to the situation (Antonovsky 1987).

2.2 Generalized Resistance Resources

Another key concept that Antonovsky has coined is Generalized Resistance Resources (GRRs). According to Antonovsky (1979) a GRR can be defined as any physical, biochemical, artificial, material, cognitive, emotional, value-established, interpersonally related or macro-socio-cultural related characteristic of an individual, primary group, subculture, or community that functions effectively in the management of a variety of stressors.

A GRR can be any phenomenon, - money, knowledge, self esteem, social support -that is effective in making sense of and combating stressors that we are constantly exposed to. GRR's create life experiences, promote development, empowers the individual to anticipate and manage various stressors more effectively, create an overload-underload balance and therefore promotes and helps maintain a strong SOC. GRR's mitigate peoples' movement in the direction of positive health (Antonovsky 1987).

General Resistance Resources bring about life experiences that promote a strong SOC in individuals (Lindström & Eriksson 2006). It is important to understand that the main issue is not the quantity or quality of resources available but the ability of the individual to use and re-use them for the proposed purpose (Lindström & Eriksson 2005).

It is not only on an individual level that GRRs are of importance. Society must, when implementing the salutogenic theory in practice, take into consideration strengthening its citizens existing GRRs, as well as facilitating the creating of new ones and making them available for the citizens to be aware of, identify and benefit from (Eriksson 2007).

2.3 Adolescence and Sense of Coherence

According to Antonovsky (1987) our Sense of Coherence develops during childhood and becomes more or less stabilized in the period of early adulthood. Factors that form and influence development of the individual Sense of Coherence during childhood and adolescence are stressors and life experiences, the social position of the family, the family's financial condition and social relations within the family, this is in accordance with Erik Eriksons view (in Friedemann 1995, 12) that coherence implies the congruence of a persons values, attitudes, beliefs and perceptions concerning the self and the human purpose in life. Psychological constructs such as personality, self-esteem, body image, personal identity, self confidence and sexual identity are essential parts of the coherence dimension. Coherence is developed and maintained through parental support, acceptance and encouragement in interrelationships and through successfully mastered challenges.

Individuals Sense of Coherence increases in strength during adolescence. The core of the Sense of Coherence concept is to perceive the world around one as predictable, manageable and meaningful. For adolescents this can prove difficult during a time that is defined by uncertainty, impulsiveness and identity searching. Mastering the developmental tasks of adolescence facilitates movement in the direction of a stronger SOC (Antonovsky & Sagy 1986). A stronger Sense of Coherence and resiliency is found in adolescents who understand the demands and expectations of the surrounding environment and who can be successful with developmental tasks, than their peers who suffer from problems such as learning difficulties (Lackaye & Margalit 2006).

According to Honkinen et al (2008) adolescents living with both biological parents tend to have a stronger Sense of Coherence than others, possibly due to the family representing a major resource in the life of a developing child. They also stated that there is no significant change in SOC between the ages of 15 and 18 years and that coherence stability did not depend on the initial SOC. This indicates that interventions aiming at influencing change in adolescents SOC should be initiated before the age of 15 years. Adolescents who experience closeness and connectedness with their families have a stronger Sense of Coherence than adolescents who perceive their family life as isolated, chaotic and filled with conflicts (Cederblad & Hansson 1996).

Empirical studies have shown that gender is a variable related to differences in the Sense of Coherence of adolescents. Boys have been found to have significantly higher SOC scores than girls (Antonovskys & Sagy 1986; Cederblad & Hansson 1996; Honkanen & al. 2008). Speculation of possible explanations for this has been that the attributes and expectations awarded the role for girls in adolescence are less clear than those for boys (Antonovsky & Sagy 1986) or that girls are more conscious of inner conflicts (Honkinen & al. 2008). Hansson & Olsson have speculated (2001) that the results may be due to the fact that boys tend to overrate themselves whereas girls underrate themselves. They also questioned the possibility of our patriarchal society influencing negatively the SOC of females.

Retrospective research to explore which experiences within the family context (table 3) during adolescence can influence the development of the Sense of Coherence has been undertaken by Sagy & Antonovsky (1999). The central purpose of this study was to explore which structural characteristics of the family and which adolescent life experiences correlate with and influence development of the SOC. The research method was a semi-structured life history interview with 100 retirees whose SOC scores had been obtained in a previous study. Four types of adolescent experiences within the family were chosen as relevant to SOC development: Consistency, Load balance, Participation in shaping outcomes and Emotional closeness. These factors were chosen as it was imagined that they would influence the family context by setting limits and/or offering opportunities for the kinds of interaction which might occur within the family and therefore be relevant in the development of adolescent SOC. Additionally four socio-demographic variables were measured: family education level, socioeconomic status, gender and ethnicity (Sagy & Antonovsky 1999).

Table 3. Sense of Coherence (SOC) development through life experiences as hypothesized by Sagy & Antonovsky, 1999.

SOC develops through	Life experiences	Consisting of
Comprehensibility	Consistency	Clear value system, order and structure in the environment. Rules and Regulations.
Manageability	Load Balance	Appropriateness of demands made upon one and one's resources. Family coping.
Meaningfulness	Participation in shaping outcomes	Autonomy. Participation. One has a say in deciding on one's fate.
Meaningfulness	Emotional closeness	Sense of belonging, Emotional bonds.

Antonovsky suggests that structured role relationships, within a sociological-historical context, shape life experiences within the family and therefore shape development of the Sense of Coherence. The findings concerning the four types of life experiences, that were hypothesized to be related to SOC development, showed that the most important experiences in adolescence which contributed to the development of SOC were life experiences related to load balance. Surprisingly there were no relationships found between the development of SOC and life experiences that were thought to be relevant to consistency. Sagy & Antonovsky hypothesized that the most appropriate explanation for this was found when one viewed these individuals adolescent development in historical context. The majority of the interviewees were adolescents during World War II and some of them were Holocaust survivors. This meant that the adolescents were living in an ever-changing unstable world, in which the future was not predictable, thus it is understandable that manageability, through load balance life experiences, was most likely to be stronger represented than

comprehensibility or meaningfulness. Further analysis of this data in another research, concerning early childhood experiences, pointed towards participation in shaping results, the motivational component, as being highly related to the development of SOC. An assumption was made that in another kind of world, during other circumstances, other life experience components may influence the shaping of one's worldview and development of SOC. It was concluded that the findings of this study implies that early life experiences may shape later life orientations. Another conclusion was that further research is warranted, both retrospective and prospective, to gain insight into the causes and process of life experiences in SOC development (Sagy & Antonovsky 1999).

2.4 Family Sense of Coherence

Sense of Coherence is a construct that can be applied to an individual as well as to a group (Antonovsky 1979; 1987). The salutogenic orientation was developed in terms of systems theory thinking (Antonovsky 1991). Family Sense of Coherence (FSOC) has been referred to as having a family perception or a family worldview. By viewing the family through a family systems approach we can define the family as a unit or collective having either a strong or weak Sense of Coherence that is a representation of the family's worldview (Sagy & Antonovsky 1992).

The Family Sense of Coherence is conceivably a significant factor in determining and transforming family members' individual sense of coherence. It is feasible that a family member with a strong Sense of Coherence may provide support and facilitate utilization of resources needed to cope successfully with stressors. This is thought to be true especially in children and adolescents due to individual and familial developmental processes (Antonovsky 1987). Family Sense of Coherence has also been seen as a family resistance resource against the impact of stress and crisis on the family, and has an influence on the quality of life of the family (Anderson 1988).

According to Antonovsky (1987) our Sense of Coherence develops during childhood as a result of stressors that we experience. These stressors promote continuous changes in life events that take place during a crucial time in both the development of not only the child but also of the family.

Elisabeth Näsman offers several related perspectives of viewing Family Sense of Coherence, e.g. the family as a source for SOC, SOC in the family, the family as a resource for stress, family as a source of stress and the meaning of FSOC. For a child to survive, grow and develop a strong Sense of Coherence in this world he needs to comprehend, manage and find meaning

in his life. The family is most often the dominating social environment a child inhabits, and interaction with parents and siblings is of importance in the development of Sense of Coherence. Comprehension comes through having a shared language and assimilation of narratives that the family shares with the child. Meaningfulness is derived from the outcome of how the child feels he is met, which in turn affects his self sense and his sense of the world around him. Manageability is developed by gradually encountering progressive stress factors. Positive family reactions to children's and adolescents coping strategies enforces behavioral coping patterns and contributes to a feeling of Manageability. Equally important is that the child or adolescent does not have to be solely self sufficient but feel that they can depend on the parents to comprehend and have resources to manage the environment. It is important to acknowledge that some children, already at an early age, develop significant relationships with individuals outside the family. These relationships can be influential on the development of a strong SOC. This is beneficial in circumstances when the family is the source for chronic stress and the most likely outcome would be a weak SOC due to the family's inability to handle stress and support the child's SOC development (Näsman 1998).

A families' Sense of Coherence is not identical to the Sense of Coherence of its family members and cannot therefore be observed as clearly as the individual Sense of Coherence (Sagy & Antonovsky 1992). Several studies of attempting to apply the Sense of Coherence to a family have been completed, focusing on the central questions of; is there a collective or Family Sense of Coherence and how is the individual SOC influenced by other family members SOC? (Antonovsky & Sourani 1988; Haour-Knipe 1999; Sagy & Antonovsky 1992).

Several models for measuring Family Sense of Coherence exist. The Family Sense of Coherence Scale was constructed in 1988 by Antonovsky and Sourani. For the purpose of measuring the families SOC, questions from the original questionnaire, designed to measure the SOC of the individual, were rewritten or constructed enabling identification of how respondents perceived family life as comprehensible, manageable or meaningful. FSOC has also been measured by using self-reports of the SOC of the individuals and then building a collective measure built on the basis of the interrelations of individual perceptions. Each of the four alternative models of collective measures (table 4) is derived from different perspectives and uses a different technique (Sagy & Antonovsky 1992).

Haour-Knipe (1999) has in her study on families adapting to a new culture after moving, used a different statistical calculation of measuring FSOC, based on the consensus model. The families' Sense of Coherence is calculated by subtracting the difference between the husband's score and the wife's score from the couple's mean score. The reason for this was to highlight differences in family coping when the marital partners had widely differing SOC scores compared to couples where both spouses SOC scores were either high or low.

Table 4. Models for measuring Family Sense of Coherence (FSOC)

The aggregation model	The collective is an averaged sum of its individuals = the mean of the individual scores as the unit score.
The pathogenic model	Perceives the collective as characterized by the weakest members score. Based on family systems approach.
The salutogenic model	Also based on family systems approach. The operational measure is the strongest unit score.
The consensus model	The model is based on the assumption that agreement improves coping and resistance ability. The operational measurement is the gap between the unit scores.

3. The evidence base of the salutogenic theory

Eriksson has made available through her Doctoral Thesis (2007), *Unravelling the mystery of salutogenesis*, a more comprehensive understanding and a deeper knowledge of the salutogenic concept Sense of Coherence (SOC). This was made possible by synthesizing research generated 1992 – 2003, focusing on the research area as measured by Antonovskys Sense of Coherence questionnaire. The search was preformed in eight authorized data bases, doctoral theses and available books. The synthesis incorporated 458 scientific publications (worldwide) and 13 doctoral theses. The result of the synthesis and analysis proved that a salutogenic approach is effective and useful for both development and maintenance of individual health as well as research for public health and health promotion (Eriksson 2007). Currently there is an ongoing review on research from 2003 to this present day, undertaken by PhD Monica Eriksson at the Folkhälsan Research Centre, The Research Programme for Health Promotion in Helsinki, Finland.

The Orientation to Life questionnaire, which is also referred to as the Sense of Coherence scale or questionnaire, has been used in at least 33 languages, 32 countries with at least 15 modified versions of the questionnaire. The original questionnaire (SOC-29) consists of 10 items measuring manageability, 8 items meaningfulness and 11 items comprehensibility. Because of the limited space that is generally available in quantitative research, Antonovsky developed a shorter form of the Sense of Coherence questionnaire, i.e. the SOC-13. Here four questions measure the manageability dimension, four items meaningfulness and five items comprehensibility. The content of the items and the scoring alternatives (1-7 points) are similar in both versions of the SOC questionnaire (Eriksson 2007).

As for reliability, when using SOC-13, Cronbach's alfa ranges from 0.70 to 0.92. Coefficients above 0.70 reflect good internal consistency. The SOC scale shows high internal consistency. There are very few longitudinal studies reporting test-retest reliability. Using SOC-13 test-retest reliability has been reported to range from 0.96 to 0.72. One study among Swiss adolescents reported the correlation was 0.77 after 18 months (Eriksson & Lindström 2005). The SOC scale has also been proven to be applicable to 12-year old children, according to research published after 2003 (Eriksson 2007).

Many empirical studies focus on Sense of Coherence by relating SOC to health variables such as psychological wellbeing, social support, stress and/or adaptive coping strategies. Research has been done throughout the lifespan, measuring SOC of the individual. According to Olsson & al (2006) only few studies use SOC as a dependant variable to help and explain the concept. Research generally shows that a high SOC is related to a high quality of life, as well as being related to attitudes and behaviors (Eriksson & Lindström 2005).

Several empirical studies on Adolescents and Sense of Coherence have focused on the development of Adolescent SOC (Buddeberg-Fischer & al 2001) as well as adolescent SOC in relation to health and stress (Sagy 2002; Nielsen & Hansson 2007), in relation to health behaviours and psychosocial factors (Myrin & Lagerström 2006; 2008) and in relation to risk and protective factors (Marsh & al 2007). Adolescent SOC has been studied in an educational context (Kristensson & Öhlund 2005; Sollerhed 2005) and in the family context (Margalit & Eysenck 1990; Sagy & Antonovsky 1999).

Empirical research on the collective or Family Sense of Coherence is found to a lesser extent. Only few studies have used the Family Sense of Coherence Scale, consisting of a longer version with 26 questions (Antonovsky & Sourani 1988; Anderson 1998; Sagy 1992) and a shorter version with 12 questions (Sagy 1998; 2001; 2002). There have been several studies using the individual SOC measure to describe the effect that SOC has on family life (Haour-Knipe 1999; Wickens & Greef 2005; Sagy & Antonovsky 1992).

