#### DIFFERENCES IN PRIVACY BOUNDARIES FOR EARLY AND LATE ADOLESCENTS

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#### Abstract

In this study, we researched differences in privacy boundaries towards parents for early (12-13 year-olds) and late (16-17 year-olds). We examined four issues, specifically online behavior, friendship, finances, and romantic involvement. We researched the privacy boundaries by taking questionnaires among students of two secondary schools in the Netherlands (N = 89). As expected, general privacy boundaries became more strict with age. However, for girls the permeability of privacy boundaries for the issue friendship increased with age. We can also conclude that late adolescents expect more privacy considering their finances. Having a part time job influenced the outcome in the way that adolescents with a part time job reported less permeable privacy boundaries. We can see this qualifier as a marker of autonomy and maturity. Whether there are also age differences in privacy boundaries in other life issues, should be studied in research with larger samples.

*Keywords:* adolescents, privacy boundaries, online behavior, friendship, finances romantic involvement

Differences in Privacy Boundaries for Early and Late Adolescents
As adolescents grow up, they increasingly feel that parents have no need to know everything about their whereabouts (Masche, 2010). On one hand, they show this by telling their parents they expect more privacy, at the same time feeling they are not longer obliged to tell parents about their lives. 'Mind your own business', is the answer when parents try to talk to them about, for instance, friendships (Arnett, 2010; Hawk, Hale, Raaijmakers & Meeus, 2008). They interpret their parents' behavior as privacy invasion. This can be disturbing for adolescents and makes the parents less able to monitor their children's life (Masche, 2010). In this study, we examine whether adolescents' privacy boundaries differ for the specific life issues that parents monitor. We will also study whether early adolescents set more or less permeable boundaries for privacy than late adolescents. Attention will be paid to the context of the findings, such as whether the experience of having a part time job contributes to financial boundaries.

Previous research on adolescents' response to parental monitoring focused on disclosure (Smetana, Villalobos, Tasopoulos-Chan, Gettman, & Campione-Barr, 2009) and information management (Tilton-Weaver et al., 2010). In this study however, the focus is on the links between parental monitoring and privacy boundaries that Dutch adolescents have towards their parents. Adolescents construct privacy boundaries that are more permeable or rigid, in order to reveal or conceal information (Petronio, 2007). Having more rigid privacy boundaries might be linked to invasive behavior of parents towards their children, or might be related to the adolescents' increasing wish for autonomy (Masche, 2010). We take four issues into account, namely online behavior, friendship, finances, and romantic involvement. These issues are relevant in adolescence and the perceptions about these subjects change as the adolescent grows older. For instance, money can give a feeling of autonomy and is a symbol of independence (Foley, Holzman, & Wearing, 2007) of which the need increases when the adolescent grows older (Masche, 2010). The aim of this study is to examine the differences in privacy boundaries of early (12/13 years), and late adolescents (16/17 years).

#### **Defining Privacy Boundaries**

#### **Privacy boundaries**

Privacy is the adolescents' expectation of control over access to the self, in order to develop self-expression and autonomy. Adolescents can experience feelings of privacy invasion when this expectation is violated (Petronio, 2002). An example of privacy invasion is when adolescents experience too much control of the parents (Smetana & Daddis, 2002). This feeling changes when adolescents grow older. With age, adolescents become more independent and want to be less controlled by their parents (Rosen, Cheever, & Mark Carrier, 2008).

In keeping things private is the notion of the ability to disclose or conceal (Petronio, 2002). This means that it is important that the adolescent is aware he has the power to manage his own privacy boundaries. This knowledge is correlated with the growing consciousness of his own identity and the feeling of being capable setting these boundaries. As the adolescent gets older, this consciousness grows. At this time, the adolescent thinks it is less legitimate for parents to have authority over them. At the same time, the older adolescent feels less obliged to obey their parents (Darling, Cumsille, & Martínez, 2008).

Parents are responsible for their children and want to protect them. Protection means knowing what the child's actions are, and therefore know what to warn for and give advice about (Stattin & Kerr, 2000). There are several important issues in life in which parents want to protect by monitoring, while adolescents might feel they do not want to be protected anymore.

