



# Time-trends in Nordic adolescents' communication with their parents

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## Abstract

Adolescence is an important developmental period toward greater independence. However, the family is still very important in the life of young people. The aim of this study was to analyse changes over time in easy communication between adolescents and their parents in the Nordic countries.

The study used the Nordic part of Health Behaviour in School-aged Children, carried out in four waves from 2002–2014. It included 109,446 adolescents. The adolescents were asked how easy it was to communicate with their mother or father about things that really bothered them. The results were analysed using descriptive statistics and binomial logistic regression.

In all Nordic countries, the prevalence of easy communication between adolescents and their parents increased from 2002 to 2014. Although the positive change in parental communication was more pronounced among Nordic fathers, the data showed that mothers had markedly better communication with their adolescents than fathers did. In 2014, around three out of four adolescents found it easy to talk with their fathers, while four out of five found it easy to talk with their mothers. The results indicate that policies in the Nordic countries to support the role of both mothers and fathers in caring for their children are warranted.

## Keywords

adolescents, parenting, gender, communication, Nordic countries

## Introduction

Adolescence is marked by a complex mixture of psychological and social challenges. Parents have a key role in helping their adolescents navigate through this period. However, research on this transition and the role of parents is complicated. The natural development in the life of most adolescents is towards greater independence (Steinberg, Vandell & Bornstein, 2011). Parents therefore often see their influence diminish and relations becoming less intimate. On the other hand, it is also clear that good relations with parents in adoles-

cence positively influences a number of psychological, social and physical factors (Bulanda & Majunder, 2009). Studies have shown that adolescents who find it easy to talk to their parents about things that bother them are more likely to be resilient and to experience mental wellbeing (Kernis et al., 2000; Levin and Currie, 2010).

Psychologist and psychiatrist John Bowlby (1977) put forth a basic theory on the nature of healthy relations between parents and their children. It also outlined how dysfunctional bonds could cause psychological problems. According to the theory, parental bonds affect persons throughout their lives, and greatly influence other intimate relationships. Subsequent research has shown that problems in these relations are linked with anxiety disorders (Warren et al., 1997), aggression (Finzi et al., 2001), school dropout (Marcus & Sanders-Reio, 2001), depression (Graham & Easterbrooks, 2000), and suicide (Adams et al., 1996). On the other hand, good relations between parents and adolescents promote emotional well-being (Carlson, Sampson & Sroufe, 2003), social skills (Bohlin et al., 2000), self-confidence (Suess et al., 1992), and academic achievement (Jacobsen & Hoffman, 1997). Flouri & Buchanan (2003) also showed a correlation between increased parental involvement and decreased suicide attempts.

Looking at the quality of communication between parents and adolescents has long been a priority of the Health Behaviour in School-aged Children (HBSC) study. Adolescents who perceive communication with their parents as being easy report better health, more well-being, and have better social skills. Easy communication between parents and their adolescents has been shown to affect the latter's health, well-being and social skills. Studies have, for example, shown that easy communication with parents is correlated with greater life satisfaction and physical activity, as well as fewer risk behaviours and health symptoms (Brooks, 2016). Although the adolescent seeks more independence and may place increasing value on his peers, the parents remain a pivotal source of communication.

Studies suggest that the quality of parent-adolescent relationships is determined both by individual factors, such as the age of the child and gender of both parent and child, and by external factors, including social and family welfare policies. The nature of such policies can differ radically between countries (Brooks et al., 2015), which should have an impact on the aforementioned relationship. A review of paid maternity in OECD countries showed that in 1970, mothers had on average only 17 weeks of paid leave. By 1990 this had increased to about 40 weeks, and by 2016 to just over one year. The largest increases in length of paid leave were in Finland and the Slovak Republic, but the difference in what the monthly sum represents in percentage of average income varies greatly (OECD, 2017). Even within the Nordic countries, which have traditionally all embraced strong welfare policies, there are important differences. They were among the first to introduce paid maternity leave and also to implement paid paternal leave giving parents the opportunity to choose how to divide the leave period between them. This was first introduced in Sweden in 1974, with all of the Nordic countries following suit in the subsequent decade (Eydal et al., 2015). In 1993, Norway was the first country to put a special father's quota into law, and in the following years the other countries did the same. Denmark did so in 1998, but it was abolished four years later. Studies have shown that these quotas have had a long-term positive effect on fathers' involvement in childcare (Brandth & Kvande, 2003; Haas & Hwang, 2008).