Sense of Coherence within the family context has also generated several studies focusing on parental SOC and its association with child health (Groholt & al 2003; Cederblad & al 2003) as well as the affect on parental SOC with a disabled child in the family (Beresford 1994, Margalit & Leyser 1991; Margalit & al 1992; Olsson & Hwang 2002).

Sense of Coherence has been used as a meta theory for salutogenic family therapy and is used as a model for clinical work with children, adolescents and their families in the child- and adolescent psychiatric ward at Lund Hospital in Sweden (Hansson & Cederblad 2004). The salutogenic model has also been used as a tool for quality of life enhancement for children with special needs (Lindström 1999). The salutogenic approach in healthcare has not generated new treatment methods but has, with its focus on health and well-being instead of disease and illness, managed to influence the therapeutically used language so that focal point is on resources and possibilities instead of problems. Therapists have together with parents tried to find ways of enhancing comprehensibility and manageability of the situation as well as guide the families towards a feeling of meaningfulness in their daily life and therefore increase Sense of Coherence in the family (Tamm 2002).

4. Aim of the study and research questions

The first most aim is to measure and describe the Sense of Coherence found in adolescents that have just started secondary school as well as gain insight into the adolescent Sense of Coherence within a family context, and investigate the collective Sense of Coherence in the family. The further aims of this study are to view how adolescents' perceive their health and the distribution of existing health promoting resources as well as investigate possible connection of these to the adolescents' Sense of Coherence.

In order to reach the aims of the study the following specific research questions have been formulated.

Research question 1:
A) What is the Sense of Coherence found in adolescents?
B) Is there a difference in Sense of Coherence between girls and boys?

Research question 2:
A) What is the families' collective Sense of Coherence?
B) Is there a relationship between the Sense of Coherence found in adolescents and the families collective Sense of Coherence?

Research question 3:
A) What is the perceived health of adolescents?
B) Is there a relationship between adolescents' perceived health and their Sense of Coherence?

Research question 4:
A) What General Resistance Resources affecting adolescent health do adolescents perceive exist in their life?
B) Is there a relationship between perceived General Resistance Resources and the Sense of Coherence in adolescents?

5. Empirical study

5.1 Method

This study is of a cross-sectional survey research design. The study is descriptive using correlations as an analysis of the data. Descriptive research, also known as statistical research, is of quantitative design and aims to gain accurate insight into, as well as describe, data and characteristics of less well-known phenomena. The emphasis is on the description of the phenomena even though patterns or links can be found between variables from the data collected. Correlation studies aim primarily to explore relationships between variables. In a descriptive correlation survey design the researcher attempts to determine, measure and describe identified variables of interest in a chosen sample. Survey designs focus on obtaining and gathering data from a selected sample of the population. There are three major areas of decision making to be taken into consideration before initiating contact with respondents. These are sample (size and choice of type etc.), mode of questioning (postal, face to face or telephone etc.) and then the questions themselves (fixed or open, scales etc.). One disadvantage with a descriptive correlation design is that it determines correlation and not causation between variables of interest. Results from descriptive studies may provide an incentive to move on to attempt to explain their findings, but their main aim is to gather data about whatever phenomena on hand that is being studied. Due to this, descriptive correlation design is quite often used in important preliminary research for further studies (Coolican 2004; Parahoo 1997; Talbot 1995).

For this study, cluster sampling was chosen as a sample selection method. A cluster sample is a sample collected from a specific area or grouping as that is seen as being representative of the population. The mode of questioning was distribution of the surveys with the help of school personnel. The questions and scales used were chosen after an extensive review of relevant literature. The sample, mode of questioning and questions used in the study will consequently be explained in detail later.

5.2 Procedure

The school headmaster was approached by phone in August 2008 and asked if she would consent to the school being part of a three (3) year study that would measure and follow the development of adolescents' Sense of Coherence, correlation between adolescent and Family Sense of Coherence and any eventual connection to the development of an eating disorder. Consent was granted from both the school and the city of Espoo's department of Education.

After an extensive review of literature in relation to salutogenesis, adolescent development, adolescent health, eating disorders and family system theories, two questionnaires were constructed. One consisting of sixty (60) questions for the students and one with forty-one (41) questions for their parents. The questionnaires were sent to an authorised translator to be checked for spelling and grammar mistakes and the questionnaire for the parents was translated from Swedish to Finnish due to the fact that many students come from bilingual families.

In September 2008 a pilot study was conducted in a similar school with a sample of adolescents in the seventh grade, and their parents, to test the suitability and comprehensibility of the questionnaires. Pilot testing allows researchers to ensure that the measuring instrument is appropriate for use in the planned study sample as well as determining the reliability of the instrument. It may also generate other useful information such as presence of confusing information (Talbot 1995) and comprehensibility of instructions (Parahoo 1997). The students and their families in the pilot test were asked to answer a few questions concerning comprehensibility of the questionnaire. Feedback showed that the wording in a few of the questions in the orientation to life questionnaire that is used in the survey caused some confusion. After several discussions with researcher Monica Eriksson a decision was taken not to change the wording in the questions, as the orientation to life questionnaire has been validated and used extensively in research with adolescents.

In September 2008 the researcher attended a parental meeting in the school chosen to participate in the research with the intention of informing the parents about the forthcoming research. Parents were informed that the duration of study is three years and that participation is voluntary but highly appreciated. They were informed that part of the study will be used to complete a Masters thesis and the rest of the collected data will be used in articles and to complete planned Doctoral studies. Parents were also informed that all participants will remain anonymous. The school will be informed of the results from each phase of the research.

In October 2008 the researcher delivered to the school one hundred (100) envelopes containing the research surveys. The questionnaires were number coded so that groups of families can be identified. The class teachers were instructed to randomly give a numbered envelope to the students and write up the code number on a list next to the students' name. The school nurse keeps the lists of the students' names and codes so that if needed the students may be identified.

The research questionnaires were distributed together with a cover letter explaining the aim of the research, offering the respondents a possibility to contact the researcher in case they want more information concerning the research.

Each family received an envelope with four copies of questionnaires, one for the student (Appendix 1), two for the parents in Swedish (Appendix 2) and one in Finnish (Appendix 3) due to the fact that many families are bilingual. Each envelope also contained a letter with instructions on how to fill in and return the questionnaires. In the same envelope was a letter of consent for the parents to return to the school if they gave consent for their child to participate in the research as well as a letter asking for volunteers to take part in an upcoming qualitative research on the collective sense of coherence in families. Families were informed that the school will not have access to any of the answered research material. The answered questionnaires will only be seen by the researcher and the thesis counsellor. The research results will be reported in such a manor that neither the individuals that answer or their families can be recognized.

5.3 Instruments

Health Promotion research can be challenging due to the many vague and indescribable meanings we ascribe to concepts affecting health behaviours. Physical properties such as age, height and weight are relatively straightforward to measure, but defining and measuring concepts such as Sense of Coherence, self-esteem, depression, self-efficacy, attitudes, perceptions, and beliefs is much more difficult as there are several underlying psychological and psychosocial factors that influence our conception of health and well-being. Measuring something that is not concrete can be achieved by creating a formalized definition of a chosen concept. Once this is achieved, this operational definition will become the used definition of the concept for the purpose of the study. After the concept is operationalized it becomes a construct, constructs require measurements, and complex constructs must be measured with multiple questions (Crosby & al. 2006).

The questionnaires took into consideration the need for identifying a great number of variables that could be used to answer both current and future research questions. The questionnaires consists of background questions as well as containing questions gathering information on Sense of Coherence, General Resistance Resources, perceived health behaviours, Family and School Connectedness, Self-esteem, Body Image satisfaction and health outcomes. Several questions concerning different aspects of health are found throughout the questionnaire. The questions measuring the concepts Sense of Coherence, Self-esteem, Family and School Connectedness are all measured using familiar and validated instruments. Only parts of the questionnaires will be used in this Masters thesis.

Several questions (no. 6, 8-10, 12-14, 16, 26-33) in the adolescent survey (see Appendix 1), were derived from the WHO cross-national survey; Health Behaviour in School-aged Children (HBSC). The HBSC-survey aims at gaining insight into and increasing understanding of young people's (age 11 to 15) health and health behaviour. The HBSC study encompasses the main belief of WHO that health consists of physical, emotional and social wellbeing and that health should be viewed as a resource for everyday living and not just absence of disease. The HBSC survey questionnaire was developed 1982 by an international research network and has been used up to date in 43 participating countries and regions. Data collection has been carried out every four years using common research protocol. Focus area varies and the most recent survey was conducted in 2005/2006 on inequalities in young people's health (HBSC, 2002).

The most important measurement of this questionnaire used in this Masters thesis is a shorter version of Antonovsky's (1987), Orientation to Life questionnaire (no. 25), which is also referred to as the Sense of Coherence scale or questionnaire (SOC-13). In the SOC-13 four questions measure the Manageability dimension, four items Meaningfulness and five items Comprehensibility. The scoring alternatives (1-7 points) give a possible range of 13 – 91 points. The Sense of Coherence scale is proven to be psychometrically sound (Eriksson 2007)

Statements 42-54 were designed to gather information on General Resistance Resources that the adolescents' feels they have at their disposal. This measuring instrument was constructed for this study by the researcher and has not been used before. The questions can be divided into subgroups for the purpose of viewing GRRs that influence the Physical, Mental, Social and Spiritual dimensions of Health. Data are measured using a Likert type attitude scale, as this is a highly structured measure, consisting of statements to which respondents provide the most appropriate response, with the measurement of numbers 1 signifying yes/often, 2 sometimes, 3 don't know, 4 seldom and 5 no/never. Attitude scales strive to be unitary measuring instruments, not opinion questionnaires (Coolican 2004).

Question no.22 was constructed to gain insight into health influencing factors that adolescents worry about. Worry leads to tension, tension to stress. Identifying and managing tension is one of the cornerstones of the salutogenic theory. Several questions (no. 21 A-C, no 34-39) measure the adolescents' sense of connectedness. Connectedness in the family context means that the adolescent enjoys being with, feels close to and cared for by the family, whereas School Connectedness refers to students enjoying school, experiencing a sense of belonging and felt connected to it. School Connectedness and Family Connectedness have all shown to promote resilience, protect against risks and be beneficial to the adolescents' perceived state of health (AHS II 1998; McNeely & al. 2002, 145; Resnick & al. 1993).

5.4 Participants

For this study, cluster sampling was chosen as a sample selection method. A cluster sample is a sample collected from a specific area or grouping as that is seen as being representative of the population. The chosen sample started secondary level studies in August and are expected to continue studying in the same school for the next three years, therefore facilitating continuity of the study. The main reason for choosing this sample is that the five classes participating in the study consist of students that have come from several smaller elementary schools in the surrounding area of Espoo and therefore represent a diverse sample of adolescents from varied backgrounds and families. The students are all born 1995 and are either in a pre-adolescent or adolescent development phase and can consequently give first hand information on their perception of their Sense of Coherence and its relation to health. Another reason for choosing this sample was the schools reputation for willingness to participate in studies that will further the well-being of its students.

The questionnaire was administered to a sample of adolescents and their parents. The sample consists of 99 students in five classes in the seventh grade and their parents. The researcher received 60 questionnaires that could be used in the study resulting in a 61% (60; *n*=99) response rate. Of the respondents 62% were girls (37) and 38% boys (23). 4 students returned the questionnaires without the parents' questionnaire, resulting in a 93% (56; *n*=60) family response rate. In 41% of the families (23; *n*=56) a single parent answered the questionnaire and in the remaining 59% of families (33; *n*=56) both parents answered.

5.5 Data preparation and steps of analysis

Statistical evaluation of the data has been performed employing the program SPSS (Statistical programme for Social Sciences) version 16. Before entering all data into the programme all answer alternatives of every variable were number coded. Items that were worded in a certain way to avoid response bias were reversely coded where applicable. Scales were computed where appropriate, and total scores of scales were calculated as new variables. The reliability of the Sense of Coherence scale was tested using Cronbach's alpha reliability coefficient.

The data file was split into 2 groups, girls and boys. Statistical procedures were performed for all variables, such as frequency distributions and descriptive statistics. The Sense of Coherence was calculated separately for each gender. Independent sample t-tests were performed to check for gender differences. Pearsons product moment correlation was used for the analysis of correlation. Analyses were run against the Sense of Coherence variable.

Sense of Coherence is reported as the sum of the answered questions. If there were unanswered questions the number zero replaced a missing score. If more than 4 questions were unanswered the researcher decided to omit this response in the study. The Sense of Coherence is reported as a number in a continuum and not dichotomised into strong or weak Sense of Coherence.

Family Sense of Coherence (FSOC) was measured using the aggregation model, meaning that FSOC is reported as the mean of the total sum of the family members individual Sense of Coherence.

Appreciation of General Resistance Resources was reported as the sum of the answered questions. General Resistance Resources were measured using a Likert-type scale with the number 1 signifying a positive appreciation of available resources and 5 a negative appreciation. The data retrieved was recoded so the answer 1 gave 5 points, 2 gave 4 etc. This was done to imitate the Sense of Coherence scale where a high SOC score suggests a strong SOC.

Family connectedness was measured using a Likert type scale with the number 1 signifying complete agreement with the statement, 2 partially agreeing, 3 partially disagreeing and 4 completely disagreeing with the statement. The data retrieved was recoded so the answer 1 gave 4 points, 2 gave 3 points etc. This was done, as with the GRR scale, to imitate the properties of the SOC scale and facilitate reading of correlation tables.

6. Results

The aim of this study is to report the measured the Sense of Coherence found in adolescents that have just started secondary school as well as investigate the collective Sense of Coherence in the family. Further aims are to report how adolescents' perceive their health as well as the distribution of existing health promoting resources and investigate a possible connection of these to the adolescents' Sense of Coherence.

The results will be viewed through Physical Health, Mental Health, Social Health and Spiritual Health dimensions. Questions concerning General Resistance Resources that are related to health and the perceived accessibility of these are also viewed for correlation to the adolescents Sense of Coherence. The same will be done with results concerning factors influencing health that adolescents worry about. The results can be viewed in their entity in the matrix of correlation between SOC and General Resistance Resources (Appendix 4) and in the matrix of correlation between SOC and factors influencing health that adolescents worry about (Appendix 5).