First, we focus on finances, which parents monitor to make their children more aware of finances and prevent them from getting into financial problems (Van Seventer, 2010). Second, we choose to focus on online behavior. Parents monitor their child's online social activities on Facebook, Hyves and MSN Messenger, because parental monitoring and supervision is a protective factor against adolescent risk-taking behavior (Pujazon-Zazik & Jane Park, 2010).

Third, we focus on friendships, because friends can have a large amount of influence on adolescents. When an adolescent in a peer group shows delinquent behavior and substance abuse, the rates of delinquent behavior and substance abuse for friends of this adolescent increase as well (Laird, Pettit, Dodge & Bates, 2008). It seems that support from the family compensates the bad influences of friends in adolescence, therefore we think it is important to measure the adolescents' opinion on the intensity a parent is involved in the child's friendships (Barnes, Hoffman, Welte, Farrell, & Dintcheff, 2006; De Kemp, Scholte, Overbeek, & Engels, 2006; Keijsers, Frijns, Branje, & Meeus, 2009).

Last, we focus on the issue 'romantic involvement', which contains dating, the identity of the partner and sexual contact (Daddis & Randolph, 2010). Romantic involvement can in many parents' eyes be a dangerous phenomenon, thinking about the consequences of potential aggressive boyfriends, sexually transmitted diseases or pregnancy (Randolph, 2007). On the other hand, by becoming involved in romantic relationships, the adolescent is on his way to achieving autonomy without the engagement of parents (Furman, 2002). These four issues are the main topics of our study.

By disclosing issues to parents, adolescents make their parents part of their private environment (Petronio, 2010). Another age-related criterion for disclosing

information is the consequence of talking about the issue to the parent. Early adolescents treat discussing dating and identity of partner with parents as issues with potential consequences such as punishment. Late adolescents, however, base their decision whether to discuss these issues on personal concerns (Smetana & Asquith, 1994). Late adolescents are more sensitive to parental authority. They feel more over-controlled when restricted by parents than early adolescents (Kakihara & Tilton-Weaver, 2009). Early adolescents have poorer online safety practices than late adolescents.

#### **Social domains**

The theoretical construct we used to look at the privacy boundaries of adolescents, is the social domain theory of Smetana (Smetana, Grusec, & Kuczynski, 1997, pp. 162-192). The social domain theory states that there are four social domains, the prudential, moral, conventional and personal domain. Issues covered by the prudential domain are issues that pertain to health safety, comfort, or harm to the self. Examples of these issues are drinking alcohol or smoking cigarettes (Smetana et al., 2009). Moral issues are issues related to fairness or rights and behavioral norms. Conventional issues are issues related to others' welfare (Smetana et al., 2009). How friends are treated, the type of language that is used and spreading rumors are examples (Smetana, Metzger, Gettman, & Campione-Barr, 2006). Personal issues pertain to control over one's body, privacy and preferences and choices about appearances, activities and friendship choices (Smetana et al., 2009). Issues that are seen as multifaceted, because they belong to diverse domains, are surfing the internet, chatting and staying out late, who adolescents are dating and hanging out with friends parents do not like (Smetana et al., 2006; Smetana et al., 2009). Multifaceted issues overlap the issues of these four domains (Smetana et al., 2009).

When the adolescent grows older and becomes more conscious, the adolescent thinks it is less legitimate for parents to control them (Darling et al., 2008). This, however, depends on which domain is involved. Both early and late adolescents reject parental authority over personal issues (Smetana et al., 2006). Adolescents and parents agree that moral and conventional issues are under parental authority (Smetana & Asquith, 1994). However, topics adolescents formerly defined as prudential, moral, or conventional shift in their view to the personal domain when they get older (Randolph, 2007; Smetana et al., 2009). With age adolescents also increasingly assert autonomy over multifaceted issues (Smetana et al., 2006).