But other factors have also been suggested as having changed parent-adolescent relationships in recent years. The advent of electronic and social media has resulted in great changes in modes of communication over the recent decades. This has raised concerns about the decreasing quality of communication within families (Brown & Grinter, 2014; Harrison et al., 2015).

The aim of the current study was to assess changes in easy communication between Nordic adolescents and their parents from 2002 to 2014, and furthermore to analyse these changes by

age and gender of the participating adolescents and their parents. These results are then discussed in the context of relevant changes in family roles and policy within the Nordic countries.

## Method

HBSC (Health and Behaviour in School-aged Children) is a multinational study examining various factors relating to health, well-being and the social situation of 11-, 13- and 15-year-old adolescents. It was initiated in the winter of 1983–1984 and included samples from five countries. Since then the survey has been conducted every four years, with 48 countries in Europe and North America now taking part (Inchley et al., 2016).

Each country selects a nationally randomised representative sample of boys and girls at 11, 13 and 15 years old. The study population should include at least 95% of adolescents in the age groups, excluding only those that do not attend schools or are receiving special education. In the last wave of the study included here, during the winter of 2013–2014, more than 200,000 adolescents took part.

The study uses a questionnaire consisting of over 100 items, some mandatory while others are optional or country-specific. Parents, school administrators and teachers were informed of the study in advance. Adolescents were able to opt out and were offered the opportunity to decline participation (passive consent). All of them were informed that their participation in the study was voluntary and were assured of the anonymity of their responses. For the schools that wanted to participate, teachers supervised the adolescents as they completed the questionnaires in their usual classrooms. All countries followed the national research ethics requirements, which in some countries included approval from ethical authorities. The response rate in most countries exceeded 60% (Torsheim et al., 2016).

The number of Nordic adolescents taking part in 2002 was 19,009. This increased to 29,656 in 2006 and to 33,232 in 2010. However, the number participating dropped in 2014, when 31,540 took part. Participation for each of the Nordic countries from 2002 to 2014 is shown in Table 1. In Iceland, the survey was first performed in 2006 and therefore no data is available for the 2002 wave.

**Table 1.** Number of participants by Nordic country and survey year.

Country	2002	2006	2010	2014
Denmark	4,672	5,741	4,330	3,891
Finland	5,388	5,249	6,723	5,925
Iceland	n.a.	9,540	11,119	10,602
Norway	5,023	4,711	4,342	3,422
Sweden	3,926	4,415	6,718	7,700
Age (Mean – SD)				
	13.6 (1.7)	13.4 (1.6)	13.5 (1.7)	13.6 (1.7)
Boys (%)				
	49.9	49.7	49.6	49.3

Looking at the distribution of participants living in different family structures we found that 69.7% (N=76,234) were living with both parents, 17.7% (19,421) with a single parent, 11.1% in stepfamilies (N=12,202), and 1.5% (N=1,589) in other arrangements.

## Measures

### Dependent variables

Easy communication with the adolescent's mothers and fathers was measured by asking young people how easy it was for them to talk with their mother and father about things that really bothered them. The five response options were "Very easy", "Easy", "Difficult", "Very difficult" and "Don't have or see this person". In the current analysis, the response options were dichotomised as "easy communication" versus "difficult communication" responses. Adolescents who responded that they did not have contact with the specific parent were treated as discrete missing. The response rate to these questions varied between 95–98% when analysed by countries, waves, gender and age.