6.1 Participants

The response rate for the adolescents was 61% (60; *n*=99) with a distribution of 62% girls (37) and 38% (23) boys. 93% (56; *n*=60) participated in this study as a family, with a 59% (33; *n*=56) response rate from both parents and a 41% (23; *n*=56) response rate from a single parent in the family, with a distribution of 88% (*n*=49) mothers and 71% (*n*=40) fathers.

In this study 72% (43; *n*=60) of the adolescents reported living with both parents, the rest lived with either mother or father permanently or on an alternating schedule.

6.2 Sense of Coherence

The individual Sense of Coherence was measured using the SOC-13 questionnaire. The individual questions each have a scoring alternative of 1-7 points, giving a possible range of 13 – 91 points for the total Sense of Coherence.

The total mean score for the adolescents SOC was 69 (*SD* 12, *n*=60) with a range between 40 and 90. For girls it was 67 (*SD* 11, *n*=37), range 40-85 and for boys 73 (*SD* 13, *n*=23), with a range of 41-90, *t*=-1.99, *p*=.01.

The total mean score for the adolescents mothers SOC was 73 (*SD* 9, *n*=48), range 43-88 and for the fathers 72 (*SD* 11, *n*=40), range 35-88. One mother had only filled in the second page of the SOC questionnaire, missing 6 questions and her SOC was therefore not calculated.

Family Sense of Coherence was measured using the aggregation model. The total mean score for the Family Sense of Coherence was 72 (*SD* 8, *n*=56), range 42-85. Significant correlation was seen between the adolescents SOC and fathers SOC (see Table 5).

Table 5. Sense of Coherence (SOC) correlation within the family

	TOTAL SOC	GIRL SOC	BOY SOC
FSOC	.796**	.754**	.873**
MOTHERS SOC	.172	.245	-.018
FATHERS SOC	.428**	.408*	.873**

** $p < .01$

* $p < .05$

6.3 Health

With health being defined as consisting of physical, mental, social and spiritual dimensions it is obvious that one question cannot give an accurate accountancy of the state of health in an individual. The students were asked how they perceived their health, in question 6, and if they have an illness, in question 7. Almost all, 98% (58; *n*=60) of adolescents perceived themselves as having good health, despite the fact that 22% (13; *n*=60) of them have an illness that has been diagnosed by a doctor.

Adolescent SOC correlated positively with the perception of good health (see Table 6), while being diagnosed with an illness correlated negatively with SOC for boys.

Table 6. Correlation between Sense of Coherence (SOC), perceived health and diagnosed illness

	TOTAL SOC	GIRL SOC	BOY SOC
PERCIEVED HEALTH	.336**	.252	.324
DIAGNOSED ILLNESS	.035	.314	-.516*

** $p < .01$

* $p < .05$

When asked if the adolescents felt stressed only 10% (6; *n*=60) said "Yes", of the remaining adolescents 45% answered "No" (27) and 45% "Sometimes" (27). Almost all, 95% (57; *n*=59) of adolescents feel content with their life at the moment.

6.3.1 Physical Health

The data showed that physical health is not an issue that adolescents worry about. Out of the 15% (9, *n*=60) that do worry there was a greater distribution among girls, 19%, (7; *n*=37) than boys 9% (2; *n*=23) t=-1.07 p=.289.

Table 7. Descriptive statistics of adolescents' perception of General Resistance Resources they find available in the dimension of Physical Health; percentages, sample size, mean, standard deviation, t-values and p-values.

	GIRLS	BOYS	TOTAL	*t*	*p*
FEELING HEALTHY	*M* 4.86 *SD* .35	*M* 4.65 *SD*.65	*M* 4.78 *SD* .49	1.66	.103
Yes / Often	86.5 (32)	73.9 (17)	81.7 (49)		
Sometimes	13.5 (5)	17.4 (4)	15 (9)		
Don't know		8.7 (2)	3.3 (2)		
	100 (37)	100 (23)	100 (60)		
HEALTHY LIFESTYLE	*M* 4.68 *SD* .53	*M* 4.52 *SD* .51	*M* 4.62 *SD*.52	1.11	.272
Yes / Often	70.3 (26)	52.2 (12)	63.3 (38)		
Sometimes	27 (10)	47.8 (11)	35 (21)		
Don't know	2.7 (1)		1.7 (1)		
	100 (37)	100 (23)	100 (60)		

Perception of Body Image is one way of looking at and judging your physical self and physical health. 73% (27; *n*=37) of the girls and 83% (19; *n*=23) of the boys stated they were "just right" when it came to body size. Body image worried 35% (13; *n*=37) of the girls but only 4% (1; *n*=23) of the boys (*t*=-2.88, *p*=.01). Feeling healthy correlated positively for boys with Sense of Coherence (see Table 8).

Table 8. Correlation between Sense of Coherence (SOC) and General Resistance Resources in the Physical Health dimension

	TOTAL SOC	GIRL SOC	BOY SOC
PHYSICAL HEALTH			
FEELING HEALTHY	.259*	.154	.476*
HEALTHY LIFESTYLE	.168	.231	.191

* $p < .05$

6.3.2 Mental Health

The majority of the adolescents, 78% (47; *n*=60) in this study perceived themselves as feeling happy often. More boys than girls claimed they felt content. A significant difference was found between girls and boys perception of having good self-esteem (see Table 9). The adolescents in this study don't seem to worry about Mental Health. Only 7% (4; *n*=60) of adolescents, all girls, claimed that this is an issue that worries them. Worrying about ones Self-esteem is another issue that was exclusive to girls, 12% (7; *n*=37).

Table 9. Descriptive statistics of adolescents' perception of General Resistance Resources they find available in the dimension of Mental Health; percentages, sample size, means, standard deviation, t-values and p-values.

	GIRLS	BOYS	TOTAL	*t*	*p*
FEELING HAPPY	*M 4.73 SD* .61	*M 4.70 SD* .70	M 4.72 *SD* .64	.20	.843
Yes / Often	78.4 (29)	78.3 (18)	78.3 (47)		
Sometimes	18.9 (7)	17.4 (4)	18.3 (11)		
Don't know	2.7 (1)	4.3 (1)	3.3 (2)		
	100 (37)	100 (23)	100 (60)		
CONTENT WITH LIFE	*M* 4.41 *SD* .87	*M* 4.78 *SD* .51	*M* 4.55 *SD* .77	-1.89	.064
Yes / Often	59.5 (22)	82.6 (19)	68.3 (41)		
Sometimes	27 (10)	13 (3)	21.7 (13)		
Don't know	8.1 (3)	4.3 (1)	6.7 (4)		
Seldom	5.4 (2)		3.3 (2)		
	100 (37)	100 (23)	100 (60)		
GOOD SELF-ESTEEM	*M* 4.24 *SD* .80	*M* 4.70 *SD* .56	*M* 4.42 *SD* .74	-2.38	.021
Yes / Often	43.2 (16)	73.9 (17)	55 (33)		
Sometimes	40.5 (15)	21.7 (5)	33.3 (20)		
Don't know	13.5 (5)	4.3 (1)	10 (6)		
Seldom	2.7 (1)		1.7 (1)		
	100 (37)	100 (23)	100 (60)		
WILL MANAGE IN LIFE	*M* 4.49 *SD* .73	*M* 4.70 *SD* .56	*M* 4.57 *SD* .67	-1.17	.245
Yes / Often	62.2 (23)	73.9 (17)	66.7 (40)		
Sometimes	24.3 (9)	21.7 (5)	23.3 (14)		
Don't know	13.5 (5)	4.3 (1)	10 (6)		
	100 (37)	100 (23)	100 (60)		

A strong positive correlation can be seen between SOC and almost all General Resistance Resources influencing Mental Health (see Table 10).

Table 10. Correlation between Sense of Coherence (SOC) and General Resistance Resources in the Mental Health dimension

	TOTAL SOC	GIRL SOC	BOY SOC
MENTAL HEALTH			
FEELING HAPPY	.527**	.634**	.556**
CONTENT WITH LIFE	.634**	.686**	.535**
SELF-ESTEEM	.437**	.479**	.255
WILL MANAGE IN LIFE	.471**	.431**	.518*

** $p < .01$

* $p < .05$

6.3.3 Social Health

92% of the adolescents (55; *n*=60) reported having "three or more" friends. Despite this almost half of the adolescents, 42% (25; *n*=59) claimed they sometimes feel lonely. Girls are more worried about their relationships to friends and family than boys are. The majority of adolescents find that social relationships are important. Feeling loved, having support and having someone to talk to about problems correlate positively (see Table 11) with Adolescent SOC.

Table 11. Correlation between Sense of Coherence (SOC) and General Resistance Resources in the Social Health dimension

	TOTAL SOC	GIRL SOC	BOY SOC
SOCIAL HEALTH			
FAMILY / FRIENDS	.045	.012	a
MONEY	.313*	.250	.448*
RECEIVE SUPPORT	.478**	.573**	.342
FEEL LOVED	.514**	.623**	.415*
SHARE PROBLEMS	.431**	.393**	.597**

** $p < .01$

* $p < .05$

a. Cannot be computed because at least one of the variables is constant.

Family connectedness was measured by asking 6 questions (no. 34-39). The individual questions have a scoring alternative of 1-4 points, giving a possible range of 6-24. The higher the score the more connected to their family the adolescents feel. The total mean score was 22 (*SD* 4, *n*=58) with range between 6 and 24. Significant correlation was found, in both girls and boys, between Sense of Coherence and Family Connectedness (see Table 12).

Table 12. Correlation between Sense of Coherence (SOC) and Family Connectedness

	TOTAL SOC	GIRLS SOC	BOYS SOC
CLOSE TO PARENTS	.328*	.319	.368
LOVING PARENTS	.327*	.356*	.211
CARING PARENTS	.255	.185	.209
GOOD RELATIONS	.406**	.420**	.223
FUN WITH FAMILY	.323*	.385*	.153
TALKS TO PARENTS	.436**	.382*	.562**
TOTAL CONNECTION	.442**	.402*	.521*

**$p < .01$

* $p < .05$

The majority of adolescents (see Table 13) feel connected to their family. The adolescents felt that they were close to their family and that they have loving and caring parents that they have a good relationship and have fun with. Only half of the adolescents on the other hand felt that they can talk to parents about their problems. A significant amount more of boys feel they have good relationships with their families.

Table 13. Descriptive statistics of Family Connectedness; percentages, sample size, means, standard deviation, t-values and p-values.

	GIRLS	BOYS	TOTAL	*t*	*p*
CLOSE TO PARENTS	*M* 3.68 *SD* .71	*M* 3.76 *SD* .54	*M* 3.71 *SD* .65	-.48	.631
AGREE	78 (29)	74 (17)	77 (46)		
PARTIALLY AGREE	14 (5)	13 (3)	13(8)		
PARTIALLY DISAGREE	5 (2)	4 (1)	5 (3)		
DISAGREE	3 (1)	-	2 (1)		
	100 (37)	91 (21)	97 (58)		
LOVING PARENTS	*M* 3.57 *SD* .73	*M* 3.73 *SD* .55	*M* 3.63 *SD* .67	-.89	.378
AGREE	67 (25)	74 (17)	70 (42)		
PARTIALLY AGREE	24 (9)	17 (4)	22 (13)		
PARTIALLY DISAGREE	5 (2)	4 (1)	5 (3)		
DISAGREE	3 (1)	-	2 (1)		
	100 (37)	96 (22)	98 (59)		
CARING PARENTS	*M* 3.70 *SD* .66	*M* 3.91 *SD* .29	*M* 3.78 *SD* .56	-1.38	.172
AGREE	78 (29)	87 (20)	82 (49)		
PARTIALLY AGREE	16 (6)	9 (2)	13 (8)		
PARTIALLY DISAGREE	3 (1)	-	2 (1)		
DISAGREE	3 (1)	-	2 (1)		
	100 (37)	96 (22)	98 (59)		
GOOD RELATIONS	*M* 3.54 *SD* .87	*M* 3.91 *SD* .29	*M* 3.68 *SD* .73	-1.92	.060
AGREE	73 (27)	87 (20)	78 (47)		
PARTIALLY AGREE	14 (5)	9 (2)	12 (7)		
PARTIALLY DISAGREE	8 (3)	-	5 (3)		
DISAGREE	5 (2)	-	3 (2)		
	!00 (37)	96 (22)	98 (59)		
FUN WITH FAMILY	*M* 3.62 *SD* .76	*M* 3.73 *SD* .46	*M* 3.66 *SD* .66	-.59	.556
AGREE	76 (28)	70 (16)	73 (44)		
PARTIALLY AGREE	14 (5)	26 (6)	18 (11)		
PARTIALLY DISAGREE	8 (3)	-	5 (3)		
DISAGREE	3 (1)	-	2 (1)		
	100 (37)	96 (22)	98 (59)		
TALKS TO PARENTS	*M* 3.34 *SD* 1.01	*M* 3.50 *SD* .60	*M* 3.34 *SD* .88	-1.08	.284
AGREE	54 (20)	52 (12)	53 (32)		
PARTIALLY AGREE	27 (10)	39 (9)	32 (19)		
PARTIALLY DISAGREE	8 (3)	4 (1)	7 (4)		
DISAGREE	11 (4)	-	7 (4)		
	100 (37)	100 (23)	100 (37)		

Social relationships can be perceived as a vital General Resistant Resource. Almost all adolescents, as seen in Table 14, agree that family and friends are important. Feeling loved, receiving support and having someone to talk to about problems is also important to the majority of adolescents.

Table 14. Descriptive statistics of adolescents' perception of General Resistance Resources they find available in the dimension of Social Health; percentages, sample size, means, standard deviation, t-values and p-values.