The four issues in this study, online behavior, friendship, finances, and romantic involvement, all are multifaceted issues. Depending on the matters involved, issues can be more or less personal, moral, conventional or prudential. For instance, parents might view friends as being dangerous and therefore a prudential issue, while adolescents see friends as something that falls within their personal choice. The amount of disclosure

correlates with the domain an issue fits in. Adolescents disclose less when it comes to the personal domain but disclose more when the prudential, moral or conventional domain is involved. For example, the adolescent does not feel obliged to disclose about purchases like clothes or presents (Darling et al., 2008; Smetana et al., 2006). Sexual contact is viewed as prudential by early adolescents. Late adolescents define sexual contact as personal and thus beyond parental regulation (Randolph, 2007; Smetana et al., 2009). The way adolescents discuss their dating activities with parents, changes together with the shift in domain consideration. For instance, pre-adolescents talk about dating issues with their parents, while late adolescents avoid talking about dating with their parents (Mazur & Hubbard, 2004). These contrasting definitions are the source of many adolescent-parent conflicts about romantic involvement. The privacy boundaries and amount of disclosure of early and late adolescents thus will relate to the domain in which an issue is placed by the adolescent.

#### **Monitoring**

Over the course of adolescents' development, parents try to keep track of their whereabouts and associations when they are not at home (Kerr, Stattin, & Burk, 2010). Parents who engage in monitoring behavior do this by practising two strategies: control and solicitation (Hawk, Hale, Raaijmakers, & Meeus, 2008). Parental control consists of setting rules and limits or requiring a child to inform parents where he goes and with who he is. This control decreases when adolescents become older, since they are more out of sight (Kerr, Stattin, & Trost, 1999). Obtained information is used to protect the child from harm and to facilitate his social-cognitive development (Petronio, 1994).

If parents do not change their monitoring strategy with the increasing need of autonomy of their children, adolescents can feel over-controlled (Kakihara et al., 2010). Feeling over-controlled is correlated with less disclosure towards parents and more deviant responses to control practices (Masche, 2010). For instance, late adolescents feel they can choose their friends themselves, but parents sometimes ask for information about a friend because they want to prevent his bad influence. Dating is another activity adolescents see increasingly as a private issue. They start to lock their doors when alone with their partners when they become older (Carver, Joyner, & Udry, 2003). In short, late adolescents can feel invaded by parental monitoring when they construct more rigid privacy boundaries than their parents find acceptable. In this study we will therefore take parental monitoring as a measure.

#### **Disclosure**

Adolescent disclosure is defined as the level by which adolescents decide to tell their parents about certain issues (Keijsers et al., 2009). Adolescent disclosure is related to both parental control and parental solicitation. A high level of parental control makes adolescents disclose less towards their parents, while a high level of parental solicitation

usually leads to a higher level of adolescent disclosure (Keijsers et al., 2009). The reason for this is that when parents show high levels of parental control, the adolescent feels more invaded in his privacy (Hawk et al., 2008). As a consequence, they decide to disclose less to their parents (Smetana et al., 2006). In this study, we will use disclosure as a variable that might connect to privacy boundaries.

#### **Present study**

In this study, we will look at differences in privacy boundaries of early and late adolescents. First, we will examine the monitoring of parents that adolescents report. With age, the adolescents' expectations about what is and what is not legitimate for parents to monitor changes. At the age of 18, adolescents feel more over-controlled when parents use control strategies than when they were 12 years old (Kakihara et al., 2010). As a response to the more rigid privacy boundaries of their children, parents adapt the use of monitoring strategies to the age of their child (Stattin & Kerr, 2000). We therefore assume that late adolescents report less monitoring than early adolescents (Hypothesis 1). Furthermore, we state that there is a positive association between privacy boundaries and monitoring (Hypothesis 2). We assume more rigid boundaries go along with more reported parental monitoring.

We will also examine the association between privacy boundaries and the willingness to disclose. When the need for autonomy of the adolescent increases with age (Masche, 2010), the willingness to disclose decreases and the privacy boundaries will be more strict. When it comes to disclosure, we expect adolescents to disclose less when they want more privacy. We therefore state that there is a negative correlation between the privacy boundaries of the adolescent and the willingness to disclose (Hypothesis 3).

When we focus on age differences in privacy boundaries, we have in mind that adolescents interpret parental monitoring more and more negatively when they get older (Kakihara & Tilton-Weaver, 2009), their wish for autonomy grows along with age. On these grounds, we expect that late adolescents will, overall, have more strict privacy boundaries (Hypothesis 4).

