

Ambivalent but an essential part of
our lives: A qualitative study of young
peoples views on the role of the Internet
in promoting health and well-being

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Sammanfattning

Bakgrund: Dagens ungdomar utgör den första generation som växer upp med den nya digitala tekniken och den kan ses som integrerad del av deras liv. Studier har visat att ungdomar uppskattar tillgång till hälsoinformation via Internet som annars kan kännas pinsamt att fråga efter personligen. De uppskattar även möjligheter att möta och utveckla relationer med andra människor via Internet. Ungdomar ställs inför olika utmaningar i övergången från barndom till vuxen ålder och psykiska och psykosociala problem ökar bland åldersgruppen i Sverige liksom i andra europeiska länder. För att utveckla Internet som en möjlig källa till hälsoinformation och socialt stöd är det viktigt att få information om ungdomars egna synpunkter och önskemål.

Syftet med studien är att fördjupa kunskapen om ungdomars inställning till Internets roll i främjandet av hälsa och välbefinnande. **Metod:** Fokusgruppdiskussioner genomfördes i sex grupper om totalt 26 ungdomar, 16-20 år och datamaterialet analyserades enligt modifierad grounded theory.

Resultaten av studien visar att ungdomar är ambivalenta i sin inställning till Internets roll i främjandet av hälsa och välbefinnande. De beskriver en positiv syn och erfarenhet av internet, men är samtidigt väl medvetna om de negativa aspekterna och gör ansträngningar för att hitta strategier för att minimera dem. Resultaten belyser att trots denna ambivalens, betraktar ungdomar Internet som en naturlig del av sina liv, en viktig källa till hälsoinformation och socialt stöd, vilket leder till kärnkategori *Ambivalent, men en naturlig del av våra liv*. **Konklusion:** Insatser bör fokusera på att minimera de negativa aspekterna av Internet för att öka ungdomars tillgång till socialt stöd och hälsoinformation av hög kvalitet.

Nyckelord

Ungdomar, Internet, Hälsa, Välbefinnande, Grounded theory



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Abstract

Background: Adolescents and young people of the 21st century represent the first generation to grow up with the new digital technology and view it as an integrated part of their lives. Previous studies show that young people value the potential of the Internet for acquiring information that otherwise might be difficult to obtain. They also recognize the potential of the Internet for meeting and developing relationships with other people. Young people face diverse challenges during their transition from childhood to adulthood and need to have easy access to health information and social support. Developing the potential of the Internet as a source of health information and social support requires increased information about young people's own views and preferences. The **aim** of the study was to deepen the knowledge about young people's views on the role of the Internet in promoting health and wellbeing. **Method:** Focusgroupdiscussions were conducted and included 26 youths between 16 and 20 years of age, divided into six groups. Collected data was analyzed using modified grounded theory. The **results** show ambivalence among young people regarding the role of the Internet in promoting health and well-being. Although young people report a positive view of the Internet and their experience with it, they were very aware of its negative aspects and tried to find strategies to minimize those aspects. Despite this ambivalence, the young people in this study considered the Internet as an essential part of their lives and a natural source of health information and social interaction. **Conclusions:** Efforts should be made to minimize the negative aspects of the Internet in order offer young people access to health information and social support in ways that suits them.

Key words

Young people, Internet, Health promotion, Health, Wellbeing, Grounded theory

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1 INTRODUCTION

The adolescents and young people of the 21st century represent the first generation to grow up with the new technology of computers, videogames, digital music players, cell phones and video cameras. They have in fact spent their entire lives surrounded by and using these toys and tools of the digital age and it can be seen as integral parts of their lives (Prensky 2001). Prensky (2001) has suggested Digital Natives as the most useful designation for this generation as all of them are “native speakers” of the digital language of computers, video games and the Internet. The others that are not born into the digital world but have become fascinated by and adopted many aspects of the new technology are, and always will be compared to them, Digital Immigrants. He points out that the Digital Immigrants have to learn to adapt to the environment and new culture. This is of special importance in the educational environment where the teacher can be designated as Digital Immigrant and the students as Digital Natives and at times they are speaking totally different languages.

Thinking about Prensky's description of teachers and students of the digital age speaking different languages, the author of this study find it reasonable to assume that the same might be valid in young people's communication with health care professionals and other supporting adults. Being aware of young peoples need for social support and health information and the growing evidence about increasing psychological problems among young people (WHO 2009, WHO 2008b, SOU 2006:77, Blair et al. 2003) the author find it important to investigate the possibilities of the Internet in promoting young peoples health and wellbeing.

Background

Studies have shown that the Internet offers adolescents a confidential way to get information that otherwise might be difficult or constrained to obtain and that it's valued by adolescents (Borzekowski, Rickert 2001a, Skinner et al. 2003, Skinner et al. 2003, Hansen et al. 2003, Valaitis, Sword 2005, Suzuki, Calzo 2004). In Borzekowski's and Rickert's study (2001a) 49% of the adolescents had used the Internet to get some type of health information. They indicate that they most frequently use it for sexual information like sexual activities, contraception and pregnancy, followed by information about fitness and exercise and then sexually transmitted diseases. Adolescents have also described how health promotion sites help to increase their awareness of health issues (Korn et al. 2006) as well as in case of tailored individual feedback give an insight into own behavior (de Nooijer et al. 2008).

Adolescents value the possibilities provided by the Internet, to meet and develop relationship with other people (Valaitis, Sword 2005, Crutzen et al. 2008, Flicker et al. 2004). They also value the chance to get in contact and share experience with other in same situation as well as getting an opportunity to break their isolation and loneliness. They see the virtual friends as an important source of social support and health information (Valaitis, Sword 2005, Flicker et al. 2004). The interactive nature of the

Internet is appreciated by adolescents, making features like chat and discussion forum possible (Valaitis, Sword 2005, Crutzen et al. 2008, Flicker et al. 2004)

Discussing with adolescents about the role of the Internet in providing health information and social support the quality of information often becomes an issue. The adolescents claim that they prefer to use the Internet for seeking information in situations that might cause embarrassment discussing with peers or conflict with parents or teachers (Skinner et al. 2003). They also describe in times, feeling overwhelmed by the amount of information resulting from their search (Skinner et al. 2003, Flicker et al. 2004) yet not necessary getting answers to their concerns. Because of that they appreciate the opportunity to get help from health professional both in assessing and finding qualified health information (Skinner et al. 2003). This was also an important issue in Crutzen et al. (2008) study where the adolescents describe suspiciousness about information retrieved from the Internet leading to double-checking the information on other sites. Despite this they did not search for the sources of the information but relied on recommendations from peers. Other studies have also pointed out that adolescents do indicate the peers, online and offline, being primary source of health information (Borzekowski, Rickert 2001a, Skinner et al. 2003).

Theoretical framework

Adolescence

Adolescence is, according to WHO's definition, the period from ten to 19 years old and is characterised by major physical and psychological change, as well as great changes in social interactions and relationships (WHO 2009). Because of the rapid changes during these years the period has been divided into three phases:

Early adolescence: Girls 10-13 years old. Boys 11-14 years old.

Middle adolescence: Girls 13-17 years old. Boys 14-18 years old.

Late adolescence: Both genders from 17-18 years old to 20.

Girls' onset of puberty tends to be a little earlier than boys and there can even be individually differences in the onset. The period of adolescence, as a whole, start with the early signs of puberty and ends when the individual is ready to enter the adult life, most often in the years of 20-25 (Berg-Kelly 1998).

In the literature regarding adolescence and the Internet, there is a slight difference in which age period is targeted in the diverse studies and which designations are used. Usually it includes individuals in the ages 12 to 24 years old and adolescents or young people are the most common designations. In the following study the individuals are 17 – 20 years old and the group is entitled as young people and thus is embraced of the period described as late adolescence.

In late adolescence the cognitive thinking functions as well as in the average adult. Late

adolescents have developed the capacity of thinking of abstract problems, about possible causality and analyzing probability. Their sense of time has become realistic in this period and thus their interests for the future usually have increased as well as the capacity of doing long-term planning. They have become more capable of understanding long-time consequences and complications regarding themselves. The identity has become more stable than in earlier periods of adolescence and the adolescents begin developing close relations to an individual or individuals outside the family (Berg-Kelly 1998).

Erikson (1971) defined identity development during adolescence as a process of person-context interactions. He placed emphasis on the important role of society and people surrounding adolescents in recognizing and supporting and thus helping to shape adolescents identity. The period of adolescence is a marked and conscious way of living between childhood and adult life where the adolescents are occupied with the physiological revolution of the puberty and the uncertainty of their future role as an adult person. They often spend a lot of effort in organizing a kind of subculture and are at times enormously occupied by the impression they have on each other without really knowing their own identity yet. Their search for new sense of coherence consists of joining the roles and skills from childhood to the new ideal prototypes, including sexual maturity. Many adolescents have to contend with crisis from earlier in life before they can find a long lasting ideal for maintaining a definitive identity (Erikson 1971). Similar to the idea of identity as person-context interactions, the development of individual identity can be seen as an adaptation to a social context. Societies do play an important role in shaping and creating the identity but people even do apply considerable amount of choices and influences on their identities. History, culture and the structure of social relations create a context in which individual identity must exist and individuals actively choose and modify their identities based on what makes it possible for them to thrive best in that context (Baumeister, Muraven 1996).

Health and health promotion

WHO defined health in 1948 as “*A state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity.*” (Nutbeam 1998). That definition is still valid even though it has been criticized for being too idealistic and unpractical aiming at complete well-being. The novel view of the human being not only as biological but even mental and social being was a break through and is an important element of the definition (Medin, Alexandersson 2000). During the years the definition has developed and in 1986 it was expanded with the statement that “*Health is a resource for every day life, not the object of living. It is a positive concept emphasizing social and personal resources as well as physical capabilities.*”(Nutbeam 1998). In the following study the focus is on the physiological, psychological and social dimensions of health when discussing health and health promotion.

Health promotion is defined as the process of enabling people to increase control over and improve their health. It represents a social and political process which embraces actions to strengthen skills and capabilities of individuals and even actions aimed at

changing social, environmental and economic conditions (Nutbeam 1998). This definition was established by WHO in the Ottawa Charter in 1986 and it includes five key principles: Build healthy public policy, Create supportive environments, Strengthen community action, Develop personal skills and Reorient health services (Tones, Tilford 2001). Health promotion is continuously developing as discipline or ideology and there isn't yet a consensus about its place in the world of science; is it an academic discipline, a field of action or an ideological stance? There is on the contrary, a consensus about it as an important component of present public health (McQueen, Kickbusch 2007). It is seen as a desirable unifying concept for those who are occupied by the need for changes in the ways and conditions of living in order to promote health. When analyzing the meaning of health promotion it can be identified on one hand, as any measure which promotes health depending on individual opinions and experiences and relying on happenstance. On the other hand, keeping WHO's definition in mind, it is reasonable to assume that health promotion should refer to planned interventions that aim to improve health and prevent diseases by involving individual behavior and lifestyle, social and environmental determinants and health services. These two perspectives represent the view of health promotion as an ideology, on the one hand, and as a structure, on the other (Tones, Tilford 2001). The Ottawa Charter of health promotion has been consolidated as an important framework for the work of health promotion by highlighting the importance of coordinating the interests of all levels to promote health and it is the definition or framework that most often is referred to of those working in the field, researchers and practitioners (Medin, Alexandersson 2000).