	GIRLS	BOYS	TOTAL	*t*	*p*
FAMILY / FRIENDS	*M* 4.95 *SD* .23	*M* 5.00 *SD*.00	*M* 4.97 *SD* .18	-1.13	.264
Yes / Often	94.6 (35)	100 (23)	96.7 (58)		
Sometimes	5.4 (2)		3.3 (2)		
	100 (37)	100 (23)	100 (60)		
MONEY	*M* 4.68 *SD* .60	*M* 4.68 *SD* .65	*M* 4.68 *SD* .60	-.04	.970
Yes / Often	73.3 (27)	73.9 (17)	73.3 (44)		
Sometimes	21.6 (8)	13 (3)	18.3 (11)		
Don't know	5.4 (2)	8.7 (2)	6.7 (4)		
	100 (37)	100 (22)	100 (60)		
RECIEVE SUPPORT	*M* 4.84 *SD* .44	*M* 4.68 *SD* .35	*M* 4.85 *SD* .41	-.23	.816
Yes / Often	86.5 (32)	82.6 (19)	85 (51)		
Sometimes	10.8 (4)	13 (3)	11.7 (7)		
Don't know	2.7 (1)		1.7 (1)		
	100 (37)	95.6 (22)	98.3 (59)		
FEEL LOVED	*M* 4.49 *SD* .93	*M* 4.48 *SD* .99	*M* 4.48 *SD* .95	.03	.974
Yes / Often	70.3 (26)	69.6 (16)	70 (42)		
Sometimes	16.2 (6)	17.4 (4)	16.7 (10)		
Don't know	5.4 (2)	8.7 (2)	6.7 (4)		
Seldom	8.1 (3)		5 (3)		
Never		4.3 (1)	1.7 (1)		
	100 (37)	100 (23)	100 (60)		
SHARE PROBLEMS	*M* 4.73 *SD* .65	*M* 4.52 *SD* .80	*M* 4.65 *SD* .71	1.11	.273
Yes / Often	81.1 (30)	65.2 (15)	75 (45)		
Sometimes	13.5 (5)	26.1 (6)	18.3 (11)		
Don't know	2.7 (1)	4.3 (1)	3.3 (2)		
Seldom					

55% (33; *n*=60) of the adolescents felt that the atmosphere at home was very good. Family meals are part of the majority of adolescents' lives. During the week 72% (43; *n*=60) reported eating family meals and during the weekend almost all, 98% (59; *n*=60), said that ate together.

6.3.4 Spiritual Health

A large amount of adolescents, 78% (47; *n*=60), with an almost even distribution between both girls and boys, have hobbies or other interests that they find meaningful (see Table 15). Interesting was that a significantly larger amount of girls 62% (23; *n*=37) found family traditions important compared to boys, 30% (7; *n*=23)

Table 15. Descriptive statistics of adolescents' perception of General Resistance Resources they find available in the dimension of Spiritual Health; percentages, sample size, means, standard deviation, t-values and p-values.

	GIRL % (n)	BOY % (n)	TOTAL % (n)	*t*	*p*
HOBBIES	*M* 4.70 *SD* .57	*M* 4.74 *SD* .69	*M* 4.72 *SD* .61	-.22	.825
Yes / Often	75.7 (28)	82.6 (19)	78.3 (47)		
Sometimes	18.9 (7)	13 (3)	16.7 (10)		
Don't know	5.4 (2)		3.3 (2)		
Seldom		4.3 (1)	1.7 (1)		
	100 (37)	100 (23)	100 (60)		
FAMILY TRADITIONS	*M* 4.46 *SD* .84	*M* 3.91 *SD* 1.00	*M* 4.25 *SD* .93	2.29	.026
Yes / Often	62.2 (23)	30.4 (7)	50 (30)		
Sometimes	27 (10)	39.1 (9)	31.7 (19)		
Don't know	5.4 (2)	26.1 (6)	13.3 (8)		
Seldom	5.4 (2)	4.3 (1)	1.7 (1)		
	100 (37)	100 (23)	100 (60)		

The importance of having meaningful hobbies or interests to adolescents is mirrored in the positive correlation between SOC and meaningful hobbies (see Table 16).

Table 16. Correlation between Sense of Coherence (SOC) and General resistance Resources in the Spiritual Health dimension

	TOTAL SOC	GIRL SOC	BOY SOC
SPIRITUAL HEALTH			
HOBBIES	.417**	.374*	.480*
FAMILY TRADITIONS	.054	.274	-.023

** $p < .01$

* $p < .05$

7. Discussion

The present study focuses on associations between adolescent Sense of Coherence, Family Sense of Coherence, perceived adolescent health and appreciation of health promoting General Resistance Resources that the adolescents find at their disposal. The results are purely descriptive and do not show any causality or in which direction the tendency goes.

7.1 Discussion of the results

The results show that the adolescents participating in this study have a high Sense of Coherence score (*M* 69, *SD* 12). In this study SOC has not been dichotomised into "strong" or "weak". The general view suggests that the higher the SOC score, the stronger Sense of Coherence is considered to be. The SOC score of the adolescents in this study can be compared to the results that Myrin & Lagerstöm (2006) found in their study of 14-15 year olds in Stockholm. This finding is of interest as adolescents have in general been reported of having a much lower SOC score (Antonovsky & Sagy 1986: Buddeberg-Fischer et al 2001; Margalit& Eyseneck 1990).

The girls in this study had a lower SOC mean score compared to boys, girls 67 (SD 11) and boys 73 (SD 13), this is congruent with findings from several studies (Antonovskys & Sagy 1986; Cederblad & Hansson 1996; Honkinen & al. 2008; Myrin & Lagerström 2006, Nielsen & Hansson 2007). As earlier mentioned in this thesis speculation of possible explanations for this has been that the attributes and expectations awarded the role for girls in adolescence are less clear than those for boys (Antonovsky & Sagy 1986) or that girls are more conscious of inner conflicts (Honkinen & al. 2008). Hansson & Olsson have speculated (2001) that the results may be due to the fact that boys tend to overrate themselves whereas girls underrate themselves. They also questioned the possibility of our patriarchal society influencing negatively the SOC of females.

Results of this study, combined with experience gained from the researchers clinical work and theoretical knowledge of the differences in gender during the different developmental stages lets the researcher agree with above named speculations but also provokes in the researcher the question of how Sense of Coherence, especially in girls, is influenced by the community and society, in particular through the media. The strong correlation between SOC and GRR'S that can be found in the mental health dimension combined with results showing that girls worry more about self-esteem issues, are less content with life and are more unsure of how they will manage in life makes the researcher believe that she is on the right path wanting to look at the connection between adolescents' SOC and the possible development of an eating disorder.

Both mothers and fathers displayed a high SOC score, resulting in the Family Sense of Coherence score also being high. The researcher has to date seen no published data on the average mean of FSOC scores in families with adolescents and/or the comparison of individual family members SOC. The FSOC is conceivably a significant factor in determining and transforming family members' individual sense of coherence. Research has shown that family members with a strong SOC may provide support and facilitate utilization of resources needed to cope with stressors; this is possible through individual and familial development processes (Antonovsky 1987).

Significant correlation was seen between the adolescents SOC and Family Sense of Coherence. This result was expected but the strong correlation between adolescent SOC and their fathers SOC was found to be interesting, even more so as there was no significant correlation between adolescent SOC and their mothers SOC. As this study is of pure descriptive design and does not attempt to examine causation there can be no explanation given but this finding does raise an interest in the researcher to undertake further analysis to explore the cause of this.

As earlier mentioned Antonovsky (1979) perceived and described health as a movement on a continuum between total ill health (dis-ease) and total health (ease). He believed that a strong Sense of Coherence, SOC, will lead to improved health. Sense of Coherence can be comprehended as the individual's ability to understand their situation in life and have the capacity to assess and use resources available that will enable to facilitate movement towards a health promoting direction.

Physical Health has been defined in this thesis as the ability of the human body to function properly and to maintain a healthy Quality of Life. In this study several questions have been asked to gather information on how adolescents perceive their health in the different dimensions of health. When it comes to adolescent health, the results of this study suggest that the vast majority of adolescents perceive themselves as having good health. This is congruent with Rimpeläs (2006) study that found that more than 80% of adolescents in Finland regard their own health as good.

Adolescent Sense of Coherence correlated positively with the adolescents perceiving themselves as having good health. Being diagnosed with an illness correlated negatively with Sense of Coherence for boys and this could be interpreted so that these adolescents perceive health as more than just absence of disease which is in congruence with WHO's 1946 definition of health as *"…a state of complete physical, mental and social well-being, and not merely the absence of disease and infirmity"*.

Gender differences in how adolescents perceive their health were in certain areas significant. Even though the majority regarded themselves as being healthy girls claimed to feel healthier and try to live a healthier lifestyle than boys. Interesting was that feeling healthy correlated with boys SOC but not girls. Could this be that girls and boys perceive health differently? Another interesting result was that 35% of girls worry about body image compared to 4% of boys. Could this be, as the researcher earlier speculated, influenced by the significance society and the media put on the female body, resulting in confusion between perceiving the difference between a "healthy body" and a "beautiful body"?

Mental Health has been defined in this thesis as having the ability to process information, think clearly, reason objectively, act coherently, cope, adjust and adapt appropriately with life's challenges. Several measurements for ill mental health exist, eg. BDI, but it is more difficult to study what defines good mental health as ones perception of mental health is subjective. According to Eriksson (2008) Sense of Coherence is strongly related to Mental Health as managing stress is about understanding and managing feelings and emotions. Adolescents go through great mental development challenges in this stage of life, much of the mood swings and behaviours that can be considered typical of adolescents' can be contributed to mental health development processes. In this turbulent stage of life adolescents often try to correct and satisfy different "needs" that makes them unhappy or uncomfortable. Therefore feeling happy with life and content will promote good mental health. In this study a strong positive correlation was found between the Sense of Coherence in Adolescence and factors found in the adolescents' life influencing Mental Health. More girls than boys worry about mental health issues. Could this perhaps be a reason that boys have a higher SOC score than girls?

Social Health has been defined in this thesis as having the ability to relate to and connect with others and to adapt to different social situations. Adolescent health is influenced strongly by the family environment. The family's health related behaviours can affect adolescent wellbeing in several ways including providing role models and facilitating a healthy or unhealthy physical and social environment (Aufseesar 2006).

Feeling loved and having someone to talk with about problems correlates positively with adolescents' SOC. This is in congruence with Marcias (2006) viewpoint that adolescents have a continuous need for close relationships with their parents, externally to use them as a base for emotional replenishing and internally as a source for regulation of self-esteem and comfort.

Feeling connected to family correlated with SOC. It was interesting to see that while the majority of adolescents felt they had loving and caring parents that they felt close to, more

than half of the adolescents felt they could not talk to their parents about things they worry about. This supports the idea behind the process of individuation and separation; being too close to parents and sharing everything results in less autonomy. Friends become at this stage in life important confidants.

What the researcher found interesting was that girls Sense of Coherence correlated with the experience of receiving support from parents, while in boys having a feeling of being economically well off correlated with their SOC. This result again provoked the question of how the family, the community and society create and enforce differences between girls and boys. As well as how, if this is the case, does this affect the development of SOC?

Spiritual Health can be defined in this thesis as having the ability to establish peace and harmony in our lives. This can be done either through religious beliefs or personal values/beliefs. In this study questions were asked about hobbies, traditions and if they worry about the world and their future. A positive correlation can be seen between Adolescent SOC and meaningful hobbies in both girls and boys. Interesting is that twice as many girls than boys claimed that their families had traditions that were important, again provoking the gender question of how we bring up our children? Is this the explanation in the difference between girls and boys Sense of Coherence? Traditions such as Christmas and Easter usually involve decorating and making food, in some families this is typically viewed as a female "work" in the household. Does this mean we are cheating boys out of potential health and Sense of Coherence enhancing resource?

It is interesting that almost 60% of girls, compared to 9% boys, worry about what is going on in the world and twice the amount of girls compared to boys worry about their future. Worrying about the future correlated with boys Sense of Coherence. Similar results, a positive correlation associated with a high coherence of personal future, have been found in a study about the structure and determinants of worrying among adolescent girls (Anttila et al. 2000).

7.2 Validity and Reliability

Validity has two meanings in research, validity of the study or research design (internal and external) and validity of a measure. The internal validity of a study is the extent to which we are able to derive clear, causal conclusions from our study; the external validity of a study or research design refers to the extent of which the results of an investigation can be generalized to other samples, situations or populations. Reliability is shown by trying to estimate the amount of random error in a particular measure in order to determine if the results will show consistency, stability and dependability. A questionnaire can be reliable without being valid, but it cannot be valid if it is not reliable.

In this study validity was assessed by submitting the questionnaire to PhD Monica Eriksson who made suggestions for the adequacy and relevance of the questions. After that in September 2008, a pilot study was conducted in a similar school with a sample of adolescents in the seventh grade, and their parents, to test the suitability and comprehensibility of the questionnaires. Pilot testing allowed the researcher to ensure that the measuring instrument was appropriate for use in the planned study sample as well as determining the reliability of the instrument. The students and their families in the pilot test were asked to answer a few questions concerning comprehensibility of the questionnaire. Feedback showed that the wording in a few of the questions in the orientation to life questionnaire that is used in the survey caused some confusion. After several discussions with researcher Monica Eriksson a decision was taken not to change the wording in the questions, as the orientation to life questionnaire has been validated and used extensively in research with adolescents.

As for reliability, when using SOC-13, Cronbach's alfa has in previous studies shown to range from 0.70 to 0.92. Coefficients above 0.70 reflect good internal consistency. The Sense of Coherence scale shows high internal consistency. There are very few longitudinal studies reporting test- retest reliability. Using SOC-13 test-retest reliability has been reported to range from 0.96 to 0.72. One study among Swiss adolescents reported the correlation was 0.77 after 18 months (Eriksson & Lindström 2005).

In this study Cronbach's alpha, when using the SOC-13, was for all adolescents 0.86. When calculated for each gender Cronbach's alpha was 0.84 for the girls and 0.88 for boys.

Evidence of validity and reliability can also be seen through the findings of similar results in other studies thus supporting the results of this study, as well as through the correlation found between the General Resistance Resource scale constructed for this study and Sense of Coherence, thus supporting the statement that General Resistance Resources perceived by adolescents influence the Sense of Coherence of an individual.

7.3 Ethical considerations

According to Crosby & al (2006) ethical considerations are of highest importance when designing and implementing health promotion programs and research. Applying ethical considerations implies protection for research subjects, prevention of harm and maximising of benefits. Ethical practice in research is guided by core ethical principles including respect for persons, beneficence, and justice.

In this study the ethical principles of respect for persons, beneficence and justice have been followed. The principle of respect for persons means that research participation must be voluntary and participants must be informed of the fundamental goals and aspects of the research. Respect of person meant, in this study, that all participants were given the choice to not return the survey if they did not want to participate. Beneficence is the ethical obligation to do well and to avoid harm. This means in Health Promotion research maximizing benefits and minimizing risks. Beneficence provides the ethical basis for conducting research that seeks to improve the health and wellbeing of participants. In this research beneficence was demonstrated by asking participants if they wanted the school nurse to contact them if they felt they needed to talk about an existing eating disorder or if they felt they were at risk of developing an eating disorder. The principle of justice demands a fair sharing of both risks and benefits and is important in the selection of research participants.