Following hypothesis four we will examine if there is a difference in the privacy boundaries of adolescents when it comes to parental monitoring of the separate issues. When it comes to finances, early adolescents are more likely to make arrangements with their parents about what they do with their money and when they get their pocket money than older adolescents (Furnham, 2001). When adolescents grow up, they change their view on friendship behavior and romantic involvement from prudential or social-conventional to personal, while parents still see it as prudential (Randolph, 2007). Based on all this, it is expected that late adolescents have less permeable privacy boundaries, because they wish more privacy and their parents still feel the need to protect their children. Thus, we hypothesize that early adolescents have more permeable boundaries

of privacy than late adolescents when it comes to parental monitoring of friendship, finances, and romantic involvement (Hypothesis 5).

When it comes to online behavior we have a different expectation. Early adolescents are monitored more by their parents than late adolescents and, because of that, use the internet more for school purposes (Aslanidou & Menexes, 2008). In addition to this, older adolescents are more likely to have their own computer in their bedroom, which makes it more difficult to monitor their online behavior (Rosen et al., 2008). Because of this, we assume that early adolescents will have more rigid privacy boundaries than late adolescents when it comes to their online behavior (Hypothesis 6).

This study adds information to the social domain theory of Smetana (2006), which is a useful theoretical framework for developmental studies. Our research is also valuable for the society, it gives more clarity about how adolescents' privacy boundaries develop.

#### Method

#### **Participants**

Participants were 101 first and fifth grade students from two secondary schools from two different small towns in a conurbation in the Netherlands. For 12 respondents, the results could not be used because they did not have the appropriate age for this study (one 15 year-old, 11 18 year-olds). The present sample contained 39 boys and 49 girls, with one missing value. There were 47 12-13 year-olds, and 42 16-17 year-olds. Forty-five students (50.6%) were in first grade, and 44 students (49.4%) in fifth grade. First grade students attended a combined HAVO/VWO class. Fifth grade students attended HAVO (52%) and VWO (48%). VWO or pre-university secondary education is the highest variant in the secondary educational system of the Netherlands. It has six grades and is generally attended from age 12 to 18. The HAVO is also a stream in the secondary educational system of the Netherlands. It has five grades and is generally attended from age 12 to 17. Most (80.9%) of the adolescents came from two-parent families, 19.1% had divorced parents. Of all participants, 82 (92.1%) had the Dutch nationality. Of the mothers, 77.5% was born in the Netherlands, as were 75.3% of the fathers. The educational level of participants' mothers was VMBO (preparatory middlelevel vocational education, 24.4%) for 22 students HAVO (25.3%) for 23 students and VWO (20.9%) for 19 students. The educational level of participants' fathers was VMBO (20.9%) for 19 students, HAVO (28.6%) for 26 students and VWO (14.3%) for 13 students. For three mothers (3.3%) and six fathers (6.6%), the highest parental educational level was primary school. For 22 mothers (24.2%) and 25 fathers (27.5%) the educational level was unknown.

#### **Procedure**

We approached several Dutch high schools in order to fill in the questionnaire, attached in the Appendix. Two high schools with first and fifth classes agreed to

participate. Active informed consent was obtained from the adolescents and passive informed consent was obtained from parents. Fewer than 3% of the parents refused permission. All of the students with parental permission agreed to participate. Anonymity of the adolescents was guaranteed. Questionnaire surveys were administered to 101 students during a class period. At least one of the researchers was always present during data collection. The students had approximately 45 minutes to complete the surveys.

**Measures.** In order to measure the constructs Disclosure, Monitoring by parents, and Privacy Boundaries, we designed our own questionnaire. Students gave their answer on 64 items on a five point scale (1 = absolutely not, 5 = absolutely). We will discuss the three parts of the questionnaire separately.

**Privacy boundaries.** A Dutch translation of the 'Intrusiveness' subscale of the Level of Expressed Emotion (LEE) was used to measure general perceptions of privacy invasion (Hale, Raaijmakers, Gerlsma, & Meeus, 2007). We adapted the measure, students gave their answer on eight items with a five point Likert scale (1 = absolutely not, 5 = absolutely). The reliability of this questionnaire is good (a = .85). Seven items were positively worded, for instance "My parents check frequently what I am doing". One item was negatively worded: "My parents don't stick their nose into my business".

