European Journal of Mental Health 9 (2014) 54–67
DOI: 10.5708/EJMH.9.2014.1.4

HELENE YBRANDT*

TEN-YEAR TRENDS IN SELF-REPORTED FAMILY AND PSYCHOLOGICAL PROBLEMS AMONG SWEDISH ADOLESCENTS

(Received: 14 July 2012; accepted: 5 December 2012)

The aim of the study was to compare problem severity among Swedish adolescents, using self-reported and interviewer-rated data from 2000 and 2010, gathered with the Adolescent Drug Abuse Diagnosis (ADAD) interview. Data relating to family relationships, psychological status and problems were collected in two samples randomly selected from the adolescent population aged 15–17 years (121 adolescents in the year 2000 and 485 adolescents in the year 2010). The results show that the self-rated and interviewer-rated problem severity of adolescents in 2000 and in 2010 seems to be unchanged, with no increased polarisation for sex and socio-economic groups. There was a difference, however, was of girls reporting more severe problems in family relationships compared to boys. In 2010, compared to 2000, adolescents reported on fewer psychological problems (e.g. experiences of serious anxiety and tension, comprehension and concentration disorder, memory loss and, in addition, problems with relationships in and outside the family sphere – e.g. problems with getting along with siblings, and with trusting other people). In order to promote the mental health of adolescents, it is essential, during the next decade to reveal relationship problems, such as problems of insecurity with people outside the family.

Keywords: Adolescent Drug Abuse Diagnosis (ADAD), adolescence, mental health, family, relationship problems

Zehn-Jahres-Trends bei familiären und psychischen Problemen in Selbstberichten von schwedischen Heranwachsenden: Ziel der Studie war es festzustellen, wie gravierend die Probleme von schwedischen Jugendlichen sind. Hierfür wurden Daten aus Selbstberichten und aus Interviews verwendet, die in den Jahren 2000 und 2010 mit Hilfe der Adolescent Drug Abuse Diagnosis (ADAD, Drogenmissbrauch-Diagnose bei Heranwachsenden) erhoben worden waren. In zwei Zufallsstichproben aus der Altersgruppe von 15 bis 17 Jahren (121 Personen im Jahr 2000, 485 Personen in 2010) wurden Daten zu familiären Beziehungen sowie zu psychischem Status und psychischen Problemen erhoben. Beim Vergleich zwischen den in Interviews erhaltenen und

* Helene Ybrandt, Department of Psychology, Umeå University, Mediagränd 14, D-114, SE-90187 Umeå, Sweden; helene.ybrandt@psy.umu.se.

ISSN 1788-4934

den durch Selbstberichte gewonnenen Ergebnissen von 2000 und 2010 konnte hinsichtlich der Schwere der Probleme der Heranwachsenden keine Veränderung festgestellt werden; die Divergenz zwischen den Geschlechtern bzw. zwischen verschiedenen sozioökonomischen Gruppen ist nicht angestiegen. Allerdings betrachten die Mädchen Probleme in ihren familiären Beziehungen als schwerwiegender als die Jungen. Im Vergleich zu 2000 berichteten die Heranwachsenden 2010 über weniger psychische Probleme (z.B. Angstzustände, Spannungen, Probleme mit dem Verstehen, der Konzentration oder dem Gedächtnis sowie Probleme mit Beziehungen innerhalb und außerhalb der Familie – wie Probleme im Kontakt mit den Geschwistern oder fehlendes Vertrauen gegenüber anderen). Eine wichtige Aufgabe für das kommende Jahrzehnt wird es sein, Beziehungsprobleme wie z.B. Unsicherheit gegenüber Personen außerhalb der Familie genauer zu untersuchen, um die mentale Gesundheit von Heranwachsenden zu fördern.

Schlüsselbegriffe: Drogenmissbrauch-Diagnose bei Heranwachsenden (ADAD), Adoleszenz, Mentalhygiene, Familie, Beziehungsprobleme

1. Introduction

Adolescents' self-rated mental health and well-being over the last decades has been generally at a high level in Sweden, and as a whole, Swedish adolescents seem to be experiencing vital mental health. Adolescents are pleased with their families, their school and social activities, and peer relations (Beckman & Hagquist 2010; Petersen et al. 2010; Statens Folkhälsoinstitut 2011; Statens Offentliga Utredningar 2006). At the same time there is an ongoing discussion about a gradual increase in the severity of adolescents' problems. The media and official reports pronounce that adolescents' mental health has deteriorated, especially that of girls (of 16 years of age) and of adolescents and young adults between 16 and 24 years of age (Beckman & Hagquist 2010). Symptoms of worry, depression and sleeping problems have worsened together with psychosomatic symptoms such as stress.