Adolescence health

During the last decades the major health problems of adolescence have shifted from infectious and somatic diseases to psycho-social and environmental problems, at least in the industrialized countries. Common health risks and problems adolescents are facing are depressions, obesity and eating disorders, sexually transmitted diseases and unwanted pregnancies, substance abuse, accidents and violence. Those problems are all, at least partly, preventable through adequate health education and health promotion (Michaud 2006). It is of special importance to age adjust the health care and keep holistic approach instead of organ specified approach when dealing with adolescence health in similar way as is done in paediatrics and geriatrics. The main reasons are the physiological changes following the puberty and the rapid growth leading to altered disease process and pharmacological tolerance. Psychological changes are another reason, including striving for independence and self-determination as well as radical cognitive development. Risk taking behaviour is a normal developmental task characterizing the adolescence bringing diverse health consequences, often negative ones because of lack of experience and knowledge about the reality. At last but not least is the period of adolescence socially exposed because of the intensive interactions in social networks that occur during adolescence and that usually are out of control of the parents. At the same time their former system of social support diminishes due to the natural separation process that occurs during the adolescence (Berg-Kelly 1998).

Salutogenesis

The term salutogenesis, denominated of Aaron Antonovsky (1991) professor of Medical Sociology, describes an approach focusing on factors that support human health and well-being, rather than on factors that cause disease. It is originated from Antonovskys interest in what makes some people survive and even grow and develop in spite of very high stress loads. He formulated in 1979 a salutogenetic model which he designated as "sense of coherence" (SOC). It consists of three main components, comprehensibility, manageability and meaningfulness. A person with high sense of comprehensibility experience most stimuli in life predictable but even in case of appearing unpredicted the stimuli are perceived as a challenge, possible to organize and explain. Manageability is according to Antonovsky, having access to necessary resources to be able to meet the demands occurring through the course of life. The third component, meaningfulness, refers to the challenges we encounter in life being worth engaging in, and that life has an emotional meaning and is worth our commitment and dedication.

The Internet

The Internet makes a universe of information and knowledge easily accessible for anyone with a computer and an Internet connection. Its interactive nature makes direct feedback, communication in real-time and contact between people independent of time and space possible. It can be argued that the Internet is a valuable tool for health care and health promotion especially due to the advanced information and knowledge seeking it enables. It has even been pointed out that the Internet as a source of health care advice has enhanced the opportunities for people to be more actively engaged in their own treatment and care (Korp 2006). Due to the interactive nature of the Internet, it can provide tailored information which makes it possible to receive individualized advice on specific concerns which has been seen as benefits as well as the option of anonymity (Borzekowski, Rickert 2001a, Korp 2006). In the aspect of health promotion the Internet can be seen as empowering as it increases peoples control and power over their own health and wellbeing by providing the opportunity to seek valuable health information when and wherever people like. It even provides opportunities to make contacts and communicate with others in matter of importance for health and well being (Korp 2006). Adolescents are early adopters of new technology and usually can easily access the Internet which leads to the Internet serving as an important tool for young people in acquiring health information (Borzekowski, Rickert 2001a). Over 80% of the Swedish people have access to the internet at home and 87% of young people 16-24 years old use the Internet almost every day, placing them among the most frequent users of the Internet (Statistic Sweden 2009b).

In Sweden the non governmental organization BRIS (Children's Rights in Society) has been offering support services via the Internet and telephone for some years and many thousands of children call and write every year (BRIS 2009). In November 2008 the first virtual youth clinic in Sweden, www.umo.se, was launched where the purpose is to offer qualified information for young people in the age 13-25 and possibilities to get personal advices (UMO 2008).

Public health perspective

Young people are a large group of the society; they are vulnerable at the same time as they are strong and getting increasingly independent. Health behavior forms to a great deal in early life and affects the health choices in adult life. Depression and anxiety is increasing among children and young people and so are rates of attempted suicide and deliberate self-harm (Blair et al. 2003). Psychological problems have increased significantly among young people in Sweden during the last 25 years with no signs of alignment ((SOU 2006:77, Swedish National Institute of Public Health 2009). The development has been the same in other European countries. In WHO's report of Health Behavior of School Children (HBSC) young people report health profile change during the transition from childhood to adult life. Many of these changes are negative: the young people report less ease in communication and increased psychosomatic symptoms. Furthermore, young people experiment with adult behavior as a part of this transition period and take risks of various degrees. This should not be seen as negative tendencies in all situations but adolescents should be given access to an appropriate support in making positive choices in order to minimize any negative effects of the risk taking behavior (WHO 2008b). Skinner et al (2003) point out that it can be difficult to engage young people in health care and health promotion but that they want to discuss issues with health care professionals even though they often do not. At last to underpin the importance reaching adolescents regarding health matters WHO's ten facts on adolescents health (2008a) is referred to, where following is stated:

“Nearly two thirds of premature deaths and one third of the total disease burden in adults are associated with conditions or behaviours that began in youth, including tobacco use, a lack of physical activity, unprotected sex or exposure to violence. Promoting healthy practices during adolescence, and efforts that better protect this age group from risks will ensure longer, more productive lives for many.”

Nordic perspective

Adolescents from all countries face similar challenges in their transition from childhood to adulthood (Borzekowski, Fobil & Asante 2006). Internet access is similar in all the Nordic countries. Over 80% of the population have access to the Internet at home in all the Nordic countries except in Finland where proportion is 72% (Nordic databank 2008). Websites targeting young people in matters of health and wellbeing exist in the other Nordic countries as well as in Sweden; for instance the Icelandic website www.heyrumst.is offering social support, moderated by Save the Children Iceland and www.unghelset.no a Norwegian website including health information for young people where the Norwegian directorate of health is providing. The Internet does not have any geographical boundaries, it's possible to access all kind of websites from anywhere in the world as long as one knows the language spoken or written and many websites even offer more than one language .

Problem formulation

Being aware of young people's willingness to discuss with health professional but lack of doing, it is important to find appropriate ways for health professionals and other supporting adults to reach them. As adolescents and young people are early adopters of new technology and frequent users of the Internet, the Internet must be seen as a presumable arena for promoting young peoples health and a forum for social support. To develop the Internet as such it is important to gain information about young peoples' own views and preferences.

Aim

The aim of this study is to deepen the knowledge of young peoples' views on the role of the Internet in promoting their health and wellbeing.

2 METHOD

In this study the aim was to gain information about young people's views of the role of the Internet in promoting their health and wellbeing, their own attitudes and preferences. Qualitative methodology was considered a natural choice of research approach because of its inherent attempts to get close to the individuals own perceptions, their experience of their reality (Hallberg 2006). Grounded theory was considered the most suitable type of qualitative research method because of its purpose of building theory from data and because of the structured procedures and analytical tools it offers (Corbin, Strauss 2008). Last but not least grounded theory was found suitable for this study because it makes it possible to focus on and illuminate what is happening within a setting or around a specific event (Morse et al. 2009).

Grounded Theory

The grounded theory method was developed in the Chicago School of Sociology early in the nineteenth century. It was formulated by Strauss and Glaser as a result of the need for a method to study human behaviour and social processes. The aim of grounded theory is to generate a theoretical framework or model to explain the collected data by transforming the raw data into theoretical social processes (Hallberg 2002). The focus is on the world as it is experienced by the individual (Hallberg 2006).

The epistemology of the method comes from the tradition of symbolic interactionism and the philosophy of pragmatism. The symbolic interactionism characterises of the interaction between persons and that they interpret each others action instead of mainly react to the others actions. The focus is on the meaning of the action for the one who is receiving instead of the direct response to the action. The philosophy of pragmatism refers to the interest in the act it self, to the relationship to the thoughts of the act and that knowledge is created through actions and interactions (Corbin, Strauss 2008).

The classical version of grounded theory was created by Glaser and Strauss (1967) and published in their book *The Discovery of Grounded Theory: Strategies for Qualitative Research* in 1967. The aim is theory generation that is grounded in the data; the author is supposed to conduct the study with as little preconceptions as possible and is supposed to stay objective thorough the whole research process. The emerging knowledge is supposed to be useful in understanding similar occurrence (Glaser, Strauss 1967). In the classical version the focus is on symbolic interactionism, social processes and pragmatism and the analysis includes strict and close line-by-line reading of the transcripts as well as rigorous identification of codes through substantial and theoretical coding (Hallberg 2006).

The modified version by Corbin and Strauss (2008) include giving voice to the informants as individuals and their views of reality. The analysis contains three types of coding: open, axial and selective (Hallberg 2002) Open coding embraces breaking the data to smaller pieces and outlining concepts that stand for blocks of data and axial coding embraces the work of connecting the concepts to each other and by that developing categories, open and axial coding can go hand in hand during the analysis (Corbin, Strauss 2008) Selective coding is the last step in the coding process where the categories are refined and related to each other resulting in the core category which illuminates the basic social process (Hallberg 2002)

The third version referred to as constructivist grounded theory was developed by Charmaz and underpins the relativism of multiple social realities and distinguish from the classical and modified version by interpreting how informants construct their realities. In this version initial and focused coding are used as steps of the analysis (Hallberg 2002).

