Stress, Over-consumption and Climate Change

Can humans manage climate change if social norms would include the significance of attachment, altruism, long term global thinking and local action?

by

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ABSTRACT

This thesis consists of four parts. Firstly an analysis of tendency of increasing stresses consumption and Green-House-Gas emissions (GHG-emissions) in today's Swedish post-modern consumption society (as well as in many other post-modern cultures). Recently published results from the psychological and medical fields have been used in order to try to illustrate healthier and happier lifestyles which the author fit into a sustainable context. This analysis results in a model of the relations between stress, overconsumption and climate change. Secondly psychological theories were selected to illustrate an alternative for a more sustainable and climate neutral lifestyle. Large-scale medical, psychological and anthropological surveys on health, wellbeing, quality of life, happiness and lifestyles which decrease GHG emissions (e.g climate change) were used for discussing an implementation of such intentions. Thirdly, a model for behaviour change integrating attitudes, norms, self-efficacy and intentions for "Making change happen" (ANSIM) was constructed in order to promote change in a more sustainable and climate-neutral direction. Fourthly, a study was conducted to try to measure attitudes, norms and behaviour towards climate change as well as many different items related to quality of life. For this purpose an instrument: Quality of life, Attachment and Climate change (QAC, Tibblin, 2008) was constructed in order to measure this quite new science field: psychology and sustainability, which was named "sustainable psychology". The participants in the study were mainly middle age, middle class academic men in Östra Torn, Lund, Sweden. The focus on this group was motivated by their tendency to have a fuel/energy demanding lifestyle and a behavioural change toward a more sustainable life style would have a significant effect and they also have potential to serve as role models for other men. Empirical evidence from the study (with 81 men) found that quality of life in this sample was to spend time with family, friends and exercising; working and being in nature. The most highly valued activities were to be more physical active; secondarily they felt they needed to spend more time with their partners and their children. They worried mostly about environmental pollution, the unequal global distribution of natural resources, loss of biodiversity, climate change and war. Significant correlations were found between securely attached individuals and happiness, satisfaction with significant relations and life situation, social competence, sense of meaning in life, and "macro worries" and less private "micro worries, engagement in the climate change issue and in decision to act in a more climate neutral way.

Keywords: *over-consumption, climate change, social norms, lifestyles, attachment, altruism and long-term planning.*

Acknowledgments

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1. Introduction

This thesis supposes that economic growth and consumption are the main driving forces today and the overall highest valued phenomena in a global world. In post-modern consumption societies (Bauman, 1998) there are aspects connected to economic growth such as increasing consumption, market availability, exchangeability, and time aspects. This thesis argue for the significance of close emotional relationships and cooperation as a strategy to increase sustainable lifestyles, with decreased stress levels, unhealthiness, over-consumption, greenhouse gas (GHG) emissions and climate change. The context in this thesis is the post-modern consumption societies, with their short-term and self-interest oriented norms and goals. Social norms and values such as attachment, health and happiness are discussed in a triangular relationship with the principles of economic growth, and with climate change. The thesis will emphasize the significance of attachment relationships and social support, and the immaterial and renewable sources for happiness and a meaningful life. Altruism and solidarity, local markets, long-term and collectivistic thinking and planning; physical daily life activities and vegetarianism are cornerstones in the author's hypothesis on decreasing global warming. The argument is that if we do not act in a more ecological, social, cultural and economic sustainable direction for managing and reducing climate change, climate change will probably hit us with such power that it will be very expensive both in terms of economy, humanity and natural resources damage; that is, if we don't fast and drastically change our social norms and lifestyle. The enormous, exponential increase of goods and meat consumption, energy and fuel consumption, transport by vehicles and airplanes, as well as travelling and leisure activities, releases enormous quantities of carbon dioxide and other GHG, which increase global warming and climate change.

1.2 Aim and Problem

What kind of paradigm shift in norms and mindsets is needed to manage threats from increasing climate change? The aim of this project is contribute to the reduction of climate change and an increase of health and well-fare by offering policymakers, leaders in business, municipalities and government, as well as schools, etc., knowledge and instruments to modify social norms and lifestyle in a more sustainable and climate neutral direction for the purpose of reducing climate change.

1.3 Research questions and hypothesis

The main research question is:

Is it possible to change social norms and lifestyles in a direction toward sustainable living with respect to climate, and at the same time enabling a healthier and happier life?

To do so, this thesis focuses on some more specific areas:

- Is it possible to do an integration of attachment theory, positive psychology, health psychology, environmental psychology, social psychology and anthropological and epidemiological studies on health and longevity: a "sustainable psychology"?
- Is it possible that this "sustainable psychology could function as a complement to green technology, green economy and green policy, to meet the complex problem of climate change?
- Is it possible that healthy and happy, long-lived cultures illustrate lifestyles that can be adapted to the current post-modern period as an antidote to climate change as well as to stress, illness and over-consumption?

Hypothesis:

- Insecurely attachment in childhood leads to an increase in focus on short-term self-gain, increased stress, and vulnerability to social, psychological and physical illness. And, in addition, this will lead to a tendency to over-consume.
- Securely attached people have a stronger tendency (then insecurely attached people) to have an altruistic, loyal and caring attitude and commitment to environmental issues like climate changes, as well as to care for future generations needs (ibid).

1.4 Theoretical framework

In this thesis there is an integration of diverse psychological theories, to meet the need for a sustainable- and climate neutral lifestyle. The concept of "sustainable psychology" as the author has constructed in this work, will be presented as an integration of attachment theory (mainly from Broberg, 2006), environmental psychology (Bell, 2001), health psychology (mainly Ogden, 2004) positive psychology (Seligman, 2007 and Diener & Suh 2000), epidemiology and anthropology studies (mainly Robbins 2007) and social psychology (Cialdini, 2005, Bandura 1977, 1986, 1997, 1998 and Rutter & Quine 2002). The "sustainable psychology" is constructed as a psychological perspective for changing behaviour in a more sustainable, healthy and climate-neutral direction. This thesis takes the perspective from attachment theories studies about the importance of secure emotional attachment to some significant not exchangeable persons during lifecycle. People with secure or insecure attachments have differing outcomes in psychological, physiological and social health.

Insecurely attached persons have higher vulnerability for stress, abuse/over-consumption, and unhealthiness. Attachment theories will be related to epidemiology studies on health and longevity, health psychology, measures for subjective wellbeing, happiness and quality of life. These theories and studies emphasize other values than economic growth, self-interest and short-term thinking, market availability and exchangeability. The theoretical areas the thesis focuses are overlapping each other, these subjects' essences and goals, have similar sources: health, altruism, solidarity, care, social support, happiness, satisfaction and a meaningful life. Due to scientific studies and hypothesis in this thesis the author argue that it is not impossible that insecure attachment, stress, over-consumption, economic growth are related, effected by self-interest and short-term thinking, harmful for humans' health and wellbeing, as well as for ecosystems, biodiversity and climate on earth.

This thesis introduces methods to influence people in to more sustainable climate friendly behaviours. A new model: ANSIM (Attitude, Norms, Self-efficacy and Intention to Make change happen, Tibblin, 2008) is introduced to possibly modify people's behaviour in direction to sustainable as well as climate neutral ways. The paper will discuss social norms – as a significant possibility for a paradigm shift in mindset and behaviour and – hopefully – a way to a more climate-neutral and sustainable lifestyle. Could psychological knowledge influence and change social norms of happiness and success by informing people that for example material consumption, high income and self interest do not cause health and happiness? Instead health and happiness are related to social support, intimacy, solidarity, altruism and a positive, open attitude according to Seligman (2007) and Diener and Suh (2000). An instrument: Quality of life, Attachment and Climate Change (QACC, Tibblin, 2008) is introduced to measure attitudes, norms and behaviour in relation to climate change; self-identity/self-image, perceived needs, close relations, happiness, satisfaction, strengths, attachment strategies, micro (personal matter) and macro(global issues) worry and quality of life. To apply hypothesis the author conducted an empirical study of a population of 81 men in Östra Torn, Lund, Sweden. The reason that the author chose middle age men as a sample is that in general, men's lifestyles entail ca 20% higher energy consumption than women, especially in relation to transport and restaurant consumption (Carlsson- Kanyama and Räty, 2008). Men are today still more represented than women in power positions in the business and political worlds and can therefore have more powerful capacity to influence (ibid); if men change to behave in a more climate friendly way, they can stand as models for other men to decrease their fuel/energy consumption, with relatively greater gains than for their women equivalents. "Sustainable Psychology" (Tibblin, 2008) are introduced, an integration of psychological theoretical frameworks and study results in this thesis. Finally there will be recommendations and discussions about how to realize this thesis's conclusion in reality.

1.5 Causal Loop Diagram (CLD) of Stress-Overconsumption-Climate change

Below is a CLD, an approach to understand relations and hypothesis in this thesis.

Stress-overconsumption-climate change
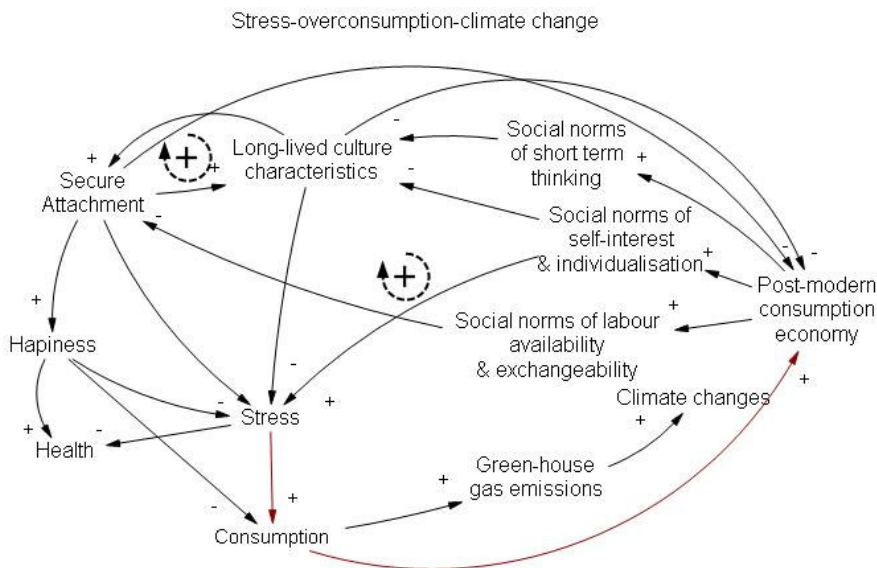
This Causal Loop Diagram tries to describe the causes, effects and relations from the perspective of system analysis. Primary one can observe links between *secure attachment*[1] and moderate (less) stress, as well as moderate (less) consumption [2]plus more happiness and wealth. Secure attachment is also linked positive to *the long-lived cultures characteristics*[3]. A second relation describes from two directions increasing consumption, increasing GHG emissions (global warming) and climate change links leads to climate change in this CLD namely:

1. Insecure attachment - increased Stress levels – which increases Consumption – which leads to increased GHG emissions – and increasing (global warming) Climate changes.

2a. Post-modern consumption economy – associates to stronger (more) social norms of availability and exchangeability in labour-market – which are supposed to lead to less secure attachment – more stress- more consumption- more GHG – more (global warming) climate change.

2b. Post-modern consumption economy – associates to stronger (more) social norms of self-interests and individualisation, as well as stronger (more) social norms of short-term, thinking which are supposed to complicate/decrease long-lived characteristics which will increase stress – consumption- green-house gases and lead to (global warming) climate change.

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[1] "Secure Attachment" includes a lot of physical contact, trust, security, social competence, collaboration and good social support, less stress, illness and abuse/over-consumption, satisfaction, intimacy, independence, extraversion and openness, positive attitude and happiness.

[2] Consumption include: food and drink, drugs; goods, heating houses, fuel to vehicles and aeroplanes.

[3] "Long-lived characteristics includes": daily physically activities, a lot of physical contact, 90%, moderate intake of vegetarian unrefined food with very high nutritional content, good social support and collaboration, avoidance of stress, shared participation in cultural manifestations and moderate consumption of alcohol (no drugs) and material things.

3. However, social norms that highlight and value secure attachment and characteristics from long-lived cultures can probably, also according to this thesis, decrease post-modern consumption societies' economic principles of short-term thinking, individualisation/self-interest and demands for availability and exchangeability in labour markets. What can be seen is a re-inforcing loop: The more social norms of self-interest and individualisation, the less long-lived culture characteristics, the less secure attachment, the less happiness, the more consumption, the more post-modern consumption economy, the more social norms of self-interest and individualisation.... Observe that there are no balancing loops in this CLD. Is that a telltale sign of a system headed for catastrophe?

1.6 Limitations

Because of space limitations there was a need for theory limitations, even excluding relevant and significant psychological theories such as Bronfenbrenner's Ecological System theory, Cialdini's (2005) theories about influence and psychological coping strategies Existential psychology and Cognitive perspectives. In this work the author chose to limit *consumption* to food, drugs, goods, and fuel for cars, motorbikes and aeroplanes and to heat homes. Due to space limitation historical perspective of post-modern consumption societies is excluded. There were time and space limitations which excluded the option to interview men in power-holder situations who have worked in a business as usual orientation but changed norms, attitude and behaviour toward a more sustainable and climate neutral way; as was an idea. There were both choice and a limitation with respect to the survey participants; they were residents or visitors in the same district: Östra Torn in Lund, Sweden, as the author; because of possibility to simplify anonymity and higher amount of participators (who could walk to the author's mailbox and anonymous deliver the questionnaire when they wanted).

2. Background

2. 1 Climate change

Temperature and climate have been changing throughout the earth's history. However, modern humans' activities have increased concentration of GHG (carbon dioxide, methane and nitrous oxide) in the troposphere especially by burning fossil fuels, clearing and burning forests and grasslands, and raising large quantities of domestic animals (Miller, 2005: 462, 465). "Global warming" is defined as warming of average global temperature by multiple degrees per century, thought by many to be due to atmospheric pollution and associated GHG, with greenhouse effects, and due to altered land use patterns. The "Greenhouse effect" is the excess heating of the planet due to carbon dioxide, methane gases and other gaseous pollutants trapping too much heat close to Earth's surface (Bell, 2001). Global warming includes the increasing temperature in the troposphere, which lead to climate change. "Global climate change" is a broad term that refers to changes in many aspects of the earth's climate, including temperature, as well as storm- and precipitation intensity. Some of the earth's floating ice

and land-based glaciers are now gradually melting. Most climate scientists agree that human activities have influenced recent temperature increases and will lead to significant temperature increases during this century. Climate scientists believe it is very likely (90-99% probability) that the earth's mean surface temperature will increase by 1.4 - 5.8 Celsius degree between year 2000 and 2100 (Miller, 2005:469). Such rapid temperature change can affect the availability of water resources, wind patterns and weather conditions, increase average sea levels and flood coastal wetlands and cities and low-lying islands, and alter the structure and location of some of world's biomes. As a consequence, widespread rioting and regional conflict have a higher probability in some climate vulnerable countries, faced with dwindling food, water and energy supplies (Miller, 2005: 466, 469, 471, 472). Warmer air temperatures leads to releases of methane gas stored in wetlands and tundra soils, causing a feedback loop that makes the air even warmer. A warmer troposphere would have most harmful effects for poor people in the tropics who will suffer the most. Effects of warmer atmosphere for the world include complex and diverse relations such as effects on coral reefs, beach erosion, loss of wildlife habitat and species as well as disappearance of some forests and increasing fires from drying. Global warming also causes changes in water supply, decreased water quality, increasing irrigation demand, increasing pests, crop diseases and extinction of some plant and animal species, loss of habitants and disruption of aquatic life. There will also be prolonged heat waves and droughts, and increasing flooding from more frequent, intense and heavy rainfall in some areas. Climate changes will also increase water pollution from coastal flooding and increase formation of brown-air smog. Finally, the effects on human population and health are predicted to include increasing deaths from heat, diseases and disruption of food and water supplies. And there will be need for taking care of more environmental/ climate refugees and an increasing migration. (Miller, 2005:474-475).

2. 2 Sweden – a post-modern consumption society?

Economic growth defines our society and reality, according to Forsberg (2007). Almost every level in the post-modern society participates to increase growth and material consumption. The climate crisis is subordinate to the economy's short-term interests. Economic growth is not just seen as a demand for development but also as the essence for development. It is also a social norm that shapes our cognition and behaviour. The "need" for growth is taken for granted. The post-modern consumption society's economic system is constructed to stimulate maximum production and consumption. Growth goals are materialistic, where production and consumption opportunities are measures for individual and societal realization. Growth of economic activity with demand for consumption causes increasing GHG emissions and climate change (Forsberg, 2007 43, 45-46). Aspects of economic growth: consumption and competition philosophy are strong barriers against a sustainable policy and development. Another barrier is the concentration and centralisation of huge organisations for production. Free competition and free mobility for growing goods transport volumes (possibly

because of low fuel prices). Private cars and sun vacations by air have become a human need: "I need my car", or "I need my sunshine vacation in the winter season!" and do not require to be motivated (Forsberg, 2007:52, 167). However, it is not just labelling that defines the modern consumer. At the deepest level, consumption supports our identities. People are influenced by massive indoctrination for the purpose to consume more. We are also influenced by group pressure to behave as everybody else (ibid). Does media consumption make us happier than an activity with friends like playing the guitar or playing football together? Public policies encourage transport, mobility and driving to shopping centres. Industry supports gigantic organisations, concentrations and long-distance transportation. The consumption discussion is mainly based on price and competition, as well as the influences from media with the foremost demand for price reductions. Social norms tell us to first look for our economic self-interest - the price of the merchandise (Forsberg, 2007: 183-184). There are some motives in the post-modern society that, according to Forsberg (2007: 184), effectively work against opportunities to live "climate smart", such as: motivations to compete, motivation for free markets and motives for the "need" of economic growth. Today's ordinary Swedish cattle are raised on concentrated feed produced from South American soybeans, and palm oil from Asia, a process that often destroys rainforests, and frequently lead to desertification, biodiversity loss and increasing climate change. Vegetarian protein is also much more ecological efficient to eat compared to red meat. Coffee, chocolate and rice stand for 23 % of the crop imports to Sweden, 60% are raw materials (mostly soy and palm oil) for concentrated animal feed, and 17% comes from other food imports (Deutsch, 2007). The modern human distances herself increasingly from the surrounding nature and seasons. Social norms in the richer part of the world often include an illusion of humans standing separated and above nature (Forsberg 2007: 201). Today we can purchase Swedish summer fruits and berries year round, as well as tropical fruits and plants. Perhaps it was not so surprising that Sweden was ranked 5th among countries with the most negative environmental impact in the world by WWF (2005), just below USA, Australia, Kuwait and the UAE. Globalisation makes economic relations anonymous and centralises power decisions, while actors on stock markets conduct electronic flows of capital. The neoclassical school stresses that exchangeability and efficacy are fundamental for the economy (Forsberg, 2007: 202-203) The anthropocentric view of the natural environment on the basis of how it meets human needs; with motivation in short-term and self-interest rather than long-term and collectivist rewards are, as the author understands the Swedish condition, dominating the Swedish society today as well as other western individualistic societies. If one looks at the main sources of Carbon dioxide (CO2) release in Sweden, Räty and Carlsson- Kanyama (2007) have found that heating of homes stands for about 30%, fuel for car transportation about 25 %, food about 20 % (included production, transport and distribution), recreation (inclusive airplane) about 15 %, clothes and shoes about 4 %. According to this information is it not unreasonable to argue that it is a significant action to choose green energy/renewable energy to decrease CO2 release in to the atmosphere; as well as to decrease transportation with car, and instead political/economical support

renewable electrical car driving and collective transportation (especially with train and tramps in Sweden which electricity is renewable). Because of long distances food production-transport-distribution network is it not incongruous to make the conclusion that local produced food, especially vegetarian food after season have lower CO_2 release than for example red meat raised on soy from for example Brasilia and palm oil from Malaysia. Recreation including airplane traffic is probably in relation to climate change one of the fastest increasing areas were it is not unreasonable to argue that air journeys to countries far away have been an exciting luxury which will give huge consequences in relation to climate in the future. The increasing global trade of clothes also contributes to CO_2 emissions and because of this it is not impossible to argue for the need for more second hand shop development as well as local ecological production and product-service systems (PSS), in a similar way as libraries lent out objects.

3. Theoretical perspectives

3.1 Health Psychology – and quality of life

3.1.1 Health definition

The World Health Organisation (1947) defined good health as "a state of complete physical, mental and social well being." Blaxter (1990) asked 9000 western individuals to define health. For a majority health was a healthy life filled with health behaviours, physical health, having energy, social relationships with others, being able to function effectively and expression of psychosocial wellbeing. Calnan (1987) definition of health: an active life, plenty of physical activity, feeling healthy, eating fit food, being the correct weight, having a positive attitude and having a good marriage; and a good life. Lau have also (1995) defined health in the following dimensions: physiological (good condition, have energy), psychological (happy, energetic, feel good), behavioural (eat, sleep, exercise and interact social suitably), future consequences (live longer) and absence of symptoms, and disease.

3.1.2 Quality of life

World Health Organisation define quality of life as "a broad ranging concept affected in a complex way by the person's physical health, psychological state, level of independence, social relationships and there relationship to the salient features in their environment" (WHOQoL Group 1993). Fallowfield (1990) defined four main dimensions for quality of life: the psychological, the social life/ leisure activities, the work-related and the physical. But these standards needs approach assumes that *needs* rather than *wants* are central to quality of life and that these needs are common to all people (Ogden, 2004:386). O´Boyle et al. (1992) find in there study relation to life quality in satisfaction with one's family life, social life and leisure, these areas were nominated most frequently for good quality of life.