The official reports, media, and the research descriptions of the trends mostly show congruency; in that researches also indicate that there has been an increase in the amount of self-reported psychological and psychosomatic symptoms among adolescents during the last two decades (Berntsson & Köhler 2001; Cederquist 2006; Danielsson 2006). However, research also shows that the actual adolescent mental health status could be best understood as a U-shaped curve, with the proportion of those in good and bad condition increased. This makes the mental health spectra polarised due to potential variables such as age, sex, socioeconomic status and geographic region. A general trend found in several studies is girls reporting more internalised problems such as depression and anxiety than boys (Petersen et al. 2010) and boys reporting more problems with delinquent behaviour than girls (Beckman & Hagquist 2010; Broberg et al. 2001). However, in the last ten years other trend findings have shown a lower rate in externalising problems such as aggression and rule breaking behaviour for both boys and girls. There are also studies showing that the prevalence of some mental health problems, for example self-destructive behaviour and neuropsychiatric problems like ADHD has not changed (Petersen et al. 2010).

Population-based and health care statistics-based studies on international trends of adolescents' mental health, particularly in the USA and Europe, also show divergent results (PETERSEN et al. 2010). For example ACHENBACH and colleagues (2003) found a decrease in total problem severity at the end of 1990 compared to 1989 and in internalised problems, especially of girls. TICK and colleagues (2008) had contrary findings for the years between 1993 and 2003: an increase in internalising problems, suicidal ideation and self-harm with adolescent girls. Their results show that younger adolescent girls experienced the most increased overall problem severity. MAUGHAN, IERVOLINO and COLLISHAW (2005), in their summary of the international trends for adolescents' mental health during the last fifty years in Western countries, also found a higher frequency in girls' self-hurting behaviour together with a similar frequency of anorexia nervosa. When it comes to externalised problems, the results show a trend of lower frequency of aggressive and rule-breaking behavioural problems with boys in the Netherlands and a simultaneous increase of externalised problems with girls (TICK et al. 2008).

Accordingly, the data on time trends are incomplete and to the present day there has been a scarcity of solid epidemiological studies based on which we might draw rigorous conclusions about adolescent mental health trends, and there is not enough evidence for making clear statements about the development of specific symptoms over time on both international and national levels. The studies have diverging time perspectives, informants, age groups, and rating methods which make comparisons between studies difficult. There is also a need for updated epidemiological studies on adolescent mental health, and the aim of this study is to contribute to the subject elucidating time trends in self-reported family and mental health problems among Swedish adolescents between 2000 and 2010. Another aim is to present possible variations effected by the age, sex, and socioeconomic status of the parents and to detect possible polarisations related to the sex, age, or the socioeconomic status of the parents.

It is well-known that adolescent mental health is linked to different social and family variables, for example, parental socioeconomic status and family health. Adolescents with a foreign background are found to be a risk group when accompanied by a low socioeconomic status of the parents (BECKMAN & HAGQUIST 2010) and this is also the case with adolescents living with a single parent of low income (HAGQUIST 2010; JERDEN et al. 2011; RINGBACK WEITOFT et al. 2008). Parental abuse and adolescent lack of support and trust in family relationships are risk factors for negative mental health (YBRANDT 2010; YBRANDT & ARMELIUS 2010). In a recent study, Swedish adolescents reported that they consider the family to be the most important determinant for their mental health (JOHANSSON et al. 2007).

The focus of this study is the 'high adolescent' age group of 15–17. This age group has been found to report more internalising and externalising problems than younger and older adolescents (BROBERG et al. 2001). The data for this study were gathered in 2000 and 2010, with the same instrument, a multi-dimensional assessment tool called Adolescent Drug Abuse Diagnosis (ADAD) (FRIEDMAN & UTADA

1989). As for two of ADAD's nine problem areas, specifically family relationships and psychological status and problems, the results were based both on adolescents' self-ratings of problem severity and of importance of need for help, and on the interviewer's ratings of problem severity and of the need for extra help and treatment in the life areas.