In all of the three versions the coding process, even though with minor differences, is the essence of the analysis as it is an effective tool for transforming raw data into theoretical structure illuminating the social process. Although these three versions have different nuances there is a consensus about fundamental strategies for grounded theory study. The inquiry is structured by discovery of social processes. The data collection and analysis proceed simultaneously and the process and the products are shaped from the data rather than theoretical frameworks. The analytical processes encourage theory development and include constant comparison of raw data and emerging categories. Memo writing is seen as an important step between coding and complete analysis in all the versions (Hallberg 2002)

Participants and procedure

The informants to the focus groups were chosen by purposive sampling which is according to Bowling (2001) a deliberate non-random sampling method that intend to select a group of people in a setting or with special characteristics. In the case of this study it was of central interest to recruit young people in the age 16-20 years. The easiest way to get in contact with this group was in upper higher school as more than 70% of this age group is attending upper higher school in Sweden (Statistic Sweden 2009a). As a start the author chose eight schools in the western region of Sweden (Västra Götalands Regionen). The schoolmasters were contacted by telephone to get permission to set up information (appendix 1) on the student's callboard in order to get some voluntary recruited. The schoolmasters also got written information about the project via email (appendix 2). Six schools gave their permission but after one week on the callboard no one had declared interest of participating. Then the schoolmasters were contacted again to ask for permission visiting the schools to get in more direct contact with the young people and be able to tell about the project in life person. Permission was attained to visit three schools and the author got the opportunity to present the project in classrooms and in cafeterias and in that way got in contact with 50 students interested in participating in the focus group discussions. The students got written information (appendix 3) about the project and a consent to sign in case they wanted to participate, those students that were under the age of 18 years also had to get a written consent from their parents (appendix 4). During the phase of scheduling the moment and location for the focus group sessions everybody did not have opportunity to participate of different private reasons so the final number of participants became 34 persons divided in eight groups. One group of five persons didn't show up at the appointed time and in one group only two persons showed up which was considered to few to be defined as a group. In the end 26 young people participated in six focus groups.

Focus groups

As the aim of the study was to gain information about young people's views and preferences, focus group discussions are considered suitable for data collection because of its usefulness in exploring people's knowledge and experience (Kitzinger, Barbour 1999, Kitzinger 1995). Focus groups discussions are sessions of discussion focusing on a specific issue of interest and are conducted in groups. The aim of such group discussions is to get the participants to talk to each other and comment on each others accounts and experiences, rather than exclusively answering questions from the researcher. The researcher is, instead of asking questions from person to person, actively encouraging the group interaction. This is particularly suited for study of attitudes and experience around specific issues. The group discussion allows the participants to formulate their own reflections and explain their own priorities in their own terms (Kitzinger, Barbour 1999). It can, not only, be used to examine what people think but also how they think and why they think that way. The group processes can help people to explore and clarify their views in ways that would be less easily accessible in a one to one interview (Kitzinger 1995). Focus groups are suitable to

reveal the range and the nature of participants' view rather than the strength of the views (Sim 1998).

In this study six focus group discussions were conducted. One group consisted of three informants, three groups consisted of four informants, one group consisted of five informants and one of six informants. The focus group discussions were conducted during two weeks period, three groups per week and the sessions lasted from 24 minutes to 43 minutes. They took place in available classrooms in the respective schools where the informants were recruited in order to make the attendance to the sessions as convenient as possible for them. Each discussion was audio taped and the author listened through each tape record before conducting next session in order to optimize the interview guide if needed. After six focus group discussions saturation in data was reached.

To give structure to the focus group discussion each session started with short description of the project and the main theme of interest. The reason for using a tape recorder was explained as well as the role of the author as a moderator in the focus groups. The informants were informed about the importance of them talking to each other and not only to the moderator and not interrupting each other speaking. The informants were given opportunity to ask questions about the project and the author before and after the session. The placement in the room was arranged so that the participants and the author could sit in a circle making it possible to get eye contact with each and everyone and to hinder that the informants got the feeling of the author interrogating them. The informants were encouraged to discuss with each other and comment each other, not only answering the authors' questions. In case that some informant did not actively participate in the discussions the author reacted by directing some follow up questions to that informant.

"There is not one reality; there are multiple "realities," and collecting and analyzing data require capturing and taking into account those multiple viewpoints." (Morse et al. 2009). Keeping that in mind the author attended to make the environment and the atmosphere in the room uninhibited so that the informants could feel free to express themselves and that every viewpoint was respected.

Interview guide

In order to facilitate the discussion an interview guide was made in forehand including three main topics and some key questions which were designed in more daily language (appendix 5). As a start the young people got opportunity to brainstorm about the concept of health. This was done to ground a broad definition of health in order to avoid a narrow focus on health as being either the presence or absence of disease (Skinner et al. 2003). It did impress the author how broad minded the young people was from the beginning, only few of them did see health as only physiological condition. The majority did mention psychological well being and social interaction as a natural part of health. The first main topic embraced health promotion with the opening question: Can

you describe your experience of using the Internet focusing on increased health and well-being? Follow up questions were used if needed, for example: How do you seek health information on the Internet? Do you know any websites about health and wellbeing specially targeting young people? Have you used any websites like that? Why? Why not? The second main topic was social support with the opening question: Can you describe your experience of using the Internet for seeking social support? Examples of follow up questions are: How have you used the Internet for seeking social support? Can you name any websites targeting young people that are offering support? The last main topic was about their wishes about health and social support on the Internet and included the opening question: If I would design a website targeting young people about health and wellbeing what should it include? Follow up questions were for example: What kind of information is most suitable spreading on the Internet? What is most important according layout and structure? The interview guide also included questions about security and trustworthiness but it was brought up around different topics in the groups depending on where it was found most appropriate. Before discussing the main topics every group had a little brainstorming session around the health concept where they were asked to what health meant to them. This was done to insure that the informants were talking and thinking about health in a broader context than only an absence of diseases in the following discussion. After being using these opening questions in two sessions of focus groups it was found necessary to do some changes in the interview guide to get deeper information (appendix 6). This was found necessary partly because of the informants often did answer the opening questions in the first two main topics in the way that they didn't have any experience of using the Internet in the matter of health and wellbeing and thus the discussion became rather short-spoken but then a moment later while discussing the optimal website they were describing diverse moments indicating that they indeed were using the Internet in that matter. These changes included asking the informants to describe and discuss how they use the Internet in their daily life keeping health and wellbeing in mind and resulted in more and deeper discussions about the health promotion topic. The changes even included asking the informants to describe how they did in case of needing support or getting answers in sensitive matters. The interview guide was only used as a supporting instrument and the following questions were always adjusted to the flow of the discussion and every focus group discussion included more or less of spontaneous questions.

Analysis

In this study the modified version of grounded theory was used for analysis because of its attribute of giving voice to the informants and their views of reality. Its structured course of action described in Corbin and Strauss (2008) was also influencing the choice of version for analysis.

After each focus group discussion the author did listen to the tape records in order to evaluate if the interview guide needed to be adjusted or if saturation in data was reached. Because of the complexity in recruiting the informants and finding optimal

time and location which suited the informants best as possible the author preferred to conduct all the focus group discussion during two weeks period. Upcoming period of examination, practice and following summer vacations on behalf the informants was also a reason for this decision.

When all the focus group discussions were done the tape records were transcribed resulting in 104 pages of text. Each discussion was then carefully read through to get an oversight over the material before the coding process was started.

In the first step of the coding process, the open coding, the material was read through piece for piece and any content of interest was coded by using words that best described conceptually what the author considered was indicated in the data (Corbin, Strauss 2008). During the open coding of the discussions, questions like: what is the informant meaning here? What is going on? were raised to the data material and the authors reflections were written down in memos making it able to connect to the reflections later in the process. According to Corbin and Strauss (2008) the process of raising questions to the data and thinking about possible answers is helping the analysts to understand the problem from the participant's perspective.

In the step of axial coding the codes were linked to each other and labelled with concepts that were descriptive for their similarities and then categories were successively built out of the concepts. Asking questions and making constant comparison of the codes and categories is seen as the main analytical strategies elaborating the analysis (Corbin, Strauss 2008) and while doing that the author discovered a process beginning to take shape.

Corbin and Strauss (2008) define a process as "An ongoing flow of action/interaction/emotions occurring in response to events, problems, or as a part of reaching a goal." They point out that actions/interactions/emotions may be strategic, routine, random, novel, automatic and/or thoughtful and that they are depending on the context due to the fact that persons act in response to something occurring in their lives. Because of persons different definitions and meaning of situations great variations can be seen in action/interaction/emotion although being a response to similar situation. Corbin and Strauss (2008) even describes different ways of conceptualizing the process; it can be seen as stages, levels, degrees, sequences of actions or steps forward towards a particular target. They even point out the importance of studying the memos and the raw data in order to explore how the main issues are handled over time.

Instead of leading the author from one place to another through the process (as she actually had been hoping) the categories did swing back and forward because of the positive nature of some of them and negative nature of others. After reading through the material again and reorganizing the codes and categories it became apparent that the categories weren't either positive or negative they rather were two-dimensional, having one positive dimension and one negative.

According to the modified version of grounded theory properties of categories can be divided into dimensions (Hallberg 2002) that embrace the variations of the categories and gives specificity and range to the concepts (Corbin, Strauss 2008).

While organizing and reorganizing the categories and linking them together the essence of the research became successfully clearer and made it possible to construct the core category. The core category presents the main theme of the research and how the researcher defines it depends on how she or he wants to place the emphasis but it will always be rooted in data provided by the informants (Corbin, Strauss 2008). After revealing the process the natural connection between the core category and the categories was found and the summary resulted in the balance scale presented in the following chapter.

Ethical considerations

As the study involved young people and possibly would have dealt with sensitive information upcoming during the discussions, an ethical vetting was formally applied for. Approval was retrieved from the regional board of ethic vetting in Gothenburg, dnr 042-09.

The respondents did get detailed information about the aim of the study, the discussion session, the process of analysis and how the data would be preserved (appendix 3). They were assured anonymity as well as opportunity to discontinue participation at any time if wanted. Approval from parents of adolescents under the age of 18 was retrieved (appendix 4). The respondents were given opportunity to get individual follow up session if needed.

Preconceptions

In Hallbergs' (2002) book *Qualitative Methods in Public Health Research* it is stated that the objective observer is a myth and emphasized that every researcher is a person with his own history and background. The researcher will always affect the research process in some way, for example can disciplinary background, preconceptions and/or professional experiences affect which research questions are investigated or which methods are chosen (Hallberg 2002). Malterud (2001) argues that preconceptions are not the same as bias as long as the researcher does mention them, reflect on them and declare openly.