3.2 Positive psychologies and happiness

In this thesis the term *happiness* is defined and used in the same way as in Seligman's book *Verklig Lycka* (2007). Happiness is equated with well-being and used as an all-embracing term for describing positive emotions, such as for example feeling well, as well as positive behaviours such as engagement. How can it be the case that in step with our economic prosperity increasing we become all the more depressed and unhappy (Seligman, 2007:341)? The *positive emotions* can, according to Seligman (2007:300) be categorised in three groups. Those that are directed to the *past*: such as satisfaction, peacefulness and pride. Those that are directed to the *future*: optimism, hopefulness and trust. As well as those that is focused on the *present*. The positive emotions that focus on the present can be divided into two categories: *enjoyment* and *higher enjoyment*. Enjoyments are temporary, positive emotions that come via the senses; the bodily enjoyments: e.g. exquisite tastes and smells, beautiful views and sounds, sensual/sexual feelings or the enjoyment of moving one's body. *Higher enjoyments* are also temporary and are initiated by events that are more complex and learned than the sensory, e.g. ecstasy, enthusiasm, blissfulness, delight, joy, consolation and relaxation (ex. when one receives a massage or does yoga) (ibid). *Satisfaction* connotes not emotions but instead activities that we like to do: e.g. to read, listen to music, dance, or work in the garden. The satisfactions absorb us and engage us completely (ibid). A complete life is constituted, according to Seligman (2007), by being able both to feel positive emotions about the past and future and to enjoy positive emotions from enjoyments. Happiness entails according to Seligman (2007), the idea that my life is and has been authentic. A meaningful life is, according to Seligman to use one's abilities and positive qualities for the purpose of reaching something larger than for self-interest (ibid,. As we can see above in Seligman's definition of happiness and satisfaction, one can conclude that happiness and satisfaction have no direct relation with material over-consumption that does not satisfy human basic needs; satisfaction and happiness are instead more related to an attitude, a view of life, a way of relating, and to finding contexts and meaning where one can live in full development. According to Seligman (2007) does people in general, say that they get enjoyment from fantastic food, massage, perfume and a warm shower. Enjoyments are based on the senses and feelings while satisfaction is based on personal abilities and well developed characteristics that are expressed in an engaging activity. An activity where we can reach a state of satisfaction that Csikszentmihaly (1992) has defined and termed "flow". According to Csikszentmihaly (1992), is flow experienced as though "time not exists", when one does exactly what one wants to do and does not want to stop; as for example when one is passionate about activity. The psychological constituent parts in satisfaction/flow are: that the task is challenging and requires knowledge and concentration and that there are clear goals in the activity. Also, that one receives immediate feedback, and has a deep relationship to what one does without it requiring effort; and that there is a feeling of control. Happiness exists in the insight that labour, effort and discomfort are also a part of happiness. To define happiness is at the same time to seek "the

meaning of life". Happiness is an unexplainable event that is related to the concept of "flow" and has to do with a feeling of connection and social ability. Positive feelings that consist of high energy are predictors of health and a long life. Research has shown that optimists live significantly longer than pessimists (Seligman, 2007:45). Happy people also have better health habits and a more aggressive immune system than less happy people. Higher happiness levels also lead to higher productivity and endurance (ibid).

3.2.1 Well-being

New psychological techniques and new conceptual frameworks have emerged for studying the large variety of human strength and there impact on physical and mental health (Diener and Suh, 2000). Subjective well-being (SWB) comprises peoples evaluations both cognitive and affective, of there life's (Triandis, (ed) Diener and Suh 2000). Well-being can be defined from six aspects: self-acceptance, positive relations to others, purpose in life, personal growth, environmentally mastery and autonomy (Diener and Suh 2000) Purpose in life and quality relations with others seems to be primary description of positive human health because of there capacity to engage the mind *and* the body (ibid). In general does good self-esteem and social relationship determine life satisfaction. Depression is highest when there is low SWB and high stress; and stress can lead to an ineffective immune system. According to many science studies worldwide there have been made conclusions and categorizations of the forces that increase or decrease SWB both at a cultural and an individual level (Triandis, 1985 & 1995; Moum,1996; Diener and Suh, 2000:Veenhoven, 1994). Forces that increase SWB at the cultural level are social security, social and gender equality, political freedom and democracy, high levels of trust, efficient public institutions, satisfactory citizen-bureaucrat relationship, and freedom of the press, high level of education, real income per capita and media attendance. Forces that increase SWB at the individual level are social support/friends, purpose in life, allocentrism (altruism), good health, less stress, social competence, belonging to a liked group, optimism, self-acceptance, self-esteem, personality open to experience, environmental mastery, personal growth, conscientiousness, employment and fit between personality and culture. Forces that lower SWB at the cultural level are civil and international conflicts, war conditions, undemocratic government, much/ many vulnerability (e.g. floods, tornados, and hurricanes) and oppression of the political opposition, much unemployment and violations of civil rights, riots, income inequality, and oppression of the political opposition. Finally forces that decrease SWB at the individual level are stress, poor health, unemployment and poor personality-to-culture-fit.

3.3. Epidemiology and anthropology studies of sustainable well-being

3.3.1 The China study

The international China study during the 1980's covering 880 million Chinese citizens (96% of the

population) who to 87% belonged to the same ethnic group (Han-people) and had almost the same genes. China in the 1980's was an excellent area to investigate for diet and disease patterns since the Chinese people yet at that time, to 90% lived all their lives in the same area as they were born in, and had eaten food from the same region in all their lives (Li & Campbell et al, 1981). Scientists in the China study found that certain categories of fatal diseases often occurred in similar economic conditions, diseases caused by malnutrition and poor sanitation lead to infectious diseases such as pneumonia, tuberculosis, diarrhoea, respiratory diseases and measles. Richer peoples illnesses was caused by the excessiveness of refined food and drink, large amounts of animal foods (dairy and meat products), saturated fat and hydrogenated fats that causes obesity, diabetes, cardiovascular disease and many forms of cancer, a consumption patterns that usually follows wealth (Li & Campbell et al 1981:71, 77; and Campbell, 2005). One of the researchers in the China study, Dr Campbell, believes that the outcome of the extensive scientific evidence received in the qualitative and comprehensive China study suggests that "a diet based on" (untreated) "food from the plant with a minimal addition of animal feed is ideal for human beings (Champbell, 2005). Campbell (2005) argues that "the highest percentage of all cancers, cardiovascular disease and other forms of degeneration diseases can be easily prevented by eating a plant-based diet (ibid). In a report were scientists and experts analyzing more than 4500 studies that focused on diet and cancer, and the main dietary guidelines that (World Cancer Research Fund and American Institute for Cancer Research, 1997) came up with after extensive analysis was: choose a diet based on a rich variety of vegetables, fruits and legumes.

3.3.2 Health aspects and quality of life in Long-living cultures

Due to the complexity of climate change causes and effects this thesis has different perspective in the search to manage increasing climate change, and have the intention to make a holistic view. To relate to Räty and Carlsson- Kanyama (2007) findings of the main sources of CO2 in Sweden: heating of homes, fuel for transportation, food and recreation this thesis introduce epidemiology studies of people's lifestyles in long-living cultures as a way of lifestyle due to there healthy, happy and "sustainable lifestyle". Following literature can probably be reasonable for making the conclusions that it could stand as a modal for an essential climate neutral lifestyle. Relationship between behaviour and mortality can be illustrated by the longevity of people in different countries. For example in USA and UK only 3 people of 100.000 live to be over 100 years. However among the Abkhazian, 400 out of every 100.000 live to be 100 (Ogden, 2004). Weg (1983) examined the longevity of the Abkhazians and suggested that there longevity relates to a combination of biological, social factors and lifestyle: like maintaining energetic work roles and habits, a diet low in saturated fat and meat and high in fruit and vegetables, no alcohol or nicotine, high levels of social support and low reported stress levels. Doctor Alexander Leaf published a series of significant medical scientific articles which described the lifestyle and health of people who lived mentally and physically healthy and happy very long in some parts of the world: Abkhazia in the Caucasus mountains, Vilcabamba valley in Ecuador and in the

Hunza region in Pakistan (Leaf, 1973). Many other scientists (mostly in medicine and anthropology) did similar interesting findings about health and satisfaction, but there was a scientific problem: these areas had not used national registrations to measure these old people's lifetimes. However subsequently other researchers identified Okinawa in southern Japan, as a place where people live unusually long healthy lives and had national registrations long time enough too scientific measure the age, health and well- being status in the population (Willcox B. J. Willcox, D.C, Suzuki M. (2001).

3.3.3 Concepts for happy long-living in Abkhazia, Vilcabamba, Hunza and Okinawa

* Much and secure Social support and Collaboration (showing empathy, solidarity and altruism) and a strong sense of caring about the other people in all stages of life (respect for the elderly and children) and frequent affectionate, mutual physical contact with each other.
* The daily life consists of much physical activity and avoidances for stress.
* Vegetarian, unrefined, seasonal, locally produced food, to constitute 90% of total moderate intake, of food with very high nutritional content; eaten gratefully and slowly with company only until one is about 80% measured.
* Shared participation in cultural manifestations (such as dance and song), and they seem to be contented with life and full of happiness and inner peace, they seem to enjoy everything that they experience with their senses.
* Moderate consumption of alcohol and material things, the motto would be: it is not how much you own that means something, but how much you give of yourself to others. It is not the wealth that is respected, but humanity and wisdom (Leaf, 1973; Willcox et al. 2001; Robbins 2007: 91-92, 107-108, 116).

3.3.4 The significance of intimacy physical contact

Researcher (Prescott, 1971 & 1975; Bloom, 1995) has found that physical nearness - that people touch each other, caress each other and carry children, generates peaceful societies. A low degree on the scale of "physical proximity to children" correlated with a high degree of physical violence in adulthood. The researchers found that the communities (from 49 traditional cultures) which to a large extent expressed warm feelings towards the children resulted in happier and healthier adults, and communities where people felt more trust in each other, their lives were marked by joy and less violence. (Prescott, 1971 & 1975; Bloom, 1995) Even in the long-living communities where people live long healthy lives, society is characterised by the children being unconditionally loved, valued and protected. Among the exceptionally healthy people who live the longest in the world is touched, hugs and other forms of respectful and affectionate contact between people happens frequently and daily in all stages of life (Robbins, 2007:252, 260).

3.4 Attachment theory

One underlying idea in attachment theory is that an insecure attachment in childhood leads to stress, and stress has a tendency to cause over-consumption of sugar, alcohol, drugs, food, and probably material goods, which causes increased GHG emissions. Stress also leads to an increasing vulnerability for psychosocial and physical unhealthy (Ogden 2004). A secure attachment, however, has a tendency to lead to empathy, altruism, solidarity, less stress, and well-being – good social, psychological and physical health; as well as engagement in social, environmental and global problems (Broberg 2006), i.e. "macro-worries" (see page 24) that would normally include problems like climate change? This thesis argues that it is possible that knowledge about secure attachment can be a way to reduce depression, stress and over consumption. Bowlby (1969) and Ainsworth (1971) described attachment as an emotional bond that has sustainability over time (continuity), and is directed towards a specific individual who has emotional relevance for the person and who is not interchangeable. Attachment is characterised by the fact that people are looking for each other's support and closeness, especially in threat of danger. Attachment means that the person is experiencing discomfort in involuntary separation from the person which is the object of attachment. Anyone who is attached seeks security, comfort and protection of his/her attachment person (Broberg et al, 2006:55 and 311). The child's attachment-relation to the parent (caregiver) develops and is created during the first two to years of life (Broberg et al, 2006). The child's attachment person has the function of a safety base for the child, if the attachment is secure, from which the child can explore its surroundings and to which the child can return when experiencing fatigue, pain, anxiety, threats etc. Children with a secure attachment have sufficient experiences of the parent seeing, hearing, understanding and helping the child. Worldwide, depending on country and culture, 55-70% of the infants in a population have a secure attachment. (Broberg et al, 2006). However children who cannot use a parent as a safety base are forced to develop alternative, precarious attachment-strategies to gain maximum protection. Three forms of insecure attachment have been studied: the avoidance - avoiding the parents (15-25% in Western countries), ambivalent - shows despair and protest against the parents, (5-15% in Western countries) and disorganised - are afraid of the parents and has chronically disoriented attachment system (10-15% in Western countries). The fact that it is the presence of regular physical contact between parents and children that determines whether an attachment develops means that infants link emotionally also to a rejecting, neglecting or abusing parent (Broberg et al, 2006). Secure attachment is created when caregivers have significant eye contact, body contact and verbal communication with their children; when parents are sensitive and responsive to their children's signals and needs, and can interpret their children's signals and respond to the child's needs adequately. Four dimensions of the parents' sensitivity are important for a secure attachment: responsiveness, acceptance, availability and cooperation. It is important to be physically, emotionally and mentally available and present in the child's daily life, to "be at hand" and have "sufficient time" when the child

needs the support/security/confirmation/consolation, and for the child to know that it always is in the parent's thought and has access to its care (Ainsworth, Bell and Stayton,1971). At an insecure attachment, the parent has often ignored the child, had not been present or unavailable physically and/or mentally in the child's daily life. The child has had to wait too much for intimacy and direct body contact. The child has not experienced that the parent has it in its mind, (Broberg et al 2006:215-216, 236). It is the caregiver's continuous availability and the ability to respond sensitively and predictably to the child's signals, not his or her gender, which determines what kind of attachment the child develops to the person in question (Broberg et al, 2006:320). Research has shown that attachment is one of the relatively few psychological phenomena where the environment/surroundings play the crucial role while the hereditary influence is extremely limited (Broberg, 2006:209). In a study carried out by Russek and Schwartz during a 35-year period, they found that among the students who rated their relationship with their mothers as "tolerant" or "stiff and cold" had 91% had a number of serious diseases when they approached the age 50. They had a twice as likely to suffer from serious illnesses than those who 35 years earlier indicated that they had a "very close" or "warm and friendly" relationship with their mothers. Among those who stated that their relationship to the father has been "tolerant" or "rigid and cold" was 82% suffered from a serious illness at age 50. And 100% of those who had described the relationship with both his mother and his father as "rigid and cold" had suffered from serious illnesses when they were in their 50'ies (Russek and Schwartz, 1996 and 1997). This could be interpreted that rejection and a cold relationship with the parents is a three times higher risk factor in the case of serious medical conditions compared to smoking and obesity (Russek and Schwartz, 1996 and 1997; Thomas and Duszynsky, 1974).

3.4.1 Replaceability and time scarcity

People whom we love and have as attachment persons can be deeply and irrationally engaged in us only if we are entirely unique in their eyes. If we were replaceable, their love would not be so comprehensive. Two principles for improving or preserving a good love relationship with a partner or a child are attention and irreplaceability. The quantity in time is decisive when it comes to love relationships. A person does not wish to be paid attention to or listened to at a specific "quality time" (Seligman, 2007:236-7). A love partner does not wish to be substituted by anything else, such as stress or time pressure that can have a negative effect on and compete with the love relation's need for attention and availability. How would people feel if we, instead of taking out all of the increase in standards development in the field of consumption, had used part of it to get more time for children, partners or friends? Research has clearly shown that there must be a reasonable quantity of time when children and parents can be found in each other's intimacy; so that the child can turn to the parent when the child himself needs and wants to get good quality in the attachment, i.e. a secure attachment. Time is needed for the parent or partners to give full attention and presence. Children who perceive

and feel that the parent with great effort has released a short time in a busy schedule to have "quality time" with their children, have little chance of being able to use this precious time in a good way, when the child does not dare or have time to feel a sense of closeness, responsiveness and accessibility (Broberg et al, 2006:327-328).

3.4.2 Insecure attachment, low levels of serotonin, stress and over-consumption

The way in which a young mammal regulates its biological system is an adaptation to the type of care it gets. Regulations are mainly driven by hormones and neurotransmitters such as serotonin and dopamine. Serotonin plays a significant role as a neurological link between the individual's early attachments-related experiences and the being's feelings, thoughts and behaviour as an adult. Low levels of serotonin are of importance in relation to later mental health problems such as anxiety and depression (Broberg, 2006:121). Studies of baby apes have demonstrated that apes with insecure attachment developed a lower concentration of serotonin metabolite than the cubs that grew up securely with their mothers (ibid). This difference in serotonin was clear right from the age of six months and remained up in adulthood and gave chronically low levels of serotonin in the ape's serotonin system, and these apes over-consumed alcohol when given the opportunity (Suomis, 1999). A large number of animal studies show that long-term separations/ insecure attachment lead to over-consumption of alcohol and anxiety-limiting medicines (Roman and Nylander, 2005). A mammal's type of stress management is influenced by whether it experienced high stress factors during its early development. Pressure and stressful living conditions activate cortisole (stress hormone). A child who grows up in a home environment characterised by strong stress will organise his/her brain so that it is able to survive in an environment full of threats and risks. This requires continuous suspiciousness and vigilance to detect hazards and the immediate struggle/escape readiness, ability to react aggressively without delay and to resist much strain (Broberg et al 2006: 124-125). Individuals who grow up under a heavy psycho-social burden develop an adaptation that serves them in the short term but which may be long-term devastating. Since the individual as an adult has a great vulnerability to for example stress, depression, addiction, aggression, social isolation or obesity. The results are based on mammal experiments, but should be the same for the mammal man (Broberg et al 2006: 124-125).

3.4.3 The attachment's significance in the life time perspective

According to Sroufe et al (2005) huge and longitudinal study are children with a secure attachment (in comparison to insecurely attached children) more curious, constructive, independent, enthusiastic, happy, flexibility in solving problems and had greater self-confidence and ability to deal with feelings like disappointment and frustration. (Sroufe et al, 2005; Broberg 2006: 246-252). Secure attachment is related to personality such as extraversion, openness, as well as to behave securely, confidently, harmoniously and have social competence (Broberg, 2006:291). Sroufe states that there are no

analyzable phenomenon's in early childhood more important than attachment (2005). It has been shown that it takes an average of two years for a love-life to develop into an attachment relation in which there is intimacy save/ maintain behaviour. To develop an attachment relation to a close friend takes on average five years (Broberg et al, 2006:259). What happens to people when the possibility of attachment relations between friends decreases – when many people do not stay in the same educational system, workplace, or residential area for as long as 5 years? Bowlby and Ainsworth thought that the attachment system is active in the whole lifecycle through attachment relations with parents, grandparents, long-term partner(s), sibling relations and long, close friendships (Bowlby, 1969; Broberg et al, 2006:257) Adults exhibit a distinct attachment type of orientation: secure, avoiding or ambivalent, through their behaviour, expectations and attitudes in intimate relationships which is in line with the attachment they had received during their childhood. People in a safe attachment relation are more satisfied in their relationships; they show more compassion to each other, help each other more and have more physical contact. In situations of threat, anxiety, stress and physical separation they seek intimacy with each other and give each other emotional support and supportive comments (Broberg, 2006:274, 283). As group-living "social animals", humans depend on the surroundings to meet trustful contacts and relationships with other humans. Trusting relationships take time to build and people invest much emotion, time and hope to those who are closest to us in life. Because of this, the loss of a close relationship is very painful for people (Broberg, 2006:262). Many types of events in adult life are stressful, as unemployment, forced migration and disease, but attachment-related losses are seen as the most stressful events of life. Children's and partners' death creates the most suffering and are the most stressful and painful, followed by divorce and separation from an attached partner. These losses can never be fully compensated by spending time with friends and acquaintances. This applies only if the person lived together with the partner (who died) for at least two years and then loses her/him (Broberg 2006:265-266). Humans also develop attachment to places. People frequently have needs and wishes for a special place in nature or at home to promote attachment and a feeling of protection and security. This includes natural areas and places, homes and communities and natural landscapes; settings that have acquired special personal meaning. The term "place attachment" refers to the sense of being deep-rooted toward certain places, a phenomenon called "sense of place".

3.5 Theories for considerate Sustainable psychology

3.5.1 Social support

Social support is the feeling that one is cared about and valued by other people; the feeling that one belongs to a group. Social support can moderate the effect of stressful conditions. Social support has been defined in a number of ways: number of friends supplying social support, and the satisfaction with this support (Ogden, 2004: 273). Wills (1985) has defined different types of social support:

esteem support, whereby other people increase one's own self-esteem, informational support, whereby other people area available to offer advice, social companionship, which involves support through activities and finally instrumental support, which involves physical help. Social support is also a mediate and an assist in stressful events. Social support defined as emotional support, involving trust between colleagues, family members, friends or neighbours. As well as social cohesion and consistency; or instrumental social support involving the provision of extra resources and assistance (Ogden, 2004: 266). Increase social support predicts a decrease in mortality rate and gives better immune functioning and lower birth complications; marriages is an effective source of social support (Ogden 2004; 273-274). According to Seligman (2007) is to live with a partner in a mutual love/care the factor that most strongly indicates happiness and similarly works as a buffer against depression (Seligman, 2007:214). It is a clear fact that the mortality rate is bigger (especially for men) for the divorced, single parents and widows / widowers (Robbins 2007:140). In an epidemiological study of 7000 men and women, Berkman (1965) find that people who had no emotional connection with other people had 3 times higher risk of dying during the 9 years the study lasted than people with strong social ties. What meant something was to have social emotional ties, a social network, as family and friends. Those who had strong emotional and social ties, but lived unhealthy lived longer than those who lacked social ties but lived healthy. Those who lived healthy and had strong social ties lived the longest (Berkman and Syme, 1979). A study from Sweden shows the same trend: those who lived lonely and in isolation at the studies' start suffered almost four times higher risk dying during the next six years. Loving relationships can be very healing for health but destructive relationships can damage health (Orth-Goma et al, 2000). However to live together with a partner makes people in general happy (Seligman 2007).