The ADAD instrument assesses the negative aspects of the mental health concept (JOHANSSON et al. 2007) and is constructed to facilitate assessment of changes both at individual and at group levels. The ADAD is used in Sweden on a regular basis in special youth homes for adolescents detained under the Swedish Care of Young Persons Act and in social services to assess problem severity changes and treatment outcome (SÖDERHOLM CARPELAN & HERMODSSON 2004). Besides this extensive use of the ADAD in groups of adolescents with antisocial problems, the results of a recent normative study of the Swedish ADAD (YBRANDT 2013) support that ADAD has the potential to serve as an instrument for assessing individual adolescents' self-reported problems in normal groups. Results of the normative study show that the effects of age, sex, and geographic region were small but significant, with older adolescents, girls, and adolescents in cities scoring higher for problem severity.

2. Method

2.1. Subjects

The ADAD in 2000 was completed by 121 adolescents (60 boys and 61 girls) and the ADAD in 2010 was completed by 485 adolescents (217 boys and 268 girls) aged 15–17 years (both samples were the total sample of interviewed adolescents). For demographics and other characteristics for the two adolescent groups see *Table 1*.

The representation of adolescents with a foreign background (i.e. either the adolescent or both parents were born in countries other than Sweden) and parents outside of employment was somewhat lower in both samples than those in the overall Swedish population (*Statistisk årsbok för Sverige* 2011). In 2010, 36% of the adolescents came from the regions of Stockholm, Gothenburg and Malmö, and the remaining 64% of the adolescents came from other parts of the country, compared to the year 2000 when all of the adolescents came from a small town and its neighbouring region. There was a small effect (partial $\eta^2 = 0.031$) of the geographic region (town versus other parts of the country) in the sample of 2010. 36% of adolescents from the three largest towns show more self-rated and interviewer-rated problems than adolescents from the regions outside these towns. There was also a significant difference ($F = 10.22$, $p = 0.001$) between the socioeconomic statuses (SES) of the fathers in the two samples; their SES was higher in 2000 than in 2010. Age, sex, background, and living arrangement were comparable between the two adolescent groups.

Table 1
Demographics and other characteristics for the two adolescent groups; 2000 and 2010

	2000 *N = 121*	*2010* *N = 485*
Background (%)		
Born in Sweden	94	94
Foreign background	6	6
Adopted	5	2
Adolescents		
Mean age	16	16
Girls	16	16
Boys	16	16
Sex (%)		
Girls	51	54
Boys	49	46
Living arrangement (%) *(Recently lived with)*		
Both parents	68	66
Single parent	17	15
Single/other custodian	15	19
Parents Work status, all (%)		
Employed	90	84
Unemployed	2	5
Students	2	2
Other	6	9
Socioeconomic status (%)		
Mother		
Group 1	16	43
Group 2	48	28
Group 3	36	29
Father		
Group 1	29	48
Group 2	27	21
Group 3	44	31

2.2. Procedure

The adolescents in the sample in 2000 were randomly selected from a register of all adolescents in a small town in the north of Sweden and its vicinity. The selection process went on until an equal number of boys and girls were obtained in the three different age groups (15, 16 and 17 years of age). As soon as an adolescent declined to participate in the study, a new adolescent was chosen at random. The total loss was 43% and the greatest loss was found among 17-year-old boys (76%).

The sample in 2010 was recruited from a Swedish population register from which a randomised sample in the three age groups was chosen. Dropout rate for the total sample in 2010 was 44% (boys 49% and girls 39%). Reasons for declining to participate were disabilities such as autism, moving within Sweden with no new address given or moving abroad, or a decision of parents and their adolescent children not to participate. The participants (2000 and 2010) were contacted by letter. The interviews in 2000 were made at the Department of Psychology at the University of Umeå and in 2010 the interviewer phoned the interviewees. The interviewers, both in 2000 and 2010, were five women, between the ages of 18 and 50, graduating psychology students, experienced clinical psychologists, and doctoral students of psychology. All interviewers received a two-day training course to get an understanding of how to administer and perform an ADAD interview. The course was given by a psychologist with extensive experience of ADAD interviews, and before the interviews started each interviewer had to do two approved test interviews.