The author's enquiry for the Internet as a setting for promoting young peoples health developed during her work as a volunteer at the non-governmental organisation BRIS (Children's Rights in the Society) answering e-mails written by young people in the age 9-18 years seeking contact with supporting adults. Her experience of that work is positive and therefore she personally does see the Internet as a possible arena for health promotion targeting young people as a complement to the school, family and the health

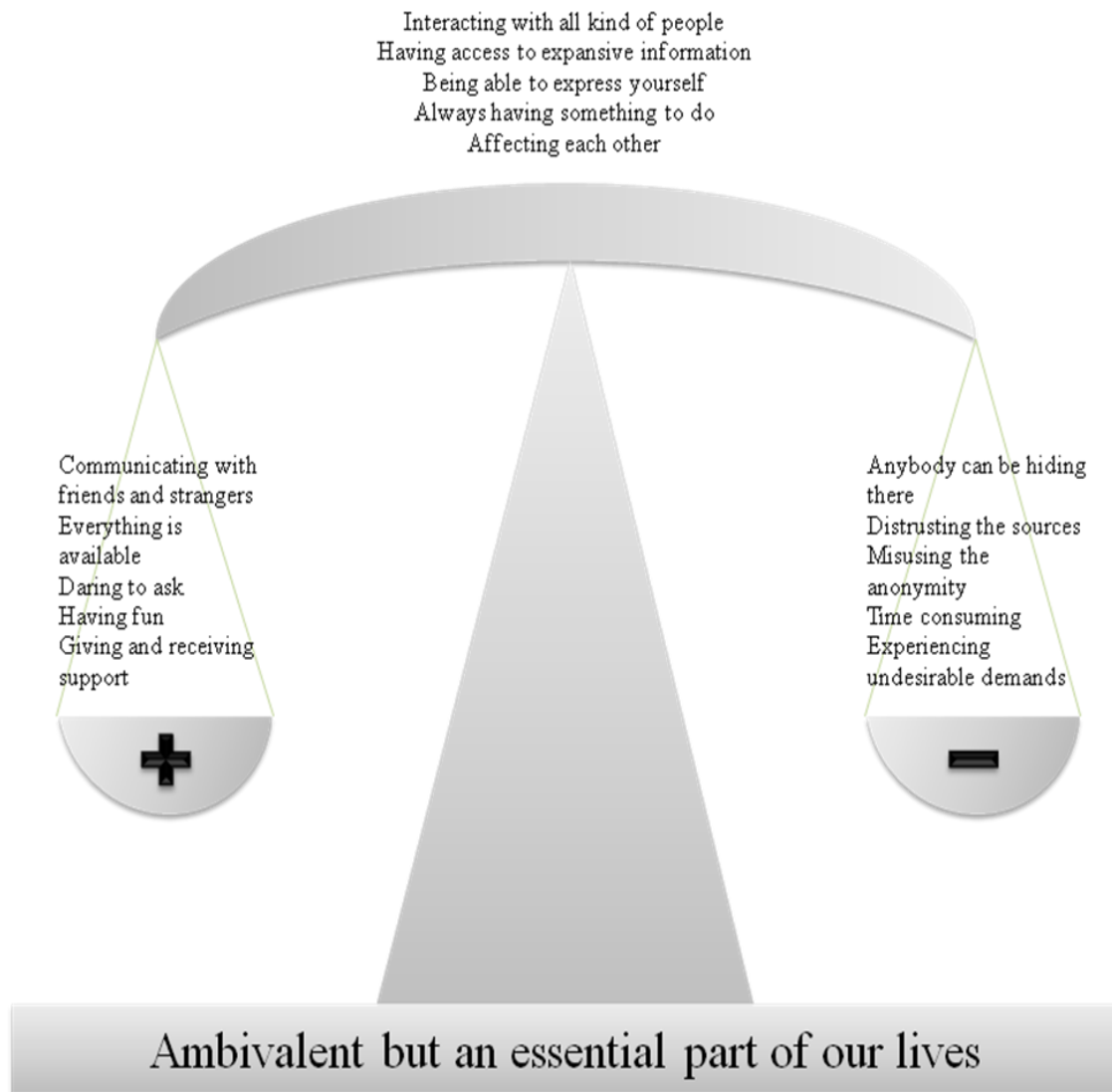
services. She hasn't discussed or worked with young people face-to-face around the issue so she started her research without any knowledge about their experiences or attitudes other than the short messages arriving occasionally to BRIS including gratitude for their existence. The author didn't tell the informants that she had been working for BRIS, partly because her work there is done totally anonymously and partly because she didn't want the discussions to focus on BRIS activities specially or that the informants would feel inhibited in criticizing BRIS if wanted.

3 RESULTS

Discussing the role of the Internet in promoting health with the young people participating in this study revealed that they do both use the Internet consciously and unconsciously in promoting their health. When asked directly if they used the Internet intending to promote their health most of them denied but while describing how they used the Internet in every day life and how it affected their health and wellbeing several things appeared promoting their health. The things most often mentioned having promoting influences on the health were social contacts, both keeping contact with friends and family and getting to know new people. Feeling of belonging and having opportunity to express oneself, were described as potentialities of the Internet which were experienced as affecting the health positively. Even though promoting health wasn't the primary reason using the Internet it was described the most natural way for young people to search all kind of information including some about health and wellbeing. It was even described giving impression of safety knowing that you could get information or support via the Internet whenever needed; that you could ask questions anonymously and get feedback on your reflections all day around without having to expose your self. Although the Internet was experienced to have big potential to affect the health positively the young people were well aware of possible negative effects it could have on health if used inappropriately. Too much time spent on the Internet was described as having negative effects on the health as well as the risk of meeting someone misusing the possibility of anonymity to get in contact, pretending to be someone else.

During the analysis of the focus group discussions, five categories developed: *Interacting with all kinds of people, Having access to expansive information, Being able to express yourself, Always having something to do and Affecting each other*. Each category had two dimensions, one positive and one negative. They are described in the subcategories: *Communicating with friends and strangers, Anybody can be hiding there, Everything is available, Distrusting the sources, Daring to ask, Misusing the anonymity, Having fun, Time consuming, Giving and receiving support and Experiencing undesirable demands*. Categories and subcategories describe the areas on the Internet young people find important and possibly affecting their health and well being. The positive dimensions of the categories are those the informants find useful in health promotion purpose while the negative dimensions describe the features having negative influences on the health. The process how young people view the role of the Internet in promoting health likens a balance scale which becomes the model presenting the results

of the study. When you put a category on the balance scale you get one dimension placed on each side of it and then depending on the situation you get either the positive or the negative dimension weighting the most. The categories with their subcategories then merge into the core category *Ambivalent but an essential part of our lives*.



Ambivalent but an essential part of our lives.

The five categories, with the positive and negative dimensions described in the subcategories, lead to the core category: *Ambivalent but an essential part of our lives*. The informants often mentioned experiencing helplessness only by thinking about existing without access to the Internet. They described the Internet as a natural and essential part of their daily life and one that they use to keep in contact with friends, communicate and get information about everything needed. They also used it for their entertainment and education and often resorted to it when wondering about things or having problems. At the same time as the informants declared the essentiality of the Internet and its usefulness they were deeply aware of some negative aspects. They highlighted that too much Internet surfing might affect the health negatively, both physically and psychologically and the fact that the sources aren't always reliable caused insecurity. In the matter of issues regarding their health and wellness they found it very important with reliable sources and secure sites so ones sensitive information wouldn't leak out making one unwillingly exposed. At times they felt vulnerable to the risk of being deceived both regarding money and relationships. That they would have to pay for something they hadn't asked for or that someone tried to convince them having won great amount of money. They even mentioned the risk of meeting corrupted people trying to get in contact but having bad intention covered by the anonymity of the Internet or lying about their real identity. At the same time the informants appraised the possibility of anonymity especially in the cases of seeking help or raising questions about sensitive matters. They argued that the Internet was a feasible way for promoting health and preventing health problems in form of good access to information as well as easily available adult- and peer support. The face to face contact with both family and health professionals was seen inevitable in case of serious problems and the Internet a good addition to the supporting system and their social capital. They emphasised the variation in needs from person to person and from situation to situation. If one felt comfortable with discussing problems with friends or family, one maybe didn't need the Internet as much. But they pointed out that some young people have problems in discussing with their families or didn't have any family or friends. For others, the nature of their problems could be of that kind that they didn't want to discuss it face to face and then the Internet was seen as a good alternative. The overall impression of the young peoples views on the role of the Internet in promoting health were positive but also had many negative aspects. At the same time the Internet was declared the most natural way to communicate and gain information, thus the core category: *Ambivalent but an essential part of our lives*.

"Internet makes you feel good in the same time it can make you feel bad, so it is both positive and negative; it is different from person to person"

Interacting with all kind of people

This category embraces the field of social interactions on the Internet, the most extensive utility according to the informants. It has the positive dimension *Communicating with friends and strangers* and the negative dimension *Anybody can be hiding there*.

Communicating with friends and strangers

The informants described keeping contact with friends and meeting new people the most important utility of the Internet. This issue was highlighted in every focus group discussion and mentioned as a positive potentiality of the Internet. They described doing so by chatting with friends or strangers in diverse forum or online chat rooms. It was described as a new way of being social and being social was experienced having a promoting health and wellbeing. The Internet was described giving opportunity to meet people with different opinions and views in life and the diverse forums enhanced participation in discussions and thereupon liberalizing the way of thinking which would affect health and wellbeing in a positive way. This opportunity of interaction was even seen as an important possibility for those who might be socially isolated or bullied in their own school or social environment to get friends and being social. Interacting on the Internet gave opportunity to keep in contact with friends and family living far away from the informants themselves. It was described as an easy way to get in contact and less expensive than using the telephone. Interacting on the Internet was even described as an opportunity to get in contact with people with same interests, having similar problems or living in same situation thereupon giving opportunity to share experiences and get feedback. This interactive nature of the Internet with the possibilities to meet all kind of people, friends and strangers, was giving a feeling of belonging and was experienced promoting on health and wellbeing.

"it's positive for the social health that you can keep contact with people and that you like, have friends that supports you and that you, like, talk to and get on with and so"

Anybody can be hiding there

At the same time as the informants described the positive aspects of interacting with friends and getting new friends on the Internet they mention the risk of meeting some corrupted individuals which are interacting under false colours. One might meet someone he or she likes and get in contact and then it appears that the person isn't the one he attended to, he or she might be a lot younger or older than they said or have bad intentions about the relationship. This was experienced as threatening to health and wellbeing. They even mentioned that by communicating with friends on the Internet there was a risk of losing a part of the conversation like the body language and nuances in voice tone which could lead to misunderstanding. Comments that were meant to be jokes might be taken for a nasty ones or insult instead, while in face to face situation

you would be able to hear on the way of speaking whether this was a joke or an insult. This was described giving feelings of insecurity and possibly spoiling friendships.

“you never know so to say, like, if you talk to someone then you believe that it’s a boy who is like 16 years old then he is like 50 maybe or something, you just don’t know”

Having access to expansive information

This category embraces the spaciousness of the internet with all kind of information available. Access to actual information is essential according to the informants and the Internet was described as the natural way of getting information. The informants also declared that the sources weren’t always reliable and that was experienced as a negative aspect. The positive dimension of the category is *Everything is available* and the negative dimension is *Distrusting the sources*.