3.5.2 Altruism and solidarity

Many studies have, according to Seligman, shown that happy people have both more superficial and closer friends, are more often married and are more involved in group activities than unhappy people. A natural consequence of the contacts with other people is the level of altruism. Happy people tend to be more empathetic and more willing to support and help others. An explanation can be, according to Seligman (2007), that when we are happy we are less self-focused, we appreciate (or like) other people more, and we want to share our success with others, even strangers. When we are depressed we tend instead to be suspicious, and turn inwards to ourselves and focus defensively on our own needs and personal problems. To have a faith, a conviction, something that creates meaning and hopefulness, gives us also satisfaction and happiness (ibid). The meaningful life has a distinguishing feature, according to Seligman (2007): to use one's resources, abilities and opportunities to attain something that is larger and more meaningful than oneself. Such as living in solidarity with coming generations by trying to reduce climate change and support biological diversity? Mikulincer & Shaver (2001) has

demonstrated that where there is a threat (e.g. climate change) people defend themselves by insecure avoiding attachment, by denying the threat, and by highlighting their independence in the situation. People with an ambivalent attachment often find themselves in a "helpless-situation" and feel they need the assistance of others, while, people with secure attachment often react with enthusiasm, confidence, solidarity and altruism in a difficult situation (Broberg 2006: 245-252). Mikulincer & Shaver (2001) have in their studies found that people with a secure attachment choose to cooperate to a greater extent than people with insecure attachment. Mikulincer and Shaver (2005) have within the attachment theory identified a significant base of processes and abilities that can be linked to positive psychology: resilience, openness, care and showing concern for others. The securely attached people show more altruism, compassion and willingness to help people in situations of vulnerability (Broberg, 2006:276). Mikulincer & Shaver (2001) argue that the mental representations associated with secure attachment give the person a general tendency to believe that others' intentions and characteristics are good/positive. Securely attached person's resilience and stability of self-esteem and sense of self-efficacy/self-confidence makes them less likely to react defensively at threatening information (e.g. about climate change). People with secure attachment have also a lower propensity to discriminate against people that do not belong to the same group, than insecurely attached persons (ibid).

3.5.3 Micro and Macro Worry

The *micro set of worries* in life concerns the welfare of the self or extensions of the self; the *macro set* concern the welfare of others in the wider society world. Micro worry relates to worry about ones own health and safety and that of ones dear ones, successes or failure in studies or career and the quality of social relationships. Micro worry leads to less satisfaction with life, more negative affect and more time of feeling sad. However macro worries have no negative impact on SWB. Humans who worry more about human suffering in society and in the world, about environmental danger (e.g. climate change) and about international safety are likely to be satisfied with life, experience positive feelings and to feel happy much of the time. There is a tendency, consistent across nations, for people who worry about macro problems to enjoy better well-being. Cross-national comparison of the importance of worries exposed that the most intense worries in most nations concerned the environment and close family members. Cultural harmony, egalitarianism and fairness correlate positively with macro worry, whereas cultural individualism correlate negative with macro worry in Schwartz (2000) study in (Diener and Suh, 2000: 245-247). This fits the conception of harmony and equal opportunity as calling for concern with the preservation of nature, (ecosystems and climate) as well as the wellbeing of others; and individualism (competition) as legitimising preoccupation with self and micro worries. Cultural egalitarianisms and harmony predict in Schwartz studies the extent to which people in a

country worries more about problem in the wider society and world as compared to personals (Schwartz, 2000).

3.5.4 Collectivistic or individualistic cultures

Derrick Jensen (2000) have described how the anthropologist Ruth Benedict (1970) studied seven hundred communities and found a pattern that could explain variations between: "Competing cultures" and "Co-operative cultures". In the co-operative cultures (collectivist) behaviour that favoured the entire group was awarded, while conduct detrimental to the whole group was banned. Generosity and compassion were appreciated while stinginess and acquisitiveness was considered shameful, why money and assets constantly circulated in the community and never piled up in the care of individual members. The co-operating cultures tended to be peaceful and harmonious, people were healthy, and children, women and the elderly were respected. People generally felt safe, trusting and happy/ satisfied (Derrick, 2000: 211-213, Benedikt, 1970). In the communities Benedikt categorised as competing cultures (individualistic) behaviour like self-interest and favoured of the individual at the expense of the community was awarded, those who collected money and possessions had high status. The people in these communities tend, according to Benedict, to be aggressive and hateful and exploit children, women and old. They see each other as threats and competitors; they look to their own interests and their self-fulfilment. They are often insecure, distrustful and hostile/aggressive. The resources are concentrated to a few individuals (Derrick, 2000: 211-213, Benedikt, 1970). People who are "allocentric" (collectivist value centred, who gives and receives social support from many close individuals) are more satisfied with there life's, but "idiocentrism" (individualistic value centred, who do not give and do not receive support from many friends) are negatively related to SWB. At the individual level allocentrism is positively related to SWB (Diener and Suh 2000). Due to increasing levels of stress, depressions, over-consumption and climate change is it not incongruous to argue that lifestyles principles of the Hunzans, Vilcabambans, Abchazens and Okinaws (co-operative cultures) is what we need to remind us very soon: because we all belong together. We all need each other. Without altruism, solidarity, respect and care for each other and our nature, humans will have very difficult to cope with climate change.

3.5.5 Life satisfaction in relation to income and consumption

Persons who rate money as less important is general more satisfied, and they who place great importance in love are accompanied by greater happiness. However to strongly being motivated by money relates to less happiness (Diener and Suh, 2000: 207). Countries in the world whose inhabitants annual income is less than 10 000 U.S. dollars (about 80 000 SEK) are usually plagued by poor sanitation, malnutrition and poor health. But studies have repeatedly shown that when rises above this income a nation's health is no longer a question of income, but rather how big the income gap between

wealthy and poor is in the society. The greater the gap between rich and the poor the worse is the health status (Bezruchka, 2001; Kawachi & Kennedy, 2002). Societies where resources are shared so that everyone gets enough are healthier because all people get their basic needs satisfied. The manner in which income is divided in a nation is more important than the mean level of income there. In general are nations with nearly equal incomes happier than a country were some are very rich and many are very poor (Diener 1995). The average industrialised nation has not experienced large increase in SWB over the years since WW II, even if wealth and economic growth has increased dramatically. Whether people are satisfied with here income depends on whether people can meet there material desires and goals (Diener and Oishi (ed) Diener and Suh, 2000:208-209). Veenhoven (1995) reviewed evidence and conclude that liveability, objective conditions that serve human nature produce happiness. Veenhoven suggests that characteristics of societies are related to the degree to which they meet universal human needs, and in turn achieve high SWB. Veenhoven´s approach (1995) is consistent with Maslow's hierarchy of needs (page 23). The conclusion that can been drawn from existing data is that more prosperous material word will not predictable increase peoples life satisfaction; and an increase in income will not inevitable guide to higher SWB. In developed industrialised countries it might be people's desires that decide whether they are psychologically rich or poor. (Diener and Suh, 2000:211). According to Seligman (2007) are individuals who have won large amounts of money habituating themselves after some months to their new life situation and are not happier with their new wealth. Even people who have been involved in serious accidents that result in their being paralysed habituate themselves after some months to their new, more limited lives and are approximately just as satisfied with life as they were before the accident. In less than three months, major events, such as being promoted, lose their significance for the level of happiness. Possessions have a low correlation with happiness, and similarly income. An obstacle to increasing the happiness level is that people so rapidly and unavoidably adapt themselves to good and bad situations by taking them for granted. When one has collected more material possessions and achievements, one's expectations are raised. Situations and objects that we have worked hard for do not make us happier any longer. One needs to obtain something even better, faster and trendier to raise the happiness level (Seligman, 2007).

3.5.6 Stress and depression

The threat of climate change and its effects already in some areas around the equator are an existing stress moment today. Science has found some factors which can counterbalance to stress response, like self-efficacy which refers to an individual's feeling of confidence that they can perform a desired action. (Ogden 2004: 240-241). Other factors are a persons feeling of control, as desire to accept challenges and commitment (Kobasa et al, 1982)**.** Most present stress researchers believe stress as the

result of a person environment fit and highlight the role of primary appraisal: "Is the event stressful (climate change)?" and secondary appraisal "Can I cope with climate change?" (Ogden, 2004:241). Stress has been linked to illness like heart disease, cancer, diabetes, depression and decrease immune functions. There is also significant links to smoking and increasing alcohol consumption, and stress causes in general reduces in physical activities habits. Stress decrease immune functions and damage neurons in the hippocampus in brain. However positive mood is connected with better immune functioning but negative mood is associated with poorer functioning. Humour appears to be specifically beneficial for the immune system (Ogden, 2004: 254-257, 261). Physical activity, coping styles, social support, actual and perceived control, as well as control over the stressors may decrease the effect of stress (Ogden 267-268). However the cause of the enormous increase in depression internationally is located by Seligman in an encouragement for and overconfidence in shortcuts to happiness (Seligman, 2007:135); such as TV entertainment, antidepressant medicines, shopping, spectator sports, alcohol, chocolate/candy, nicotine, sex without love, fast food and drugs etc. A shortcut does not require any knowledge (in contrast to flow) and almost no effort. One does not need to use one's abilities or inner resources in order to consume shortcuts to happiness (Seligman, 2007:137). The more flow one has that creates satisfaction, the fewer tendencies one has to become depressed. A powerful means against depression is to strive for more flow/ satisfaction in one's activities and reduce the hunting for shortcuts to enjoyment/passive consumption (Seligman, 2007:137). Satisfaction and flow require capability, work, effort and challenge. Shortcuts to enjoyment require no work; to watch football on TV is not challenging, requires no effort and extremely little knowledge – and there is no risk of failing (Seligman, 2007:137). Additionally, this author wishes to point out, shortcuts variously involve passive consumption that in all kinds of ways contributes to energy consumption, emissions of GHG and climate change.

3.5.7 Social contracts

It is hard to imagine any behaviour process that truly is more important to us than attachment. To eat, sleep and move are all behaviours that are necessary for our survival, but man is, as Baruch Spinoza stated, a "social animal" and it is our social attachment we live for (Insel & Young, 2001:129). The Scottish philosopher David Hume argued that, in essence, the feelings, not intellect, govern human behaviour. According to Hume, it was the "delicate fabric" of long-developed emotional attachment, obligations, commitments and dedication that made society possible (Rosenberg, 2003:112). But the attachment theory can provoke strong reactions as there is a real conflict between the individual child's need and the desire for the best possible care and the parent's need to compromise between various requirements in a long-term and sensible way (Broberg et al, 2006:318-319).
The child gets its experience of relationships in their interaction with their earliest carers. These give the child his/her first unconscious images of other people: as reliable and sympathetic, or unreliable

and perfidious. Various self-images and expectations will ultimately lead to one's view of the outside world as good or bad, predictable or chaotic. The early attachment relationship experience shapes our model and picture of what we expect of social interactions (Broberg et al, 2006:324-325). *Social contracts* – how individual citizens should be made to agree to renounce their own short-term profits for the benefit of the long-term common good, which in the long run will benefit the individual who has made the short-term loss is also related to attachment. Bowlby assumed that the nursing care quality is the basis on which all subsequent personal relationships are based. Those who have an insecure attachment pattern (has reduced capacity) will never charge the common aspirations or social leaders with viable constructive/positive energy. And they will never abandon their own short-term self-interest of their private purposes even if it harms the common objective (Bowlby, 1946). Bowlby thought that this was partly related to the individual citizen's own childhood (levels of trust and confidence), and partly on the integrity and credibility of the elected political leaders. Bowlby (1946) thought that political leadership and all other leadership should be based on basically the same footing as a secure attachment. Parents, leaders and politicians have to earn their child/staff/citizens' trust by being responsive, accessible and predictable. Leaders will have to earn people's trust and confidence by being sympathetic and honest and they must show that they are looking for the common good to be able to encourage citizens to refrain from their own short-term profits for the benefit of general long-term goals – in solidarity with future generations (Broberg et al, 2006:325-326).

3.6 Social norms

Culture is learned; it is passed down from generation to generation, through family members, adults outside the family, schools, religious, (political groups, media) and other institutions. The content of individual culture is copied directly from the norms, values, beliefs, traditions and customs of the society and the culture the person belongs and lives (Ratzlaff et al (ed) Diener and Suh, 2000: 40). Today's Swedish life stile with increasing turnover of material and fossil energy do not create conditions for a sustainable development, with respect to coming generations or to the global power- and natural recourse distribution. Already now oversteps Earth ecological capacity by 25%. Hydén and Wickenberg (2007) mention a FAO-rapport (2006) which indicates that meat production contribution to the climate impact in a global perspective has passed the transport section. After all rapports from UN:s climate panel IPCC during springtime 2007, Hydén and Winckenberg (2007) suppose we now know that the ongoing climate change are strengthen by humans; that it is human's behaviour, production and consumption which have effected the Earth climate, and the future. If we do not change our lifestyles and organises our societies in a sustainable way will it be difficult for coming generations. Sustainable developments have three dimensions ecological, social and economic (sometimes even cultural), the large challenge is now to work with all these dimensions at the same time (ibid). Hydén and Wickenberg (2007) argue that our behaviour is decided by social norms. A

norm is a behaviour directive in a social context. Social norms function as preferences; they tell us what "we" want, or believe we want; norms are combination of values, cognitive factors and a society's systems condition. Our society system demand fast consumption, and the economic interest is superior the social, ecological and cultural. Sustainable consumption assume sustainable norms, in this context it is significant that individuals can recognise the consequences of there behaviour. But the consequences of over consumption are not seen here and now but later (in the future) and often somewhere else on earth (ibid). The climate report from UN ascribe to a collective responsibility, which is relevant, but if norms should function spontaneous must the individual feel touched and receive the information as a matter also for him/her as a individual person. There is lacking bridges and connections between knowledge and affections of willingness to behave climate neutral/smart. A law or an international convention is never stronger than the social norm which underlies it (Hydén and Wickenberg 2007). Al Gore has through direct communication to people asked for solidarity with the planet – and in that way been a creator of more sustainable norms and political influences. Environmental and Sustainable science and knowledge about climate change causes and effects are significant areas to educate young and adult people about. As well as to increase awareness of values as solidarity, altruism, justice for all and democracy in schools and working places, which can be constructive ways to develop sustainable norms. UN has decided - A decade for learning for a sustainable development- 2005-2015. But it is not enough with cognitive aspects to change out behaviour in to a sustainable direction, the emotional and moral aspects have to be including, and that can just happen in a social context (ibid). A culture can through social norms, rewards and economic punishment aid to define what a good social norm or character is. Humans have been equip with positive emotions like proud, inspiration and success which reinforce willingness for cultural "good" behaviour and characteristics; and with negative affections as disgust, guilt and shame to counteract "bad" behaviour (Seligman (2007:327). Due to the serious of climate change is it not unreasonable to argue that a democratic government can, if it is a priority, give directive for sustainable social norms and behaviour expectations through rewards and economic punishment, to aid and define sustainable, altruistic, equitable *and* climate neutral attitudes, norms, behaviour and long term thinking. *Subjective norms* are the perception of social pressure to perform behaviours, and personal/moral norms, are the individual perception of the moral correctness or incorrectness of performing the behaviour. Moral or personal norms take account of personal feelings of responsibility to perform, or refuse to perform certain behaviour (Ogden, 2004). If people believe that *significant others* want them to perform behaviour, they tend to, as a consequence, have a positive attitude towards the behaviour. Attitude, is a relatively stable tendency to evaluate a person, object or idea in a positive or negative way: the interrelationship of feelings and cognition in relation to a object (Bell, 2001).Changing *subjective norms* would be one way of changing *attitude*, and changed subjective norm and changed attitude can change *intention to act* (Sutton, 1998a). The perceptions of what significant others think we should do may be of more importance than our own beliefs when performing preventive

behaviours in public. Normative beliefs, what significant others, like ones partner, family members and close friends think and feel about one's behaviour is significant for the behaviour to be performed or not. Anticipated regret from other about something they think or feel is wrong with a behaviour leads to feelings of shame and guilt if one do the behaviour, this has also a significant prediction to do or not do the behaviour (Parker et al. 1996). For normative beliefs, the views of friends are found to have the strongest impact. Interventions could take advantage of the powerful influence of friends and peers to change attitudes and behaviour (Ogden, 2004)**.**

4. Behaviour changes - methods for a sustainable psychology

4.1 Social cognition models

"Peoples' social behaviour is best understood by examining their beliefs about their behaviour in a social context, and their social perceptions and representations" (Rutter & Quine, 2002:1). Weinstein (1980) drew attention to what he called the "popular belief" that people tend to think they are invulnerable. People generally expect misfortunes to happen to others, not ourselves. And Weinstein argued that most members of a group will say they are less likely than the average to suffer from bad events in life, and more likely than the average to experience good events. According to Weinstein are the most likely motivational candidates' defensiveness, wishful thinking and cognitive factors. We use others behaviour as a modal for our own behaviour, especially when we think the other person is alike us in age, gender, clothes style, etc, this occur both for children and adults (Phillips, 1983). Over resent years an increasing number of behavioural interventions have drawn upon a theory of behavioural change. Those based on social cognition models have attempted to change a variety of behaviour. Social models can be combined with intervention groups, lectures, videos and discussions (Rutter and Quine, 2002). A causal model dictates that following: behavioural belief change, attitudes will change and influence behavioural intentions, which will ultimately change behaviour. Successful behavioural change will occur only when intentions are changed through either attitudes or subjective norms. Changing behavioural beliefs involves beliefs about the consequences of one's actions (Armitage and Conner, 1999a). Social cognitive interventions are potentially the safest and most effective way of intervening in a new behaviour (ibid).

4.1.1 Precaution Adoption Process Model (PAPM)

By Weinstein and Sandman (1991) is an adoption process model of changing individual behaviour.
1 *People are unaware of issue* (are not aware that climate change is a threat).
2 *Unengaged by issue* (aware but not engaged) Whether a person has or has not seen climate change as requiring a personal decision appears to be a significant difference.
3 *Deciding about acting* (considering the possibility of taking action)

4 *Decided not to act* (in relation to climate change). Since people are reluctant to acknowledge personal susceptibility to harm even when they acknowledge the risk faced by others, it appears that overcoming this reluctance is one of the barriers to getting persons to decide to act.

5 *Decided to act* (to adopt the precaution, have become engaged by the climate issue) A growing body of research suggests that there are important gaps between intending to act and carrying out this intention, and that helping people develop implementation intentions/plans (when, were and how) can reduce these barriers (Gollwitzer, 1999).

6 *Acting- initiates the behaviour*. Detailed implementation information that would not be interesting for people in earlier stages may be essential at this change.

7 *Maintenance,* the behaviour have been maintained over time. When change is difficult and resistance is high, there is a greater need for the delivery of separate messages for each stage (Weinstein & Sandman, 1991), as in the case of global warming.

4.1.2 Self-identity and self- image

The *self-identity* is significant, individuals will only intend to carry out behaviour if that behaviour fits with there own image of themselves (Ogden, 2004): "I am a green consumer and an equitable person and therefore I by ecological and fair-trade food." Self-identity, the labels individuals use to describe themselves, may predict intention to perform behaviour (Ogden, 2004). If a person have act in a certain situation in a way that have changed her attitude about her self as engaged citizens will she probably behave as an engaged citizen in many other situations. She will probably continue to have a society engaged behaviour-stile as long as the new self-image exist (Cialdini 2005:101). The vital point is that she have started to look at her self as a human who have realised the need and significance of climate friendly/neutral behaviour (e.g. eat local produced mainly vegetarian food from season, take train, bicycle or sail for transportation, choose renewable energy, re-use and by second hand). Active commitment gives us that kind of information we use to shape and modify our self-image, and will influence future behaviour and strengthen the modified self-image (Cialdini 2005, 82). The self-image are under pressure from outside and inside as soon as one have taken an commitment, we try to adapt self-image to how others look at us and try to make the self-image to fit to our behaviours. Subjective norms, self-identity and perceived behavioural control are significant predictors of intention to behave.

4.1.3 Self-efficacy and Internal locus of control

According to Bandura (1997) is the sense of self-efficacy a key factor in how people regulate there lives and there believes concerning there ability to perform the behaviours needed to achieve desired outcome. People whose self-efficacy is high have self-confidence in there ability to do what it takes to overcome obstacles and achieve there goals. The distinction between self-efficacy and perceived control over behaviour is based on distinguishing "internal" (for example lack of knowledge about

ecological labelling). And "external" influences are about for example availability or not to cheap train tickets to Paris. Perceived control- is an important moderator of stress, providing a sense of being able to cope effectively, to predict events, and to determine what will happen (Bell, 2001). Based on science work by Bandura (1997) self-efficacy/self-confidence is defined as "confidence in one's own ability" and relates to feelings of personal competence, ability and skill associated with engaging in the behavioural in question. *Internal-external locus of control* is an expectancy concerning the degree of personal control we have in our lives. People with an internal locus of control believe that life outcomes are largely under personal control and depended on there own behaviour. People with an external locus of control believes that their destiny has less to do with there own efforts than with the influence of external factors (luck, chance, powerful others)(Rotters,1954). Internal locus of control is positively related to self-esteem and feelings of personal effectiveness (self efficacy), and internal tends to cope with stress in a more active and problem focused way than do externals (Passer and Smith, 2004).