For analysis with easy communication with *both parents*, we combined the two groups (with mother and father) and used the strictest criterion for analysis so that easy communication with both parents are compared to all other familial communication structures (such as: easy communication with only one parent or no parents).

### Independent variables

The following socio-demographic characteristics were used in our analysis: gender (boys and girls), age (11–16), country (Denmark, Finland, Iceland, Norway and Sweden) and survey year (2002–2014).

### Data analysis

The binomial logistic regression analysis was performed using the survey package in R developed for analysing complex survey samples (Lumley, 2017; R core team, 2017). Analysis of communication with parents were design-based, correcting for clustering of pupils within the same school class, as recommended by Schnohr et al. (2015). These authors also recommend adding a country by survey year interaction term, to investigate country-specific trends. A test for higher-order interaction using Wald F-tests was performed to assess any interaction effects of country by survey year. Only interactions that significantly improved the model fit were included in the final analysis.

For the regression analysis, gender, age, country and survey year were all centred at their first meaningful values (boy, 11 years of age, living in Denmark, in the year 2002) to get a meaningful intercept for all regression analysis. Moreover, all regression coefficients were adjusted to control for differences in family structure (i.e. adolescents living with both parents, one parent, step family, or other family structures). Predicted values were computed from the design-adjusted binomial logistic regression models and are presented as adjusted prevalence rates in the results section.

## Results

Table 2 shows the percentage of Nordic adolescents rating communication with their parents as easy. Table 2a shows increased prevalence of easy communication with fathers in all the countries in the period 2002–2014. These increases are not linear, as can be seen in the case of Norway, where 66% of adolescents rated their communication with fathers as easy in the first three waves, but in the most recent wave the figure increased to 76%.

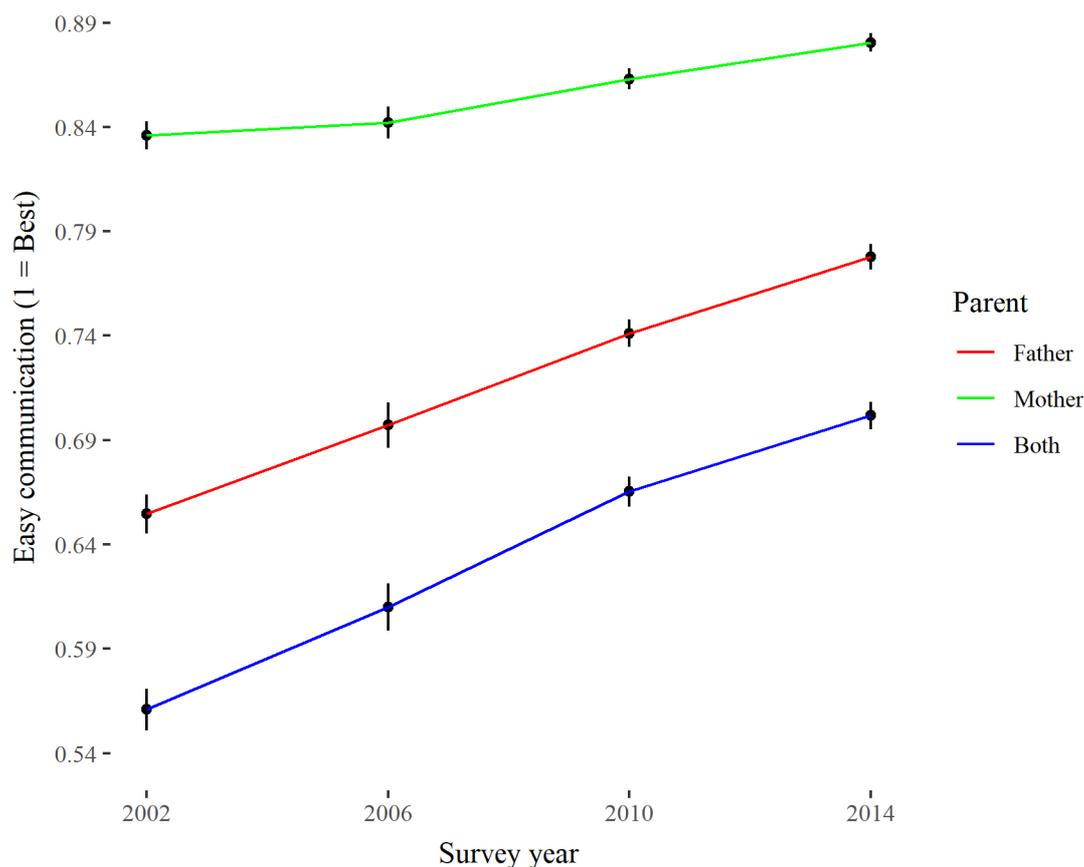
The prevalence of adolescents indicating easy communication with their mothers was higher than with their fathers (Table 2b). In all countries, there was an increase in easy communication with mothers in the period 2002–2014. The only exception was Sweden, which was already very high in 2002. In Norway, there was a decrease in the 2006 and 2010 surveys, but for all countries, 2014 was a year of favourable results.