Everything is available

One of the biggest advantages of the Internet was found to be the easy access to information. The informants described the information flow on the Internet as spacious, they expressed that there it is possible to find everything you need. It’s all about knowing where to seek and what to find and the most common way to find the information wanted was to enter the search engine google.com. By entering the terms of interest they got a lot of information in response. They got information from ordinary people writing about their experiences and sharing their views but also information from professionals and institutions. Many websites even includes reclamations for certain products giving the young people an overview of the market. These different kinds of sources were found positive and useful in different kinds of settings. Information about how to exercise in effective way without harming the body or getting information about a specific operation they were intending to do were mentioned as examples of health information they had been actively searching for on the Internet. In matters regarding the body and possible illness it was found important to get reliable information from qualified professionals. It was described useful to be able to read about different kind of symptoms to get an idea about what is bothering and whether it’s necessary to seek doctor’s advice. The informants expressed feeling embarrassed to ask certain questions in person and then it’s valued to be able to get this information on the Internet, read “frequently asked questions” on a reliable website or study the experience of others. Many of the informants pointed out the Swedish web-based youth friendly clinic, www.umo.se, as a reliable website with a lot of useful information. Not all of the informants had experience of using the Internet for searching health information but everybody found it to give an impression of safety to have the possibility to do so. Discussing what kind of information was valued, the importance of variation in information was emphasized and that it was depending upon the age what kind of information was valued. For example it was mentioned that in the early ages of adolescence, 12-14 years it was important to have easy access to information about sex

and sexual behaviour of high quality as well as the normal development of the body. For older kids, youth friendly information regarding education, employment and economy were of importance as many young people worried about these issues. In some of the focus groups the fragile self-esteem of teenage girls were discussed and the possibilities of the Internet in providing information and discussions forum aiming at strengthen this group was valued. Many of the informants emphasized even the importance of the easy access to information on the Internet in making every kind of research for school work and this was both effective and timesaving. These factors were experienced as contributing to less stressful life as well as giving an opportunity to be well informed about health and illnesses, body and soul.

“so you get enormously prepared for those things, you have to do, via Internet and I think that’s very good because there is a lot of information there, like others that have done this things and doctors that writes and so on, so I think it’s very good about Internet just because of that”

Distrusting the sources

The informants were conscious about the variation of the quality of information and pointed out that everyone can write anything and publish on the Internet. They emphasized the importance of evaluating the reliability of the source of information to be able to decide whether the information was worthy or not. They did so mostly by observing who the publisher was and if it was someone they knew they considered it reliable, as well as if the website was owned by some governmental or other distinguished organization. Some of the informants valued the reliability by how many websites published the same facts; if there were many it was considered reliable and they argued that it was unlikely that many people would have reason to lie about same things on the Internet. Websites with a lot of reclamation was considered less reliable and some of the informants declared it remarkable that reclamation about diverse dieting supplements, which indeed were made for adults, would exist on sites targeted to young people. They found it to be sending out wrong messages, especially to young girls who often are self criticising and doubting about their body and weight.

“if you are searching for information then I think you should take everything with a pinch of salt, that is if you don’t know for sure that it is a reliable source /.../ you might have to check more sites as well to secure.”

Being able to express yourself

This category embraces the impressions of being able to express oneself in the way that suits one. The Internet provides the possibility of interacting with people and getting information without exposing the identity but also includes the risk of someone performing under false colours. The category is described with the positive dimension *Daring to ask* and the negative dimension *Misusing the anonymity*.

Daring to ask

One of the most frequently discussed issues in the focus groups was the matter of anonymity. The informants did find it an advantage to be able to ask questions and discuss sensitive matters with competent personnel via the Internet without having to expose their identity. They debated that during adolescence many questions, speculations and even problems crop up that they feel embarrassing to discuss with family and friends and in those cases it was presumable to be able to discuss anonymously on the Internet. The school nurse was mentioned as a person you could ask about almost everything but at times problems were so embarrassing that you wouldn't even ask her and even though you would like to she wasn't always available. Worries about whether being infected with sexually transmitted disease was mentioned as an example of embarrassing problem. They even discussed the fear of making fool of oneself by asking "stupid" questions and found the possibility of asking questions anonymously on the Internet a good way to avoid that. One informant mentioned that the opportunity to perform anonymously made it possible to introduce a stronger version of oneself. Like, if one were an unsecure person and even a little shy one might have trouble with expressing oneself and declaring ones opinions even though one had a lot to say. According to the informants some young people find it easier to be open and honest discussing things anonymously and being able to do so on the Internet gave opportunities to participating in discussions and achieving some personal development in that way. The informants even argued that some things are easier to write than to say and often mentioned the opportunity the Internet gave for "writing off" or to write about feelings and thoughts. The diverse blog sites were found useful in this purpose; the informants described the "writing off" as a way of tackling their feelings and frustration and the possibility to do so without exposing oneself was valued. Having the opportunity to express oneself in these ways was experienced having positive influences on health and wellbeing.

"when you come up to certain age then you think damn, it doesn't work discussing this with the parents and not only the parents you get ashamed of mentioning it at all for people, you prefer keeping it for yourself and maybe check on the internet, maybe you find something there"

Misusing the anonymity

As many of the issues discussed in the focus groups anonymity was also found having a seamy side. The informants mentioned that at the same time as anonymity could help some people to be open and honest it could inspire others to be false and dishonest. It could give opportunity to say nasty things that you would never dare to say face to face and this could be hurting and making the receiver feel bad. They described how some people did this by commenting on others photographs or blogs in a way that could be badly hurting and being exposed to such things would affect the mental health negatively. The informants, especially the girls, talked a lot about the site bilddagboken.se, which is a site where the members publish pictures of themselves or something they are doing and then they comment on each others photos. It was

described as a popular community where you meet new and old friends, keep contact and communicate. They had a great discussion about the photos they were publishing and how the photos could be giving a wrong picture of one. They also described how the comments given could affect their self esteem negatively if they were of a nasty kind and even how some corrupted persons in times copied the pictures and published somewhere else with some nasty comments or totally wrong information.

“...that can write like nasty things or be mean or something and that doesn’t make you feel good /.../ you can write just about anything but you can’t say whatever right in someone’s face”

Always having something to do

This category embraces the importance of having something to do, being occupied and avoiding the feeling of boredom. The informants described the Internet as offering a lot of entertainment but at the same time being very time consuming. The positive dimension of the category is *Having fun* and the negative dimension is *Time consuming*.

Having fun

The informants described the Internet playing an important role in young people’s entertainment and recreation. They described that on the Internet you can always find something to do. Many of the informants used the Internet to listen to music and to watch music videos. They even watched TV on the Internet and in that way didn’t have to follow the TV programme and watch on some specific hours. The informants described how the Internet makes it easy to attend to your interests of any kind; it’s possible to follow your team in diverse sports, keep up to date about what is going on in the fashion world or even follow celebrities’ lives. The two groups consisting of boys mentioned that the Internet offers wide variety online games where one can play, either on your own or by meeting some friends, these eventually located somewhere else. They discussed the online games and its positive and negative influences on the health. Writing blogs seemed to be of more interest among the girls than the boys; almost all of the girls did write their own blog or had been doing so for a period because it was a fun way for time drifting. They even described using the Internet to keep up to date about events in their surroundings. The informant’s attitude was that entertainment and enjoyable things made them feel good and feeling good was seen as a sign of good health.

“...when you listen to music you feel happy in a way/.../ [health is] feeling good, being active, exercising, doing things you like, so to say”

Time consuming

In all of the focus groups the aspect of the Internet as time consuming was discussed and the ways it affected the health. They described how it at times affected their night sleep negatively because they might sit up late at nights. They also mentioned that it increased their feeling of stress because schoolwork often was put aside for surfing on the Internet and it even gave feelings of tiredness and though head. Some of the informants mentioned the risk of being isolated and becoming addicted to playing online games. They also mentioned physical symptoms like headache and stiffness in shoulders and arms. One informant mentioned that too much Internet surfing could lead to sedentariness and highlighted the importance of even keeping active and exercising to prevent that and to maintain health.

“even that about the psychological health, you feel not concentrated because when you sit by the computer then maybe it feels like you sit there for twenty minutes and then you sit there for two hours actually and then you don’t have time for anything else”

Affecting each other

This category embraces the Internet featuring as a channel for people to affect each other in positive and negative ways. Communication via the Internet was found giving opportunity to affect people positively by giving and receiving feedback and support via diverse forums, chat rooms or other social communities. On the other side it was found to be affecting negatively by increased stress because of both concrete and perceived demands. The two dimensions of this category are *Giving and receiving support* and *Experiencing undesirable demands*

Giving and receiving support

The Internet was highlighted as a presumable arena for social support of any kind in all of the focus groups. Many of the informants mentioned the advantage in being able to easily meet people in same situation to share their feelings and experiences with. Reading about other people’s lives and experiences in for example blogs, was found supporting as well as the possibility to give and receive feedback in form of positive comments. Reading about the experience of others was appreciated as a way of getting convinced of not being the only one experiencing certain kind of problem or making certain kind of reflections. The experiences of others were also found helpful to get ideas about how to solve a problem. One informant described the encouragement she found in getting to know that certain things went well for another person and thus might go well for her as well. The informants stressed the importance of having access to different kind of support, adult support and peer support, as well on the Internet as in person. The informants found it supporting being able to access information that could affirm that their body condition, thoughts and feelings were normal and not unusual or weird. They highlighted the importance of getting that kind of information from a

reliable source, provided by supporting adults, presumably someone professional. Many of the informants found it trusting to know that there were adults controlling discussion forums where sensitive issues were discussed, securing that no insulting comments were published. It was found at least as important to have the possibility of getting support from people in their own age. They meant that adults couldn't always understand how it was to be young and then it was more valued to get advices from peers.

“blogs can be like, then you really publish it out that you feel bad, you do not have to leave everything but sometimes you can indeed get feedback on it on how you feel”

Experiencing undesirable demands

Some of the informants, especially the girls, mentioned that their social networking on the Internet could have a negative aspect in the form of being demanding. They described as an example blogging being a fun thing to do and even a good way of writing off their feelings but also demanding in a way of the must of constantly updating the blog. It could become a feasible spot for attacking if you were not creative enough or not updating frequently. At the same time as publishing photos could be a fun way to communicate, it was also sometimes perceived as demanding and pressing, i.e. the photos needed to be interesting and nasty comments could be posted if the photos did not fit into the community that the person was a part of. The demand of updating frequently was found increasing stress and they experienced worries about exposing themselves to much both by publishing photos and by blogging about their feelings. The informants mentioned the need for being up to date about the active blogs in their social network making them spend a great amount of time in reading all the different blogs or else they would not be up to date in discussions when they next met their friends. The informants claimed that these additional demands in their already stressful daily life had negative influence on their health and wellbeing.