Ethical considerations were taken seriously due to the fact that the participants, adolescents, are perceived as being a particularly vulnerable group. Written consent to conduct this study was obtained from the department of education in the City of Espoo. Due to the fact that the participants in school were minors a letter was sent to the students parents asking for parental consent for student participation in this study. Privacy was ensured by keeping the participants anonymous. According to the rule of confidentiality it was guaranteed that no information concerning the survey or the participants would be divulged to a third party without the permission of the participant. Fidelity implies that steps of the research design were followed correctly, all collected data reported anonymously and that the surveys were collected, checked and stored in the proper manor. Ethical arguments can be seen throughout the entire research process. Striving to be faithful to present the correct viewpoints of the participants, to uphold confidentiality and to be trustworthy are all attempts at being ethical (Talbot 1995).

The researcher has chosen not to name the schools where the pilot study and research have taken place as there are only a few Swedish schools in the city of Espoo and there may therefore be a risk of identification of students or their families, however unintentional and despite all measures of precaution taken.

7.4 Strengths, limitations of the study and directions for further research

The strengths of this thesis is that it adds to previous work in the field of Salutogenesis by providing new insight into the relatively little researched area of Family Sense of Coherence.

Virtually every study has limitations. Study limitations are recognized weaknesses in the research. Limitations of this study may be the small sample size, as sample size influences the level of statistical significance. A small sample size may also result in a problem with generalizability. The low participation rate of 60% suggests the possibility that participation bias may have occurred. There is also always a possibility of social desirability bias occurring when conducting research with adolescents. Adolescents have a desire to appear "normal", not be different than their peers and fit in. This may result in adolescents reporting answers they believe are expected of most adolescents instead of reporting their own actual response to the question. In this study the adolescents were asked to fill in the questionnaires at home, giving them time to reflect on answers to the questions and avoiding any possibilities of peer pressure influencing answers. To encourage adolescents and their families to answer as honestly as possible they were assured they would remain anonymous.

Limitations of the study design may also be a weakness. The present study is purely descriptive, exploring possible associations between variables and does not provide prediction about causality. Further longitudinal research is needed to predict causal relationship between variables.

There may also be methodological issues, regarding the survey method, and the instruments used. First of all, the survey method "dictates" the responses participants can give. The provided questions and response categories limit to some extent the participants' opportunity to express true feelings and experiences. Further qualitative research is therefore needed to obtain a deeper understanding of the research phenomenon.

Using a new survey instrument is always a complex matter. For this study the General Resistance Resource scale was constructed. New scales are innovative and may add to the study but the question of construct validity – the degree to which an instrument measures the intended hypothetical construct should always be considered. Further research using more sophisticated measurements with multiple indicators for the variables in question could be needed, in order to be able to explain variations in Sense of Coherence. In addition bias introduced by the transformation of variables, to imitate the properties of existing scales may occur as rearranging variables suggests the error rate is expected to increase.

7.5 Conclusion

As earlier mentioned this study focuses on associations between adolescent Sense of Coherence, Family Sense of Coherence, perceived adolescent health and appreciation of health promoting General Resistance Resources that the adolescents find at their disposal.

According to the researcher, the main result generated from this study was verification of the researchers own assumption that families are important in the development of adolescent Sense of Coherence and that there is a strong association between adolescent Sense of Coherence and perceived General Resistance Resources in the Social Health dimension.

Results from this study support the implication that the family, and interaction with parents, is of importance in the development of Sense of Coherence and therefore in the development of a healthy adolescent. The adolescents Sense of Coherence showed strong association to the Family Sense of Coherence and especially fathers Sense of Coherence. Results suggest that the family may influence the different components of Sense of Coherence in several ways. As Näsman (1998) has suggested Comprehension comes through having a shared language and assimilation of narratives that the family shares with the child, in this study it is shown as the adolescents claiming they can talk to parents. Meaningfulness is derived from the outcome of how the child feels he is met, which in turn affects his self sense and his sense of the world around him, in this study shown as the adolescents claiming they have good relations with their parents. Manageability is developed by gradually encountering progressive stress factors. Positive family reactions to children's and adolescents coping strategies enforces behavioral coping patterns and contributes to a feeling of Manageability, in this study shown as the adolescents claiming they can talk to and share problems with their parents.

Viewing development of the adolescents' Sense of Coherence through Family Systems Theory makes sense as we then focus on the relationships between individuals and the potential they have of being resources in the development of adolescent Sense of Coherence. Repetition of patterns of interaction leads most often to families creating stable identities. This lends itself well to the explanation of familial responses to stressors and the effects those stressors may have on the system as a whole. As earlier mentioned, a healthy adolescent can be seen as an individual who successfully engages in the diverse developmental tasks of adolescence, who applies healthy behaviours that promote a healthy lifestyle, who possesses the capacity to thrive despite stressors in life and who experiences a sense of wholeness and wellbeing in relation to themselves, others and the community. We must also see the individual in the family context and appreciate the impact family and/or close social relations have on the individual. It is also important to understand the adolescent in the continuum of the lifespan. Looking to the past we see that experiences in childhood most often have significant impact on adolescence, and experiences in adolescence will therefore most likely have an impact in adulthood. In light of the results from this study the researcher finds that continuing to research the families' contribution to the development of Sense of Coherence is extremely important. More research is also needed on how families create and enforce gender differences that perhaps influence individual differences in Sense of Coherence that could lead to inequalities in health.

References

Add Health. 2007. National Longitudinal Study of Health. National Institute of Child Health and Human Development. http://www.nichd.nih.gov/health/topics/add_health_study.cfm Accessed 15.12.2008

Adolescent Health Survey II. 1998. Healthy Connections. Connectedness & BC Youth. http://www.mcs.bc.ca/pdf/connections.pdf Accessed 20.10.2008

Anderson, K.H. 1998. The relationship between Family Sense of Coherence and Family Quality of Life After Illness Diagnosis. In Stress, Coping and Health in Families. Sense of Coherence and Resiliency. Ed. McCubbin & al. 1998. California, USA: Sage publications, Inc.

Anderson, K.H. 2000. The family health system approach to family system nursing. Journal of family nursing, 6(2): 103-119.

Anttila T, Poikolainen K, Uutela A & Lönnqvist J. 2000. Structure and Determinants of Worrying among Adolescent Girls. Journal of Youth Studies, 3(1): 49 – 60.

Antonovsky, A. 1979. Health, Stress and Coping. San Francisco: Jossey-Bass, Inc.

Antonovsky, A. 1987. Unravelling the Mystery of Health. How people manage stress and stay well. San Francisco: Jossey-Bass, Inc.

Antonovsky, A. 1990. A somewhat personal odyssey in studying the stress process. Stress medicine, 6: 71-80.

Antonovsky, A. 1991. The salutogenic approach to family systems health: Promise and Danger. Speech at European Congress on "Mental health in European families", Prague, Czechoslovakia, 5-8 May 1991. http://www.angelfire.com/ok/soc/agolem.html Accessed 11.11.2000

Antonovsky, A. 1992. Can Attitudes Contribute to Health? Advances. The Journal of Mind-Body-Health, 8(4): 33-49.

Antonovsky, A. 1996. The sense of Coherence. An historical and future perspective. Israel Journal of Medical Science, 32: 170-178.

Antonovsky, A. 1998. The Sense of Coherence. An Historical and Future Perspective. In Stress, Coping and Health in Families. Sense of Coherence and Resiliency. Ed. McCubbin & al. 1998. California, USA: Sage publications, Inc.

Antonovsky, H & Sagy, S. 1986. The Development of a Sense of Coherence and its Impact on Responses to Stress Situations. The Journal of Social Psychology, 126(2): 213-225.

Aufseeser D, Jekielek S, & Brown B. 2006. The Family Environment and Adolescent Well-Being: Exposure to positive and negative Family Influences. Washington, DC: Child Trends; and San Francisco, CA: National Adolescent health Information Center, University of California, San Francisco.

Beresford, B.A. 1994. Resources and strategies: How parents cope with the care of a disabled child. Journal of Child Psychology and Psychiatry, 35(1): 171-209.

Berzonsky, M.D. 2000. Theories of Adolescence. In Adolescent Development: The essential readings. Ed. Adams, G. 2000. Cornwall, Great Britain: Blackwell Publishers.

Breidablick, H-J, Meland, E & Lydersen, S. 2008. Self-rated health in adolescence: A multifactorial composite. Scandinavian Journal of Public Health, 36: 12-20.

Buddeberg-Fischer, B., Klaghofer, R. & Schnyder, U. 2001. Sense of coherence in adolescents. Sozial-und-Präventivmedizin, 46: 404-410.

Cederblad, M & Hansson, K. 1996. Känslan av sammanhang – ett centralt begrepp i hälsoforskning. Socialmedicinsk tidskrift, 4: 152-158.

Cederblad, M., Ruksachatkunakorn, P., Boripunkul, T., Intraprasert, S. & Höök, B. 2003. Sense of Coherence in a Thai Sample. Transcultural Psychiatry, 40: 585-600.

Clements, I. 1983. Elements of a living system. In Family Health, A theoretical Approach to Nursing Care. Ed. Clements, I & Roberts, F. 1983. New York, USA: John Wiley & Sons, Inc.

Coolican, H. 2004. Research Methods and Statistics in Psychology. 4th ed. India: Hodder Arnold.

Crosby, R.A., DiClemente, R.J. & Salazar. L.F. 2006. Research Methods in Health Promotion. California, USA: Jossey-Bass.

Dallos, R. 1995. Constructing Family Life: Family Belief Systems. In Understanding the Family. ed. Muncie,J; Wetherell, M; Dallos, R & Cochrane, A. London, Great Britain: Sage Publications.

Dallos, R & Denford, S. 2008. A qualitative exploration of relationship and attachment themes in families with an eating disorder. Clinical Child Psychology and Psychiatry, 13(2): 305 – 322.

Dallos, R & Draper, R. 2000. An Introduction to Family Therapy. Systemic theory and practice. Great Britain: Biddles Ltd.

Denham, S. 1999. Part 1: The definition and practice of family health. Journal of Family Nursing, 5(2): 133-159.

Doherty, W. 1991. Family Theory and Family Health Research. Canadian Family Physician, 37: 2423 – 2428.

Eisenberg, M.E., Olson, R.E., Neumark-Stzainer, D., Story, M., & Bearinger, L.H. 2004. Correlations Between Family meals and Psychological Well-Being among Adolescents. Archives of Pediatrics and Adolescent Medicine, 158: 792-796.

Eriksson, M. 2007. Doctoral Thesis. Unravelling the mystery of salutogenesis. The evidence base of the salutogenic research as measured by Antonovsky's sense of coherence. Turku: Åbo Akademis Tryckeri.

Eriksson, M. & Lindström, B. 2005. Validity of Antonovsky's Sense of Coherence scale: A systematic review. Journal of Epidemiology Community Health, 59: 460-466.

Eriksson, M. & Lindström, B. 2007. Antonovsky's Sense of Coherence Scale and its relationship with Quality of Life: a systematic review. Journal of Epidemiology Community Health, 61: 938-944.

Eriksson, M. & Lindström, B. 2008. A salutogenic interpretation of the Ottawa Charter. Health Promotion International, 23(2):190-199.

Eriksson, M. 2008. Lecture on Salutogenesis Research Critique. Helsinki, May 7, 2008.

Eriksson, M. & Lindström, B. 2009. From an epidemiology of disease to an epidemiology of health: The contribution of the salutogenic framework for public health and health promotion research and practice. In Morgan A, Ziglio E, Davies M, editors. International health and development: Investigating in assets of individuals, communities and organisations. In press: 2009

Friedman, M. M. 1998. Family nursing: theory, research and practice. 4th ed. Stamford Connecticut, USA: Appleton & Lange.

Friedemann, M.L. 1995. The framework of systemic organization. Thousand Oaks, California, USA: Sage Publications, Inc.

Goldenberg, H. & Goldenberg, I. 2004. Family therapy. An overview. 6th ed. Pacific Grove, California, USA: Brooks/Cole.

Groeholt, E.K., Stigum, H., Nordhagen, R. & Köhler, L. 2003. Is parental sense of coherence associated with child health? European Journal of Public Health, 13:195-201.

Haour-Knipe, M. 1999. Family Sense of Coherence and Adapting to a New Culture. A Case Study. Polish Psychological Bulletin, 30(4): 311-321.

Hansson, K & Cederblad, M. 2004. Sense of Coherence as a Meta-Theory for Salutogenic Family Therapy. Journal of Family Psychotherapy, 15(½): 39-54.

HBSC. 2002. Health Behaviour in School-Aged Children: A World Health Organisation Collaborative Cross-National Study. http://www.hbsc.org Accessed 12.01.2009

Health Canada. 1999. Healthy Development of Children and Youth. The Role of the Determinants of Health (Full Report). http://www.phac-aspc.gc.ca/dca-dea/publications/pdf/child_and_youth_e.pdf Accessed 21.10.2008

Honkinen, P.L. et al. 2008. Stability of the Sense of Coherence in Adolescents. International Journal of Adolescent Medical Health, 20(1):85-91.

Hårtveit, H. & Jensen, P. 2005. Familjen plus en. En resa genom familjeterapins praktik och idéer. Stockholm: Bokförlaget Mareld.

Kristensson, P. & Öhlund, L.S. 2005. Swedish upper secondary school pupils' sense of coherence, coping resources and aggressivness in relation to educational track and performance. Scandinavian Journal of Caring Science, 19: 77-84.

Lackaye, T.D & Margalit M. 2006. Comparisons of achievement, effort, and self-perceptions among students with learning disabilities and their peers from different achievement groups. Journal of Learning Disabilities, 39(5): 432-446.

Lindström, B. 1992. Children and Divorce in the light of Salutogenesis – Promoting ChildHealth in the face of Family Breakdown. Health Promotion International, 7(4): 289-296.

Lindström, B. 1994. Doctoral Thesis. The essence of Existence. On the Quality of Life of Children in the Nordic Countries. Göteborg, Sweden: The Nordic School of Public Health.