For privacy boundaries of online behavior, friendship, finances, and romantic involvement, there were 22 positively worded questions and a minimum of three questions for each issue. The reliability of these questions about the issues is acceptable (a=.63, .72, .76, and .77, respectively). The questions all started with "I think my parents interfere unduly with me when they..." Examples of questions per issue are for online behavior "... look over my shoulder when I am busy on Hyves, Facebook or MSN"; for friends "... give their opinion concerning people who I hang out with"; for finances "... check my bank account"; and for romantic involvement "... ask me whether I have already kissed someone or had sexual intercourse". The students gave their answer on a five point Likert scale (1 = absolutely not, 5 = absolutely). To measure the construct Privacy Boundaries we used indicators that were inspired by the social domain approach (Smetana, Grusec, & Kuczynski, 1997, pp. 162-192).

**Disclosure.** The 13 questions about disclosure measured the rating of adolescents and parents how often they "usually tell or are willing to tell their mother (or father), without them asking" about personal, peer, and schoolwork issues. The reliability is good (a = .87). All questions start with "I would tell my parents..." An example of a question for online behavior is: "... with who I talk on MSN"; for friendship "... whether I use drugs/alcohol"; for finances "... how much I earned with my part time job"; for romantic involvement "... whether I have already kissed". The students gave their answer on a five point Likert scale (1 = absolutely not, 5 = absolutely).

**Monitoring.** In the next part of the questionnaire we asked the adolescents about how they feel about being monitored by their parents. There were 22 questions about online behavior, friendship, finances, and romantic involvement. The reliability is acceptable (a = .55, .62, .63, and .77, respectively), except for online behavior. An example of a question for online behavior is: "My parents talk with me about the safety of putting private stuff on the internet"; for friendship "My parents ask me what I talk about with friends"; for finances "My parents check my bank account"; for romantic involvement "My parents give me sex education". The students gave their answer on a five point Likert scale (1 = absolutely not, 5 = absolutely).

**Strategy of analysis.** For each of the four issues, online behavior, friendship, finances, and romantic involvement, we will investigate the hypothesis that there are group differences between early (12/13 years) and late adolescents (16/17 years) concerning privacy boundaries towards their parents. To answer these hypotheses we used a repeated measure ANOVA. First we checked the relevance of the variables nine to 20 (see Appendix), whether they influence the results of having more or less permeable privacy boundaries. In order to find these possible influences we used a chi-square test.

In order to look for significant differences between age groups of the background variables (see Appendix question 11 to 20), we used Chi-square tests. We did this to see whether these background questions could have an effect on later tests. If the Chi-square test shows a significant result, the specific question can be used as a covariate.

To test whether late adolescents report more monitoring than early adolescents on the four issues (Hypothesis 1), we conducted a repeated-measures Analysis of Variance (ANOVA). For the significant issues we will control for a covariate by performing an Analysis of Covariance (ANCOVA). If the covariate has a significant relationship to the outcome variable monitoring (p < .05) it means that the means of early and late adolescents are significantly different after partialling out the effect that the covariate has on the outcome.

We will compute a Pearson product-moment correlation coefficient to assess the relationship between the adolescents' reports of overall monitoring by parents and adolescents' privacy boundaries, which we hypothesized there is (Hypothesis 2). For Hypothesis 3, in which we state that there is a negative correlation between the privacy boundaries of the adolescent and the willingness to disclose, we will compute the same test.

To examine whether late adolescents overall report more rigid privacy boundaries than early adolescents (Hypothesis 4), we will also perform a repeated-measures ANOVA. For this hypothesis we will control for covariates by performing an ANCOVA, as well.

For the issues, Friendship, Finances, and Romantic Involvement we hypothesized that early adolescents have more permeable privacy boundaries than late adolescents

(Hypothesis 5). We hypothesized that early adolescents have less permeable privacy boundaries than late adolescents when it comes to their online behavior (Hypothesis 6). We will test these two hypothesis with the repeated measures ANOVA, as well. To test whether the permeability of privacy boundaries is different for boys and girls, we will add the between-group factor Gender in the repeated measures test.