4. 1.4 Modelling

"Modelling", is the learning that occurs by observing the behaviour of a model. When we observe another person engaging in a climate neutral or sustainable behaviour can be considered a type of prompt of what to do. Researches have found that modelling is most effective when the modal is perceived positively and is similar to the observer (Bandura 1977 in Bell et al, 2000:488) e.g. the same age and gender. Most probably, this similarity leads the observer to expect to receive rewards similar to the modal if s/he performs the modelled behaviour. Studies have found that modelling can function effective to change an inappropriately behaviour (Newhouse, 1990, Bell et al, 2001:486, 488-489). Modelling is effective in real world but also when the observer is looking at television or videotape at the modal. Bandura (1977) views modelling as a four-step process involving *attention* (to the models behaviour), *retention* (retain the information in memory, so that it can be recalled when needed), *reproduction* (we must be capable of reproducing the moles behaviour or something similar) and *motivation* (we must be motivated to display the behaviour).

4.1.5 Human needs

P*erceived need*, is the perception by an individual that they need to change there behaviour: "I really need to be more with my children" (Ogden, 2004:40). Maslow (1954) proposed the concept of a need hierarchy, a progression containing deficiency needs - needs concerned with physical and social survival - at the base of the "triangle" and uniquely human growth needs at the top. From the bottom: physiological needs, safety needs, belongingness and love needs, esteem needs, cognitive needs, aesthetics needs and self- actualization (meaning with life) in the "top".

4.1.6 Using the Theory of Planned Behaviour

Theory of Planned Behaviour (TPB) **-** is a theory derived from the work of Fisbein and Ajzen which propose that *attitudes* plus *subjective norms* plus *perceived control* predict *behavioural intentions,* which in turn predict *behaviour* (Bell, 2001). Ajzen´s and Madden's (1986) Theory of Planned Behaviour (TPB) can, suppose author applies to over-consumption. The TPB would in this situation make the following predictions: if an individual believed that reducing her purchasing would make her life more happy and beneficial to her health, satisfaction, economy and climate change (attitude to behaviour) and believed that significant people in her life wanted her to cut down purchasing (subjective norms) and in addition believed that she were capable of consuming less things due to her past behaviour and evaluation of internal and external control factors (high behaviour control), then this would predict high intentions to reduce purchasing (behaviour intentions). However perceived control, reflect actual control, a belief related to if the individual would be or not be able to purchase because they are economically incapable or capable of purchasing, would maybe be a better predictor of there purchasing behaviour than there high intention to consume less or more (Ogden 2004:33)?

4. 1.7 Attitude, Norms, Self-efficacy and Intention for Making change happen (ANSIM)
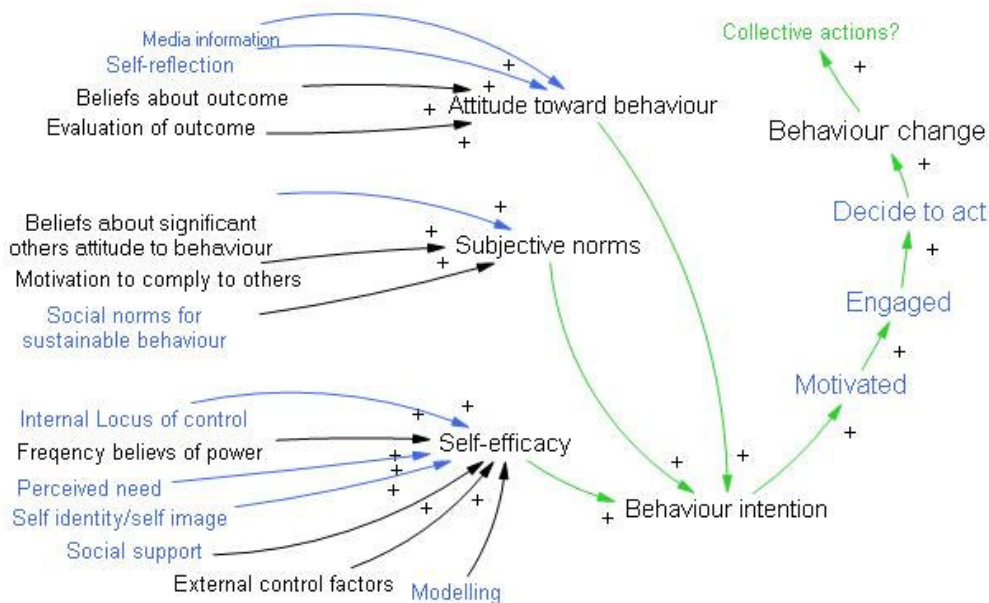
Black: Extended Theory of Planned Behaviour (without perceived control over behaviour)
by Armitage and Connor 1999a

In this thesis Tibblin have created and integrated a combination of Ajzen´s and Madden's (1986) Theory of Planned Behaviour (TPB) model and Armitag´s and Connor's (1999a) model: *Extended Theory of Planned Behaviour*. However in Tibblin's model (2008) some new/other variables not mentioned in TPB or Extended Theory of Planned behaviour are included, namely *Perceived need*, *Self-identity*, HAPA's factor: *Social support* from Schwarzer (1992) as well as Rotters (1954) *Internal*

locus of control and Banduras (1977) *Modelling* (observational learning) as backgrounds factors for self-efficacy. *Social norms* in society function as a back-ground factor to subjective norms. As driving forces for attitude toward behaviour have Tibblin (2008) integrated two factors from her own study with the instrument Quality of life, Attachment and Climate change (QAC, Tibblin, 2008) namely *Media information* and *Self-reflection.* From the Precaution Adoption Process Model (PAPM) the stages *engage* and *decide to act* are lend, which the author suppose are key factors for realizing behaviour changes as well as *Motivation* (Bandura 1977) to change behaviour. When a behaviour change has occurred and behaviour has been maintained over time, finally collective actions could happen when people gathering together with other significant people. The model is called ANSIM: Attitude, Norms, Self-efficacy and Intention for Making change happen (Tibblin, 2008). In the context of making behaviour changes in to a more sustainable direction the author assumes that perceived need is significant because that will motivate our behaviour. Self-identity is also a motivating factor because people want to behave consequent and in a consensus with there self-identity/self-image. Social support from significant persons seems also to be an important aspect for increasing self-efficacy. Social norms added to subjective norms, behaviour intension and decisions to act in a way that decrease GHG and reduce global warming (when climate neutral social norms have been established) will be significant. "Modelling", the learning that occurs by observing the sustainable/climate neutral behaviour of others can also function effective to change an inappropriately behaviour. Finally people with an Internal Locus of control believe that life outcomes are largely under personal control and depended on there own behaviour. Internal locus of control is positively related to self-esteem and feelings of self efficacy.

4.2 Environmental psychology perspective
4.2.1 Social traps and the Tragedy of the common.

Hardin's (1968) called the "Tragedy of the commons", when individual, short-term self-interest by multiple individual's leads to ecological disaster for all. Many natural resources are being consumed at too high a rate, which is endangering availability for future generations. If we drive car today, or fly to London next weekend or feel affection for shopping we may satisfy our immediate needs with the prospect of negative future consequences to society and coming generations. Hardin's argued (1968) that if we want the commons to survive, each of us must give up some of our freedom (Bell et al, 2001: 500,468). A great deal of environmental destructive behaviour can be conceptualized in terms of "Social traps" (Bell 2001). These are situations in which personal interests with a short-term focus conflict with societal needs that have a long-term focus (Bell et al 2001:500). Platt (1973, in Bell 2001) conceptualized the commons dilemma as a type of "Social trap". Platt described three such categories of social traps, which is relevant to environmentally destructive behaviour and the climate change: *Individual good – collective bad traps,* involves group competing for a valued resource (e.g. fit available water, soil, forest, air etc.) such that destructive behaviour by one individual has minor

impact on the commons is disastrous. *One-person trap/self-trap,* involves a disastrous consequence to one person, e.g. over-consumption of food, tobacco, alcoholic or pharmaceutical; as well as "shopaholic" or the frequent and common use of private automobiles. The momentary pleasures of the present intake/activities have disastrous consequences in the long run. *Missing hero trap, i*nvolves an action we fail to take. Such as refusing to decrease GHG now when we can, and not in twenty years from now when it's probably are too late for the security for our children and many coming generations. Or failing to warn others, (in the case of this thesis): about consequences of the primary principles of economic growth and individualism; as well as insecure attachment, increasing stress and depression, over-consumption, GHG release, global warming and climate change. All three social traps can be analyzed in terms of rewards and punishments, i.e. reinforcements, associated with them. There is a positive aspect to the situation that humans seek, and a negative element that we want to avoid. The crisis is that the positive and negative have become separated in time and place, or the negative has been diluted across the members of a group or culture, so that the behaviour leading to the short-term positive consequences, e.g. taking the car for a distance less then 5 km, is more likely to take place than to move by public transport, bicycling or walk. (Bell et al, 2001:476). These *commons dilemmas* – are that depletion of scare recourses can happen because people sharing a resource harvest it with short-term self-interest in mind rather than long-term group interest (Belle et al 2001). How can we avoid these social traps? Increasing *communication* and *trust* and *fostering attraction toward group identification* with those who share the commons are valuable strategies. In the case of climate change, group identification have to be global, e.g. humanity on earth (Bell et al. 2001). Social traps can be avoided by altering reinforcements, or consequences which also is an exceptionally effective approach; adding positive reinforcement, e.g. to receive money or something valuable, or positive feedback, for conservation and climate neutral behaviour. But one can also be given negative reinforcement when behaving unacceptable. Negative reinforcement or consequences for an improper "climate behaviour" can be for example high energy bill, high fuel price, high meat price, high flying price, as well as shaming and embarrassing for exploitive or greenhouse increasing activities (social norms). These methods can aid to protect the commons for all (Bell et al 2001:500).

4.2.2 Make change happen!
Changing individual's attitude does not at all times lead to considerable pro-environmental behaviour. Personal incentives do not normally have as much impact on the environment as policy and technology change. However individual commitment can make a difference, as well as when people corporate adoption of "green/sustainable/climate smart/climate neutral" practices, behaviours and lifestyles, which can have a large-scale impact. Any intervention always starts with individual action. Personal commitment to live in a way that can decrease carbon dioxide release (e.g. traffic, heating homes and consumption) will make a difference (Bell et al: 2001:500) and function as a model for others. From different studies Bell et al (2000: 478) have analyzed different methods for impact and

found that *communication* and *punishment* (negative unpleasant consequences occur: penalty, expel a member and shame-giving) have the significant highest impact and influence for saving commons. Punishment (administering a noxious or painful stimulus to those who engage in environmentally destructive behaviour) make 19-40%, participation and communication between stakeholder have 15-44% impact to save common resources or interest, (like for example biodiversity, ecosystems or climate conditions). Positive reinforcement or Feedback gives 16-19% impact and to get reward gives 9-17 % high influence, Social attraction 12% and Group identity 11%, even Trust have some influence, 8%. Those who have a trustful and cooperative nature seem able to manage the commons together easier (Parks 1994). Environmental *education*, relevant *prompts* and *reinforcement-related techniques* are considered as potential means of altering environmental destructive behaviour. Other strategies are *modelling*, and *removing barriers* to protection and sustainability, individual sacrifice and commitment, and "green" economy and policies as well as "green" technological advances. These approaches seem to contain great promise at both individual and group level (Bell et al 2001:501). In terms of impact, education and attitude change produce about 10% improvement in outcome, prompts about 15%, and reinforcement strategies 10-20%. Reinforcement strategies are appealing to self-interest motive (to get reward or punishment). Bell et al (2000) believe that strategies that are combining the above interventions with following can succeed. But the author suppose one need to make removal of barriers within today powerful social norms; and encourage a commitment to an *ecocentric* viewing/perspective (valuing nature for its own sake instead of for how it supports humans) at both the population level as well as at the government/media/business level. An individual and collective sacrifice with altruistic motives can aim. There is also need for policy and technology innovations influencing individuals, as well as green adaptations by industries and market (ibid). In the analysis of this paper the barriers discussed is the economic growth (and neo-liberalistic) principles' and norms of individualism, competition, consumption and labour force strained to be interchangeable and availability in market. These social norms are assumed in this discussion to be incorporated barriers in the consumption society.

5. Principles for Sustainable psychology

Sustainable psychology as Tibblin defines it (2008) takes the perspective from attachment theories studies about the importance of secure emotional attachment to some significant not exchangeable persons during lifecycle. And the assumptions that people with secure or insecure attachments have differing outcomes in psychological, physiological and social health; insecurely attached persons have higher vulnerability for stress, addiction/over-consumption and unhealthy. Sustainable psychology views the rectangular relations between secure attachment, health, happiness and sustainable lifestyle (less materialism, addiction, ill-health and GHG emissions). However a secure and trustful partner/close friend/ psychotherapist can during years (probably at least 2-5 years) of available

intimacy and trustful support create an opportunity for a new secure attachment attitude to develop and cure an insecure attachment style. Self-reflection and continuing creative cultural expression can also have a positive impact in a direction to a more securely attached attitude, like probably also significant places in nature which a person have a continuing deep and close relation to. Sustainable psychology is influenced from the anthropological and epidemiological studies on health and longevity in long-lived cultures described in this thesis as well as health psychology and positive psychology. Due to these scientific studies sustainable psychology emphasizes the significance of attachment relationships, wealthy social support, caring physical contact, regular physically activities, avoidance of stress and the immaterial and renewable sources for happiness and a meaningful life, shared participation in cultural manifestations and moderate consumption. Sustainable psychologies follow the principles of altruism and solidarity, local markets, long-term and collectivistic thinking and planning; mainly vegetarian food local produced after seasons, as well as shared cultural manifestations with active participations from citizens like sports, festival days, rituals dances, ritual songs and story telling. These factors are the cornerstones in sustainable psychology put in a cultural, ecological, social and economic sustainable context. Sustainable psychology focus on health, social support, happiness, satisfaction, quality of life, wellbeing, care and a meaningful life; and works preventive to reduce stress, depression, addiction/over-consumption and psychological and social illness. Sustainable psychology include the importance of caring physical contact, trustful and secure communication, social competence, collaboration and good social support and a satisfied open, positive attitude. Sustainable psychology introduces methods to influence people in to more sustainable climate friendly behaviours. Like for example the model: ANSIM (Attitude, Norms, Self-efficacy and Intention to Make change happen, Tibblin, 2008). Sustainable psychological knowledge could influence and change social norms of happiness and success by informing people that material consumption, high income and self interest do not cause health and happiness, instead health and happiness are related to social support, intimacy, solidarity, altruism and a positive, open attitude. Sustainable psychology can develop instruments like: Quality of life, Attachment and Climate Change (QACC, Tibblin, 2008) to measure attitudes, norms and behaviour, health, well-being and quality of life in relation to climate change and other essential areas for sustainability. Like ecosystems, biodiversity, energy/electricity/fuel demand, management mobility, urban planning, health, educational institutions, political-business- and media world were within "bridges" and network can be built. In the therapeutic or consulting work emphasizes close continuing relationships, social networks, internal/ individual resources/strengths (self-reflection, creativity, motivation, sociability, optimism, altruism, perceived need, macro worries, secure attachment, self-identity) and external resources/strengths (significant others, social network support, modelling and experiences in nature). Sustainable psychological treatment include and respect persons/couples/families/groups or organizations significant others, social networks support and the ecological and cultural environment for a deeper and broader understanding of problem/ vulnerability as well as resources/strengths'.

Sustainable psychology can use pedagogical and psychological tools like visualisation and expressive symbolical therapy like picture therapy, story telling, song- dance- and music therapy and creative/therapeutic writing). The viewpoint is to see humans as one of other mammals in nature, depended on ecosystems services and belonging to a cultural and ecological context. Therefore the sustainable psychologist do not close the door to the therapeutic room, instead the psychological treatments occur out in the environment, in school, working place, home or natural surroundings. The sustainable psychological practice will support circumstances for secure attached to happen and will work in direction to an altruistic, loyal and caring attitude in a long-term and cultural perspective. Sustainable psychology encourage secure close relations, creativity, stress and depression reduction (yoga, massage, meditation, dance, song, exercise, physical activities in nature etc.) as well as sustainable attitudes, norms, behaviour and life style, and have the intention to increase biodiversity, global fairness/justice and health for people on earth, as well as to care for future generations needs.

6. Methodology

6.1 Interventions
The author wanted to assess the hypothesized relationships with a moderate size survey, complemented with several deep interviews of selected participants in leading power positions.

6.2 Research design
This study was a small study; and the research followed a correlational design (Bryman 2004) where participant's attitudes, norms, and behaviours in environmental areas, as well as general well-being and attachment styles, were measured in the instrument (discussed in detail below). Sub-scales were factor-analyzed, and resulting factors were then submitted to regression analyses to assess relationships. The used research theory was Interpretivism (Weber, Mead, Blumer). The target group of interest was middle-class males (39-60 years old) in the area in some streets of Östra Torn Lund, Sweden, 81 of 110 answered. Due to lack of time, as well as space issues, the deep interviews could not be conducted.

6.3 Participants
To apply the hypothesis and research questions the author conducted an empirical study of a population of 81 men in Östra Torn, Lund, Sweden about their attitudes, norms, behaviour, self-identity/self-image, needs, close relations, happiness, satisfaction, strengths, attachment strategies, micro (personal matter) and macro(global issues) worry and quality of life. The reason that the author chose middle age men as a sample is that in general, men's lifestyles entail 20% higher energy consumption than women, especially in relation to transport and restaurant consumption (Carlsson-Kanyama and Räty, 2008). Men are today still more represented than women in power positions in the business and political worlds and can therefore have more powerful capacity to influence (ibid); if men

change to behave in a more climate friendly way, they can stand as models (Bandura 1977) for other men to decrease their fuel/energy consumption, with relatively greater gains than for their women equivalents. The questionnaires were distributed to 110 males living in Östra Torn, Lund, along the following streets: Spexarevägen, Uardavägen, Iliongränd and Borgåslingan. Of these, 81 (and four too late for this study) individuals returned the survey. The area is the neighbourhood of the author. The selection of the sample was too contributed to the ease with which participants could return the survey in a cost-effective and anonymous manner. Observations was also done in Östra Torn when discussion with interested people about the topic. Four men in power position were asked if they wanted to participate in a deep interview situation about a paradigm shift in mindset and behaviour from a business as usual behaviour to a sustainable. All of them wanted to participate. Unfortunately the author did not have the time or space in this thesis to analysis that kind of qualitative data so I did not do the interviews'. The author got continual information, facts, simple opinions, and attitudes values, interpretation from newspapers, radio and television about relevant for climate change, which not is used directly but indirectly in this thesis.

6.4 Measures

The instrument, a self-completion questionnaire with 99 questions: Quality of life, Attachment and Climate change (QAC, Tibblin, 2008) was composed of fixed-choice question and three open questions, inspired by scientific psychological studies (mainly from diverse studies in Rutter & Quine 2002, Ogden 2004 and Seligman, 2007) and modified to be suitable for the purpose in this thesis: to measure several scales taken from the literature, so as to assess attitudes, norms and behaviour towards climate change and sustainable behaviour. The scales were specifically chosen to assess the hypothesized relationships listed in the introduction. The questionnaire intended to measure the following constructs: subjective wellbeing/happiness, social support, attachment relations, health, self-identity, needs, social norms, behaviour and lifestyle in relation to climate change. The hypothesis and the goal was that the questionnaire could measure following issues: Precaution adoption processes stages (Wrinstein, 1998), behavioural intention, outcome expectancies, self-efficacy, behavioural willingness, anticipated affect, attitude, norms (Ogden 2004), "Locus of control" - internal or external feeling of control-(MHLC, Wallstone et al, 1978), self-identity (Ogden 2004), sustainable behaviour, perceived need (Ogden 2004), A measure of subjective happiness (Lyubomirsky and Lepper ,1999) The Satisfaction with life scale (Diener, Emmons, Larsen, & Griffin, 1985), Strengths (Seligman, 2007), Attachment strategies: ambivalent, secure, avoidant (Tibblin, 2008), age, living, income, university studies, occupation/employment, married/partner/single, children, children age, on paternity leave, satisfaction with close relationships (Tibblin, 2008; Russek och Schwartz, 1996 and 1997 in Robbins, 2007:247-248), Micro and Macro worries (Schwartz, 2000) Quality of life (O´Boyle et al.1992; Tibblin, 2008).

6.5 Materials

From 110 distributed questionnaires 81 responded (74%), a very good response according to Bryman (2004) and five more responded too late. The resulting instrument comprised 99 questions. Of these 96 closed questions (between 2 and 7 alternatives) and three open-ended. The instrument was initially pilot tested with eight participants, which resulted in some changes to the instrument.

6.6 Procedure

During three afternoons and evenings, the author recruited 110 men by personally visiting them at their homes. Prior to agreeing to participate, they were informed about the purpose of the study (informed consent). During this time they were also informed that participation was voluntary, and that all responses were anonymous. They were also told that they could either have the author return to pick up the responses in their homes, or drop them off in a sealed envelope at the author's mailbox. The author chose the door-to-door method, because she anticipated participation would be higher than mailing or –emailing. All participants in the tenant-ownership area, where the author lives, agreed to participate, whereas in the residential district roughly half declined to participate, referring either to time-pressure or non-interest in the climate-change questions. In a second tenant-ownership area about four fifths of the potential participants agree to take part.