2.3. Instruments

The Adolescent Drug Abuse Diagnosis (ADAD) is a 150-item semi-structured interview with mostly fixed reply alternatives and checklists (Friedman & Utada 1989). Information is gathered in nine separate problem areas categorised as medical status, school history and status, employment, social activities and peer relations, family background and relationships, psychological status and problems, legal involvement, alcohol use, and drug use, and adolescents are mostly asked about problem severity for the last 30 days. Two of these nine problem areas are used in this study. *Family background and relationships* deals with the quality of the adolescent's family relations and problems and includes information about family conflicts; psychological, sexual and emotional abuse; positive and negative roles and the adolescent's behaviour at home; and negative parental reactions to the adolescent's behaviour. Adolescents answer on a four-grade scale (0 = none/not at all, 1 = a little, 2 = a fair amount, 3 = a lot). *Psychological status and problems* includes a checklist of common adolescent symptoms and psychological and emotional reactions, as well as an assessment of both current and lifetime psychiatric status in terms of the most common diagnostic categories. Fifty items from checklists were used and the adolescents had to answer whether the items fitted their mental health situation with yes or no. The separate items in the two problem areas are presented in *Table 2*.

Table 2
List of the separate questions in the family relationships and psychological health problem area

Area	*Questions*
Family	How much conflict is there in your family? How much would you say your parents argue or fight? How much conflict is there in your family over money and finances? How much would you say your family suffered financial hardships in the past year? How much fun or how pleasant is your family to live with? How well do you get along with the members of your family? Mother? Father? Sister? Brother? Other family members or relatives? How satisfied are you with how well you get along with your family? How difficult do you find it to talk to your mother about things that bother you? How difficult do you find it to talk to your father about things that bother you? How close do you feel to your mother? How close do you feel to your father? How much do you feel you can rely on what your mother tells you? How much do you feel you can rely on what your father tells you?
Psychological health	Here are some feelings and reactions that young people sometimes experience. Tell me if any of them apply to you. Lack of confidence in yourself. Feel lack of problem-solving or decision-making skills. Feel you are too shy. Feel you don't belong or fit in. Feel lonely. Feel easily discouraged. Feel you are not as smart as others. Daydream a lot. Feel blue or depressed. Feel anxious or worried a lot. Feel you have no interest in things. Feel bored. Get into arguments/fights easily. Can't go to sleep without drugs. Have nightmares. Feel people cannot be trusted. Feel you are watched by or talked about by others. Have difficulties expressing your feelings. Do angry things you can't control. Feel like injuring/hurting yourself. Feel afraid you will hurt someone physically. Are always telling lies. Feel like you'd be better off dead. Feel like your head is going to burst. Get crazy ideas in your head. Feel that something inside you makes you do things you don't want to do. Feel lonely even when you are with people. Feel others are against you or out to get you. Feel that you should be punished for your sins. Feel that something is wrong with your mind. Feel afraid of losing control of your behaviour or actions. Feel that things are not real. React by slamming doors. Have thoughts of ending your life. Feel hopeless about the future. Your feelings are easily hurt. Feel people are unfriendly/dislike you. Feel inferior to others. Have feelings of worthlessness. Feel very self-conscious (uneasy about yourself when with others). Feel like killing someone. Experienced serious depression. Experienced serious anxiety or tension. Experienced trouble understanding, concentrating, or remembering. Experienced trouble controlling violent behaviour. Experienced serious thoughts of suicide. Experienced hallucination (saw or heard things that may not be there). Taken prescribed meds for psychological or emotional problems. Had anorexia or bulimia. Deliberate hurting yourself.

In addition to responding to items relating to the specific problem areas, both the interviewer and the adolescent independently rate how much help is needed for each problem area (Interviewer Severity Rating – ISR and Adolescent Rating – AR). The questions to the adolescents are 'How troubled or bothered have you been by these . . . problems in the past 30 days?' and 'How important to you is the treatment for these . . . problems?' The question to the interviewer is 'How would you rate the client's need for . . . treatment?' The interviewer's rating is done on a ten-point scale (0–9) with scoring 0–1 representing no real problems and no need for further help and 8–9 representing extreme problems where treatment is absolutely necessary. The interviewer severity ratings consider the overall problem severity in the area with focus on critical questions and the adolescent's rating for need of help. The adolescent's rating for level of concern about each problem area (ARC) and need of help (ARH) is done on a four-point scale (0–3) with 0 = not at all, 1 = a little, 2 = a fair amount and 3 = a lot.