Lindström, B. 1999. The Salutiogenic Model as a tool for Quality of Life Enhancement for Children with Special Needs. Exeptionally Education Canada, 9 (1&2): 105-109.

Lindström.B & Eriksson.M. 2005. Salutogenesis. Journal of Epidemiology and Community Health, 59: 440-442.

Lindström,B & Eriksson, M. 2006. Contextualizing salutogenesis and Antonovsky in public health development. Health Promotion International, 21(3): 238 – 244.

Marcia, J. 2006. Jagidentitet och Objektrelationer.
Translated by Sten Andersson. In Ungdomar och Identitet.
Ed. Frisén, A. & Hwang, P. 2006. Stockholm, Sweden: Natur och Kultur.

Margalit, M. & Eysenck, S. 1990. Prediction of coherence in adolescence: gender differences in social skills, personality and family climate.
Journal of Research in Personality, 24: 510-521.

Margalit, M & Leyser, Y. 1991. Community support in Israeli Kibbutz and families of children with disabilities: Family climate and parental coherence. Journal of Special Education, 24(4): 427.

Margalit, M., Raviv, A & Ankonina, D.B. 1992. Coping and Coherence Among Parents With Disabled Children.
Journal of Clinical child Psychology, 21(3): 202-209.

Marsh, S.C., Clinkinbeard, S.S., Thomas, R.M., & Evans, W.P. 2007. Risk and Protective factors predictive of Sense of Coherence during adolescence. Journal of Health Psychology, 12: 281-284.

McNeely, C.A., Nonnemaker, J.M. & Blum, R.W. 2002. Promoting School Connectedness: Evidence from the National Longitudinal Study of Adolescent Health. Journal of School Health, 72(4): 138-146.

Myrin, B. & Lagerström, M. 2006. Health behavior and sense of coherence among pupils aged 14-15. Scandinavian Journal of Caring Science, 20: 339-346.

Myrin, B. & Lagerström, M. 2008. Sense of coherence and psychosocial factors among adolescents. Acta Peadiatrica, 97: 805-811.

Nielsen, A.M. & Hansson, K. 2007. Associations between adolescents' health, stress and sense of coherence. Stress and Health, 23: 331-341.

Neumark-Stzainer, D., Wall, M., Story, M. & Fulkerson, J.A. 2004. Are Family Meal Patterns Associated with Disordered Eating Behaviours among Adolescents?
Journal of Adolescent Health, 35(5): 350-359.

Norris,J, Pratt, M & Kuiack, S. 2003. Parent-Child Relations in Adulthood. An Intergenerational family Systems Perspective. In Handbook of Dynamics in Parent-Child Relations. Ed. Kuczynski, L. 2003. California, USA: Sage Publications, Inc.

Nutbeam, D. 1998. Health Promotion Glossary.
World Health Organization. Geneva.
http://who.int/hpr/NPH/docs/hp_glossary_en.pdf Accessed 3.12.2008

Näsman, E. 1998. Känsla av sammanhang i ett familjeperspektiv.
Forskningsnämdens rapport 98:9. Känsla av sammanhang i teori, empiri och kritik.
Uppsala, Sweden: Ord & Form AB.

Olson, H & Petit, B. 1999. Familjeterapilexicon.
Göteborg: Bokförlaget Korpen.

Olsson, M, Hansson, K, Lundblad, A-M & Cederblad, M. 2006. Sense of Coherence: definition and explanation. International Journal of Social Welfare, 15: 219-229.

Olsson, M.B. & Hwang, C.P. 2002. Sense of Coherence in parents of children with different developmental disabilities. Journal of Intellectual Disability Research, 46(7): 548-559.

Parahoo, K. 1997. Nursing research; Principles, Process and Issues.
Great Britain: MacMillan press ltd.

Rew, L. 2005. Adolescent Health. A Multidisciplinary Approach to Theory, Research, and Intervention. California, USA: Sage Publications, Inc.

Resnick, M.D., Harris, L.J. & Blum. R.W. 1993. The impact of caring and connectedness on adolescent health and well-being.
http://www.cyfc.umn.edu/schoolage/resources/caring.html Accessed 3.12.2008

Rimpelä, A. 2006. Health of Adolescents and young people.
In Health in Finland. Ed. Koskinen, S et al.
National Public Health Institute, KTL; National research and Development Centre for Welfare and Health, STAKES; Ministry of Social Affairs and Health. Vammalan Kirjapaino Oy.

Sagy, S & Antonovsky, H. 1992. The Family Sense of Coherence and the retirement Transition. Journal of Marriage & family, 54(4): 983.

Sagy, S & Antonovsky, H. 1999. Factors Related to the Development of the Sense of Coherence (SOC) in Adolescents. A Retrospective Study.
Polish Psychological Bulletin 30(4): 255-262.

Satir, V. 1972. Peoplemaking. 4th ed.
Palo Alto, California, USA: Science and Behaviour Books, Inc.

Satir, V. 1988. The New Peoplemaking.
Palo Alto, California, USA: Science and Behaviour Books, Inc.

Sollerhed, A-C., Ejlertsson, G. & Apitzsch, E. 2005. Predictors of strong sense of coherence and positive attitudes to physical education in adolescents. Scandinavian Journal of Public Health, 33: 334-342.

Talbot, L.1995. Principles and practice of nursing research.
Missouri, USA: Mosby-Year Book, Inc.

Tamm, M. 2002. Psykosociala teorier vid hälsa och sjukdom. 2 upplagan.
Lund, Sweden; Studentlitteratur.

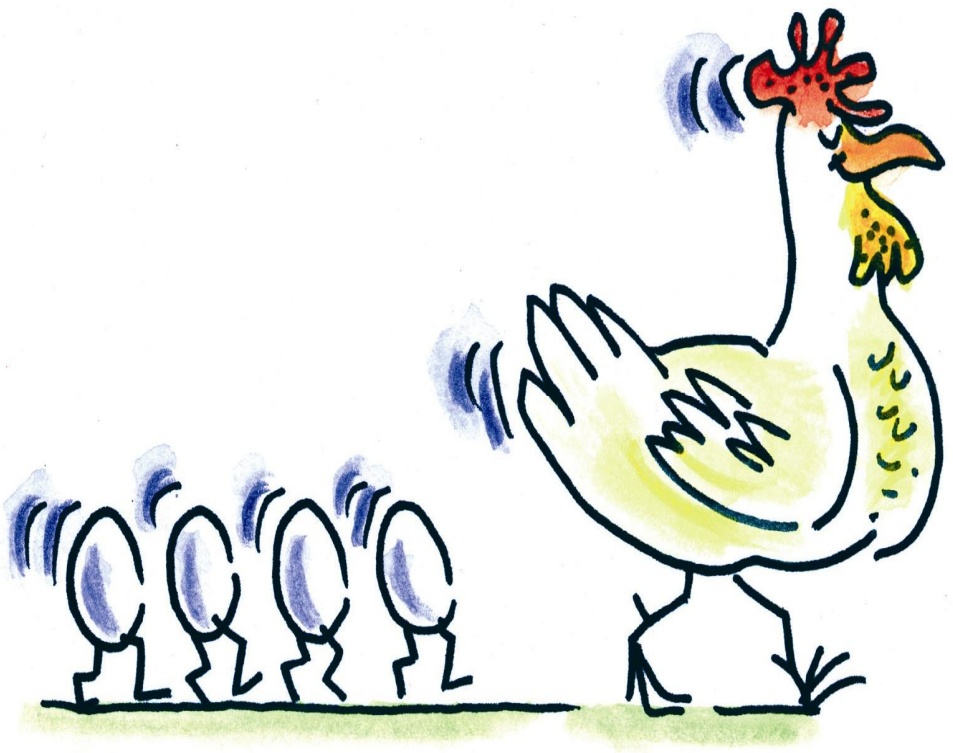
Wickens, L & Greeff, A.P. 2005. Sense of Family Coherence and the Utilization of Resources by First Year Students. The American Journal of Family Therapy, 33: 427 – 441.

World Health Organization. 1946. Constitution of the World Health Organization.
http://whqlibdoc.who.int/hist/official_records/constitution.pdf
Accessed 17.08.2008

World Health 0rganization. 1986. The Ottawa Charter for Health Promotion. Geneva: WHO
http://who.int/hpr/hpr/documents/ottawa.html Accessed 17.08.2008

Appendix 1. Questionnaire for adolescents

FAMILJEN SOM KÄLLA TILL LIVSKRAFT



PAMELA MOSLEY-HÄNNINEN
FOLKHÄLSANS FORSKNINGSCENTRUM
PROGRAMMET FÖR FORSKNING I HÄLSOFRÄMJANDE

20.10.2008

Appendix 1

1. Kön _____Flicka _____Pojke FSOC/

2. Födelseår _____ 3. Modersmål _____

4. Klass _____ 7A _____ 7B _____ 7C _____ 7D _____ 7E

5. Längd _____ cm Vikt _____ kg

6. Hur bedömer du din hälsa?

_____ Mycket bra
_____ God
_____ Medelmåttig
_____ Dålig

7. Har du någon långvarig sjukdom eller något handikapp som en läkare konstaterat? (såsom diabetes, reumatism, allergi, astma, adhd…)

_____ Ja _____ Nej

Ifall du svarade ja, så vad _____

8. Tycker du att du är…?

_____ för mager
_____ lite för mager
_____ lagom
_____ lite för tjock
_____ för tjock

9. Tycker du att du …?

_____ är mycket snygg
_____ är ganska snygg
_____ ser helt vanlig ut
_____ inte är så snygg

_____ inte alls är snygg

10. Följer du just nu någon särskild diet för att gå ner i vikt?

_____ Nej, min vikt är OK _____ Nej, därför att jag är för mager

_____ Nej, men jag borde gå ner i vikt _____ Ja

11. Har du bantat under de senaste 12 månaderna?

_____ Nej
_____ Ja, några dagar
_____ Ja, en vecka
_____ Ja, längre än en vecka men mindre än en månad
_____ Ja, en månad
_____ Ja, längre än en månad men mindre än 6 månader
_____ Ja, 6 månader eller längre

Appendix 1

12. Vilket alternativ beskriver bäst din familjs måltidsvanor under SKOLDAGAR?

_____ Ingen egentlig måltid, var och en tar sig något att äta

_____ Lagad mat, men hela familjen äter inte samtidigt

_____ Gemensam måltid, oftast är alla med vid matbordet

13. Vilket alternativ beskriver bäst din familjs måltidsvanor under VECKOSLUTET?

_____ Ingen egentlig måltid, var och en tar sig något att äta

_____ Lagad mat, men hela familjen äter inte samtidigt

_____ Gemensam måltid, oftast är alla med vid matbordet

14. Känner du dig någonsin ensam?

_____ Ja, mycket ofta _____ Ja, ganska ofta _____ Ja, ibland _____ Nej

15. Hur många nära vänner har du för tillfället?

_____ Inte en enda _____ En _____ Två _____ Tre eller flera

16. Hur upplever du atmosfären i ditt hem?

_____ Mycket bra _____Ganska bra _____Inte bra och inte dålig _____Ganska dålig _____ Mycket dålig

17. Jag bor tillsammans med…

Mor och far bor tillsammans _____ Jag bor med mor och far

Mor och far bor skilt
_____ Jag bor med mor
_____ Jag bor med far
_____ Jag bor mest med mor
_____ Jag bor mest med far
_____ Jag bor lika mycket med mor och far (t.ex. veckovis)

Jag bor inte tillsammans med mina föräldrar

_____ Jag bor i fosterfamilj eller annan familj
_____ Jag bor på barnhem

18. Hur många vuxna över 18 bor hemma hos dig?

_____ En _____ Två _____ Tre eller flera

19. Hur många barn under 18 bor hemma hos dig?

_____ Ett _____ Två _____ Tre eller flera

20. Är du _____ Äldst _____ Yngst _____ Mellanbarn

Appendix 1

21.

A. Vad tycker du om skolan för tillfället?

_____ Jag tycker om min skola mycket _____ Jag tycker om min skola

_____ Jag tycker inte om min skola så mycket _____ Jag tycker inte alls om min skola

B. Det är trevligt att vara i min skola

_____ Jag är starkt av samma åsikt _____ Jag är av samma åsikt

_____ Jag är varken av samma eller annan åsikt _____ Jag är av annan åsikt

C. Jag känner att jag hör hemma i min skola

_____ Jag är starkt av samma åsikt _____ Jag är av samma åsikt

_____ Jag är varken av samma eller annan åsikt _____ Jag är av annan åsikt

22. Är du orolig för eller funderar på din

_____ Fysiska hälsa

_____ Psykiska hälsa

_____ Din kroppsbild (hur kroppen ser ut)

_____ Självkänsla

_____ Relation till kamraterna

_____ Relation till familjen

_____ Skolan

_____ Din eller familjens ekonomiska situation

_____ Vad som händer i världen

_____ Framtiden

23. Känner du dig stressad/oroad? _____ Ja _____ Nej _____ Ibland

Vilka saker oroar dig? _____

_____

_____

24. Trivs du med ditt liv just nu?

_____ Mycket bra _____ Bra _____ Inte särskilt bra _____ Dåligt

Appendix 1

25.

Här är några frågor som berör skilda/olika områden i livet. Varje fråga har 7 möjliga svar. Var snäll och markera den siffra som bäst passar in på ditt svar. Siffran 1 eller 7 är svarens yttervärden. Om du instämmer i det som står under 1, så ringa in 1:an; om du instämmer med det som står under 7, så ringa in 7:an. Om du känner annorlunda, ringa in den siffra som bäst överensstämmer med din känsla. Ge endast ett svar på varje fråga. Det är viktigt att du svarar på alla 13 frågor.