6.7 Results

Prior to analysis each sub-scale was analyzed for reliability as well as submitted to a factor-analysis to establish whether the subscale might reasonably be divided up into several factors. The scales assessing stages of behavioural change, norms in regard to climate change and behaviour with regard to climate change were rendered into separate single scales by taking the mean response across all items. All three scales suggested several sub-factors, but were also high on reliability (chronbach's alpha around .70), and due to the modest sample size it was deemed prudent to not divide them up further, other than for exploratory purposes. Scales assessing locus of control, happiness, and satisfaction all resulted in single factors, and were thus turned into single item measures by averaging the responses. All but one item on the self-identity correlated highly, and thus, a single measure was created by averaging all responses except item 'I am a caring person'. The scales assessing the subjective need for improvement also resulted in a single factor, and were thus averaged. The items on the current relationships measure were highly correlated and thus turned into a single factor. Relationship to mother and father were turned into a single averaged parental attachment factor. The factors assessing attachment did not result in an interpretable factor, and thus they were kept separate, as, theoretically, they do measure different dimensions of attachment. To assess whether participants were predominantly concerned with close personal matters (micro-worries) or more global issues (macro-worries) the number of micro-worries and the number of macro-worries the participant selected was counted, and averaged over the total possible micro- or macro- worries (6 micro, 13 macro).Then the difference was arranged between the mean macro-worries and mean micro-worries to

turn the assessment into a single measure. The main dependent variable was stated climate-conscious behaviours (henceforth behaviour). In an initial step-wise regression analysis using all climate related measures (stages, locus of control, norms....) only the stages measure was found to be related to behaviour ($\beta = .556$, $t(78) = 5.90$, $p < .001$, $R^2 = .309$, $F(78) = 34.83$, $p < .001$). Exploratory work, using the stages measure as the dependent variable, suggests, however that self-identity ($\beta = .442$, $t(75) = 4.68$, $p > .001$), locus of control ($\beta = .279$, $t(75)$ 3.02, $p = .003$), perceived need ($\beta = -.230$, $t(75) = -237$, $p = .019$) and climate norms ($\beta = .200$, $t(75) = 2.14$, $p = .036$) predicts the stages variable $R^2 = .395$, $F(75) = 12.24$, $p < .001$. Additional analysis revealed no relationship between the attachment assessments and either climate-behaviour or the stages measure. However, exploratory analyses suggest that a larger sampling and employment of path-analysis may reveal such a relationship. The measure of secure attachment (varying from not at all secure to secure) was positively related to the macro-micro worries measure in such a manner that those that were more securely attached had a higher degree of macro-worries), whereas the those who claimed to be low on the secure attachment showed a higher degree of micro-worries as compared to macro worries $r(77)$ 0 $.326$, $p = .004$. A larger sample may reveal a stronger relationship. From the factor analysis there is possible to see relations between perceived needs, macro worry, and locus of control and self-identity and to Weinstein and Sandman (1991) the stages in there Precaution Adoption Process Model (PAPM) of changing individual behaviour linked to "environmental/climate friendly behaviour ". There was also a relation to the higher secure attachment the less micro worries (global issues about for ex. poverty, biodiversity, climate changes) and the more insecure attachment the more micro worries (private problems). Men who have started a behaviour change for a more climate neutral behaviour and lifestyle were find in PAPMs Stage 3: deciding about acting (considering the possibility of taking action), Stage 5: decided to act (have become engaged by the issue), Stage 6: acting, initiate the behaviour or Stage 7: maintenance, the behaviour have been maintained over time. As a summary there are significant correlations between high scores on the following items: perceived needs, macro worries, locus of control and self identity and more environmental/climate friendly behaviours and actions (engagement and decide to act). Men with high scores in secure attachment also score higher on happiness, satisfaction in life, social competence/ social strength and meaningfulness.' Men with high secure attachment also show higher satisfaction with their significant relations, and are more pleased with their relations with partner, children, friends, siblings, parents and boss. The correlations are: Secure-present relations: $r = (76) = - 480$ $p<.001$. Secure – Happiness e $(76) = . 428$ $p<.001$. Secure – Satisfaction $r (76) = .521$ $p<.001$. Secure- Social strength/ Social competence $r (76) = 247$ $p<.05$. Secure – Meaning of life strength $r (76) = .334$ $p<.01$ There is an opposite correlation for men with insecure anxious/ambivalent attachment. Men with insecure anxious/ambivalent attachments are more displeased with their significant relations to partner, children, friends, siblings, parents and boss. Men with an insecure anxious/ambivalent strategy have stricter or cool relation to parents; -they also scored less happiness and satisfaction in life. Inferential statistics are: Anxious/ambivalent – present

relations r (76) = .514 p<.001. Anxious/ambivalent – parents r (76) = .358 p<.01. Anxious/ambivalent – Happiness r (76) = -.399 p<.001. Anxious/ambivalent – Satisfaction r (76) = -.372 p<.001. All results mentioned in this section are significant.

6.7.1 Descriptive statistics

Beliefs and attitudes - about climate change
55% did experience climate change as a threat/worry, and 57% (had an internal locus of control) believed that if climate change increases or not can be influenced by themselves and other individuals activities and behaviours or misbehaviours; and that human decide in the closest future how threatening or manageable the climate change will be for us in Sweden and all over the world. 55% believed that they or their children could possibly be affected negatively by climate change. However 85% believed they tried to take responsibility for coming generation's well-fare; and 68% thought the climate problem is one of the most significant problems we have to react to.

Behaviour
44% preferred to rent or loan things (CD, books, videos etc.) and 15% when they could. 44% bicycled always to work and 23% did so when they could, 28% had taken an active interest in the climate issue 25% wanted to take the train instead of car or aeroplane within Sweden and Northern Europe, and 38% wanted to do that if they could. 19% preferred to buy second hand and 43% did so when they could; 15% avoided meat and 11% had choose green/environment friendly electricity.

Perceived needs
Their strongest perceived need was for increased physical activity (51%) to be more with one's partner (41%) children (40%) and close friends (39%), relief from stress (38%) and more vegetarian food (37%) and finally 28% had a perceived need to spend more time with one's parents and siblings.

Micro (private) worries

Highest micro worry: one's own or relatives' health (43%), worry about problems with children (41%) and with one's partner (28%), 12% was worried about problems with work/studies, few was worried about there own economy; or if there parents should die.

Macro worries
Highest macro worry: environmental pollution (19%), unequal/unfair distribution of natural resources in the world (16%), loss of biodiversity (14%), climate change and war (12%). A minority was worried about the poverty in the third world, traffic accidents, increasing global population, increasing privatisation, increasing individualisation, increasing vehicle/air traffic, water scarcity.

Attachment styles
54% of the men seem to have a secure attachment stile, 31% an avoidant insecure, and 15 % an ambivalent insecure attachment style.

Social norms

20% said they felt guilt if they did not take bicycle or train if they could

15% said that close relatives wanted them to eat a smaller amount of meat.

5% thought that people was a shame of commuting between Lund-Malmö/Helsingborg

5% had feelings of guilt if they did not order "green electricity"

4% believed that people in general feel it is shameful to be on holiday in Thailand or travel for shopping in London. 77% had a willingness to change to green/renewable energy for heating there house, 14% did not know if they wanted to do it and 8% didn't want to change to green/renewable energy (water, wind, sun). However 88% did not feel guilt if they didn't change to renewable energy when heating there house, 6% % did not know it they should feel guilt, only 5% would have feelings of guilt (an answer to a manifest social norm).

Quality of life

In the semi open questions (measured 1-5, 5 = most significant) about activities valued as most significant for quality of life: the men choose first to spend time with family (94%), to spend time with friends/social life (49%), physical activity (25%), working life (25%), to be in nature (23%) and to be creative (22%, 9 persons valued creativity highest: score 5, 8 person's chose 4) 22% valued to be on journey /outing (3 persons valued journey highest, score 5, 13 persons chose score 4) and 19% valued reading highest. Media: TV/video/computer/mp3/Ipod activity, shopping/IKEA, colony/gardening, studies, repair home, concert /dance /choir, hobby/leisure activity was not valued high for quality of life and time use, just among some few individuals.

Influences to change behaviour in to a more climate "friendly" way

In the first open question 59 individuals (of 81) answered, there were diverse influences for changing behaviour to a more sustainable/climate "friendly" way of life among the men. Al Gore had influenced two persons, international relationships/journeys had an impact on two other persons, two other individual has changed behaviour because of the threaten picture / frightens for climate change. Two other persons have been influenced by common sense/common opinion, and three from political events. Four persons was influenced by interest for nature, five from science/articles and five from significant friends. However the biggest influence came from wife/children/ parents/siblings: fourteen individuals of fifty-nine (ca 24%), peoples own awareness/self-reflection had influenced even more: seventeen (ca 29%) individuals and media information had the greatest influence: twenty persons (ca 35%) wrote they were mainly influenced from media. Below some voices from the sample: "Conditions of illnesses were one have changed attitude and raised a new awareness about sustainability". "Today's new political economy, with a short-term exchangeable principle which follows market demand and expectations' has an impact". "Media information and ruthless exploitation of nature" "Universal threatening picture." "Global warming in it self and my children." "Started to practise yoga." "Knowledge about changes and consequence." "Because it exists something named climate changes." "Education, self reflection, view and awareness about the world's conditions." "Consciousness about what will happen if India's and Chinas slightly more than 2

milliards people start to consume in the rate people in west world have done during many years; we in the west word have to take a bigger responsibility." "Media, friends, journeys." "Climate change, environmental pollution, I like the nature." "Information from media and increasing prices." "Media, wife, children" "Media, close relations" "Have not changed life style, will not do so, because climate change is not new (people knew about it since long time ago)." "My older brother." "My son." "News, articles, books," "Wife and media." "A combination of many things: a growing family, international relations, age and information from media."

Have this questionnaire increased your consciousness about climate change?

33 of 72 answered yes (ca 46%) and said this instrument had increased there consciousness about climate change. Some voices: "Yes in some way, have got a better understanding that my own health has to be prioritized. I need to give my self more time for a more healthy life. This is a little part in a bigger context however even so significant." "Yes, and I got new energy in the word: water scarcity." "Well, maybe, the questions have forced me to do some reflections." "I was already aware about the climate change and its consequences' for our existence. "Yes, anyway to remind me about green electricity." "No, however it has given opportunity to reflections, mainly on personal questions and chooses". "Well, mostly to show my double standard of morality."

Reflections from some participants from the last open question

"Life is short. All these days which comes and disappear is the life." "To change human's norms and lifestyle could take very long time, 15-20 years. Don't give up!!!" "Increasing stress and many/huge options/chooses make us think less on the climate change." "I believe a radical changed point of view in relation to consumption is necessary when constructing a society for future which is sustainable both in a social as well as from the climate perspective." "A rational Government authority/supranational politics are a demand if it should be possible to influence climate change. My own possibility to influence feels totally irrelevant when the government choose to for example compensate nuclear power with coal plant electricity to win populist points." "I can't judge how huge threat climate change constitutes. Apart from that is the social-psychological aspect interesting and irritating. Peoples need to see them self as good and others as bad seams fundamental and fulfils obvious by climate change. We have a driving force to dirt-free our self and give guilt to others." "We need more political actions which are built on environmental thinking! More ecological food and wind power, more re-cycling, less petrol/diesel production through increased taxes. It should be a winning situation to be environmental friendly." "The debate about climate, as I concern, deal with, and focus on catastrophe scenarios. Is the climate problem as gigantic as it states to be, can it probably not be enough with a little bit higher fuel prices or more focus on recycling? There is rather some kind of revolutionary agenda which should be desirable. On the other hand if the perspectives are exaggerated, maybe other great society problems grow in the shadow of the trendy and correct climate discussion?"

7. Analysis

There are significant correlations between high scores on perceived needs, macro worries, locus of control and self identity and more environmental/climate friendly behaviours and actions (higher engagement and more implemented decisions to act. There are also significant correlations between more securely attached and higher degree of macro-worries, whereas those who claimed to be low on the secure attachment showed a higher degree of micro-worries as compared to macro. There was also a relation to the higher secure attachment the less micro worries and the more insecure attachment the more micro worries. Highest micro worry was for one's own or relatives' health (43%), worry about problems with children (41%) and with one's partner (28%). Highest macro worry was for environmental pollution (19%), unequal/unfair distribution of natural resources in the world (16%), loss of biodiversity (14%), climate change and war (12%). Men with high scores in secure attachment scored higher on happiness, satisfaction in life, social competence/ social strength and meaningfulness.' Men with high secure attachment also show higher satisfaction with their significant relations, they are more pleased with their relations with partner, children, friends, siblings, parents and boss. There is an opposite correlation for men with insecure anxious/ambivalent attachment, they are more displeased with their significant relations to partner, children, friends, siblings, parents and boss, and have stricter or cool relation to parents; they also scored less happiness and satisfaction in life. 54% of the men seem to have a secure attachment stile, 31% an avoidant insecure, and 15 % an ambivalent insecure attachment style. This results can be compared with results worldwide: depending on country and culture, 55-70% of the people in a population have a secure attachment 15-25% have an insecure avoidant attachment style, and 5-15 % an ambivalent insecure attachment style in Western countries according to Broberg (2006). In this sample 55% did experience climate change as a threat and 57% had an internal locus of control in relation to climate change. 55% believed that they or their children could possibly be affected negatively by climate change and 68% thought the climate problem is one of the most significant problems we have to react to. However 85% believed they already took responsibility for coming generation's well-fare and 28% had taken an active interest in the climate issue. Subjective/moral norms had some influence: 20% said they felt guilt if they did not take bicycle or train if they could, 15% said that close relatives wanted them to eat a smaller amount of red meat, but only 5% thought that people was a shame of commuting between Lund-Malmö/Helsingborg. 5% had feelings of guilt if they did not order "green electricity", however 77% had a willingness to change to green/renewable energy for heating there house. Though 88% did not feel guilt if they didn't change to renewable energy when heating there house. Just 4% believed that people in general feel it is shameful to be on holiday in Thailand or travel for shopping in London (due to GHG emissions). From these results it seems that social norms did not have any correlation to climate friendly/climate neutral behaviour or the stages in PAMP. An interpretation of this can be that there are not yet any social norms for decreasing modern human's activities of burning fossil fuels or

raising large quantities of domestic animals (for meat), however there is probably a beginning of moral norms for bicycling. "Social sustainable norms" do not directly decide behaviour intentions, because 44% preferred to rent or loan things instead of buy and 19% preferred to buy second hand and 43% did so when they could. 44% bicycled always to work, 25% preferred to take the train instead of car or aeroplane within Sweden and Northern Europe, and 38% wanted to do that if they could. Finally 15% avoided eating meat, but only 11% had chosen green/environment friendly electricity. These men's strongest perceived need was for increased physical activity (51%) to be more with one's partner (41%) children (40%) and close friends (39%). Both perceived needs and quality of life are from the results assessed by measuring basic needs like spend time together with one's family (94%) and friends (49%), being physically active(25%) and work (also 25%), spending time in nature (23%) and to be creative(22%), as well as relief from stress (38%) and increased vegetarian food (37%). This is all consistent with modest or decreased demands for fuel/energy/consumption and less GHG emissions. In this sample 8% of the men was influenced, from science/articles and also 8% from significant friends to change there behaviour in to a more climate "friendly" way. Though a greater impact came from family members, 24% was influenced by wife/children/siblings, even higher power have self-reflection, 29% answered that there own reflections was the influence, however 35 % answered that most powerful influence to change there behaviour had media information. 46% of the participants supposed the QAC instrument (the questionnaire) had increased there consciousness about climate change. Finally some participants' self-reflections from the last open question: "To change human's norms and lifestyle could take very long time, 15-20 years. Don't give up!!!" "Increasing stress and many/huge options/chooses make us think less on the climate change." "We need more political actions which are built on environmental thinking! It should be a winning situation to be environmental friendly." "The debate about climate, as I concern, deal with, and focus on catastrophe scenarios. Is the climate problem as gigantic as it states to be, can it probably not be enough with a little bit higher fuel prices or more focus on recycling? There is rather some kind of revolutionary agenda which should be desirable. On the other hand if the perspectives are exaggerated, maybe other great society problems grow in the shadow of the trendy and correct climate discussion?"

8. Discussion

Is it possible to change social norms and lifestyles in a direction toward sustainable living with respect to climate, and at the same time enabling a healthier and happier life? According to results and earlier psychological studies referred to in this thesis there can be an optimistic answer. According to 46% of the participants had the QAC instrument an influence to increase consciousness about climate change. Intensive mass media communication with a sustainable message, one-to-one (friend to friend, family member to family member) counselling and inspiration (Ogden 2004) as well as commercial and pedagogical video modelling (Bandura 1977) are efficient methods for influence to a more climate

neutral behaviours. As well as social cognition models which can influence to a sustainable behaviour, and can be combined with intervention groups, lectures, videos and discussions. Social cognitive interventions (like ANSIM) are potentially one of the safest and most effective ways of intervening new behaviour (Rutter and Quine, 2002). However successful behavioural change will occur only when intentions are changed through either attitudes or subjective norms. Changing behavioural beliefs involves beliefs about the consequences of one's actions (Armitage and Conner, 1999a). Results from the study with the QAC (Tibblin, 2008) questionnaire showed significant correlations between high scores on perceived needs, macro worries, locus of control and self identity and more environmental/climate friendly behaviours with higher engagement and more implemented decisions to act. Hypothesis was illustrated in the model ANSIM (Attitude, Norms, Self-efficacy and Intention for Making change happen, Tibblin, 2008) and gave positive correlations in the results from the QAC questionnaire. The result showed great effect from media information, self-reflections and close family members influences for a change to a more sustainable behaviour and lifestyle. Because of this results media information and self-reflection are included in ANSIM model. Climate change can be conceptualized in terms of "Social traps" (Platt, 1973) and "Tragedy of the commons" (Hardin's, 1968) situations were short-term individual convenience conflicts with the long needs of society. The momentary pleasures of the present intake/activities have disastrous consequences in the long run. However people can avoid social traps and tragedy of the commons by increasing *communication* and *trust* and fostering attraction toward group identification with those who share the commons wish are valuable strategies. In the case of climate change, group identification have to be global, e.g. humanity on earth. Social traps can be avoided by adding positive reinforcement, or positive feedback, for conservation and climate neutral behaviour, one can also be given negative reinforcement when behaving unacceptable in relation to sustainability/climate crisis. These methods can aid to protect the commons for all (Bell et al 2001:500). Policy, media and technology have a large amount of influence on environmental change. However personal commitment to live in a way that can decrease GHG release would make a difference (Bell et al: 2001) and function as a model for others. Any intervention always starts with individual action; individual commitment can make a difference as well as when people corporate adoption of sustainable practices and make collective actions which can have a large-scale impact. *Communication* and *punishment* (negative consequence) have the significant highest influence for saving commons (Bell, 2000). Due to today's powerful driving forces for economic growth and norms of individualism, competition, consumption and labour force strained to be interchangeable and availability in market increases stress and GHG. These norms are assumed to be incorporated barriers for sustainability in consumption societies. However new sustainable and climate neutral norms which will be established from science- policy- business- and media world would probably have an enormous influence; and could encourage a commitment to an *ecocentric* viewing (valuing nature for its own sake instead of for how it supports humans) at many levels in society. Individual and collective attitudes and motives of altruism and solidarity will also aim. As

well as to change social norms of happiness and success, by informing people that material consumption, high income and self interest do not cause health, happiness and quality of life. Instead health, happiness and quality of life are related to social support, intimacy, altruism, solidarity and a positive and optimistic attitude. When one combine and integrate these methods there would be an increased effect to influence. Results from quality of life could be seen as cultural related because O´Boyle et al. (1992) find in there study relation to life quality in satisfaction with one's family life, social life and leisure, and did not mention factors as physical activity, work life, nature or creativity? Men with insecure attachment are more displeased with their significant relations, and they feel less happiness and satisfaction in life. However climate change was not yet a big worry for a majority. Micro worry for one's own or relatives' health, problems with children and with one's partner and macro worry for environmental pollution and unequal/unfair distribution of natural resources was greater worries than worry for climate change. Cross-national comparison of the importance of worries exposed that the most intense worries in most nations concerned the environment and close family members (Diener and Suh, 2000). Sustainable/climate neutral norms seems not yet been established in society, it is really OK according to this samples social norms to eat large amount of meat, commuting with car, not order renewable/green energy for heating house and household equipment, to take airplanes for holidays in Asia or other far away countries, or fly for weekend shopping's in London. However a majority had a willingness to bicycle to work and change to renewable energy for heating there house, almost half of the sample preferred to rent and loan and 15% when they could. One of four chose to take the train instead of car or aeroplane within Sweden and Northern Europe, and 38% wanted to do that if they could (probably depending on external control factors like price and availability). Almost one of five preferred to buy second hand and 43% did so when they could. This result shows a large opportunity for increasing personal railway transport in Sweden and Europe if good external factors like moderate price, availability and efficiency is present. This external factor is probably also the case for people's behaviour in relation to willingness to loan and rent things from library and buy in second hand shops or flea market which could decrease consumption a lot.