Table 2c shows the percentage of adolescents rating their communication with both parents as easy or very easy. Overall, these rates were slightly lower than communication with only one of the parents, which is only logical as the criteria for communication was more stringent. There were cases where the adolescents only rated communication with one parent as easy, which necessarily resulted in a lower percentage of easy communication with both parents. The rating of communication with both parents, however, appears to be improving in all Nordic countries between 2002–2014.

**Table 2.** Prevalence of easy communication with parents in the Nordic countries 2002–2014 (percentages and 95% confidence intervals).

	2002	2006	2010	2014
a) Easy communication with fathers.				
Denmark	59% (57–61)	64% (58–69)	70% (68–72)	70% (68–72)
Finland	66% (64–67)	68% (66–70)	73% (72–75)	75% (74–76)
Iceland	n.a.	74% (73–75)	80% (79–81)	83% (82–84)
Norway	66% (64–67)	66% (64–68)	66% (64–68)	76% (74–78)
Sweden	72% (70–74)	73% (71–75)	73% (72–75)	77% (76–79)
b) Easy communication with mothers.				
Denmark	78% (78–80)	82% (78–85)	85% (83–86)	84% (82–85)
Finland	84% (83–85)	85% (84–86)	87% (86–88)	87% (86–88)
Iceland	n.a.	86% (85–87)	89% (89–90)	91% (90–91)
Norway	84% (83–85)	80% (79–82)	79% (78–81)	88% (86–89)
Sweden	88% (87–89)	86% (85–87)	86% (85–87)	88% (87–88)
c) Easy communication with both parents.				
Denmark	50% (48–52)	54% (49–60)	60% (58–61)	62% (60–63)
Finland	56% (54–58)	60% (58–62)	66% (64–67)	68% (66–69)
Iceland	n.a.	66% (64–67)	73% (72–74)	75% (74–77)
Norway	57% (55–59)	57% (55–59)	58% (56–60)	70% (67–72)
Sweden	63% (61–66)	65% (63–67)	67% (65–69)	69% (68–71)

Figure 1 shows the unadjusted prevalence of parent-adolescent communication by fathers, mothers and both parents. Although the communication with fathers has improved more than the communication with mothers, the latter have superiority on all measurements.