1. Har du en känsla av att du inte riktigt bryr dig om vad som händer runt omkring dig?

1.	2.	3.	4.	5.	6.	7.
mycket sällan eller aldrig						mycket ofta

2. Har det hänt att du blev överraskad av beteendet hos personer som du trodde du kände väl?

1.	2.	3.	4.	5.	6.	7.
har aldrig hänt						har ofta hänt

3. Har det hänt att människor som du litade på har gjort dig besviken?

1.	2.	3.	4.	5.	6.	7.
har aldrig hänt						har ofta hänt

4. Hittills har dit liv:

1.	2.	3.	4.	5.	6.	7.
helt saknat mål och mening						genomgående haft mål och mening

5. Känner du dig orättvist behandlad?

1.	2.	3.	4.	5.	6.	7.
mycket ofta						mycket sällan/aldrig

6. Har du en känsla av att du befinner dig i en obekant situation och inte vet vad du ska göra?

1.	2.	3.	4.	5.	6.	7.
mycket ofta						mycket sällan/aldrig

7. Är dina dagliga sysslor en källa till:

1.	2.	3.	4.	5.	6.	7.
glädje och djup tillfredsställelse						smärta och leda

8. Har du mycket motstridiga känslor och tankar?

1.	2.	3.	4.	5.	6.	7.
mycket ofta						mycket sällan/aldrig

9. Händer det att du har känslor inom dig som du helst inte vill känna?

1.	2.	3.	4.	5.	6.	7.
mycket ofta						mycket sällan/aldrig

10. Även en människa med stark självkänsla kan ibland känna sig som en ”olycksfågel”. Hur ofta har du känt det så?

1.	2.	3.	4.	5.	6.	7.
aldrig						mycket ofta

11. När något har hänt, har du vanligtvis funnit att:

1.	2.	3.	4.	5.	6.	7.
du över- eller undervärderade dess betydelse						du såg saken i dess rätta perspektiv

12. Hur ofta känner du att det inte är någon mening med de saker du gör i ditt dagliga liv?

1.	2.	3.	4.	5.	6.	7.
mycket ofta						mycket sällan/aldrig

13. Hur ofta har du känslor som du inte är säker på att du kan kontrollera?

1.	2.	3.	4.	5.	6.	7.
mycket ofta						mycket sällan/aldrig

Appendix 1

Ringa in det alternativ som passar bäst in på dig

1= Helt av samma åsikt 2= Delvis av samma åsikt 3= Delvis av annan åsikt 4= Helt av annan åsikt

26. Jag tycker att jag är åtminstone lika kunnig och skicklig som andra människor	1	2	3	4
27. Jag tycker att jag har flera goda egenskaper	1	2	3	4
28. Jag känner mig ofta misslyckad	1	2	3	4
29. Jag klarar av saker lika bra som de flesta andra	1	2	3	4
30. Jag har en känsla av att jag duger	1	2	3	4
31. Jag är nöjd med mig själv	1	2	3	4
32. Emellanåt känns det som om jag var totalt värdelös	1	2	3	4
33. Ibland tycker jag att jag inte duger till något	1	2	3	4
34. Jag har ett nära förhållande till mina föräldrar	1	2	3	4
35. Jag tycker att mina föräldrar är varma och kärleksfulla	1	2	3	4
36. Jag känner att mina föräldrar bryr sig om mig	1	2	3	4
37. Jag är nöjd med mitt förhållande till mina föräldrar	1	2	3	4
38. Jag har roligt med min familj	1	2	3	4
39. Jag kan tala med mina föräldrar om mina problem	1	2	3	4

40. Har ni husdjur hemma hos er? _____ Ja _____ Nej

Vilken sorts? _____

Appendix 1

41. Vad tänker du på när man talar om att man har ett gott liv / bra livskvalitet ?

Skriv tre saker

1)_____

2)_____

3)_____

Är dessa också en del av ditt liv?

_____ Ja _____ Till en del _____ Nej

Ringa in det alternativ som passar bäst in på dig

1= Ja / Ofta 2= Ibland 3= Vet inte 4= Sällan 5= Nej / Aldrig

42. Jag känner mig frisk	1	2	3	4	5
43. Jag känner mig glad	1	2	3	4	5
44. Jag känner mig nöjd med livet	1	2	3	4	5
45. Vänner och familjen är viktiga för mig	1	2	3	4	5
46. Jag har det ekonomiskt bra	1	2	3	4	5
47. Jag har bra självkänsla	1	2	3	4	5
48. Jag tror att jag klarar mig bra i livet	1	2	3	4	5
49. Jag får stöd av mina vänner/ min familj	1	2	3	4	5
50. Jag försöker leva ett hälsosamt liv	1	2	3	4	5
51. Jag har hobbyn/intressen som känns meningsfulla	1	2	3	4	5
52. Jag känner mig omtyckt / älskad	1	2	3	4	5
53. Jag har någon jag kan tala med om viktiga saker	1	2	3	4	5
54. I vår familj har vi traditioner som är viktiga för oss	1	2	3	4	5

Appendix 1

55. Har du någonsin haft eller har du nu en ätstörning? _____ Ja _____ Nej

56. Ifall du svarade ja, hurudan ätstörning?

_____ Anorexia Nervosa (anorexi)

_____ Bulimia Nervosa (bulimi)

_____ BED (hetsätningsstörning)

_____ Ätstörning utan närmare specifikation

57. Har någon i familjen / släkten ätstörningar? _____ Ja _____ Nej _____ Vet inte

58. Vem har i så fall en ätstörning? _____ Mor _____ Far _____ Syskon

_____ Styvmor/ Styvfar _____ Annan person

59. Tror du det finns en risk för att du kan få en ätstörning? _____ Ja _____ Nej _____ Kanske

Tack för att du deltog i denna forskning. Frågeformulärens svar behandlas anonymt. Forskaren kan inte identifiera enskilda svarare.
Din klasslärare och skolhälsovårdare kan identifiera dig genom identifikationskoden men har inte tillgång till svarsmaterialet. Forskningsresultat framställs så att ingen enskild svarare eller dennas familj kan identifieras.

Och till sist

60. Ifall du har en ätstörning och ännu inte har fått hjälp eller om du är orolig för att det finns en risk att du utvecklar en ätstörning, vill du då att forskaren berättar din identifikationskod för skolans hälsovårdare så att hon kan kontakta dig och erbjuda dig hjälp.

_____ Ja _____ Nej

TACK FÖR ATT DU SVARADE !!!

Appendix 2. Questionnaire for adults in Swedish

1. Kön _____Kvinna _____Man FSOC/

2. Födelseår _____ 3. Modersmål _____

4. Yrke _____

5. Civilstånd: Gift_____; Sambo_____; Ogift_____; Frånskild_____; Änka/Änkling_____

6. Familjens storlek: _____ Vuxna _____ Barn

7. Eleven på sjunde klassen som svarar på enkäten är min
   _____ Dotter _____ Son
   _____ Styvbarn / Sambos barn
   _____ Adoptivbarn

8. Hur bedömer du din hälsa?

   _____ Mycket bra
   _____ God
   _____ Medelmåttig
   _____ Dålig

9. Längd _____ cm Vikt _____ kg

10. Har du någon långvarig sjukdom eller något handikapp som en läkare konstaterat? (såsom diabetes, högt blodtryck, reumatism, allergi, astma, adhd…)

    _____ Ja _____ Nej

    Ifall du svarade ja, så vad _____

11. Tycker du att du är…?

    _____ för mager
    _____ lite för mager
    _____ lagom
    _____ lite för tjock
    _____ för tjock

12. Tycker du att du…?

    _____ är mycket snygg
    _____ är ganska snygg
    _____ ser helt vanlig ut
    _____ inte är så snygg
    _____ inte alls är snygg

13. Följer du just nu någon särskild diet för att gå ner i vikt?

    _____ Nej, min vikt är OK _____ Nej, därför att jag är för mager

    _____ Nej, men jag borde gå ner i vikt _____ Ja

Appendix 2

14. Har du bantat under de senaste 12 månaderna?

_____ Nej
_____ Ja, några dagar
_____ Ja, en vecka
_____ Ja, längre än en vecka men mindre än en månad
_____ Ja, en månad
_____ Ja, längre än en månad men mindre än 6 månader
_____ Ja, 6 månader eller längre

15. Vilket alternativ beskriver bäst din familjs måltidsvanor under SKOLDAGAR?

_____ Ingen egentlig måltid, var och en tar sig något att äta

_____ Lagad mat, men hela familjen äter inte samtidigt

_____ Gemensam måltid, oftast är alla med vid matbordet

16. Vilket alternativ beskriver bäst din familjs måltidsvanor under VECKOSLUTET?

_____ Ingen egentlig måltid, var och en tar sig något att äta

_____ Lagad mat, men hela familjen äter inte samtidigt

_____ Gemensam måltid, oftast är alla med vid matbordet

17. Hurdan är atmosfären i ditt hem?

_____ Mycket bra _____Ganska bra _____Inte bra och inte dåligt _____Ganska dåligt _____Mycket dåligt

18. Oroar du dig för eller funderar du på

Din	Ditt barns
_____ Fysiska hälsa	_____ Fysiska hälsa
_____ Psykiska hälsa	_____ Psykiska hälsa
_____ Kroppsbild / utseende	_____ Kroppsbild / utseende
_____ Självkänsla	_____ Självkänsla
_____ Relation till kamraterna	_____ Relation till kamraterna
_____ Relation till familjen	_____ Relation till familjen
_____ Ditt arbete	_____ Skolgång
_____ Din eller familjens ekonomiska situation	_____ Ekonomiska situation
_____ Vad som händer i världen	
_____ Framtid	_____ Framtid

Appendix 2

19. Här är några frågor som berör skilda/olika områden i livet. Varje fråga har 7 möjliga svar. Var snäll och markera den siffra som bäst passar in på ditt svar. Siffran 1 eller 7 är svarens yttervärden. Om du instämmer i det som står under 1, så ringa in 1:an; om du instämmer med det som står under 7, så ringa in 7:an. Om du känner annorlunda, ringa in den siffra som bäst överensstämmer med din känsla. Ge endast ett svar på varje fråga. Det är viktigt att du svarar på ALLA 13 frågor.

1. Har du en känsla av att du inte riktigt bryr dig om vad som händer runt omkring dig?

1.	2.	3.	4.	5.	6.	7.
mycket sällan eller aldrig						mycket ofta

2. Har det hänt att du blev överraskad av beteendet hos personer som du trodde du kände väl?

1.	2.	3.	4.	5.	6.	7.
har aldrig hänt						har ofta hänt

3. Har det hänt att människor som du litade på har gjort dig besviken?

1.	2.	3.	4.	5.	6.	7.
har aldrig hänt						har ofta hänt

4. Hittills har dit liv:

1.	2.	3.	4.	5.	6.	7.
helt saknat mål och mening						genomgående haft mål och mening

5. Känner du dig orättvist behandlad?

1.	2.	3.	4.	5.	6.	7.
mycket ofta						mycket sällan/aldrig

6. Har du en känsla av att du befinner dig i en obekant situation och inte vet vad du ska göra?

1.	2.	3.	4.	5.	6.	7.
mycket ofta						mycket sällan/aldrig

Appendix 2

7. Är dina dagliga sysslor en källa till:

1.	2.	3.	4.	5.	6.	7.
glädje och djup tillfredsställelse						smärta och leda

8. Har du mycket motstridiga känslor och tankar?

1.	2.	3.	4.	5.	6.	7.
mycket ofta						mycket sällan/aldrig

9. Händer det att du har känslor inom dig som du helst inte vill känna?

1.	2.	3.	4.	5.	6.	7.
mycket ofta						mycket sällan/aldrig

10. Även en människa med stark självkänsla kan ibland känna sig som en ”olycksfågel”. Hur ofta har du känt det så?

1.	2.	3.	4.	5.	6.	7.
aldrig						mycket ofta

11. När något har hänt, har du vanligtvis funnit att:

1.	2.	3.	4.	5.	6.	7.
du över- eller undervärderade dess betydelse						du såg saken i dess rätta perspektiv

12. Hur ofta känner du att det inte är någon mening med de saker du gör i ditt dagliga liv?

1.	2.	3.	4.	5.	6.	7.
mycket ofta						mycket sällan/aldrig

13. Hur ofta har du känslor som du inte är säker på att du kan kontrollera?

1.	2.	3.	4.	5.	6.	7.
mycket ofta						mycket sällan/aldrig

Appendix 2

20. Känner du dig stressad/oroad? _____ Ja _____ Nej _____ Ibland

Vilka saker oroar dig? _____

_____

_____

21. Trivs du med ditt liv just nu?

_____ Mycket bra _____ Bra _____ Inte särskilt bra _____ Dåligt

Ringa in det alternativ som bäst stämmer in på dig

1= Ja / Ofta 2= Ibland 3= Vet inte 4= Sällan 5= Nej / Aldrig

22. Jag känner mig frisk	1	2	3	4	5
23. Jag känner mig glad	1	2	3	4	5
24. Jag känner mig nöjd med livet	1	2	3	4	5
25. Vänner och familjen är viktiga för mig	1	2	3	4	5
26. Jag har det ekonomiskt bra	1	2	3	4	5
27. Jag har bra självkänsla	1	2	3	4	5
28. Jag tror att jag klarar mig bra i livet	1	2	3	4	5
29. Jag får stöd av mina vänner/ min familj	1	2	3	4	5
30. Jag försöker leva ett hälsosamt liv	1	2	3	4	5
31. Jag har hobbyn/intressen som känns meningsfulla	1	2	3	4	5
32. Jag känner mig omtyckt / älskad	1	2	3	4	5
33. Jag har någon jag kan tala med om viktiga saker	1	2	3	4	5
34. I vår familj har vi traditioner som är viktiga för oss	1	2	3	4	5

Appendix 2

35. Vad tänker du på när man talar om att man har ett gott liv / en bra livskvalitet ?

Skriv tre saker

1)_____

2)_____

3)_____

Är dessa också en del av ditt liv?

_____ Ja _____ Till en del _____ Nej

36. Har du någonsin haft eller har du nu en ätstörning? _____ Ja _____ Nej

37. Ifall du svarade ja, hurudan ätstörning? _____ Anorexia Nervosa (anorexi)

_____ Bulimia Nervosa (bulimi)

_____ BED (hetsätningsstörning)

_____ Ätstörning utan närmare specifikation

38. Har någon i familjen / släkten ätstörningar? _____ Ja _____ Nej _____ Vet inte

39. Ifall du svarade ja, vem har ätstörning? _____ Mor _____ Far _____ Syskon

_____ Styvmor/ Styvfar _____ Annan person

40. Tror du att det finns en risk för att ert barn kan få en ätstörning?

_____ Ja _____ Nej

41. Vad tror du skyddar henne/honom från att få en ätstörning?

_____

_____

_____

_____

_____

_____

TACK FÖR ATT DU SVARADE !!!