Conclusions

Overall the theoretical framework and results from the study supported the hypotheses that insecurely attachment leads to an increase in focus on short-term and self-interest, as well as increased stress levels and vulnerability to ill-health. And, in addition, this will lead to a tendency to over-consume. The hypothesis that securely attached people have a stronger tendency to have an altruistic, loyal and caring attitude and commitment to environmental issues/macro worries like climate changes was confirmed. Whereas insecure attachment has a tendency to cause attitudes of self interest, short term thinking, individualism and competition which are similar to the social norms of post-modern consumption societies. The main research question if it is possible to change social norms and

lifestyles in a direction toward sustainable living with respect to climate, and at the same time enabling a healthier and happier life could from results and earlier psychological studies referred to in this thesis be answered positively. According to 46% of the participants had the QAC instrument (the questionnaire) an impact to increase consciousness about climate change. It is significant to remember that health; happiness and quality of life are mainly related to social support, intimacy, altruism, solidarity and a positive and optimistic attitude. According to result in this study could it be possible to change social norms and lifestyles in a direction toward sustainable living with respect to climate, and at the same time enabling a healthier and happier life because the participants' strongest perceived need was for increased physical activity, to be more with one's partner, children and close friends, relief from stress and increased vegetarian food. These perceived needs requirements to change social norms from high emphasise on self-interest, short-term thinking/planning, individualism /competition, economical growth and exchangeability. To a paradigm shift in mind-set, a priority including social norms of attachment, altruism, long term global thinking and local action. Quality of life was according to the results to spend time together with one's family and friends, being physically active and work, to be in nature and to be creative. Both perceived needs and quality of life are from the results assessed by measuring basic needs. Perceived needs and quality of life is all consistent with modest or decreased demands for fuel/energy/ consumption and less GHG emissions as well as enabling a healthy and happy life. Securely attached men cares more about macro-worries like climate change but have less micro (private worries) however insecure attached have more micro worries. Secure attached man was happier, more satisfied in life, had more social competence/ social strength and felt more meaningfulness' in life, they also show higher satisfaction with their significant relations, the opposite relations was for insecure attached men. This results shows that secure attached people have resources and possibility to be in this world with a sustainable lifestyle with respect to climate, and at the same time enabling a healthier and happier life. "Sustainable psychology" could aim and increase awareness, and offer theories, methods and tools for climate friendly behaviours, which could function as a complement to green technology, green economy and green policy, to meet the complex challenge of climate change. Sustainable/climate neutral norms seems not yet been established in society, this reality is indeed a challenge to take for policy makers, diverse institutions as well as sustainable psychology to try to reach out with theories and methods to influence for increasing innovative sustainable norms in society. This thesis shows fairly obvious that it is possible that long-living cultures characteristics could be a model and illustrate lifestyles that can be adapted to the current post-modern period as an antidote to climate change as well as to stress, ill-health and over-consumption. There are clear correlations to participant's results concerning that perceived needs and quality of life are in agreement with a lifestyle like the one of the long-living cultures and also the recommendations from health- and positive psychologies. Finally our human health and survival depends on whether we realise how deeply we all depend on each other here on Earth.

"You must be the change you wish to see in the world…" GANDHI

10. References

Allen, M. (1991) Meta-analysis comparing the persuasiveness of one-sided and two-sided messages. *Western journal of Speech Communication,* 55: 390-404

Ainsworth,M., Bell, S.M., & Stayton, D.J. (1971) Individual differences in Strange Situation behaviour of one year olds. I: H.R. Schaffer (Red.), *The origins of human social relations*. New York: Academic Press.

Ajzen, I. (1991) The Theory of Planned Behaviour, *Organizational Behaviour and Human Decision Processes,* 50:179-211

Ajzen, I. (1998) Models of human social behaviour and there application to health psychology, *Psychology and Health*, 13(4):735-739

Ajzen. I. and Madden T.J. (1986) Prediction of goal-directed behaviour: Attitudes, intentions, and perceived behavioural control. *Journal of Experimental Social Psychology,* 22: 453-474

Armitage, C.J. and Conner, M. (1999a) Distinguishing perceptions of control from self-efficacy: predicting consumption of a low fat diet using the theory of planned behaviour, *Journal of Applied Social Psychology*, 29: 72-90

Biddle, B., Bank, B.. and Slavings, R. (1987) Norms, preferences, identities and retention decisions, *Social Psychology Quarterly,* 50:322-337

Aronson, Elliot (2006) *How to live to be 100: The lifestyle of the people of the Caucasus* (New York: Dial Press, 1976:42

Bandura A.,Grusec, J.E. and Menlove, F.L. (1968) Factors determining vicarious extinction of avoidance behaviour through symbolic modeling. *Journal of Personality and Social Psychology,* 8, 99-108 in Cialdini 2005:121

Bandura, A. (1977) *Social learning theory*. Rnglewood Cliffs, NJ:Prentice-Hall

Bandura, A. (1986) *Social Foundations of Thought and Action: A Social Cognitive Theory*. Eglewood Cliffs, NJ:Prentice-Hall.

Bandura, A. (1997) *Self-Efficacy: The Exercise of Control.* New York: Freeman.

Bandura, A. (1998) Health promotion from the perspective of social cognitive theory*, Psychology and Health,* 13:623-649)

Bartholomew, L.K., Parcel, G.S. and and Kok, G. (1998) Intervention mapping: a process for developing theory- and evidence-based health education programs, *Health Education and Behaviour*, 25:545-563

Bauman, Z (1998) *Work, consumerism and the new poor,* Buckingham; Philadelphia, Open University Press

Beck, A. T. (1999) *Prisoners of hate*. New York: HarperCollins

Bell, P.A., Green, T.C., Fisher, J.D. & Baum, A. (2001) Environm3ental Psychology 5th edition, Harcourt College Publisher

Benedict, R. (1970) Patterns of Good Culture, *American Anthropologist* 1970, vol.72 (in Robbins 2007)

Berg, L. (2005) *Gryning over Kalahari. Hur människan blev människa.* Stockholm: Ordfront

Berkman, L.F. & Syme (1979) Social networks, host resistance, and mortality: A nine-year follow-up study of Alameda County residents, *American Journal of Epidemiology* 1979,109:186-204 (in Robbins 2007) Monthly Press 1195:239

Bezruchka (2001) Social hierarchy and the health Olympics, *Canadian Medical Association Journal* 12 June 2001

Both, W. (1988) Johnny Appleseed and the greenhouse. *Science,* 242:19-20

Bowlby, J. (1969) Attachment and loss: Vol. 1*: Attachment.* New York: Basic Books.

Bryman, A. (2004) Social Research Methods, 2th, Oxford University Press

Broberg, A., Granqvist, P., Ivarsson, T & Risholm Mothander, P. (2006) *Anknytningsteori – Betydelsen av nära känslomässiga relationer,* Natur och Kultur

Cabrera, N. et al (2000) Fatherhood in the Twenty-First Century. *Child Development*, 69:1107-1128

TK*Campbell, T. C. & Cox C., (1996) The China Project. Revealing the Relationship Between Diet and Disease (New Century Nutrition, 1996:8, 80-81 (in Robbins 2007)

Carlsson-Kanyama,A & Täti,R (2008)*Kvinnor, män och energi:makt, produktion & användning,* Stockhlm, FOI

Cassidy, J och Shaver, P. (Eds.) (1999) *Handbook of attachment,* 1999:336-354. New York: Guildford Press

Charng, H.W., Piliavin, J.A. and Callero, P.L. (1988) Role identity and reasoned action in the prediction of repeated behaviour, *Social Psychology, Quarterly*, 51:303-317

Conger, R. och Elder, G. (1994) *Family in troubled times: Adapting to change in rural America.* Hawthorne, NY:Aldine de Gruyter

Csikszentmihalyi, M. (1992) *Flow – Den optimala upplevelsens psykologi*, Natur och Kultur

Cialdini, R.B., (2005) Påverkan – teori och praktik, Liber AB

Collins, N. L. & Read, S.J. (1990) Adult attachment, working models, a

Davies, J.C. (1962). Toward a theory of revolution. *American Sociological Review*,27, 5-19.

Davies, J.C. (1969). The J-curve of rising and declining satisfactions as a cause of some great revolutions and a contained rebellion. I. H. D. Graham & T. R. Gurr (Red.), Violence in America. New York: Signet Books.(In Cialdini 2005: 240-241.)

Diener, E (2000) Subjective wellbeing: The science of happiness and proposal for national index. *American Psychologist* 55:34-43

Diener, E. Suh, E.M (2000) *Culture and Subjective Well-being*, Bradford Book, Cambridge, Massachusetts

Eagly, A.H. and Chaiken, S. (1993) *The Psychology of Attitudes.* New York: Harcourt Brace and Jovanovich

Evans, D. (1999) *Understanding and changing road safety awareness in adolescents*, PhD thesis, University of Wales Swansea.

Fishbein, M. and Ajzen, I. (1975) Belief*, Attitude, Intention and Behaviour: An Introduction to Theory and Research*. Reading; MA: Addison-Wesley.

Fisher, J.D. and Fisher, W.A. (1992) Changing AIDS-risk behaviour, *Psychological Bulletin*, 111(3):455-474

Folkman, S. and Moskowsitz, J.T. (2000) Positive affect and the other side of coping, *American Psychologist,* 55: 647-654.

Fraley, R. C. (2002) Attachment stability from infancy to adulthood: Meta-analysis and dynamic modelling of development mechanisms. *Personality and Social Psychology Review*, 6, 123-151

Freedman, J. L. and Fraser, S.C.(1966:201) Compliance without pressure: The foot-in-door technique. *Journals of Personality and Social Psychology,* 4, 195-203.

Grossman, K. et al (2002) The uniqueness of the Child-Father Attachment Relationship: Fathers´ Sensitive and Challenging Play as a Pivotal variable in a 16-year longitudinal study. *Social Development,* 11:307-331.

Gollwitzer, P.M. (1990) Action phases and mind-sets, in E.T. Higgins and R.M. Sorrentiono (eds) *Handbook of Motivation and Cognition:Foundations of Social Behaviour*, 2: 53-92. New York: Guilford

Gollwitzer, P.M. (1993) *Goal achievement: the role of intentions*, in W. Stroebe and M. Hewstone (eds) European Review of Social Psychology, 4. Chichester: Wiley.

Gollwitzer, P.M. and Oetting, G. (1998) The emergence and implementation of health goals, *Psychology and Health* 13(4):687-715

Hardin, G. (1968) The tragedy of the commons. *Science,* 162: 1243-1248 (in Bell 2001)

Forsberg, B. (2007) *Tillväxtens sista dagar – miljökamp om världsbilder.* Ruin

Robbins, J. (2007) *Hälsans hemligheter*, Forum

Hovland, C.I., Janis, I., & Kelley, H.H.(1953) *Communication and persuasion. New* Haven, CT: Yale University Press

Howe, D. (2005) Attachment Theory for Social Work Practice, Palgrave

Hrdy, S.B. (1999) *Mother Nature: Natural selection & the female of the species.* London: Chatto & Windus.

Honoré, C, 2004, In praise of Slow, How a Worldwide movement is Challenging the Cult of Speed, Orion Books, Great Brittan, Conville & Walsh Limited

Deutsch P (2007) (Red. Birgitta Johansson) *Formas Fokuser* ”Konsumera mera- dyrköpt lycka,.51-53

Hydén, H and Wickenberg, P (2007) (Red. Birgitta Johansson) *Formas Fokuser* ”Konsumera mera- dyrköpt lycka, 2007:150- 159

Insel, T.R. & Young, L.J. (2001) The neurobiology of attachment. Nature Reviews Neuroscience, 2:129-136

Jensen, D. A (2000) *Language Older Than Words*, Chelsea Green Publishing, 2000:211-213 (in Robbins 23007) *Bulletin*, 17, 289-299

Kawachi, I. & Kennedy, B.P., (2002)Health of Nations: Why Inequality is Harmful to Your Health, New Press

Kendrick, K.M. (2000) Oxytocin, motherhood and bonding. *Experimental Physiology*, 85:11-124

Kirby, D., Short, L., Collins, J. et al (*1994) School-based programs to reduce sexual risk behaviours: a review of effectiveness, Public Health Report,* 109:339-360

Kobasa, S.C. Maddi, S.R. and Puccetti, M.C. (1982) Personality and exercise as buffers in the stress-illness relationship. *Journal of Behavioural Medicine*, 5:391-404

Leaf, A., (1973) Everyday is a gift when you are over 100 years”, *National Geographic 1973: 143(1):93-119)*

Leaf, A., (1973) Getting old, *Scientific American* 1973:229:45-52 (Leaf 1973 & Leaf 1973 in Robbins 2007)

Li J.Y. et al (1981) Atlas of cancer mortality in the People's Republic of China: An aid for cancer control aid research, *International Journal of Epidemiology* 1981, 10:127-33 (in Robbins 2007)

Liebowitz, M (1983) The chemistry of love. New York: Berkeley Books

Lyubomirsky and Lepper ((1999) A measure of subjective happiness; Preliminary reliability and Construct validiation, *Social Indicators Research*, 46, 137-155 (Med tillåtelse från Kluwer Academic Publishers, in Seligman, 2007:51)

Maccoby, N., Farquhar, J.W.,Wood, P.D. and Alexander, J. (1977) Reducing the risk of cardiovascular disease: effects of a community-based campaign on knowledge and behaviour, *Journal of Community Health*, 3:100-114

Maslow, A. h. (1954) *Motivation and personality.* New York: Harper

Mikulincer, M. Florian, V. & Weller, A. (1993) Attachment styles, coping strategies, and post-traumatic psychological distress: The impact of the Gulf War in Israel. *Journal of Personality and Social Psychology,* 64, 817-826

Mikulincer, M. & Shaver, P. R. (2001) Attachment theory and intergroup bias: Evidence that priming the secure base Schema attenuates negative reactions to out-groups. *Journal of Personality and Social Psychology,* 81: 97-115. (in Broberg 2006)

Mikulincer, M. et al (2005) Attachment, Caregiving, and altruism: Boosting Attachment Security Increases Compassion and Helpning. *Journal of Personality and Social Psychology*, 89 (5): 817-839(in Broberg 2006)

Miller, T (2005) *Living in the Environment – Principles, Connections and Solutions*, 14th, Thomson, Brooks/Cole

Moffat, A.S. (1997) Resurgent forests can be green-house gas sponges. *Science,* 277:315-316.

Moos, R.H. and Shaefer, J.A. (1984) The crisis of physical illness: An overview and conceptual approach, in R.H. Moos (ed) *Coping with physical illness: New Perspectives*, 2, pp. 3-25. New York: Plenum

Newhouse, N. (1990) Implications of attitude and behaviour research for environmental conservation. *The Journal of Environmental* Education, 22, 1

Myers, D. (2000) *The American paradox,* New Haven, CT: Yale University Press

Oatley, K., Keltner, D. & Jenkins, M. (2006) *Understanding Emotions, second edition,* Blackwell Publishing

O´Boyle, C. McGee, H. Hickey, A., O´Malley, K. and Joyce, C.R.B. (1992) Individual quality of life in patients undergoing hip replacements, *Lancet,* 339:1088-1091 (in Ogden 2004)

Ogden, J. (2004) *Health Psychology – A Textbook 3rd edition*, Open University Press

Orbell, S., Hodgkins, S. and Sheeran, P. (1997) Implementation intention and the theory of planned behaviour, *Personality and Social Psychology Bulletin*, 23(9):945-954

Orbell, S.and Sheeran, P. (2000) Motivational and volitional processes in action initiation: a field study of implementation intentions, *Journal of Applied Social Psychology*, 1:35-50

Orth-Gomer, K. et al, (2000) Marital Stress Worsens Prognosis in Women with Coronary Heart Disease, Journal of American Medical Association 2000, 284:3008-3014 (in Robbins 2007)

Parker, D., Stradling, S.G. and Manstead, A.S.R. (1996) Modifying beliefs and attitudes to exceeding the speed limit: an intervention study based on the theory of planned behaviour, *Journal of Applied Social Psychology*, 26 (1): 1-19

Parks, C.D. (1994) The predictive ability of social values in resource dilemmas and public goods games. *Personality and social Psychology Bulletin*, 20: 431-438

Passer, M. W. & Smith, R. E. (2004) *Psychology – The Science of Mind and Behaviour,* second edition, McGrawHill, New York

Petty, R.E. and Cacioppo, J.T. (1986a) *Communication and Persuasion: Central and Peripheral Routes to Attitude Change.* New York:Springer

Petty, R.E. and Cacioppo, J.T. (1986b) The elaboration likelihood model of persuasion, in L. Berkowitz (ed) *Advances in Experimental Psychology*, 19. London: Academic Press

Petty, R.E., Flemming, M.A. (2001) Individual versus group interest violation: Surprise as determinant of argument scrutiny and persuasion. *Social Cognition*, 19:418-442

Phillips, D.P. (1983) The impact of mass media violence on U.S. Homocides. *American Sociological Review,* 48, 560-568 in Cialdini 2005:140-146

Prescott, J.W. et al (1975) Body Pleasure and Origins of Violence, *Bulletin of the Atomic Scientists,* November1975:10-20 (in Robbins 2007)

Price, W.A. *Nutrition and Physical Degeneration*, Keats Publishing, 1939:170-171, 174, 179

Robbins, J., (2007) *Hälsans hemligheter – Så lever du ett långt och friskt liv,* Forum

Roman, E och Nylander, I. (2005) Review. The impact of emotional stress early in life on adult voluntary ethanol intake – results of maternal separation. *Stress*, 8:157-174

Rosenberg, G. (2003) *Plikten, profiten och konsten att vara människa*. Stockholm: Bonniers (in Broberg 2006)

Rotter, J.B. (1954) Social learning and clinical psychology. Eglewood Cliffs, NJ: Prentice Hall.

Russek, L.G. & Schwartz (1996) Narrative descriptions of parental love and caring predict health status in midlife: A 35-year follow-up of the Harvard Mastery of Stress study, *Alternative Therapies in Health and Medicine* 1996, 2:55-62 (in Robbins 2007)

Russek, L.G. & Schwartz (1997) Perceptions of parental caring predict health status in midlife: A 35-year follow-up of Harvard Mastery of Stress Study, *Psychosomatic Medicine* 1997, 59(2):144-149

Rutter, D. & Quine, L. (2002) *Changing Health Behaviour*, *Intervention and Research with Social Cognition Models,* Open University Press, Buckingham, Philadelphia

Räti, R. and Carlsson-Kanyama, A. (2007) *Energi – och koldioxid intensiteter för varor och tjänster*. FOI

Schwartz, S.H., Sagiv, L. and Boehnke, K. (2000) Worries and values. *Journal of Personality* 68:309-346

Schwarzer, R. (1992) Self efficacy in the adoption and maintenance of health behaviours: Theoretical approaches and a new model, in R. Schwarzer (ed.) *Self Efficacy: Thought Control of Action,* pp. 217-243. Washington, DC: Hemisphere

Seligman, M (2007) *Verklig Lycka – en grundbok i positive psykologi*, Optimal Förlag

Simpson, J.A., Rholes, Rholes, W.S.& Nelligan, J.S. (1992). Support seeking and support giving within couples in an anxiety provoking situation: The role of attachment styles. *Journal of Personality and Social Psychology,* 62:434-446

Sheeran, P. and Orbell, S. (1999) Implementation intentions and repeated behaviour: augmenting the predictive validity of the theory of planned behaviour, *European Journal of Social Psychology,* 29:349-369

Sheeran, P. and Orbell, S. (2000b) Using implementation intentions top increase attendance for cervical cancer screening, *Health Psychology,* 19 (3): 283-289

Sparks, P. and Shepherd, R. (1992) Self-identity and the theory of planned behaviour: assessing the role of identification with green consumers, *Social Psychology Quarterly*, 55:388-399

Sroufe, L.A. et al (2005) *The development of the person: The Minnesota study of risk and adaptation from birth to adulthood.* New York: Guilford Press (in Broberg 2006)

Sutton, S. (1998) Predicting and explaining intentions and behaviour: how well are we doing? *Journal of Applied Social Psychology*, 28(15):1317-1338

Thomas, C.B. & Duszynski, K. (1974) Closeness to parents and the family constellation in a prospective study of five disease states: Suicide, mental illness, malignant tumour, hypertension and coronary heart disease, *John Hopkins Medical Journal* 1974, 134:251 (in Robbins 2007)

Triandis, H.C. (1995) Individualism and Collectivism. Boulder, CO: Westview Press (in Diener & Suh 2000)

Triandis, H.C. et al (1985) Allocentric vs. idiocentric tendencies: Convergent and discriminant validation. *Journal of research in Personality* 19:395-415 (in Diener & Suh 2000)

Veenhoven, R. (1994a) Correlates of happiness: 7838 findings from 603 studies in 69 nations 1911-1994. RISBO, Erasmus University, Rotterdam. Updated version on Internet:http:/www.eur.nl/fsw/research/happiness

Veenhoven, R. (1995) The cross-national pattern of happiness: Test of predictions implied in three theories of

Wallston, K.A. Wallstone, B.S. and DeVeliis, R. (1978) Development of the multidimensional health locus of control (MHLC) scales, *Health Education Monographs,* 6: 160-70

Weg, R.B. (1983) Changing physiology of aging, in D.S. Woodruff and J.E Birren (eds) *Ageing: Scientific Perspectives and Social issues*, 2nd edn. Monterey. CA:Brooks/Cole (in Ogden 2004)

Weinstein, N.D. (1980) Unrealistic optimism about future life events, *Journal of Personality and Social Psychology,* 39(5):806-820

Weinstein, N.D. (1982) Unrealistic optimism about susceptibility to health problems, *Journal of behavioural Medicine*, 5(4):441-460

Weinstein, N.D. (1983) Reducing unrealistic optimism about illness susceptibility, *Health Psychology*, 2(1)

Weinstein, N.D. (1987) Unrealistic optimism about susceptibility to health problems: conclusions from community-wide sample, *Journal of Behaviour Medicine*, 10:481-500

Weinstein, N.D. Rothman, A.J. and Sutton, S.R. (1998) Stage theories of health behaviour: conceptual and methodological issues, Health Psychology, 17(3):290-299

Weinstein, N. D, Sandman, P.M. and Robert, N.E. (1991) Perceived susceptibility and self-protective behaviour: a field experiment to encourage home radon testing, *Health Psychology*, 10: 25-33

happiness. Social Indicators Research 34:33-68

Willcox B. J. Willcox, D.C, Suzuki M. (2001) The Okinowa Program: Learn the Secrets to Health and Longevity, Three Rivers Press, 2001:43, 71

Wills, T.A. (1985) Supportive functions of interpersonal relationships, in S. Cohen and S.L. Syme (eds.) *Social Support and Health.* Orlando, FL: Academic Press

WHOQOL Group, Study prorocol for World Health Organisation project to develop a quality of life assessment instrument (WHOQOL) Quality of Life Research, 2153-2159, 1993 in Ogden, J. (2004) *Health Psychology – A Textbook 3rd edition*, Open University Press

World Cancer Research Fund and American Institute for Cancer Research, Food, Nutrition and the Prevention of Cancer: A Global Perspective, 1997 (in Robbins 2007)

APPENDIX

Result from the study: attachment

SECURE ATTACHMENT	INSECURE ATTACHMENT
More macro worries (e.g. climate change) and more climate-friendly behavior	More micro (private) worries and less climate-friendly behaviour
More happiness, satisfaction in life, social competence/social strength and meaningfulness in life. Shows more altruism, solidarity and clear self-identity.	Less happiness and satisfaction in life, less health, meaningfulness in life and less social competence. More short-term thinking, self-interest and unclear self-identity
More satisfied with significant relationships, feels good social support	More unsatisfactory and problematic relationships with significant others

Quality of life, Attachment and Climate Change (QACC, Tibblin, 2008)

Hej, Du som svarar på denna enkät (tar ca 15 min) om normer och livsstil i relation till klimatförändringarna. Jag som ställer dessa frågor till dig är legitimerad psykolog och skriver under våren 2008 min Mastersuppsats i Hållbarhets- och Miljövetenskap vid Lunds Universitet, LUCSUS/ LUMES institution. Uppsatsen handlar om hur man kan förändra sociala normer och livsstil på ett sätt som både kan mildra klimatförändringarna och samtidigt möjliggöra att vi lever hälsosammare och lyckligare. Dina svar kommer att hanteras anonymt och med sekretess. Det är frivilligt att delta och du kan avbryta när du vill. Tack på förhand! Vill Du läsa uppsatsen & resultaten, Maila annika.tibblin@gmail.com

1) Tror du att det existerar något som kallas klimatförändringar?