The six-grade scale of the socioeconomic index (Statistiska centralbyrån 1983) in ADAD distinguishes unskilled and semiskilled workers (1), skilled workers (2), assistant non-manual employees (3), intermediate non-manual employees (4), employed and self-employed professionals, higher civil servants, and executives (5) and self-employed other than professionals (6). The scale was divided into three groups; group 1 represents SES grades 1 and 2, group 2 represents SES grades 3 and 4, while group 3 represents SES 5 and 6.

Good inter-rater reliability was shown for the ISR for the Family and Psychological status and problem areas (Pearson's r 0.70 and 75, Cohen's kappa 0.57 and 0.61) in the 2000 study (for details see Börjesson et al. 2007). The Swedish ADAD psychological status and problem area show an overall good concurrent validity (0.80 *Youth Self Report* total score, 0.77 *Youth Self Report Internalised problems*, 0.55 *Youth Self Report Externalised problems* and 0.70 *Becks Depression Inventory*), and low to moderate predictive validity (for details see Börjesson & Ybrandt 2012).

2.4. Statistical analysis

Main and interaction effects of year, age, sex and socioeconomic status were analysed by means of the MANOVA design using sex (boys and girls) and age (15, 16, and 17 years of age) and SES divided into three groups and separately for mother's and father's SES. When the MANOVA showed at least one significant difference, univariate ANOVAs were performed on each dependent variable. Bonferroni corrections were generally applied to adjust the many comparisons. The comparisons on item levels and frequency comparisons were conducted with univariate ANOVAs and with a Mann-Whitney U test for independent samples. The significance level was $p = 0.05$.

3. Results

3.1. Interviewer (ISR) and adolescent (ARC and ARH) severity ratings 2000 and 2010

No main effect was found for adolescent concerns about problems, or for adolescent ratings of need for help, or interviewer ratings of need for extra help and treatment in the family, and psychological health problem areas related to the given years. However, there was evidence for main effects for sex ($F = 2.89$, $p = 0.001$). It was a trend that compared to boys, girls reported more concerns about problems in the family area ($F = 9.10$, $p = 0.003$) and the importance of getting help with family problems ($F = 7.19$, $p = 0.008$). The interviewer also rated girls more in need of extra help and treatment in the family problem area ($F = 5.91$, $p = 0.015$). There was no interaction effect found for sex, for age or for father's and mothers' socioeconomic status and year.

As for the adolescents' self-ratings, the results of the analyses showed that the adolescents were 'not at all' worried and it was 'not at all' important for them to get help, and according to the interviewers' ratings the adolescents had 'no real problems and no need for further help'.

In addition, the results show no significant difference between 2000 and 2010 in the frequency of adolescents being worried or needing help in ranges 3 ('a fair amount') and 4 ('a lot') or in the proportion of those who were rated to have moderate to extreme problems indicating need for help or being absolutely in need for treatment. The results neither showed significant difference between 2000 and 2010 in the frequency of the following self-ratings: 'not at all' troubled and 'not at all' important to get help or in the frequency of the interviewers' ratings of adolescents having 'no real problems'. Thus there were no conspicuous trends of adolescents having an either increasingly worsening or improving state of mind in 2010 compared to 2000 in the family or psychological problem area. Furthermore, there was no significant difference between the frequency of adolescent girls or boys having more problems or adolescent girls or boys reporting having no problems in 2010 compared to 2000. Thus there was no increased polarisation in sex found in 2010. This was also true for the mother's and father's SES with no increased or decreased problem levels for the lowest and highest SESs in 2010 compared to 2000.

The mean and standard deviation for the problem areas for sex and age are presented in *Table 3*.

Table 3
Mean and standard deviation for interviewer severity ratings (ISR) and adolescent ratings (ARC and ARH) for boys and girls of 15 to 17 years in 2000 and 2010