“I also think it have been getting demands that it must be interesting stuff, that you sit and upload pictures, if you just write a post about other things so people think it is really unnecessary and stuff like they see it as it should be informative and serious, even if one might want to have it that way to relax yourself”

4 DISCUSSION

The results of the study show that young people have an ambivalent view on the role of the Internet in promoting health and well being. They declare a positive view and experience of it but are at the same time well aware of the negative aspects and make effort to find strategies to minimise them. The results illuminate that despite this ambivalence, young people consider the Internet as an essential part of their lives, a natural source of health information and social interaction, leading to the core category *Ambivalent, but an essential part of our lives*.

Discussion of results

The category *Interacting with all kind of people* embraces all the interaction young people are engaged in on the Internet. It was found one of the most important advantages the Internet offers. Communicating with friends and family and getting in contact with new people and getting to know new friends was seen as the positive dimension of the category designated as *Communicating with friends and strangers*. This was experienced promoting their social health and well being and is concurrent with previous research (Skinner et al. 2003, Valaitis, Sword 2005, Crutzen et al. 2008, Flicker et al. 2004). Individuals in various ages do use the Internet as a mean of maintaining ties with existing family and friends as well of forming close and meaningful new relationships and it is found a relatively nonthreatening environment (McKenna, Green & Gleason 2002). Löfberg (2008) describes online communication as a context where young people have access to social knowledge and a space to try out ideas, norms and values about sensitive matters both in their own peer culture and in adult society. Being a member of a community, having shared sense of purpose and a network of mutually supportive relationship is found being fundamentally healthy. Membership of a virtual community can be at least as valuable regarding giving and receiving social support as being a part of contented community (Tones, Tilford 2001). The negative aspects the young people did highlight when discussion interactions on the Internet was the risk of meeting individuals interacting under false colours, *Anybody can be hiding there*. This is also an aspect adults often highlight in informal discussions about the issue and incidences attributed to girls meeting older boys they have learned to know on the Internet gets much attention in the media which can lead to suspiciousness about the Internet as an appropriate forum for interactions. The Swedish national study of young people and media (2008) shows that only 9% of adolescents state that they have met someone they got to know on the Internet in person. The majority of those who have done it describe it as a positive or neutral experience and only 2% state direct negative experiences. These results might indicate that this is a relative small risk that should not be seen as a hinder for the development of the Internet as a forum for social interaction. The young people's awareness of the risk can be seen as a resource making them capable to interact on the Internet in a sensible way.

Knowledge is fundamental in making healthy decisions and constitutes one of the major elements of health promotion programs. Health education emerging increased individual knowledge about health plays a central role. It is seen important to personalise health information such that it is more immediately relevant to the individual (Nutbeam, Harris 2004). Easy access to information was frequently discussed as one of the most important advantages of the Internet embraced by the category *Having access to expansive information* with its positive dimension *Everything is available* which is experienced by the young people contributing to less stressful life and giving opportunity being well informed about health and diseases, body and soul. Having access to such spacious amounts of information requires strategies for evaluation of its quality; the nature of the Internet makes it possible to everyone to publish information about anything. This was experienced problematic by the young people in the study illuminated by the negative dimension *Distrusting the sources*. They did work out their

own strategies to evaluate the quality and reliability of the sources but it should be seen as a central matter for health care professionals to secure accessibility to health information of high quality targeted to young people, disseminated in their social networks.

While developing the Internet as a source for health information it is important to take into account people's ability and motivation to understand and use the information gained to promote and maintain good health, referred to as health literacy (Nutbeam 1998). Studies have shown that adolescents do encounter challenges when seeking health information on the Internet such as spelling medical terms and judging the trustworthiness of the websites (Skinner et al. 2003, Hansen et al. 2003, Borzekowski, Rickert 2001b, Gray et al. 2005). Grey et al (2005) point out that these challenges might be linked to poor health literacy skills and concluded that tools to help young people to spell medical terms, ask accurate questions and develop skills of critical appraisal would be valuable developing the Internet as a reliable source of health information. They also point out that young people have good insight in the area and should be involved in such development.

Another perspective to take into account when discussing health promotion on the internet is whether physical access to the Internet can increase the already unacceptable health inequalities referred to as the digital divide. People of the lower socioeconomic classes or living in developing countries might have lower access to computer and the Internet and also do people adapt to new technology at different rates (Gray et al. 2005). Adolescents are early adapters of new technology (Borzekowski, Rickert 2001a), adolescents of the 21st century have been designated as digital natives (Prensky 2001) and it is indicated that the digital divide isn't observed to same extent among adolescents as other age groups of the population (Borzekowski, Rickert 2001a). Borzekowski et al (2006) point out in their study of Ghanaian adolescents use of the Internet for health information that a large proportion of the adolescents in the capital city of Ghana did use the Internet for health information regardless of their school status, gender age or ethnicity. They also found that despite less access to the Internet, the out-of-school adolescents found the Internet more important source of health information than did the in-school adolescents. They concluded that the Internet might become an increasingly effective way to reach lower socioeconomic status adolescents with prevention message which could have important public health implications, keeping in mind the HIV/AIDS problematic in Africa. Their study showed that 63% of Ghanaian adolescents had ever gone online compared to 90% of the American and inexpensive internet cafés were popular, making the access possible for many out-of-school adolescents.

The category *Being able to express yourself* illuminates the young peoples view of the Internet enabling them to express themselves in a suitable way. The opportunity of anonymity provides the possibility of interacting with people, discussing and asking questions without exposing the identity which is illuminated by the positive dimension of the category *Daring to ask*. It was mentioned as an opportunity to introduce a stronger version of oneself which come up to the statement that people often better are

able to express and convey an important aspects of their real selves over the Internet where one can share one's inner beliefs and emotional reaction with much less fear of disapproval and sanction (McKenna, Green & Gleason 2002) . This category is also in congruity with the results of the study of Valaitis and Sword (2005) where the alternative of anonymity in online discussions, is highly valued and make some adolescents feel that they can be more open and honest especially those who describe themselves as shy. McKenna, Green and Gleason (2002) point out that the Internet may be helpful for those who have difficulty building relationships in face-to-face situations because of shyness, social anxiety or a lack of social skills. They also conclude that virtual relationships can become incorporated into, and thus a part of the individual's identity and that they tend to be brought into the persons traditional, face-to-face, real-life network of friends and intimates. Also this category has a negative dimension *Misusing the anonymity* where the informants refer to the risk of anonymity to inspire some people to act false and dishonest. Bullying occurs in virtual communities as well as in real life and the opportunity of anonymity can easily be misused. The Swedish Data Inspection Board (2009) report although a decrease in bullying among young people on the Internet during the last two years and point out that increased awareness of the problem among adults and the attention it has been given might be generating some results.

The negative dimension of the category *Being able to express yourself* has similarities to the negative dimension of the category *Interacting with all kind of people* where the young people describes worries about meeting someone interacting under false colours. In both cases the negative aspect is about the risk of interacting with someone misusing the possibility of being anonym in interactions on the Internet. In the former *Anybody can be hiding there* the focus is on the meeting, where the risk is that the one you're meeting in the virtual community is presenting oneself under wrong identity, lying about oneself which is having negative consequences on the wellbeing. The focus is also on the risk of spoiled friendships because of misunderstanding induced by the lack of body language and nuances in voices when communicating via the Internet. In the latter *Misusing the anonymity* the focus is on misusing the anonymity to say or do things one would never do in face-to-face contact leading to bullying in the virtual communities. The essence of both of these negative dimensions is that there are seamy sides of interacting via the Internet but the most important is being aware of the risks and adults maybe should focus on supporting young people in finding strategies to avoid the risks.

While discussing the concept health in the beginning of the focus group discussions the informants often mentioned that health involve everything that makes one feel good. Social interactions, feeling good and doing amusing things were all a part of their definition of health. So when discussing the Internet in relation to health the category *Always having something to do* naturally emerged embracing the importance of entertainment in the young peoples life and the urge of avoiding the feeling of boredom with the positive dimension *Having fun*. Other studies have shown that young people consider the Internet a good alternative for entertainment with its various supplies of games, music and movies (Skinner et al. 2003, Crutzen et al. 2008, Flicker et al. 2004).

Playing affects cognitive processes; Piaget observed for instance that different stages in the psychological development of children correspond to different stages in play development. The games evolve from being simple and foremost perceptual and motor pleasure to more symbolic, characterized by imagination and fantasy as the child gets older. Gradually the symbolic play even becomes replaced by games with rules, involving a group of participants with different and specific roles imitating the real world. Games have changed in the last decades from “hide and seek” played in real life with friends to “World of Warcraft” played in virtual communities beyond geographical boundaries. Computer games can provide alternative realities where people can feel safe and allow themselves to step back from the real world for a while. Games are entertaining and convey an emotional experience which increases the attractiveness of the game beyond its educational and developmental aim. Computer games are considered powerful tools for training and clinical settings. Their entertaining nature makes them act as possible motivators where rehabilitation or interventions can be painful or boring. Computer games can, for instance, in the case of behavior problems, provide alternative worlds, which can be shaped after individual needs, facilitating the development of adequate behaviors that the individual later can adapt into the real world (Gamberini et al. 2008). There were gender differences in the results of the study related to the entertainment feature of the Internet. The boys did highlight using the Internet for playing computer games as an entertainment affecting the health and wellbeing positively as long as they didn’t spend too much time playing. The girls on the other hand didn’t mention computer games at all when discussing the entertainment feature; instead they discussed reading and writing blogs as an entertaining factor which the boys didn’t discuss a lot. Listening to music and watching TV and videos were entertaining features discussed by both girls and boys.

The young people in the present study were aware of the negative aspects of spending too much time on the Internet illuminated by the negative dimension *Time consuming* describing negative influences on both physical and mental health. In the discussions about playing computer games, risk of addiction was mentioned as a negative consequence of too much time spent playing games and surfing the Internet. Research supporting whether computer game addiction exists or not is limited and further research is needed but that excessive computer game playing can become problematic is confirmed. Problems like headache, back strain, eye strain and carpal tunnel syndrome are mentioned (Young 2009) but even disturbed night sleep, social withdrawal, deteriorated nutrition habits and family conflicts have been described (The Swedish Data Inspection Board 2009, Young 2009, The Swedish Media Council 2007). Whether the problem is a form of addiction is said to be an open and central research question for future research. It is highlighted that if the concept of addiction is to be used in this contexts, it is necessary to differentiate it from the addiction concepts used in the research on alcohol and drugs because the problems are not of same origin (The Swedish Media Council 2007). Other types of Internet usage than playing online games were described in the present study being time consuming and negatively affecting health and wellbeing but never assigned as addiction. It was rather described as a matter of discipline and one that young people might in times need a help from an adult to control.