Ingen åsikt/vet inte	Nej	Ja

2) Har du tagit till dig information om orsakerna till det man kallar klimatförändringarna?

Ingen åsikt/vet inte	Nej	Ja

3) Känner du till några av de konsekvenser klimatförändringarna kan leda till?

Ingen åsikt/vet inte	Nej	Ja

4) Har du funderat på att ändra din livsstil pga. klimat förändringarna?

Ingen åsikt/vet inte	Nej	Ja

5) Upplever du personligen något hot eller oro i relation till klimat förändringarna?

Ingen åsikt/vet inte	Nej	Ja

6) Angår klimatförändringarna dig, bryr du dig?

Ingen åsikt/vet inte	Nej	Ja

7) Engagerar du dig aktivt i klimatfrågan?

Ingen åsikt/vet inte	Nej	Ja

8) Har du bestämt dig för att inte bry dig om klimatrapporterna?

Ingen åsikt/vet inte	Nej	Ja

9) Har du förändrat vissa inköp och beteenden i din livsstil för att minska utsläppen av växthusgaser?

Ingen åsikt/vet inte	Nej	Ja

10) Har du vid i stort sätt alla dina inköp eller resor klimatfrågan i åtanke?

Ingen åsikt/vet inte	Nej	Ja

11) Är klimatförändringarna ett allvarligt problem/tillstånd?

Ingen åsikt/vet inte	Nej	Ja

12) Är det stor chans att du/eller dina barn kommer att drabbas negativt av klimatförändringarna?

Ingen åsikt/vet inte	Nej	Ja

13) Stämmer detta påstående på dig? "Jag har för avsikt att börja leva på ett mer klimatneutral sätt detta år"

Vet inte	Nej	Ja

14) Stämmer detta påstående?

Flyg- och biltrafik orsakar klimatförändringar.   Vet inte   Nej   Ja

15) Stämmer detta påstående? Att sluta äta kött kan minska risken för klimatförändringar.   Vet inte   Nej   Ja

16) Stämmer detta påstående? Att sluta äta kött kan minska risken för cancersjukdomar.   Vet inte   Nej   Ja

17) Stämmer detta påstående på dig Jag har tillit till att jag kommer att kunna ändra min livsstil på ett sätt som kan bidra till att mildra klimatförändringarna.
                    Vet inte   Nej   Ja

18) Jag är villig att äta mer lokalt odlade grönsaker, frukt och fullkorn.
                    Vet inte   Nej   Ja

19) Jag är villig att avstå från att flyga.
                    Vet inte   Nej   Ja

20) Jag är villig att avstå från att till vardags köra bil.
                    Vet inte   Nej   Ja

21) Jag är villig att byta till grön el/ förnyelsebar el.   Vet inte   Nej   Ja

22) Om jag inte tar cykel eller tåg när jag kan får jag skuldkänslor.
                    Vet inte   Nej   Ja

23) Om jag inte beställer förnyelsebar "Grön el" får jag skuldkänslor.
                    Vet inte   Nej   Ja

24)Tycker du att klimatfrågan är ett av de angelägnaste problemen vi har att ta ställning till?   Vet inte   Nej   Ja

25) Vad tror du? Är det sannolikt att de flesta män i din ålder gör något för att hindra klimat förändringarna.   Vet inte   Nej   Ja

26) Tror du att de flesta människor som är viktiga för dig tycker att du ska förändra ditt beteende så att det blir mer klimatvänligt?   Vet inte   Nej   Ja

27) Tror du att miljöpartiets politiker/miljöministern lever miljövänligt?
                    Vet inte   Nej   Ja

28) Tror du att folk i allmänhet tycker att det är skamligt att flyga, t.ex. till Thailand på semester eller åka och shoppa i London?   Vet inte   Nej   Ja

29) Tror du att folk i allmänhet som pendlar med bil från Lund till t.ex. Malmö/Helsingborg skäms över bilens koldioxid utsläpp?   Vet inte   Nej   Ja

30) Tycker någon av dina närmaste anhöriga att du ska äta mindre kött?
                            Är vegetarian   Vet inte   Nej   Ja

31) Ifall klimatförändringarna förvärras tror jag beror på mitt eget och andra personers handlande eller ickehandlande. Vi själva avgör inom de närmaste åren hur hotfulla eller hanterbara klimatförändringarna kommer att bli för oss här i Sverige och i världen. Ingen åsikt/ Vet inte Nej Ja

32) Om klimatförändringarna oroar mig kan jag tänka mig att kontakta politiker eller skriva i tidningen, liksom att blogga för att påskynda ett konstruktivt politiskt eller lagligt beslut. Vet inte Nej Ja

33) Om det löser sig med klimatförändringarna handlar mest om tur eller otur.
Vet inte Nej Ja

34) Jag är en miljömedveten person. Vet inte Nej Ja

35) Jag är en hälsosam person. Vet inte Nej Ja

36) Jag är en person som bryr mig om andra. Vet inte Nej Ja

37) Jag bryr mig om naturen. Vet inte Nej Ja

38) Jag försöker ta ansvar inför kommande generationer Vet inte Nej Ja

39) Cyklar du till arbetet istället för att åka bil? Ja☐ När jag kan ☐ Nej☐ Vet inte☐

40) Har du valt miljövänlig/"Grön el"? Ja☐ När jag kan ☐ Nej☐ Vet inte☐

41) Handlar du mest lokalt producerad mat? Ja☐ När jag kan ☐ Nej☐ Vet inte☐

42) Handlar och äter du mest ekologiskt mat? Ja☐ När jag kan ☐ Nej☐ Vet inte☐

43) Handlar du mest FairTrade produkter? Ja☐ När jag kan ☐ Nej☐ Vet inte☐

44) Handlar du mest säsongsanpassad mat? Ja☐ När jag kan ☐ Nej☐ Vet inte☐

45) Undviker du att äta nöt- och griskött? Ja☐ När jag kan ☐ Nej☐ Vet inte☐

46) Undviker du växthusodlade grönsaker? Ja☐ När jag kan ☐ Nej☐ Vet inte☐

47) Föredrar du att låna/hyra bil istället för att äga? Ja☐ När jag kan ☐ Nej☐ Vet inte☐

48 Föredrar du att köpa återanvända ting Ja☐ När jag kan ☐ Nej☐ Vet inte☐

49) Föredrar du att hyra/låna t.ex. filmer, CD, eller böcker istället för att köpa?
Ja☐ När jag kan ☐ Nej☐ Vet inte☐

50) Återvinna du sopor på återvinningsstation? Ja☐ När jag kan ☐ Nej☐ Vet inte☐

51) Undviker du att köpa importerad mat som är färsk?

Ja☐ När jag kan☐ Nej☐ Vet inte☐

52) Väljer du att ta tåget istället för bil/flyg inom Sverige/Norra Europa?

Ja☐ När jag kan☐ Nej☐ Vet inte☐

Kryssa för i den ruta, i det alternativ som passar bäst på dig:
Instämmer helt & hållet =1 Instämmer inte alls= 5

53) Jag behöver motionera/röra min kropp oftare. 1 ☐   2   3   4   5

54) Jag behöver äta mer frukt, grönsaker och fullkorn. 1 ☐   2   3   4   5

55) Jag behöver umgås mer med nära vänner. 1 ☐   2   3   4   5

56) Jag behöver känna mig mer fri från stress. 1 ☐   2   3   4   5

57) Jag behöver vara mer tillsammans med min partner.
Har ingen partner ☐   1 ☐   2   3   4   5

58) Jag behöver vara mer tillsammans med mina barn.
Har inget barn ☐   1 ☐   2   3   4   5

59) Jag behöver vara mer tillsammans med mina föräldrar/syskon
 Har ingen familj ☐   1 ☐   2   3   4   5

För var och en av följande påståenden och/eller frågor ringar du in en punkt på skalan där du känner att det bäst beskriver dig.

60) Jag känner mig i allmänhet som:
       1   2   3   4   5   6   7
En inte   En mycket lycklig person
särskilt
lycklig
person

61) Jämför med de flesta av mina vänner känner jag mig:
       1   2   3   4   5   6   7
Mindre lycklig   Mer lycklig

62) En del människor är generellt mycket lyckliga. De njuter av livet oberoende av vad som pågår och de får det bästa ut av allting. Hur väl beskriver detta dig?
       1   2   3   4   5   6   7
Inte alls   Helt & hållet

63) En del människor är generellt inte särskilt lyckliga. Fastän de inte är deprimerade, verkar de aldrig vara så lyckliga som de skulle kunna vara. Hur väl beskriver detta dig?
       1   2   3   4   5   6   7

Helt & hållet   Inte alls

Nedan finns 5 påståenden som du kan hålla med om eller inte. När du använder skalan 1-7 visar du hur mycket du håller med för varje fråga genom att välja ett nummer och placera det på linjen före frågan. Instämmer helt & hållet =7, Instämmer inte alls= 1

64) På många sätt är mitt liv nära de ideal jag har
      7   6   5   4   3   2   1

65) Mina livsvillkor är utmärkta
      7   6   5   4   3   2   1

66) Jag är helt och hållet nöjd med mitt liv
      7   6   5   4   3   2   1

67) Än så länge har jag fått de viktiga saker jag ville ha i livet
      7   6   5   4   3   2   1

68) Om jag kunde leva livet igen skulle jag inte förändra någonting
      7   6   5   4   3   2   1

Kryssa för i den ruta, i det alternativ som passar bäst på dig:
5= väldigt mycket som jag, 4= som jag, 3= neutral, 2= olikt mig, 1= väldigt olikt mig

69)"Jag håller alltid mina löften"   5 ☐   4   3   2   1

70) "Jag har frivilligt hjälpt en granne den senaste månaden"
        5 ☐   4   3   2   1

71) "Det finns människor i mitt liv som bryr sig lika mycket om mina känslor och mitt välmående som om sitt eget"   5 ☐   4   3   2   1

72) "Jag arbetar bäst när jag befinner mig i en grupp" 5 ☐   4   3   2   1

73) Jag vill helst inte avstå från mina egna intressen för gruppens fördel"
        5 ☐   4   3   2   1

74) Den senaste månaden har jag förundrats av skönheten i naturen eller konsten"
        5 ☐   4   3   2   1

75)"Jag stannar sällan upp och tänker på de glädjeämnen jag har i mitt liv"
        5 ☐   4   3   2   1

76)" Jag har en positiv grundsyn"   5 ☐   4   3   2   1

77) "Jag känner meningsfullhet med mitt liv"   5 ☐   4   3   2   1

78) Läs alla tre styckena nedan. Välj om du är mest lik Herr A, B eller C.

A) Jag känner ofta mig lite osäker på mig själv och förstår inte alltid andras förväntningar på mig. Nära relationer är lite knepiga tycker jag, jag har inte så många gamla vänner kvar. Ibland kan jag känna att jag är lite för osjälvständigt och beroende av min partner. Jag oroar mig ibland för min relation och att min partner inte accepterar mig för den jag är. Min partner förstår inte så ofta mina behov som jag skulle önska. När jag känner mig orolig, stressad eller hotad tycker jag inte att min partner kan stödja mig på det sätt jag behöver och vill.

B) Jag känner oftast tillit till mig själv och andra, jag gillar att samarbeta med andra. I stort sätt är jag tillfredsställda i mina nära relationer, jag gillar att ge och ta emot fysik kontakt. Jag känner mig känslomässigt nära min partner men samtidigt självständig i förhållande till henne/honom. Jag känner mig trygg med att min partner accepterar mig och tycker om mig. När jag känner mig osäker, stressas eller hotad brukar jag söka närhet till min partner, vi kan ge känslomässigt stöd till varandra när vi behöver det.

C) Jag känner oftast att jag får klara av saker själv, och jag arbetar hellre själv än i grupparbeten. Jag trivs bäst när jag känner mig fri och oberoende, och när jag har lite "luft" i relationen och eventuellt en "nödutgång" . När det blir konflikter i en relation brukar jag dra mig undan. Jag vill helst inte berätta för min partner om mina djupaste mest personliga känslor och tankar. När jag känner mig osäker, stressad eller hotad söker jag sällan kroppsligt eller känslomässigt stöd, jag brukar ta hand om mina problem själv

Hur mycket liknar du herr A?
Mycket____Ganska mycket____Lite____Inte alls____
Hur mycket liknar du Herr B?
Mycket____Ganska mycket____Lite____Inte alls____
Hur mycket liknar du Herr C?
Mycket____Ganska mycket____Lite____Inte alls____

79) Din ålder: -39   40-49   50-59   60-
80) Ditt boende: bostadsrätt   köpt hus   Annat boende_____

81) Din inkomst: 0-100 000 kr/år   101 000-200 000 kr/år   201 000-300 000 kr/år

301 000-400 000 kr/år   401-500 000kr/år   501 000-600 000 kr/år

601 000-700 000kr/ år   701 000 kr/år eller mer

82) Var växte du upp och levde tills du blev 20 år?   Sverige

   Annat land/länder:_____

83) Har du studerat vid universitetet? Ja   Nej

84) Din sysselsättning de senaste tre månader?
Arbetat   Studerat   Arbetslös   Sjukskriven   Pensionär   Annat

85) a. Är du gift?   Ja   Nej   87. b. Är du sammanboende?   Ja   Nej

86) Har du några barn?   Ja   Nej   Födda år:_____

87) Har du varit pappaledig och haft huvudansvar(om du har barn) **mer än tre månader?**

Kryssa för i den ruta, i det alternativ som passar bäst på dig:
Ja helt & hållet =1   **Nej inte alls= 5**

88) Är du nöjd med relationen till din chef?   1 ☐   2   3   4   5
89) Är du nöjd med dina vänskaps relationer?   1 ☐   2   3   4   5
90) Är du nöjd med relationen till din fru/partner?   1 ☐   2   3   4   5
91) Är du nöjd med relationen till ditt/dina barn?   1 ☐   2   3   4   5
92) Är du nöjd med relationen till dina föräldrar/syskon? 1 ☐   2   3   4   5

93) Ranka din relation med din mamma (även om hon inte lever nu)
   på en fyragradig skala som mäter närhet
   (1)   Mycket nära
   (2)   Varm och vänlig
   (3)   Tolerant
   (4)   Stel och kall.

94) Ranka /kryssa för, din relation med din pappa på skalan som mäter närhet
   (1) Mycket nära
   (2) Varm och vänlig
   (3) Tolerant
   (4) Stel och kall

95) Vad oroar du dig mest för? Kryssa endast för de 7-9 områden i tillvaron som du
oroar dig allra mest för, prioritera 1,2,3…9.   1= mest orolig   9 = minst oroande

Att mina föräldrar ska dö___
Fattigdom hos en stor del av världens befolkning___
Miljöförstörelsen___
Min hälsa/ anhörigs hälsa___
Klimatförändringarna___
Trafik olyckor___
Problem på arbetet/i studierna___
Problem med min partner___
Problem med barnen___
Problem med ekonomin___
Befolkningsökningen___
Den orättvisa resursfördelningen i världen___
Den ökade privatiseringen___
Den ökade individualiseringen___
Krigstillstånden i världen___
Förlusten av biologisk mångfald___
Den ökade bilismen/flygtrafiken___
Befolkningsökningen___

Vattenbristen___

Något annat_____

96) Markera fem områden i ditt liv som du värdesätter som viktigast att tillbringa din tid.

Familjeliv   Socialt liv/vänner   Arbetslivet   Media: TV/video/datorn/mp3/Ipod

Motionerande/fysiskt aktiv   I naturen   I kolonin/trädgården   Att läsa   Studera

Handla/shoppa/IKEA   Reparera hemmet   Resa/på utflykter   konsert/dansa/kör

Vara kreativ/skapande   Med hobby/fritidssysselsättning   Annat   _____

Skriv ner dina 5 alternativ och rangordna dem utifrån hur viktiga de är för din livskvalité.

5 = oerhört betydelsefullt/ovärderligt   inte lika betydelsefullt =1

_____   5 ☐   4   3   2   1
_____   5 ☐   4   3   2   1
_____   5 ☐   4   3   2   1
_____   5 ☐   4   3   2   1
_____   5 ☐   4   3   2   1

**97) Om Du redan har förändrat din livsstil till ett mer hållbarare sätt att leva;
undrar jag vad var det för fenomen/faktor, eller person, som påverkade dig att göra så?**
_____
_____
_____

98) Har dessa frågor/denna enkät ökat din medvetenhet om klimatförändringarna?
_____
_____
_____

99) Är det något du har lust att tillägga?
_____
_____
_____

Tack för vänligheten att Du deltog i denna enkät om
Sociala Normer, Livsstil & Klimatförändringarna

Med Varma vårhälsningar
Annika Tibblin 076-212 63 43

Quality of life, Attachment and Climate Change (QACC, Tibblin, 2008)

1) Tror du att det existerar något som kallas klimatförändringar?
Ingen åsikt/vet inte_____ Nej_____Ja_____

**2) Har du tagit till dig information om orsakerna till det man kallar
klimatförändringarna?**

Ingen åsikt/vet inte_____Nej_____Ja_____

3) Känner du till några av de konsekvenser klimatförändringarna kan leda till?
Ingen åsikt/Vet inte_____Nej_____Ja_____

4) Har du funderat på att ändra din livsstil pga. klimat förändringarna?
Ingen åsikt/Vet inte_____Nej_____Ja_____

6) Upplever du personligen något hot eller oro i relation till klimat förändringarna?
Ingen åsikt/Vet inte_____Nej_____Ja_____

7) Angår klimatförändringarna dig, bryr du dig?
Ingen åsikt/Vet inte_____Nej_____Ja_____

8)Är du aktivt engagerad i klimatfrågan?
Ingen åsikt/Vet inte_____Nej_____Ja_____

9) Har du bestämt dig för att inte bry dig om klimatetraporterna?
Ingen åsikt/Vet inte_____Nej_____Ja_____

10) Har du förändrat vissa inköp och beteenden i din livsstil för att minska utsläppen av växthusgaser?
Ingen åsikt/Vet inte_____Nej_____Ja_____

11) Har du vid i stort sätt alla dina val, handlingar, inköp och resor, miljön och klimatfrågan i åtanke?
Ingen åsikt/Vet inte_____Nej_____Ja_____.