	15				*16*				*17*			
	Boys		*Girls*		*Boys*		*Girls*		*Boys*		*Girls*	
Area	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Family												
ISR2000	0.38	0.59	0.32	0.95	0.47	0.84	1.10	1.84	0.95	1.81	0.52	0.87
ISR2010	0.44	1.01	1.18	1.72	0.49	1.22	0.78	1.52	0.33	1.11	1.25	1.97
ARC2000	0.19	0.40	0.21	0.42	0.42	0.61	0.71	0.96	0.21	0.71	0.29	0.56
ARC2010	0.13	0.53	0.31	0.63	0.12	0.44	0.30	0.56	0.13	0.41	0.44	0.77
ARH2000	0.29	0.64	0.16	0.50	0.11	0.32	0.43	0.81	0.16	0.50	0.19	0.40
ARH2010	0.11	0.46	0.42	0.86	0.12	0.44	0.32	0.70	0.13	0.53	0.48	0.90
Psychol												
ISR2000	0.57	0.87	0.89	1.60	0.26	0.56	1.48	1.89	0.89	1.56	1.10	1.41
ISR2010	0.62	1.61	1.40	2.76	0.56	1.33	1.22	1.99	0.58	1.41	1.80	2.25
ARC2000	0.19	0.40	0.42	0.61	0.11	0.32	0.71	0.78	0.42	0.61	0.62	0.74
ARC2010	0.25	0.63	0.49	0.76	0.19	0.49	0.56	0.79	0.15	0.40	0.63	0.85
ARH2000	0.14	0.36	0.21	0.42	0.05	0.23	0.43	0.68	0.11	0.32	0.29	0.56
ARH2010	0.10	0.48	0.31	0.70	0.14	0.42	0.35	0.70	0.07	0.39	0.49	0.88

N for boys (2000) = 60, n = 21 boys (15 years), n = 20 boys (16 years), n = 19 boys (17 years). N for girls (2000) = 61, n = 19 girls (15 years), n = 21 girls (16 years), n = 21 girls (17 years). N for boys (2010) = 217, n = 72 boys (15 years), n = 73 boys (16 years), n = 72 boys (17 years). N for girls (2010) = 268, n = 90 girls (15 years), n = 81 girls (16 years), n = 97 girls (17 years).

3.2. Separate ADAD items in 2000 and 2010

Additional results on item levels in the problem areas show differences between the years in the family and psychological areas. The relations in the family show variation between 2000 and 2010; for example, family conflicts ($F = 8.54$, $p = 0.004$) and conflicts related to money ($F = 7.52$, $p = 0.006$) are rated by the adolescents as less frequent in 2010. Furthermore, adolescents report that they are closer to their mother ($F = 4.63$, $p = 0.032$) in 2010 compared to 2000 (no differences in terms of the father). They get along with her better ($F = 7.62$, $p = 0.006$) and they think that it is easier to talk to her about what bothers them ($F = 9.14$, $p = 0.003$). On the other hand, they do not get along better with other family members, for example sisters ($F = 26.33$, $p = 0.000$) and brothers ($F = 10.89$, $p = 0.001$) in 2010 compared to 2000. Adolescents both in 2000 and in 2010 found it equally pleasant to live in their families. Results of the survey on psychological health show that adolescents in 2010 have more feelings of insecurity, they feel more frequently that people cannot be trusted ($p = 0.003$) and they are more afraid of losing control over their behaviour and actions ($p = 0.001$) than adolescents in 2000. On the other hand, they have less experience of serious anxiety and tension ($p = 0.000$) and less experience of troubles with understanding, concentrating or remembering ($p = 0.000$) in the last 30 days. Adolescents in 2000 and in 2010 report a similar amount of examples of lack of confidence in themselves, depression and anxiety, serious thought of suicide, anorexia and deliberate self-harm.

4. Discussion

The aim of the study was to explore trends of problem severity in 2000 and in 2010 for adolescents between 15 to 17 years of age and present possible variations effected by age, sex, and the socioeconomic status of the parents. The results show that self-rated and interviewer-rated problem severity did not change between the years 2000 and 2010 in the family and psychological area. The problem level seemed to be unchanged for both adolescent boys and girls and for the whole age group. It seems also true that adolescents' problem severity in a specific socioeconomic group or sex did not have a tendency to change during the ten years. Thus, a polarisation in the well-being of adolescents according to sex or the socioeconomic status of parents was not found in this study. An unchanged trend, however, could be seen with girls experiencing more intense problem severity in the family relationships area compared to boys. The girls' report on problem level was confirmed by the interviewers who also rated girls more in need of help with family matters. A recent Swedish total population study shows a higher frequency of boys reporting well-being at home compared to girls (Statens Folkhälsoinstitut 2011). There are several possible explanations for the higher frequency of girls self-reporting feelings of problems in different life areas compared to boys, such as that girls are more concerned about their well-being, or girls have higher

expectations of positive health than boys, or girls in general are more inclined to report health problems than boys, or that biologically, girls have more problems in adolescence than boys (JOHANSSON et al. 2007; TORSHEIM et al. 2006). Surprisingly, the results showed similar experiences of psychological problems in the groups of boys and those of the girls, which are not in line with the results of other epidemiological studies (e.g. HAGQUIST 2010; PETERSEN et al. 2010) where girls reported more mental health problems than boys. However, it is difficult to make comparisons with results gained with other instruments and more studies with the ADAD are needed to confirm the results of this study.