**Figure 1.** Unadjusted prevalence rates of parent-child communication in the Nordic countries, 2002–2014.

Table 3 presents the results of the binomial logistic regression models for communication with fathers, mothers and both parents, controlled for differences in family structure. The point of reference was boys at age 11 living in Denmark in the year 2002. It is noticeable that adolescents' easy communication with either father, mother or both parents had similar patterns for all independent variables in the analysis. The Nordic countries appear quite homogenous regarding adolescents' easy communication with their parents, based on the very small or small differences in country odds ratios. The change over time in easy communication with parents, based on the survey year, indicated a small increase for both parents for consecutive years after 2002. The survey year by country interaction also indicated that the slope coefficient differs between Nordic countries over time. Adding this interaction improved the model fit significantly for easy communication with fathers (Wald  $F(4, 6302) = 21.68, p < 0.001$ ), mothers (Wald  $F(4, 6299) = 22.38, p < 0.001$ ) and both parents (Wald  $F(4, 6305) = 23.06, p < 0.001$ ), even though the differences were quite small. In summary, this indicated that all the Nordic countries had a similar increasing trend of easy communication with parents, but at slightly different rates.

There were also indications of both age and gender differences in easy parent-adolescent communication based on the regression analyses. Girls had more difficulty in communicating with parents compared to boys, especially with their mothers. Regarding age, easy communication with parents decreased through adolescence after the age of 11.

**Table 3.** Logistic regression analysis for easy communication with parents among adolescents in the Nordic countries.

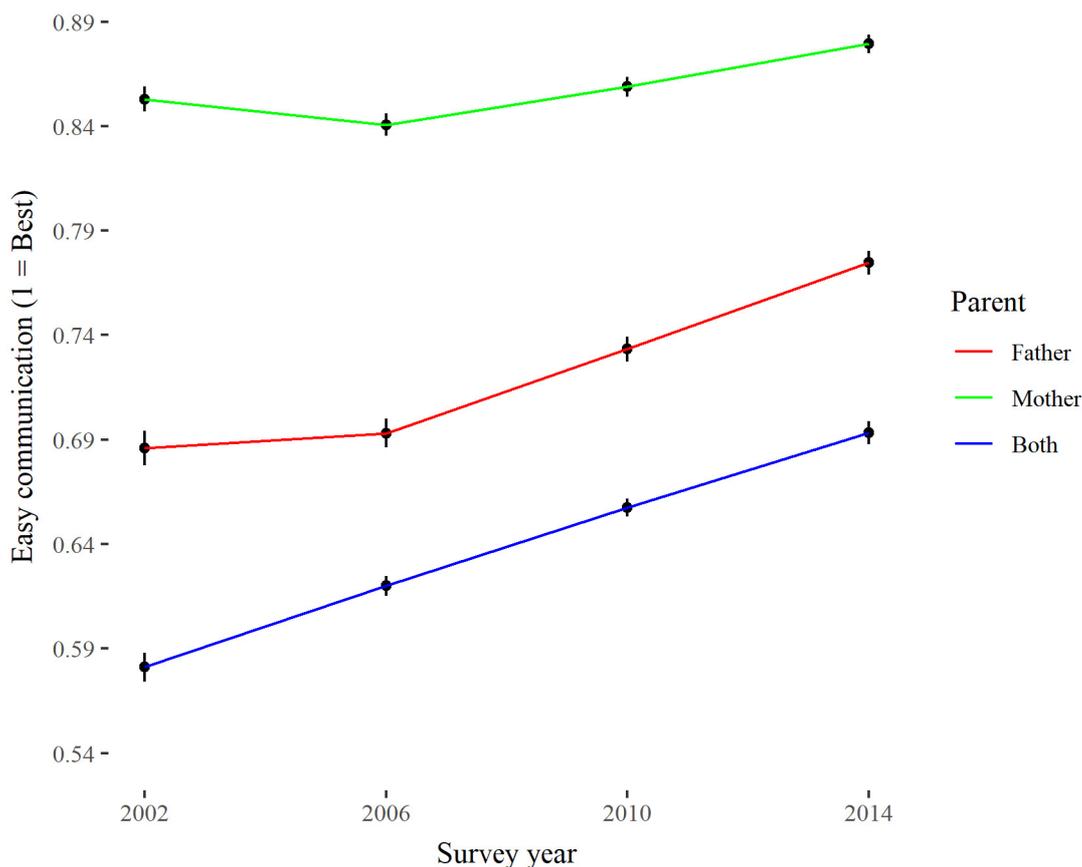
Easy communication with:	Father		Mother		Both parents	
	OR	95% CI	OR	95% CI	OR	95% CI
(Intercept)	5.83 ***	5.41 – 6.29	11.31 ***	10.34 – 12.38	3.96 ***	3.71 – 4.23
Gender	0.44 ***	0.43 – 0.45	0.85 ***	0.82 – 0.88	0.51 ***	0.49 – 0.52
Age	0.77 ***	0.76 – 0.78	0.76 ***	0.75 – 0.77	0.78 ***	0.77 – 0.79
Country						
<i>Finland</i>	1.33 ***	1.22 – 1.46	1.46 ***	1.31 – 1.63	1.33 ***	1.23 – 1.44
<i>Iceland</i>	1.35 ***	1.21 – 1.50	1.18 *	1.03 – 1.34	1.39 ***	1.26 – 1.53
<i>Norway</i>	1.20 ***	1.10 – 1.32	1.19 ***	1.07 – 1.32	1.23 ***	1.13 – 1.33
<i>Sweden</i>	1.71 ***	1.55 – 1.88	1.72 ***	1.53 – 1.92	1.84 ***	1.69 – 2.00
Survey year	1.05 ***	1.04 – 1.06	1.04 ***	1.02 – 1.05	1.05 ***	1.04 – 1.06
Interaction						
<i>Finland: Survey year</i>	0.99	0.98 – 1.01	0.99	0.97 – 1.00	1.00	0.99 – 1.01
<i>Iceland: Survey year</i>	1.04 ***	1.02 – 1.05	1.04 ***	1.02 – 1.05	1.03 ***	1.02 – 1.04
<i>Norway: Survey year</i>	0.98 **	0.97 – 0.99	0.97 ***	0.95 – 0.98	0.98 **	0.97 – 1.00
<i>Sweden: Survey year</i>	0.98 ***	0.97 – 0.99	0.97 ***	0.95 – 0.98	0.98 ***	0.96 – 0.99
Observations	101.013		103.856		106.270	