The category *Affecting each other* embraces the Internet featuring as a channel for people to affect each other in positive and negative ways. The Internet was highlighted as a presumable arena for social support of any kind in all of the focus group illuminating the positive dimension of the category *Giving and receiving social support*. Sharing experience via the Internet was often mentioned in the study as an important source of social support, this is in consistency with results of other studies. Valaitis and Sword (2005) study shows that it was highly valued by pregnant and parenting adolescents being able to discuss online with others in same situation. This was also the case in Flicker et al (2004) study of HIV- positive young people's perspective on the Internet and health. The young people in present study did not describe any particularly health problems making social support on the Internet valuable; being young was reason enough for considering the Internet valuable as a forum for sharing experiences and source of social support. The young people in Skinner et al study (Skinner et al. 2003) did likewise consider the Internet as a valuable opportunity to connect with others and create virtual support networks. It is well rooted in the health promotion literature that access to and provision of social support is beneficial for the promotion of health (Tones, Tilford 2001) and is now widely legitimated as an important determinant of health (Nutbeam 1998). WHO defines social support as: *"that assistance available to individuals /.../ which can provide a buffer against adverse life events and living conditions, and can provide a positive resource for enhancing the quality of life"* (Nutbeam 1998).

The SOU, Swedish governmental official report (SOU 2006:77) about young people, stress and psychological health states that most young people are feeling good and doing well in everyday life. But they even point out that at the same time there is a large and growing proportion of young people feeling bad or having psychological problems. Stress, anxiety, depression, self-destructive behaviour, pain and sleep disorders has increased more among young people than in the rest of the population over the last two decades. The increase in psychological ill-health is according to the results of the report, in relation to the individualisation which is characterizing the modern society with wide variety of new options and freedom of choice. This is causing increased demands for young people to live up to and life is getting less and less predictable. The ability to manage the freedom of choices does not seem to have evolved at the same rate as the new opportunities have emerged. In the report various measures to improve the psychological health of young people are proposed. They are directed to the school system, health care system and even including measures to support parents in their roles. One concrete measure proposed is Internet based service with the aim to promote the mental health of young people, such service is considered cost-effective and successful especially in combination with personal contact with professionals. Borzekowski (2001a) likewise highlights the potentiality of the Internet serving as a useful supplement to existing health care services and systems. It allows people to educate themselves on a variety of health related topics, from diseases to prescription drugs as well as linking to online support groups and individuals (Borzekowski, Rickert 2001a). Thinking and acting in the terms of Antonovskys (1991) salutogenesis can be appropriate in this matter by focusing on the young people's resources. It can as well be of value for the development of health promotion on the Internet to maintain the

salutogenetic perspective focusing on measures that foster the positive aspects and minimize the negative ones.

The negative dimension of the category *Affecting each other* embraces *Experiencing undesirable demands* which the young people often expressed discussing interactions on the Internet. Keeping the SOU report in mind additional demands are not what young people seems to need in the modern society. It is worth reflecting on how adults can support young people prioritising in every day life. Some informants in the present study mentioned the problems teenage girls often face, struggling with their self-esteem and pleaded for more attention from adults in the matter and even measures to strengthen teenage girl's self-esteem. It is worth considerations for health care personnel as well as other supporting adults.

Methodological consideration

The inefficacy of announcing on the bulleting boards in the involved schools made recruiting in person necessary. It had its advantages and disadvantages. One of the possible advantages that meeting in person the one the participants were supposed to discuss with, reasonably gave them some sense of security. On the other hand it possibly made some of them feel forced to accept participation, experiencing it constraining to refuse in face to face communication. Six to eight participants were recruited to each focus group but in no discussion session the entire group did show up even though everyone was reminded of time and place by telephone or sms during the days before. Some absenteeism was factum in every group and in some group new informants showed up asking if they were allowed to participate, which was accepted. The absenteeism was more usual by the younger informants and might be explained by their developmental stage in the limit of the middle and late adolescence with not quite realistic sense of time or fully developed consequence thinking (Berg-Kelly 1998). The informants that did participate gave an impression of confidentiality and good self-esteem. It is reasonable to assume that those who chose to participate are rather confident individuals, open and interested in their health and wellbeing.

While choosing schools for recruitment to the study the author attempted to get a spread in location and educational alignment, it wasn't possible to reach at optimum because of lack of interest for participating from some of the schools. The schools that did participate all had some kind of social science, information technological or health care alignment. The author does not expect it to have influenced the results of the study because adolescents face same challenges during their transition from childhood and adulthood and use the Internet, regardless of social status or interests. The educational alignment might on the contrary have influenced the willingness of the informants to participate. Individuals attending education with these kinds of alignments might be more interested in studies of the present study's nature and the willingness to participate when asked and the interest for the study was experienced genuine.

One of the advantages of focus group discussions is that it allows the participants to formulate their own reflections and explain their own priorities in their own terms and by that it is particularly suited for study of attitudes and experience as in this study (Kitzinger, Barbour 1999). Possible disadvantages by conducting focus group discussions among young people can be that they might hesitate to declare views that are unlike the other participants because of their fright of being perceived different or odd. In group discussions there is always a risk that some take more place than another, taking the command and leading the discussions in a specific direction. It is also reasonable to assume that those who decided to participate are individuals that are confident and not having any problems of declaring their views in front of others.

When conducting focus group discussions it is recommended to have a secretary in place to assist the moderator in taking notes and observing nonverbal communication (Kitzinger, Barbour 1999). This was not done in the present study because of the relative small sizes of the groups and the risk of the situation being perceived threatening for the participants, meeting two adults observing their discussions and one of them in addition, writing down notes and following all their moves. Instead the author chose to write down some reflections afterwards about the atmosphere in the group and the nonverbal communication.

One of the fundamental strategies in grounded theory is to simultaneously collect data and do the analysis, and using theoretical sampling when recruiting informants is optimal (Corbin, Strauss 2008). In the case of the present study theoretical sampling was not considered suitable because of the informants schedule, it was seen more advantageous to time the discuss sessions when it best suited the informants; between Easter holiday, school practices and examination. Convenience sample was thus found more suitable with the inclusions criteria of being attending upper second high school, Swedish speaking and being able to attend the discussion sessions. In order to follow the recommendations of grounded theory as accurately as possible the author did listen to every tape recorded before conducting next discussion session to be able to develop the themes if needed or as Corbin and Strauss (2008) declare “*a researcher does what he or she has to do, ... Sometimes several interviews come all at once.*”

In all but two groups the informants knew each other either they attended the same class or did belong to the same group of friends. In these groups the discussions proceeded smoothly. The two other groups were constituted of informants coming from two different classes or groups of friends so each informant only knew one half of the group. After the discussion session of the former of these groups the author made the conclusions that it was more advantageous to have the groups consisting of informants knowing each other. This because of her experience that the one half the group became more silent and didn't feel convenient to express themselves as wanted of respect to the others who had a lot to say. The experience after the discussion session with the other group consisting of individuals only knowing the half of the group was quite on the contrary. There the author experienced that not knowing each other did stimulate to interesting discussion about different views and experiences of using the Internet.

The limits of the present study are foremost how homogenous the groups are, all the participants are living in an urban area, attending second upper high school and in relative small age span. It might also have gained deeper information to expand the study with interviews of individuals with more experience of using websites targeting young people regarding health promotion and social support. Another limit might be the inexperience of the author conducting focus group discussions; more experienced moderator might have been able to develop the themes further during the discussions. In spite of this, the information gained has given the author an insight into young people's experiences and perceptions which was the aim of the study and hopefully it has contributed with a piece of puzzle to the field of health promotion, young people and the Internet.

Validity

Internal validity indicate whether a research is investigating what it is meant to as external validity indicate in what context the findings can be applied (Malterud 2001). Validity in qualitative research involves intern control through the whole research process. The researcher is supposed to add a critical view on his or her analysis, declare his or her perspective on the research theme and continuously verify the credibility of the results. In the present study this was done by continually raise questions like what does that mean? and why is it that way? to the data material and the results through the process. Validity is by that not a quality control done when the research is finished but shall be incorporated in the research process (Kvale 1997). According to Larsson (1993) empirical connection is a part of the quality criterion and includes concurrence between the reality and the interpretation. Presenting a quotation from the informants in each category is a way to verify the empirical connection. Larsson (1993) also points out as a quality criterion that the results is having a heuristic value ie that the results is structuring a new knowledge, offering a new way of considering the reality as well as being transferable. The results of the present study have been reviewed and discussed with other researcher in order to verify the validity.

Transferability of the results

The attitudes presented in this study are of those particular groups of young people 16-20 years old, living in west Sweden, year 2009, attending three upper high schools in the region. They are valid only for those particular groups but can be seen giving valuable implications about the attitudes of young people in the same age living in similar kinds of societies. Other researches indicate that young people have similar attitudes in other parts of the world (Skinner et al. 2003, Valaitis, Sword 2005, Borzekowski, Fobil & Asante 2006). It is important to keep in mind that the designation young people embrace individuals in the ages ten to 20 years which is a quite long age span. During these ten years major physical, mental and social development occur within each individual which can influence their attitudes and it is reasonable to assume that the attitudes even changes over time. Therefore it is essential to take into account which age group referring to when interpreting results like these.

5 CONCLUSION

The Internet is here to stay and has become an essential part of young people's life. It offers wide variety of opportunities to promote health and provide support to young people. There are negative aspects of various things in young people's life and seeking health information and social support on the Internet likewise have its negative aspects. In order to enhance the development of the Internet as an arena for health promotion it is important for both adults and young people to be aware of the negative aspects, find strategies to handle them and avoid letting them hinder the development. Mental and psychosocial health problems are increasing among young people and needs to be counteracted and young people should be offered initiatives to promote their health and wellbeing in ways that suits them. To be able to do that health care professionals and other supporting adults perhaps should take the opportunity and learn the language of the Digital Natives.

Implications

Referring to the core category of the results *Ambivalent but essential part of our lives* the author thinks it is reasonable to assume that the Internet is a presumable arena for health promotion targeting young people. Focus should be on developing the Internet in ways that make young people less ambivalent in their views. Visualising the balance scale, measures should be taken to make the positive side of the balance scale weight more than the negative side, both by strengthening the positive aspects but even by minimizing the negative ones. Measures as for instance, ensuring health information of high quality and providing legible instructions about reasonable usage of the Internet might be of value. Enhancing safe forums for interaction, especially regarding sensitive matters, can also be a valuable measure, for example by using usernames and passwords or having anonymous adults reading through each contribution on discussions forums before they are published in order to eliminate any hurting or discriminating comments. Doing so would also give opportunity to remind the young people if they are publishing private information which they probably would regret later on. Supervising the interactions like that should be done so it gives increased sense of security but without violating the integrity. The most important is to provide various options and listen to the young people's needs and wishes.