The results showed an altogether positive state of mental health and positive family relationships among the adolescents, and problems in these areas were on the same low level in 2010 as in 2000. In the case of some psychological symptoms such as serious anxiety, distress and concentration problems, an improvement was detectable on item level. The Statens Folkhälsoinstitut (2009) suggests that the negative trend of mental health and that of the psychosomatic symptoms has ceased since the mid-2000s as could be seen in this study. Hopefully, the reduction of the symptoms has been a result of the focus on the area of stress during the last decade (Statens Offentliga Utredningar 2006). Terms and expressions used in this study may have reflected other values and terms in 2010 compared to 2000, and another potential explanation to the lower frequency of examples of serious anxiety may be explained by the fact that the concept has changed its connotation for adolescents by 2010. The adolescents also reported feelings of being better supported by their mothers. This positive development could be fortified by a negative time variation for the adolescents reported experiencing more problems and a lack of trust in relationships other than with their mothers. This negative time trend could be a threat against the adolescents' mental health when the family members and other people outside the family become less trustable in the eyes of the adolescents. One possible explanation for adolescents experiencing more problems with getting along with other people could be that the adolescents of 2010 compared to the ones of 2000 were probably exposed to handling added relationships both in and outside of the family.

Shortcomings of this study are the small adolescent group of the year 2000 and the high dropout rate, especially for boys. Another shortcoming is the difference in the selection of the samples, the first being taken from a small northern town and the second from a heterogeneous population. The sample of 2010 included a third of the adolescents with higher rates of problems (from the three largest towns). Consequently, the results may have underestimated problem severity, as well as the need for help and treatment, both self-rated and interviewer-rated, and the effect of the time variation in 2000 and 2010. However, the effect of region was small, and concerning the dropout rate, only very high scores for all dropouts would have substantially changed the results. There were also different data collection methods in 2000 and 2010; face-to-face interviews and telephone interviews which could have affected the results.

Much the same adolescent problems seemed to be in focus that need the atten-

tion of parents, school and public health work in 2010 as in 2000. However, it is important to highlight the problems the adolescents seem to have in relationships and the diminished trust they report having in other people, making sure these problems do not counteract the possibilities of a continued health development for adolescents in Sweden. More epidemiological research is needed as a premise for more extensive public health actions exploring the well-being and trends both for the positive functioning and for the problem severity in adolescence.

References

ACHENBACH, T.M., L. DUMENCI & L.A. RESCORLA (2003) 'Are the American Children's Problems Still Getting Worse? A 23-Year Comparison', *Journal of Abnormal Psychology* 31, 1–11.

BECKMAN, L. & C. HAGQUIST (2010) *Hur mår barn och ungdomar I Sverige? Analys av den officiella bilden, mediabilden och bilden från forskningen* (Karlstad: Universitetstryckeriet).

BERNTSSON, L.T. & L. KÖHLER (2001) 'Long-Term Illness and Psychosomatic Complaints in Children Aged 2–17 Years in the Five Nordic Countries: Comparison between 1984 and 1996', *European Journal of Public Health* 11, 35–42.

BÖRJESSON, J. & H. YBRANDT (2012) Concurrent and Predictive Validity of Adolescent Drug Abuse Diagnosis (ADAD), *The Open Psychology Journal* 5, 20–30.

BÖRJESSON, J., B-Å. ARMELIUS & H. ÖSTGÅRD-YBRANDT (2007) 'The Psychometric Properties of the Swedish Version of the Adolescent Drug Abuse Diagnosis (ADAD)', *Nordic Journal of Psychiatry* 61, 225–32.

BROBERG, A.G., K. EKEROTH, P.A. GUSTAFSSON, K. HANSSON, B. HÄGGLÖF, T. IVARSSON & B. LARSSON (2001) 'Self-Reported Competencies and Problems among Swedish Adolescents: A Normative Study of the YSR', *European Child and Adolescent Psychiatry* 10, 186–93.