Notes \*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$

Calculating the predicted marginal proportions of parent-adolescent communication to illustrate changes over time showed a trend of increasing prevalence of easy communication in the Nordic countries for consecutive survey years between 2002 and 2014 (Fig. 2), similar to the unadjusted rates (Fig.1).

## Discussion

The aim of the current study was to assess changes in the prevalence of Nordic adolescents reporting easy communication with their parents using cross-sectional data from the HBSC study from 2002 to 2014. Our results show that prevalence of easy communication in Nordic countries between adolescents and their fathers increased from 2002 to 2014. Looking at these increases by different countries, we see that they are not linear and it is not necessarily straightforward to link them with changes in parental leave legislation. Norway was, for example, the first country to enact a fathers' quota (Eydal et al., 2015), but the same percentage of Norwegian adolescent rated their communication with fathers as easy in the first three waves, but then it soared 10% in the last wave.



**Figure 2.** Adjusted prevalence rates of parent-child communication in the Nordic countries, 2002–2014.

The communication with mothers, which always received more favourable ratings, also improved in most countries. Similarly, the percentage of adolescents that experience easy communication with both of their parents is also rising. However, since some adolescents only perceive their communication with one parent as easy, the numbers for easy communication with both parents are necessarily lower than for each parent. These changes mean that compared with other countries in Europe and North America participating in the HBSC study, Nordic adolescents are now amongst those that report the highest percentage of easy parental communication.

Since the 1960s, Nordic countries have had relatively high levels of cohabitation, nonmarital childbearing, divorce rates, and single-person households. The family system in these societies has thus been seen as emphasising individual independence, autonomy, gender equality, and reliance on welfare state institutions rather than on the family for social and economic security (Sandström & Garðarsdóttir, 2018). This has been seen by some scholars as a sign of a “weak family system” (Reher, 1998). Although ours is not a measurement of the family system as such, we can at least say that the quality of adolescent-parent communication seems to be steadily increasing in the Nordic countries.