Appendix 3. Questionnaire for adults in Finnish

1. Sukupuoli _____ Nainen _____Mies FSOC/

2. Syntymävuosi _____ 3. Äidinkieli _____

4. Ammatti _____

5. Siviilisääty: Naimisissa_____; Avoliitossa_____; Naimaton_____; Eronnut_____; Leski_____

6. Perheen koko: _____ Aikuista _____Lasta

7. Oppilas joka vastaa kyselyyn on
_____ Tyttäreni _____ Poikani
_____ Lapsipuoleni / Avopuolisoni lapsi
_____ Ottolapseni

8. Miten koet terveytesi?
_____ Erittäin hyvä
_____ Hyvä
_____ Keskinkertainen
_____ Huono

9. Pituus _____ cm Paino _____ kg

10. Onko sinulla jokin lääkärin toteama pitkäaikainen sairaus?
(esim. sokeritauti (diabetes), korkea verenpaine, reuma, allergia, astma…)

_____ Kyllä _____ Ei

Jos vastasit kyllä, niin mikä _____

11. Oletko mielestäsi…?

_____ aivan liian laiha
_____ liian laiha
_____ sopiva
_____ liian lihava
_____ aivan liian lihava

12. Oletko mielestäsi…?

_____ erittäin hyvännäköinen
_____ hyvännäköinen
_____ tavallisen näköinen
_____ ei niin hyvännäköinen
_____ ei ollenkaan hyvännäköinen

13. Oletko tällä hetkellä dieetillä laihtuaksesi?

_____ Ei, painoni on OK _____ Ei, koska olen liian laiha

_____ Ei, mutta minun pitäisi laihtua _____ Kyllä

Appendix 3

14. Oletko ollut laihdutuskuurilla viimeisten 12 kk aikana?

_____ En ole
_____ Kyllä, pari päivää
_____ Kyllä, yli viikon mutta alle kuukauden
_____ Kyllä, ainakin kuukauden
_____ Kyllä, yli kuukauden mutta alle puoli vuotta
_____ Kyllä, kuusi kuukautta tai pidemmän ajan

15. Mikä näistä vaihtoehdoista kuvailee parhaiten perheenne ruokailutapoja KOULUPÄIVINÄ?

_____ Ei varsinaista ateriaa, jokainen ottaa itse jotain syötävää

_____ Valmistettu ruokaa, mutta koko perhe ei syö yhdessä

_____ Yhteinen ateria, useimmiten kaikki syövät yhdessä

16. Mikä näistä vaihtoehdoista kuvailee parhaiten perheenne ruokailutapoja VIIKONLOPPUISIN?

_____ Ei varsinaista ateriaa, jokainen ottaa itse jotain syötävää

_____ Valmistettu ruokaa, mutta koko perhe ei syö yhdessä

_____ Yhteinen ateria, useimmiten kaikki syövät yhdessä

17. Millainen on mielestäsi kotinne ilmapiiri?

_____ Erittäin hyvä _____ Hyvä _____ Ei hyvä, eikä huono _____ Huono _____ Erittäin huono

18. Oletko huolestunut tai mietityttääkö

Oma	_____ Fyysinen terveytesi	Lapsesi	_____ Fyysinen terveys
	_____ Psyykkinen terveytesi		_____ Psyykkinen terveys
	_____ Kehonkuvasi		_____ Kehonkuva
	_____ Itsetuntosi		_____ Itsetunto
	_____ Ystävyyssuhteesi		_____ Ystävyyssuhteet
	_____ Perhesuhteesi		_____ Perhesuhteet
	_____ Työsi		_____ Koulunkäynti
	_____ Sinun tai perheen rahatilanne		_____ Rahatilanne
	_____ Maailmantapahtumat		
	_____ Tulevaisuutesi		_____ Tulevaisuus

Appendix 3

19. Ohessa on kolmetoista kysymystä, jotka koskevat eri elämänalueitasi. Jokaisessa kysymyksessä on seitsemän vastausvaihtoehtoa. Ympäröi numero siten, että 1. ja 7. ovat kulloisenkin asteikon ääripäitä. Jos väittämä numero 1 kuvaa tunnettasi parhaiten, ympyröi 1 ja jos taas väittämä numero 7 kuvaa parhaiten tunnettasi, ympyröi se. Jos vastaukset 1 tai 7 eivät tunnu kuvaavan tilannettasi, ympyröi numero joka parhaiten tekee sen niiden välillä. Ympyröi kustakin kysymyksestä yksi vastausvaihtoehtonumero. On tärkeätä, että vastaat kaikkiin 13 kysymyksiin.

1. Tuntuuko sinusta siitä, ettet oikeastaan välitä siitä mitä ympärilläsi tapahtuu?

1. hyvin harvoin/ ei koskaan 2. 3. 4. 5. 6. 7. erittäin usein

2. Onko joskus niin, että olet yllättynyt sellaisten ihmisten käyttäytymisestä, jotka olet uskonut tuntevasi hyvin?

1. ei koskaan 2. 3. 4. 5. 6. 7. aina

3. Onko käynyt niin, että ihmiset, joihin luotit, tuottivat sinulle pettymyksen?

1. ei koskaan 2. 3. 4. 5. 6. 7. aina

4. Tähän menneessä elämäsi on ollut

1. vailla tarkkoja tavoitteita tai tarkoituksetonta 2. 3. 4. 5. 6. 7. erittäin tarkoituksellista ja tavoitteellista

5. Tuntuuko sinusta, että sinua kohdellaan epäoikeudenmukaisesti?

1. erittäin usein 2. 3. 4. 5. 6. 7. erittäin harvoin tai ei koskaan

6. Onko sinulla joskus sellainen tunne, että olet oudossa tilanteessa, etkä tiedä, mitä tehdä?

1. erittäin usein 2. 3. 4. 5. 6. 7. ei koskaan

Appendix 3

7. Arkipäiväisten asioittesi hoitaminen on

1. erittäin mielekästä ja tyydyttävää
2.
3.
4.
5.
6.
7. erittäin tylsää ja epätyydyttävää

8. Koetko, että tunteesi ovat ristiriidassa keskenään?

1. erittäin usein
2.
3.
4.
5.
6.
7. hyvin harvoin tai ei koskaan

9. Koetko, että sinussa on tunteita, joita et mielelläsi tuntisi?

1. erittäin usein
2.
3.
4.
5.
6.
7. hyvin harvoin tai ei koskaan

10. Useat, jopa vahvan luonteen omaavat ihmiset, kokevat joskus epäonnistuneensa. Kuinka usein sinusta on tuntunut siltä?

1. ei koskaan
2.
3.
4.
5.
6.
7. erittäin usein

11. Kun jotain on tapahtunut, oletko sinä jälkikäteen

1. väheksynyt tai ylikorostanut sen merkitystä
2.
3.
4.
5.
6.
7. nähnyt sen oikeassa valossa

12. Kuinka usein sinusta tuntuu, että päivittäisillä asioilla on vähäinen merkitys?

1. erittäin usein
2.
3.
4.
5.
6.
7. erittäin harvoin tai ei koskaan

13. Kuinka usein sinusta tuntuu, ettet ole varma pystytkö hallitsemaan itseäsi?

1. erittäin usein
2.
3.
4.
5.
6.
7. erittäin harvoin tai ei koskaan

20. Oletko stressaantunut / huolestunut? _____ Kyllä _____ Ei _____ Joskus

Mitkä asiat huolestuttavat? _____

_____

_____

Appendix 3

21. Oletko tyytyväinen elämääsi tällä hetkellä?

_____ Erittäin tyytyväinen _____ Hyvin tyytyväinen

_____ En kovin tyytyväinen _____ En lainkaan tyytyväinen

Ympäröi vaihtoehto joka parhaiten sopii kohdallasi

1= Kyllä / Usein 2= Joskus 3= En osaa sanoa 4= Harvoin 5= Ei / Ei koskaan

22. Tunnen itseni tällä hetkellä terveeksi	1	2	3	4	5
23. Tunnen itseni tällä hetkellä iloiseksi	1	2	3	4	5
24. Olen tällä hetkellä tyytyväinen elämääni	1	2	3	4	5
25. Perhe ja ystävät ovat minulle tärkeitä	1	2	3	4	5
26. Olen tyytyväinen taloudelliseen tilanteeseeni	1	2	3	4	5
27. Minulla on hyvä itsetunto	1	2	3	4	5
28. Luulen pärjääväni elämässä	1	2	3	4	5
29. Saan tukea ystäviltäni ja perheeltäni	1	2	3	4	5
30. Yritän elää terveellistä elämää	1	2	3	4	5
31. Minulla on mielekkäitä harrastuksia	1	2	3	4	5
32. Tunnen itseni pidetyksi / rakastetuksi	1	2	3	4	5
33. Minulla on joku jonka kanssa voin keskustella tärkeistä asioista	1	2	3	4	5
34. Perheellämme on tärkeitä perinteitä	1	2	3	4	5

Appendix 3

35. Mitä asioita ajattelet kun puhutaan hyvästä elämästä / hyvästä elämänlaadusta?

Luettele kolme asiaa

1)_____

2)_____

3)_____

Ovatko nämä asiat osa elämääsi?

_____ Kyllä _____ Osittain _____ Ei

36. Kärsitkö nyt tai oletko joskus kärsinyt syömishäiriöstä? _____ Kyllä _____Ei

37. Jos vastasit kyllä, niin minkälaisesta? _____ Anorexia Nervosa (anoreksia)

_____ Bulimia Nervosa (bulimia)

_____ BED (ahmimishäiriö)

_____ EDNOS (muu, ei diagnostisoitu)

38. Onko perheessänne/suvussanne syömishäiriöitä? _____ Kyllä _____ Ei _____ En tiedä

39. Jos vastasit kyllä, niin kenellä on ___ Äidillä ___ Isällä ___ Sisarella / Veljellä

___ Äiti- tai isäpuolella ___ Jollain muulla

40. Onko olemassa riski, että lapsesi voisi sairastua syömishäiriöön?

_____ Kyllä _____ Ei

41. Mitkä asiat voisivat suojata lastasi syömishäiriöltä ?

_____

_____

_____

_____

_____

KIITOS KUN VASTASIT !!!

Appendix 4. Correlation Matrix of Sense of Coherence (SOC) and General Resistance resources that adolescents perceive exist in their lives

	TOTAL SOC	GIRL SOC	BOY SOC	1	2	3	4	5	6	7	8	9	10	11	12	13
AD TOTAL SOC	1															
GIRL SOC		1														
BOY SOC			1													
GENERAL RESISTANCE RESOURCES																
PHYSICAL HEALTH																
1) FEEL HEALTHY	0,259*	0,154	0,476*	1												
2)LIFESTYLE	0,168	0,231	0,191	0,463**	1											
MENTAL HEALTH																
3) FEEL HAPPY	0,572**	0,634**	0,556**	0,557**	0,328*	1										
4) FEEL CONTENT	0,634**	0,686**	0,535**	0,367**	0,322*	0,701**	1									
5) SELF-ESTEEM	0,437**	0,479**	0,255	0,345**	0,287*	0,430**	0,571**	1								
6) SUCCESS	0,471**	0,431**	0,518*	0,276**	0,386**	0,418**	0,501**	0,469**	1							
SOCIAL HEALTH																
7) FAM + FRIENDS	0,045	0,012	a	0,108	0,220	0,063	0,012	-0,147	-0,121	1						
8) MONEY	0,313*	0,25	0,448*	0,338**	0,196	0,469**	0,346**	0,375**	0,324*	-0,101	1					
9) SUPPORT	0,478**	0,573**	0,342	0,031	0,214	0,463**	0,463**	0,216	0,415**	0,161	0,104	1				
10) FEEL LOVED	0,514**	0,623**	0,415*	0,485**	0,209	0,677**	0,699**	0,359**	0,493**	0,096	0,332*	0,500**	1			
11) DIALOGUE	0,431**	0,393**	0,597**	0,461**	0,089	0,562**	0,390**	0,185	0,352**	0,04	0,211	0,629**	0,635**	1		
SPIRITUAL HEALTH																
12) HOBBIES	0,417**	0,374*	0,480*	0,356**	0,448**	0,526**	0,480**	0,338**	0,560**	0,066	0,443**	0,325*	0,415**	0,275*	1	
13) TRADITIONS	0,054	0,274	-0,023	0,195	0,061	0,234	0,065	-0,177	0,176	0,151	0,046	0,340**	0,341**	0,366**	0,037	1
TOTAL GRR'S	0,651**	0,723**	0,539*	0,501**	0,476**	0,753**	0,775**	0,607**	0,651**	0,129	0,426**	0,659**	0,772**	0,561**	0,500**	0,353**

**Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

a. Cannot be computed because at least one of the variables is constant.

Appendix 5. Correlation Matrix of Sense of Coherence (SOC) and factors influencing health that adolescents worry about.

	TOTAL SOC	GIRL SOC	BOY SOC	1	2	3	4	5	6	7	8	9	10
AD TOTAL SOC	1												
GIRL SOC		1											
BOY SOC			1										
WORRIES ABOUT													
1) PHYSICAL HEALTH	0,260*	0,078	0,552**	1									
2) MENTAL HEALTH	0,221	0,242	a	0,449**	1								
3) BODY IMAGE	0,443**	0,483**	0,256	0,541**	0,484**	1							
4) SELF-ESTEEM	0,195	0,180	a	0,429**	0,319*	0,536**	1						
5) FRIENDS	0,195	0,159	a	0,438**	0,239	0,388**	0,255*	1					
6) FAMILY	0,287*	0,304	a	0,477**	0,262*	0,430**	0,429**	0,564**	1				
7) SCHOOL	0,156	0,133	-0,066	0,336**	0,262*	0,327*	0,329*	0,390**	0,438**	1			
8) MONEY	0,146	0,166	a	0,016	-0,089	0,079	0,052	0,149	0,327**	0,388**	1		
9) WORLD	0,128	0,084	-0,200	0,229	0,191	0,273*	0,233	0,274*	0,324*	0,505**	0,295*	1	
10) FUTURE	0,297*	0,123	0,483*	0,377**	0,224	0,256*	0,278*	0,141	0,279*	0,435**	0,105	0,471**	1

**Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

a. Cannot be computed because at least one of the variables is constant.