CEDERQUIST, Å.V. (2006) 'Psychiatric and Psychosomatic Symptoms are Increasing Problems among Swedish Schoolchildren', *Acta Pediatrica* 95, 901–1003.

DANIELSSON, M. (2006) *Svenska skolbarns hälsovanor 2005/06* (Stockholm: Statens Folkhälsoinstitut).

FRIEDMAN, A.S. & A. UTADA (1989) 'A Method for Diagnosing and Planning the Treatment of Adolescent Drug Abusers (The Adolescent Drug Abuse Diagnosis (ADAD) Instrument)' *Journal of Drug Education* 19, 285–312.

HAGQUIST, C. (2010) 'Discrepant Trends in Mental Health Complaints among Younger and Older Adolescents in Sweden: An Analysis of WHO-Data 1985–2005', *Journal of Adolescent Health* 46:3 (March) 258–64.

JERDEN, L., G. BURELL, H. STENLUND, L. WEINEHALL & E. BERGSTRÖM (2011) 'Gender Differences and Predictors of Self-Rated Health Development among Swedish Adolescents', *Journal of Adolescent Health* 48:2 (Feb) 143–50.

JOHANSSON, A., E. BRUNNBERG & C. ERIKSSON (2007) 'Adolescent Girls' and Boys' Perception of Mental Health', *Journal of Youth Studies* 10, 183–207.

MAUGHAN, B., A.C. IERVOLINO & S. COLLISHAW (2005) 'Time Trends in Child and Adolescent Mental Disorders', *Current Opinion in Psychiatry* 18, 381–85.

PETERSEN, S., E. BERGSTRÖM, M. CEDERBLAD, A. IVARSSON, L. KÖHLER, A-M. RYDELL, M. STENBECK, C. SUNDELIN & B. HÄGGLÖF (2010) *Barns och ungdomars psykiska hälsa i*

Sverige: En systematisk litteraturöversikt med tonvikt på förändringar över tid (Stockholm: Kungliga Vetenskapsakademien).

RINGBACK WEITOFT, G., A. HJERN, I. BATLJAN & B. VINNERLJUNG (2008) 'Health and Social Outcomes Among Children in Low-Income Families and Families Receiving Social Assistance: A Swedish National Cohort Study', *Social Science and Medicine* 66, 14–30.

SÖDERHOLM CARPELAN, K. & A. HERMODSSON (2004) 'ADAD och utvecklingen av ett dokumentationssystem för ungdomar', *Nordisk Sosialt Arbeid* 24, 110–23.

Statens Offentliga Utredningar (2006) *Ungdomar, stress och psykisk ohälsa: Analys och förslag till åtgärder* (Stockholm: Fritze).

Statens Folkhälsoinstitut (2009) *Socialstyrelsens folkhälsorapport* (Stockholm: Sozialstyrelsen).

Statens Folkhälsoinstitut (2011) *Kartläggning av psykisk hälsa bland barn och unga: Resultat från den nationella totalundersökningen i årskurs 6 och 9 hösten 2001* (Mölnlycke: Elanders Sverige).

Statistisk årsbok för Sverige: Statistical Yearbook of Sweden (2011) (Stockholm: SCB).

Statistiska centralbyrån (1983) *Socioekonomisk indelning (SEI)* (Stockholm: SCB).

TICK, N.T., J. van der ENDE & F.C. VERHULST (2008) 'Ten-Year Trends in Self-Reported Emotional and Behavioral Problems of Dutch Adolescents', *Social Psychiatry and Psychiatric Epidemiology* 43, 349–55.

TORSHEIM, T., U. RAVENS-SIEBERER, J. HETLAND, R. VÄLIMAA, M. DANIELSSON & M. OVERPECK (2006) 'Cross-National Variation of Gender Differences in Adolescent Subjective Health in Europe and North America', *Social Science & Medicine* 62, 815–27.

YBRANDT, H. (2010) 'Risky Alcohol Use, Peer and Family Relationships and Legal Involvement in Adolescents with Antisocial Problems', *Journal of Drug Education* 40, 243–62.

YBRANDT, H. (2013) 'A Normative Study of the Swedish Adolescent Drug Abuse Diagnosis (ADAD)', *Journal of Substance Use* 18, 138–47.

YBRANDT, H. & K. ARMELIUS (2010) 'Adolescents' Mental Health and Their Images of Self and Parents', *European Journal of Mental Health* 5, 59–75.