The trends in the Nordic countries seem to develop quite homogeneously with regards to easy communication between adolescents and parents. This is important, since measurements of parental support have shown correlation with various factors related to an adolescent’s mental well-being (Parker & Benson, 2004). For example, Papini & Roggman (1992) suggested that mutual trust and good communication might mitigate some of the stress experienced during adolescence. The quality of parental communication can substantially

affect the development of social values, as well as give young people the strength to deal with challenges and help them avoid risk behaviour, such as smoking, substance use and violence (Carver et al., 2017). Open communications in families also reduce the likelihood of risky sexual behaviour during adolescence (Whitaker & Miller, 2000). Similarly, studies have shown that poor communication with parents is linked to poorer outcomes for the children (Brooks, 2016; Bulanda & Majumdar, 2009; Duncan et al., 2007). From the Danish HBSC data (Damsgaard et al., 2014), we know, for example, that adolescents experiencing poor communication with parents are twice as likely to show symptoms of poor emotional health.

Although the positive change in parental communication is more pronounced for Nordic fathers, our data shows that the mothers have markedly better communication with their adolescents than the fathers. This is in line with other studies (Pleck & Masciadrelli, 2004), suggesting that fathers are less involved with their children, and that adolescents feel closer to their mothers. Studies have also shown that fathers not living in the home have particularly poor relations. It should therefore come as no surprise that adolescents who are not living with their fathers' experience worse communication with them (William & Kelly, 2005). These effects should be especially strong in countries like the Nordic countries since the divorce rate there is relatively high. However, these effects may be mitigated due to laws ensuring that both parents have an equal right to associate with their children. It is also important to note that many divorced parents in the Nordic countries choose joint physical custody, which has been shown to impact adolescents' communications with their fathers very positively (Bjarnason & Arnarsson, 2011).

In a study from 2005, William & Kelly claimed that little was known about the difference in the effect of mothers and fathers on adolescent development. Prior to that, Phares (1996) had pointed out the near invisibility of fathers in studies of family function. The most likely explanation for this is that during early attachment, theorists focused mostly on the child's main caretaker, usually assuming that it was the mother (Bowlby, 1977). Even today few comparable studies are available, although it has been shown that a positive bond between father and child has a significant effect on the child's wellbeing. Easy communication with a father correlates with emotional well-being, self-esteem and a positive adolescent body image, especially among girls (Brooks, 2016, Bulanda & Majumar, 2009). Interestingly, communication with fathers does not seem to affect the same factors for boys and girls (Levin et al., 2012). Difficult communication with fathers seems to influence girls' internalisation of problems, whereas good communication seems to decrease various health-related risk behaviours (Brooks, 2016; Demidenko et al., 2015). The nature of boys' communications with their fathers seems to be more related to the development of negative emotions, such as aggression (Gallarín & Alonso-Arbiol, 2012). It is important to state that not all scientists agree on this point. Some studies suggest that although good relationships with fathers strengthen children, the studies find no difference in this regard based on a child's sex (Carlson, 2006).

Our results reflect a mixture of changes both in gender roles and in particular masculine identities, as well as in social policy, that have increasingly recognised the importance of fathers in adolescent development (Brooks et al., 2015; Marsiglio et al., 2000). The increased emphasis on individual and family welfare has led researchers and policymakers to focus more on the role of fathers in modern families. A United Nations publication on this subject (Barker & Pawlak, 2011) emphasises up that even though many societies still view fathers as breadwinners, protectors and disciplinarians, they have increasingly found new roles and responsibilities for fathers within families, such as caregiving, emotional support of children, communication and household chores. Societies that have established parental leave for fathers have acknowledged that fathers have a role equal to that of mothers in caring for their children. This is the basis of

the idea of giving fathers the opportunity for paid parental leave. That is, they will become more active in caring for their children, sharing the responsibility with the mothers. Studies from Sweden and Norway have demonstrated positive relations between fathers' parental leave and their participation in their children's upbringing (Hass & Hwang, 2008; Brandth & Kvande, 2003). These studies showed that fathers taking leave shortly after their child was born were more likely to continue their active involvement after the leave.