Future research

Further research is needed to get broader perspective of young people views. It would be of interest to conduct similar focus group discussions among younger adolescents. It is reasonable to assume that their views differ from those of older adolescents foremost due to the difference in the developmental stage. Younger adolescents might be more vulnerable for the negative aspects using the Internet in health promoting purpose due to

their often more instable identity and undeveloped capacity to think in long term consequences. Even interviewing young people that actively have used the Internet to seek help could give further knowledge about young people's views on the role of the Internet promoting health and wellbeing.

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Appendix 1: Announcement for recruiting



I am looking for YOU who wants to discuss with me about the possibilities of using the Internet to evolve yourself, get self-confident, seek information on health, sexuality, feelings, relationships, meet friends, get support, talk to adults or just about anything that make you feel good!

We will discuss together in groups of 5-7 persons, the girls and boys separately. If you are interested in participating or getting more information, please contact me at tel: 0705 323037 or email: hildurgunnarsd@gmail.com



Hildur Gunnarsdottir, registered nurse BSc and MPH student
This is a research project and a part of the MPH program at the Nordic
School of Public Health

Appendix 2: Information to schoolmasters

Göteborg xx 2009

To: xx

I, the undersigned, am a nurse and master's student at the Nordic School of Public Health. Under the supervision of Associate Professor Ulrika Hallberg I am working on a research project on young people's attitude to health promotion on the Internet.

According to WHO survey on school children's health (HBSC) 2008 has young peoples psychosocial health deteriorated, they report greater difficulty in communication, and increase in psychosomatic disorders. Meanwhile, the Internet has become an important and integral part of young people's everyday lives and according to Statistic Sweden are young people aged 15-24 the most frequent users of the Internet. Increased use of the Internet poses a number of possibilities. High quality information can be made available to young people on their conditions. It even provides an opportunity to seek personal support in the form of chat and written contacts with other young people, supporting adults and/or health professionals. The Internet can by that be seen as a source of social support and health information as well as a forum where young people and adults can meet. BRIS activities and the newly formed www.umo.se are two examples of how the Internet can be used in a healthy way, to benefit young people.

When developing new methods and strategies, it is important to take into account the perspective of the users, why the aim of this study is to deepen the knowledge about young people attitudes and experience of health promotion on the Internet.

This is a qualitative study where data will be collected by focus group discussions. The project leader will conduct discussions in groups of 5-7 adolescents aged 16-20 years, using open questions about the Internet and its potential health and supportive possibilities. The results will be presented at seminar at the Nordic School of Public Health, and by publishing a scientific article. The study has been approved by the Regional Board of Ethic Vetting in Gothenburg.

For this longer need, I kindly ask for your permission to put up the accompanying announcement in your school to recruit young people to the focus groups.

Best regards

Hrafnhildur Gunnarsdottir Project Leader
Tel: 0705323037
e-mail: hildurgunnarsd@gmail.com

Appendix 3: Information to participants more than 18 years old.

Göteborg xx 2009

Hi!

I am a nurse and master's student at the Nordic School of Public Health. Under the supervision of Associate Professor Ulrika Hallberg I am working on a research project on young people's attitude to health promotion on the Internet.

Background and aim

The Internet has become an important and integral part of everyday life and, according to Statistic Sweden, young people aged 15-24 are the most frequent users of the Internet. Increased use of the Internet poses a number of possibilities. High quality information can be made available in terms of different groups as well as opportunities to seek personal support in form of chat and written contacts. This means that the Internet can be used as a forum for young people and adults to meet and discuss, to seek support and health information and get in contact with other young people, supporting adults and health professionals.

How to go?

The study will carry out in the way that I at one occasion will lead discussion on the issue where you, together with four to six other young people will be participating. I will ask some open questions about the theme, the number depending on how the discussions will be progressing and the goal is to cover the subject as well as possible. The discussion will take about 1 ½ hours and will be tape recorded for later analysis. The group will consist of either only girls or only boys. After the analysis of one group's discussion another discussion will be conducted with another group to add to the information that has been gained. I will continue like that until no new information will be added during the discussion sessions.

Privacy and Participation

The discussion will be analyzed according to specific research methods in which all participants will be anonymous so no one can find out who said what. Your response and your results will be addressed so that no unauthorized person can access them. The recordings will be kept locked up in the archive at the Nordic School of Public Health. All data that might be linked to a specific person will be removed or altered. The registration of the persons included in the study (code list) will only be available for the project. Responsible for your personal information is Nordic School of Public Health.

In case of upcoming discussion about sensitive issues where you or any other participant will become sad or upset, I will offer those who want an individual follow-

up call where we will together work out a solution. These conversations will not be included in the study.

Participation in the project is voluntary and that means you have full right and all the opportunity to cancel your participation at any time. The information you have provided before you decide to cancel will be destroyed and not used the study in any way. In case you decide to participate, I kindly ask you to sign the following consent statement and submit to me at the moment of the discussion.

If you have any additional questions or concerns please do not hesitate to contact me on telephone 0705 323037 or e-mail: hildurgunnarsd@gmail.com

Many thanks!

Hildur Gunnarsdóttir project leader

Consent:

I attest that have been supplied with information about the study of young people's attitudes to health promotion on the Internet, I have had the opportunity to ask questions and got them answered, and hereby gives my consent to participate in the study.

Signature: _____

I can be reached at the following phone number and / or e-mail address:

Appendix 4: Information to participants less than 18 years old.

Göteborg xx 2009

Hi!

I am a nurse and master's student at the Nordic School of Public Health. Under the supervision of Associate Professor Ulrika Hallberg I am working on a research project on young people's attitude to health promotion on the Internet.

Background and aim

The Internet has become an important and integral part of everyday life and, according to Statistic Sweden, young people aged 15-24 are the most frequent users of the Internet. Increased use of the Internet poses a number of possibilities. High quality information can be made available in terms of different groups as well as opportunities to seek personal support in form of chat and written contacts. This means that the Internet can be used as a forum for young people and adults to meet and discuss, to seek support and health information and get in contact with other young people, supporting adults and health professionals.

How to go?

The study will carry out in the way that I at one occasion will lead discussion on the issue where you, together with four to six other young people will be participating. I will ask some open questions about the theme, the number depending on how the discussions will be progressing and the goal is to cover the subject as well as possible. The discussion will take about 1 ½ hours and will be tape recorded for later analysis. The group will consist of either only girls or only boys. After the analysis of one group's discussion another discussion will be conducted with another group to add to the information that has been gained. I will continue like that until no new information will be added during the discussion sessions.

Privacy and Participation

The discussion will be analyzed according to specific research methods in which all participants will be anonymous so no one can find out who said what. Your response and your results will be addressed so that no unauthorized person can access them. The recordings will be kept locked up in the archive at the Nordic School of Public Health. All data that might be linked to a specific person will be removed or altered. The registration of the persons included in the study (code list) will only be available for the project. Responsible for your personal information is Nordic School of Public Health.

In case of upcoming discussion about sensitive issues where you or any other participant will become sad or upset, I will offer those who want an individual follow-

up call where we will together work out a solution. These conversations will not be included in the study.

Participation in the project is voluntary and that means you have full right and all the opportunity to cancel your participation at any time. The information you have provided before you decide to cancel will be destroyed and not used the study in any way. In case you decide to participate, I kindly ask you to sign the following consent statement and submit to me at the moment of the discussion. Since you have not reached the age of 18 I will even have to get permission from your parents for your participation.

If you have any additional questions or concerns please do not hesitate to contact me on telephone 0705 323037 or e-mail: hildurgunnarsd@gmail.com

Many thanks!

Hildur Gunnarsdóttir projektledare

Consent:

I attest that have been supplied with information about the study of young people's attitudes to health promotion on the Internet, I have had the opportunity to ask questions and got them answered, and hereby gives my consent to participate in the study.

Signature: _____

I can be reached at the following phone number and / or e-mail address:

Consent:

I attest that have I been supplied with information about the study of young people's attitudes to health promotion on the Internet, I have had the opportunity to ask questions and got them answered, and hereby gives my consent that my son/daughter participate in the study.

Name Children:

Signatur Parent: _____

Appendix 5: Interviewguide A

<u>Main topic/Research questions:</u>	<u>Key questions/ Interview questions:</u>
Health: How do young people reflect on the concept of health?	• What does the concept health mean to you? • How do you reflect around the different dimensions of health: physical, mental and social health?
Health promotion: How do young people use the Internet in health promotion purpose?	• Can you describe your experience of using the Internet regarding increased health and wellbeing? • In which ways can one use the Internet in that purpose? • How do you seek information about health and wellbeing on the Internet? • Do you know any particularly websites for young people about health and wellbeing? • Have you use such sites? How? Why/Why not? • Does it feel safe to use such sites?
Social support: How do young people use the Internet in giving and receiving social support?	• Can you describe your experience of using the Internet when you need someone to talk to or want to get support? • In which ways have you used the Internet in that purpose? • Do you know any particularly websites for young people which can be used to get in contact with other people? Eg others in same situation, adults, friends.. • Have you use such sites? How? Why/Why not? • Does it feel safe to use such sites?
Wishes: In which forms would young people prefer to get health information and social support via the Internet?	• What kind of information do you think is most suitable offering by the Internet? • If I were to make a website regarding health and wellbeing targeting young people what would you want to be included? • What kind of information, content would you like to have on such website? (counseling, chat with adults, chat with friends, information) • What is most important regarding the layout? (text, photos, video, self tests, games) • What makes you feel safe when using websites like that? Username and password?

Appendix 6: Interviewguide B

<u>Main topic/Research questions:</u>	<u>Key questions/ Interview questions:</u>
Health: How do young people reflect on the concept of health?	• What does the concept health mean to you? • How do you reflect around the different dimensions of health: physical, mental and social health?
Health promotion: How do young people use the Internet in health promotion purpose?	• Can you describe how you use the Internet in your daily life regarding increased health and wellbeing? • In which ways can one use the Internet in that purpose? • How do you seek information about health and wellbeing on the Internet? • Do you know any particularly websites for young people about health and wellbeing? • Have you use such sites? How? Why/Why not? • Does it feel safe to use such sites?
Social support: How do young people use the Internet in giving and receiving social support?	• Can you describe your how you do when you need someone to talk to or want to get support? • Is it possible to use Internet in that purpose? • Do you know any particularly websites for young people which can be used to get in contact with other people? Eg others in same situation, adults, friends.. • Have you use such sites? How? Why/Why not? • Does it feel safe to use such sites?
Wishes: In which forms would young people prefer to get health information and social support via the Internet?	• What kind of information do you think is most suitable offering by the Internet? • If I were to make a website regarding health and wellbeing targeting young people what would you want to be included? • What kind of information, content would you like to have on such website? (counseling, chat with adults, chat with friends, information) • What is most important regarding the layout? (text, photos, video, self tests, games) • What makes you feel safe when using websites like that? Username and password?