Precaution Adoption Process Model (PAPM) of Weinstein and Sandman (1991)
Stage 1. Unaware of issue (not aware that this is a an issue or threat)
Stage 2. Unengaged by issue (aware but not engaged)
Stage 3. Deciding about acting (considering the possibility of taking action)
      ------------------------- Stage 4 Decided not to act
Stage 5. Decided to act (to adopt the precaution, have become engaged by the issue)
Stage 6. Acting, initiate the behaviour
Stage 7. Maintenance, the behaviour have been maintained over time
(Weinstein et al (1998))

12) Är klimatförändringarna ett allvarligt problem/tillstånd?
Ingen åsikt/Vet inte___Nej___Ja__
 (Severity)

13) Är det stor chans att du/eller dina barn kommer att drabbas negativt av klimatförändringarna?
Vet inte_____Nej_____Ja_____
(Susceptibility)

14) Stämmer detta påstående på dig? "Jag har för avsikt att börja leva på ett mer hållbart/ klimatsmart detta år"
Vet inte_____Nej_____Ja_____
 (INTENTIONS)(behavioural intention)

15) Stämmer detta påstående? Flygåkning och bilkörning kan orsaka klimatförändringarna.
Vet inte_____Nej_____Ja_____
(Situation outcome expectancies)

16) Stämmer detta påstående? Att sluta äta kött kan minska risken för cancersjukdomar.
Vet inte_____Nej_____Ja_____

(Outcome expectancies)

16) Stämmer detta påstående? Att sluta äta kött kan minska risken för ökade klimatförändringar.
Vet inte_____Nej_____Ja_____
(Outcome expectancies)

17) Stämmer detta påstående på dig?Jag har tillit till att jag kommer att kunna ändra min livsstil på ett sätt som kan bidra till att mildra klimatförändringarna.
Vet inte_____Nej_____Ja_____
(Self –efficacy expectancies)

18) Jag är villig att äta mer lokalt odlade grönsaker, frukt och fullkorn.
Vet inte_____Nej_____Ja_____
19) Jag är villig att avstå från att flyga. Vet inte_____Nej_____Ja_____
20) Jag är villig att avstå från att till vardags köra bil. Vet inte__Nej___Ja___
21) Jag är villig att byta till grön el/ förnyelsebar el. Vet inte___Nej____Ja____
(Beahvioural willingness)

22) Om jag inte tar cykel eller tåg när jag kan får jag skuldkänslor.
Vet inte_____Nej_____Ja_____
23) Om jag inte köper lokalt odlad mat när jag kan får jag skuldkänslor.
Vet inte_____Nej_____Ja_____
24)Om jag inte beställer förnyelsebar "Grön el" får jag skuldkänslor.
Vet inte_____Nej_____Ja_____
 (ANTICIPATED AFFECT) (Anticipated regret)

25)Tycker du att klimatfrågan är ett av de angelägnaste problemen vi har att ta ställning till? Vet inte_____Nej_____Ja_____
 (ATTITUDE)

26) Vad tror du? Är det sannolikt att de flesta män i din ålder gör något för att hindra klimat förändringarna. Vet inte_____Nej_____Ja_____

27) Vad tror du? De flesta människor som är viktiga för dig tycker att du ska förändra ditt beteende så att det blir mer klimatvänligt.
Vet inte____Nej_____Ja_____
 (SUBJECTIVE NORMS)

28) Tror du att miljöpartiets politiker/miljöministern lever miljövänligt?
Vet inte_____Nej_____Ja_____
 (descriptive norms)

29) Tror du att folk i allmänhet tycker att det är skamligt att flyga, t.ex. till Thailand eller London?
Vet inte_____Nej_____Ja_____

30) Tror du att folk i allmänhet som pendlar med bil från Lund till t.ex. Malmö/Helsingborg skäms över bilens koldioxid utsläpp?

Vet inte_____Nej_____Ja_____
(injuctiv norms)

31) Tycker någon av dina närmaste anhöriga att du ska äta mindre kött?
Vet inte_____Nej_____Ja_____
(NORMATIVE BELIEFS)

32) Ifall klimatförändringarna förvärras tror jag beror på mitt eget och andra personers handlande eller ickehandlande. Vi själva avgör inom de närmaste åren hur hotfulla eller hanterbara klimatförändringarna kommer att bli för oss här i Sverige och i världen.
Vet inte_____Nej det tror jag inte____Ja så tror jag_____
(internal control)

33) Om klimatförändringarna oroar mig kan jag tänka mig att kontakta politiker eller skriva i tidningen, liksom att blogga för att påskynda ett konstruktivt politiskt eller lagligt beslut.
Vet inte_____Nej____Ja_____
(internal control)

34) Om det löser sig med klimatförändringarna handlar mest om tur eller otur.
Vet inte_____Nej____Ja_____
(external control/chans)
18-item Multidimensional Health Locus of Control Scale (MHLC) (Wallston et al., 1978)

35) Jag är en miljömedveten person. Vet inte_____Nej_____Ja_____
36) Jag är en hälsosam person. Vet inte_____Nej_____Ja_____
38) Jag bryr mig om naturen Vet inte_____Nej_____Ja____
39) Jag försöker ta ansvar inför kommande generationer Vet inte_____Nej_____Ja____
.(SELF-IDENTITY)

(Ogden, 2004:38-41; Rutter & Quine , 2002))

40) Cyklar du till arbetet istället för att åka bil? Ja☐   När jag kan☐   Nej☐   Vet inte☐
41) Har du valt miljövänlig/"Grön el"?   Ja☐   När jag kan☐   Nej☐   Vet inte☐
42) Handlar du mest lokalt producerad mat?   Ja☐   När jag kan☐   Nej☐   Vet inte☐
43) Handlar och äter du mest ekologiskt mat?   Ja☐   När jag kan☐   Nej☐   Vet inte☐
43) Handlar du mest FairTrade produkter?   Ja☐   När jag kan☐   Nej☐   Vet inte☐
43) Handlar du mest säsongsanpassad mat?   Ja☐   När jag kan☐   Nej☐   Vet inte☐
44) Undviker du att äta nöt- och griskött?   Ja☐   När jag kan☐   Nej☐   Vet inte☐
45) Undviker du vitt ris?   Ja☐   När jag kan☐   Nej☐   Vet inte☐
46) Undviker du växthusodlade grönsaker?   Ja☐   När jag kan☐   Nej☐   Vet inte☐
48) Föredrar du att låna/hyra bil?   Ja☐   När jag kan☐   Nej☐   Vet inte☐
47) Föredrar du återanvänt/begagnat?   Ja☐   När jag kan☐   Nej☐   Vet inte☐
48) Föredrar du att hyra filmer, CD, böcker?   Ja☐   När jag kan☐   Nej☐   Vet inte☐
51) Återvinna du sopor på återvinningsstationen? Ja☐   När jag kan☐   Nej☐   Vet inte☐

49) Undviker du att handla färsk föda producerad utanför vårt klimat?
                              Ja☐   När jag kan☐   Nej☐   Vet inte☐

50) Väljer du att ta tåget istället för bil/flyg inom Sverige/Norra Europa?

Ja☐   När jag kan☐   Nej☐   Vet inte☐

51) Jag behöver motionera/röra min kropp oftare.   Vet inte☐   Nej☐   Ja☐

52) Jag behöver äta mer frukt, grönsaker och fullkorn.   Vet inte☐   Nej☐   Ja☐

53) Jag behöver umgås mer med nära vänner.   Vet inte☐   Nej☐   Ja☐

54) **Jag behöver känna mig mer fri från stress**.   Vet inte☐   Nej☐   Ja☐

55) Jag behöver vara mer tillsammans med min partner (om partner)

Vet inte☐   Nej☐   Ja☐

56) Jag behöver vara mer tillsammans med mina barn (om barn)   Vet inte☐   Nej☐   Ja☐

57) Jag behöver vara mer tillsammans med mina föräldrar/syskon

Vet inte☐   Nej☐   Ja☐

(Perceived need)

.

För var och en av följande påståenden och/eller frågor ringar du in en punkt på skalan där du känner att det bäst beskriver dig.

58. Jag känner mig i allmänhet som:

      1   2   3   4   5   6   7

En inte   En mycket lycklig person

särskilt

lycklig

person

59. Jämför med de flesta av mina vänner känner jag mig:

      1   2   3   4   5   6   7

Mindre lycklig   Mer lycklig

60. En del människor är generellt mycket lyckliga. De njuter av livet oberoende av vad som pågår och de får det bästa ut av allting. Hur väl beskriver detta dig?

      1   2   3   4   5   6   7

Inte alls   Helt & hållet

61. En del människor är generellt inte särskilt lyckliga. Fastän de inte är deprimerade, verkar de aldrig vara så lyckliga som de skulle kunna vara. Hur väl beskriver detta dig?

      1   2   3   4   5   6   7

Helt & hållet   Inte alls

Mätning av allmän lyckonivå: Räkna ihop poängen, dividera den totala summan med 8.
Medeltal vuxna i USA: 4,8

(5)Lyubomirsky and Lepper ((1999) A measure of subjective happiness; Preliminary reliability and Construct validiation, *Social Indicators Research*, 46, 137-155 (Med tillåtelse från Kluwer Academic Publishers, in Seligman, 2007:51)

Nedan finns 5 påståenden som du kan hålla med om eller inte. När du använder skalan 1-7 visar du hur mycket du håller med för varje fråga genom att välja ett nummer och placera det på linjen före frågan. Instämmer helt & hållet =7, Instämmer inte alls= 1

62. På många sätt är mitt liv nära de ideal jag har

7   6   5   4   3   2   1

63. Mina livsvillkor är utmärkta
              7   6   5   4   3   2   1

64. Jag är helt och hållet nöjd med mitt liv
              7   6   5   4   3   2   1

65. Än så länge har jag fått de viktiga saker jag ville ha i livet
              7   6   5   4   3   2   1

66. Om jag kunde leva livet igen skulle jag inte förändra någonting
              7   6   5   4   3   2   1

30-35 Extremt nöjd
25-29 Mycket nöjd
20-24 Ganska nöjd, genomsnitt för amerikanska vuxna
15-19 Aningen missnöjd, östeuropeiska och kinesiska studenter
10-14 Missnöjd, patienter inlagda på sjukhus, människor med psykologiska sjukdomar
5-9   Mycket missnöjd, manliga interner på fängelse
(Baserat på 10 000 tals personer från olika kulturer)

Test för livstillfredsställelse: Diener, E, Emmons, R, Larsen, R.,Griffin, S. (1985) The Satisfaction with life scale. *Journal of Personality Assessment,* 49, 71-75

Kryssa för i den ruta, i det alternativ som passar bäst på dig:
5= väldigt mycket som jag, 4= som jag, 3= neutral, 2= olikt mig, 1= väldigt olikt mig

Mod:
67.”Jag håller alltid mina löften”   5 ☐   4   3   2   1

Humanitet och kärlek:
 Vänlighet:
68. ”Jag har frivilligt hjälpt en granne den senaste månaden”
                                                                    5 ☐   4   3   2   1
Att älska och bli älskad:
69. ”Det finns människor i mitt liv som bryr sig lika mycket om mina känslor och mitt
välmående som om sitt eget”   5 ☐   4   3   2   1

Samarbete:
70 ”Jag arbetar bäst när jag befinner mig i en grupp” 5 ☐   4   3   2   1

Lojalitet:
71. Jag vill helst inte avstå från mina egna intressen för gruppens fördel”
                                                                    5 ☐   4   3   2   1

Vördnad och förundran: **72. Den senaste månaden har jag förundrats av skönheten i**
naturen eller konsten” är   5 ☐   4   3   2   1

73.”Jag stannar sällan upp och tänker på de glädjeämnen jag har i mitt liv”
                                                                    5 ☐   4   3   2   1

Optimism
74." Jag har en positiv grundsyn"   5 ☐   4   3   2   1

Meningsfullhet:
75. "Jag känner meningsfullhet med mitt liv"   5 ☐   4   3   2   1

("Styrkor", Seligman, M. 2007, www.authentichappiness.com)

76. Vilken av följande tre beskrivningar stämmer bäst in på dig? Ringa in A, B, C, D

A. Ambivalent anknytning
Jag känner ofta mig lite osäker på mig själv och förstår inte alltid andras förväntningar på mig. Nära relationer är lite knepiga tycker jag, jag har inte så många gamla vänner kvar. Ibland kan jag känna att jag är lite för osjälvständigt och beroende av min partner. Jag oroar mig ibland för min relation och att min partner inte accepterar mig för den jag är. Min partner förstår inte så ofta mina behov som jag skulle önska. När jag känner mig orolig, stressad eller hotad tycker jag inte att min partner kan stödja mig på det sätt jag behöver och vill.

B. Trygg
Jag känner oftast tillit till mig själv och andra, jag gillar att samarbeta med andra. I stort sätt är jag tillfredsställda i mina nära relationer, jag gillar att ge och ta emot fysik kontakt. Jag känner mig känslomässigt nära min partner men samtidigt självständig i förhållande till henne/honom. Jag känner mig trygg med att min partner accepterar mig och tycker om mig. När jag känner mig osäker, stressas eller hotad brukar jag söka närhet till min partner, vi kan ge känslomässigt stöd till varandra när vi behöver det.

C. Undvikande
Jag känner oftast att jag får klara av saker själv, och jag arbetar hellre själv än i grupparbeten. Jag trivs bäst när jag känner mig fri och oberoende, och när jag har lite "luft" i relationen och eventuellt en "nödutgång" . När det blir konflikter i en relation brukar jag dra mig undan. Jag vill helst inte berätta för min partner om mina djupaste mest personliga känslor och tankar. När jag känner mig osäker, stressad eller hotad söker jag sällan kroppsligt eller känslomässigt stöd, jag brukar ta hand om mina problem själv.

A Otrygg ambivalent ängslig anknytningstil
B Trygg, säker anknytnings stil
C Otrygg undvikande aknytningsstil
D. Ingen av dem

Fraley och Shaver www.authentichappiness.com (Modifierad av Annika Tibblin, 2008)

 77. Läs alla tre styckena nedan. Välj om du är mest lik Herr A, B eller C.

Herr A arbetar först och främst för att tjäna tillräckligt med pengar för att betala för sitt liv utanför arbetet. Om han hade gott om pengar skulle han inte fortsätta med sitt nuvarande arbete, utan hellre göra något annat. Herr A:s arbete är bara en livsnödvändighet, ungefär som att andas eller att sova. Han önskar ofta att tiden skulle gå snabbare på arbetet. Han ser fram emot helger och semestrar. Om Herr A levde sitt liv igen skulle han antagligen inte välja samma typ av arbete. Han skulle inte

uppmuntra sina vänner 0ch barn att arbeta med samma sak som han. Herr A kan faktiskt redan börja se fram en del till när han skall pensionera sig.

Herr B tycker om sitt arbete, men förväntar sig inte att arbeta med samma jobb om fem år. Istället planerar han att avancera till ett bättre arbete på en högre position. Han har flera mål för att i framtiden tillhöra de befattningar han till slut skulle vilja ha . Ibland verkar hans arbete som ett slöseri med tid, men han vet att han måste arbeta tillräckligt bra på sin nuvarande befattning för att kunna fortsätta uppåt. Herr B kan inte vänta för att få en befordran. För honom betyder en befordran en uppskattning av hans goda arbete och det är ett tecken på framgång i tävlan med hans medarbetare.

Herr C:s arbete är en av de viktigaste delarna i hans liv. Han är mycket nöjd med att han har det här arbetet. Eftersom det han gör på sitt arbete är en livsviktig del av vem han är, är det en av de första sakerna han berättar för andra människor om sig själv. Han har en förmåga att ta med sig arbetet hem, liksom på semestrarna. Han har flera vänner på sitt arbete och är med i en organisation i anslutning till arbetet. Herr C älskar sitt arbete och tycker att det är meningsfullt och ger något betydelsefullt till världen. Han skulle uppmuntra sina vänner och barn att välja samma arbete som han. Herr C skulle bli rätt så upprörd om han skulle bli tvingad att sluta sitt arbete. Han ser inte precis fram emot pensionen.

Hur mycket liknar du herr A?
Mycket____Ganska mycket____Lite____Inte alls____
Hur mycket liknar du Herr B?
Mycket____Ganska mycket____Lite____Inte alls____
Hur mycket liknar du Herr C?
Mycket____Ganska mycket____Lite____Inte alls____

Arbetsorientering Herr A: ett lönearbete
Arbetsorientering Herr B: en karriär
Arbetsorientering Herr C: ett kall = 2 eller 3
(Seligman, 2007:195)

78. Din ålder: -39   40-49   50-59   60-

79. Ditt boende: bostadsrätt   köpt hus

80. Din inkomst: 0-100 000 kr/år___101 000-200 000 kr/år___201 000-300 000 kr/år___ 301 000-400 000 kr/år____401-500 000kr/år___501 000-600 000 kr/år___601 000- 700 000kr/ år___701 000 kr/år eller mer____

81. Har du studerat vid universitetet? Ja_____Nej_____

82. Vilken är din yrkestitel?_____

83. Din sysselsättning de senaste tre månader?
Arbetat_____Studerat_____Arbetslös_____Sjukskriven_____Pensionär_____ Annat_____

84. a. Är du gift?   Ja_____Nej_____84. b. Är du sammanboende?   Ja_____Nej_____

85. Har du några barn?   Ja_____Nej____Födda år:_____

86. Har du varit pappaledig (om du har barn) **mer än tre månader?**
Vet inte____Ja _____Nej_____

87. Är du nöjd med relationen till din chef? Vet inte/saknar chef____ Ja_____Nej_____

88. Önskar du nöjd med dina nära känslomässiga relationer?
Vet inte_____Ja_____Nej_____

89. Är du nöjd med relationen till din fru/partner? Vet inte____ Ja____Nej____

90. Är du nöjd med relationen till ditt/dina barn (om du har)?
Vet inte____ Ja_____Nej_____

91. Ranka din relation med din mamma (även om hon inte lever nu)
   på en fyragradig skala som mäter närhet
   (1) Mycket nära
   (2) Varm och vänlig
   (3) Tolerant
   (4) Stel och kall.

92. Ranka din relation med din pappa på en fyragradig skala som mäter närhet
   (5) Mycket nära
   (6) Varm och vänlig
   (7) Tolerant
   (8) Stel och kall.

(1-4) Vid en studie som utfördes av Russek och Schwartz (1996 och 1997) under en 35 års period fann Russek och Schwartz, vid Harvard University, att bland de universitetsstudenter som rankade sin relation till sina mödrar som "tolerant" eller "stel och kall" hade 91 % haft ett antal allvarliga sjukdomar när de närmade sig 50 årsåldern. De hade en dubbelt så stor risk att drabbas av allvarliga sjukdomar än de som 35 år tidigare uppgivit att de hade en "mycket nära" eller "varm och vänlig" relation till sina mödrar. Bland dem som uppgivit att relationen till fadern varit "tolerant" eller "stel och kall" hade 82 % drabbats av en allvarlig sjukdom i 50 årsåldern. Och 100 % av dem som hade beskrivit relationen med både sin mamma och sin pappa som "stela och kalla" hade drabbats av svåra sjukdomar när de var i 50-årsåldern. Desto fler positiva omdömen individen sagt som ung om sina föräldrar desto godare hälsa hade de 35 år senare. 95 % av studenterna som hade använt få positiva ord i sina beskrivningar av föräldrarna hade utvecklat allvarliga sjukdomar i 50 årsålder i jämförelse med 29 % av dem som använt mycket positiva ord som studenter (Russek och Schwartz, 1996 och 1997) Detta skulle man kunna tolka som att en avvisande och kall relation med föräldrarna är en tre gånger så stor riskfaktor när det gäller allvarliga sjukdomstillstånd som rökning och fetma (Russek och Schwartz, 1996 och 1997; Thomas och Duszynsky, 1974).(I Robbins, 2007:247-248)

TK* Russek, L.G. & Schwartz (1996) Narrative descriptions of parental love and caring predict health status in midlife: A 35-year follow-up of the Harvard Mastery of Stress study, *Alternative Therapies in Health and Medicine* 1996, 2:55-62
TK* Russek, L.G. & Schwartz (1997) Perceptions of parental caring predict health status in midlife: A 35-year follow-up of Harvard Mastery of Stress Study, *Psychosomatic Medicine* 1997, 59(2):144-149

93. Vad oroar du dig mest för? Kryssa för de fem områden I tillvaron som du oroar dig mest för, prioritera 1-5, 1= mest orolig/bekymrad

Att mina föräldrar ska dö____
Fattigdom hos en stor del av världens befolkning_____
Miljöförstörelsen_____
Klimatförändringarna_____
Trafik olyckor_____

Problem på arbetet/i studierna_____
Problem med min partner_____
Problem med barnen_____
Problem med ekonomin_____
Befolkningsökningen_____
Den orättvisa resursfördelningen i världen_____
Den ökade privatiseringen_____
Den ökade individualiseringen_____
Den ojämlika resursfördelningen mellan fattiga och rika länder_____
Förlusten av biologisk mångfald____
Den ökade bilismen/flygtrafiken____
Befolkningsökningen_____
Något annat_____
Något annat_____
Något annat_____
Något annat_____
Något annat_____

98) Välj 5 områden i ditt liv som du värdesätter som viktigast att tillbringa din tid.

Med min familj   Med vänner   På arbetet   Vid TV/video/datorn/mp3/ Ipod

Motionerande/fysiskt aktiv   I naturen   I kolonin/trädgården   Att läsa

Handla/shoppa/IKEA   Reparera hemmet   Resa/på utflykter   konsert/dansa/kör

Vara kreativ/skapande   Med hobby/fritidssysselsättning   Annat _____

Skriv nedan ner och rangordna dina 5 alternativ utifrån hur viktiga de är för din livs kvalité.

5 = oerhört betydelsefullt   inte lika betydelsefullt =1
_____ 5 ☐   4   3   2   1
_____ 5 ☐   4   3   2   1
_____ 5 ☐   4   3   2   1
_____ 5 ☐   4   3   2   1
_____ 5 ☐   4   3   2   1
(SEIQoL) (McGee et al 1991; O´Boyle et al 1992).
´

Slutligen, om Du redan har förändrat din livsstil till ett mer hållbarare sätt att leva;
Undrar jag vad var det för fenomen/faktor, eller person, som påverkade dig att göra så?
_____
_____
_____

Är det något du har lust att tillägga?
_____
_____
_____

Tack för vänligheten att Du deltog i denna enkät om
Sociala Normer, Livsstil & Klimatförändringarna

Med Vänliga hälsningar Annika Tibblin 076-212 63 43