Looking at the changes in all of the countries participating in the HBSC study from 2006 to 2014, we see that there was no change in the percentage of adolescents reporting easy communication with their mothers. Given that there was an increase in easy communication with mothers in the Nordic countries during this period, this has resulted in them being high up on the list of the HBSC countries in 2014. Only Denmark is around the average. Easy communication with fathers has been increasing from 2006 to 2014 in all countries of the HBSC. We see that of all participants combined, 70% of 11-year-old girls and 81% of boys perceived communication with their fathers as easy in 2006, compared with 73% of girls and 83% of boys in 2014. Among 13-year-olds, 55% of girls and 75% of boys felt that communication with their fathers was easy in 2006, whereas in 2014 the average percentages from the HBSC countries were 60% for girls and 78% for boys. The average percentages for 15-year-olds in 2006 were 48% for girls and 67% for boys, compared with 54% and 73% respectively in 2014. It is therefore important to realise that the percentage of adolescents reporting easy communication with their fathers has been increasing in Europe and North America. However, in the Nordic countries this increase has been twice as great (Inchley et al., 2016). These average percentages for the HBSC countries show the same difference between gender that we find in the Nordic countries, namely that boys are more likely to perceive their communication with parents as easy than girls are. This is somewhat surprising since studies have shown that girls perceive more cohesion in their relations with parents (Scabini & Galimberti, 1995), are closer to them during the transition into adulthood, and are more affected by them than boys (Sneed et al., 2006). Most studies in fact show that girls tend to have closer bonds with their parents than boys (Saraiva & Matos, 2012), but most of them have small effect sizes. A longitudinal study from Spain showed that although the difference was not statistically significant, girls showed less family conflicts than boys on four measures extending from early adolescence to emerging adulthood (Parra et al., 2005). It is, however, important to bear in mind that having less conflict and being more dependent on one's parents doesn't necessarily indicate good communication. It is more difficult to explain another finding from the same study, namely that girls become significantly more talkative at home than boys from middle of adolescence through emerging adulthood. One might expect to find some relation between quantity and quality of communication, but that is not apparent since both boys and girls were found to experience the same amount of family affection.

Although our adolescents live in the age of social media, with all the changes in the mode of communication that this entails (Brown & Grinter, 2014; Harrison et al., 2015), we see no evidence that it is impacting their communication with parents. On the contrary, it might be that the use of electronic media makes parental communication easier.

To put our results into a proper perspective, it is important to bear in mind that our participants in the last wave were mostly born between the years 2002 and 2006. Since then, there have been further amendments made to the parental leave legislations in most of the Nordic countries. All of them except Denmark have since extended the fathers' quota, and three have done the same with the mothers' quota. As our study indicates that these legislative actions may have played a part in increasing the prevalence of easy communication

between adolescents and parents, it will be of great interest to see whether further improvements will be seen in future waves of the HBSC study. As the Nordic countries have been among the pioneers of parental leave legislation, while still enacting it somewhat differently, analysis of changes in family communication is of utmost importance. The Nordic HBSC data gives us the opportunity to compare results for using the same instrument in all five countries at the same time every four years.

## Limitations

Some limitations of this study should be considered. First, pupils who were absent on the day of the data collection were not considered since they cannot be tracked due to ethical considerations in most Nordic countries. Therefore, it is not possible to examine differences between participating and non-participating youths in this study. Second, using comparative cross-sectional data allows for analysing temporal trends, but not for drawing causal conclusions. Thirdly, using only one question to measure parental communication calls for some caution when extrapolating from these results.

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