Further, we reported trends when the significant level is .05 . To value the effect sizes of the correlation we will use Pearson's <math>r. The values are labelled accordingly: r up until .20 as small, r from .24 to .33 as medium, and r from .37 to .71 as large (Cohen, 1988). To value the effect sizes of the ANOVA's we will use  $\eta^2$ , or the proportion of variance accounted for each of the main effects, interactions, and error in an ANOVA study (Tabachnick & Fidell, 2001). The  $\eta^2$  is valued accordingly: up until .06 as small, from .06 to .11 as medium, and from .14 to .50 as large (Baarda & De Goede, 2007).

#### **Results**

#### **Descriptives**

The descriptive statistics can be seen in Table 1. Table 1 shows the group sizes, and the mean scores of the two age groups on the different issues. In Table 1 the means and standard deviations are included. We performed a Chi-square test to look at the significant differences between age groups of the background variables. Compared to early adolescents, late adolescents more often had a computer in their room than early adolescents did,  $\chi^2 = 10.58$ , df = 1, p < .001 (p = .00), had access to their own bank account ( $\chi^2 = 6.58$ , df = 1, p = .01), had a romantic relationship at the moment ( $\chi^2 = 8.36$ , df = 1, p = .01), had once kissed someone ( $\chi^2 = 15.06$ , df = 1, p < .001), had a part time job ( $\chi^2 = 21.01$ , df = 1, p < .001), smoked ( $\chi^2 = 5.29$ , df = 1, p = .02), and drank alcohol ( $\chi^2 = 37.50$ , df = 1, p < .001). The results are presented in Table 2.

#### Monitoring

We performed a repeated-measures ANOVA to test whether late adolescents report more monitoring than early adolescents on the four issues (Hypothesis 1). We found a significant main effect of Age Group, F(1, 87) = 30.69, p < .001,  $\eta^2 = .26$ . This was a large effect. Early adolescents (M = 2.68) reported more monitoring than late adolescents (M = 2.04). We also found a trend of Issues F(1, 85) = 2.47, p = .07,  $\eta^2 = .08$  and a significant interaction effect of Issues and Age Group F(1, 85) = 5.65, p = .001,  $\eta^2 = .17$ . These effect sizes were medium and large, respectively. The results mean that the age groups reported differences in the specific issues that were monitored by their parents.

Adolescents, in general, reported significantly more monitoring of Finances (M = 2.45, SE = .07) than of Romantic Involvement (M = 2.24, SE = .08), p = .01. We found a trend in reported monitoring of Romantic Involvement, and Online Behavior, p = .07, adolescents reported less monitoring of Romantic Involvement (M = 2.24, SE = .08) than

of Online Behavior (M = 2.40, SE = .08). We found no significant differences in reported monitoring of Online Behavior and Finances, p = .60; Friendship and Finances, p = .25; Romantic Involvement and Friendship, p = .20; Friendship and Online Behavior, p = .57.

We found a significant difference in Age Group for monitoring Online Behavior  $(t(87) = 5.96, p < .001, \eta^2 = .29)$ , Friendship  $(t(87) = 2.25, p = .03, \eta^2 = .06)$ , Finances  $(t(87) = 6.46, p < .001, \eta^2 = .32;)$ , and Romantic Involvement  $(t(87) = 2.19, p = .03, \eta^2 = .05)$ . For all issues, early adolescents reported more monitoring than late adolescents. For Online Behavior and Finances effect sizes were large, for Friendship and Romantic Involvement monitoring, the effect sizes were medium.

We then conducted several Analysis of Covariance (ANCOVA) in order to control for a covariate to be included in the significant issues. The covariate, having a computer with internet access in the bedroom, was significantly related to monitoring of Online Behavior, F(1, 86) = 14.07, p < .001,  $\eta^2 = .14$ . This effect was large. After controlling for the covariate, there was still a large significant difference between early and late adolescents on monitoring of Online Behavior, F(1,86) = 22.16, p < .001,  $\eta^2 = .21$ . The covariate having a relationship, was significantly related to monitoring of Romantic Involvement, F(1, 86) = 10.86, p = .001,  $\eta^2 = .11$ . This effect size was medium. The difference between early and late adolescents and monitoring of Romantic Involvement was still significant after controlling for this covariate, F(1, 86) = 10.30, p = .002,  $\eta^2 =$ .11. The effect size of this difference was medium. The covariate, ever having kissed, was also significantly related to monitoring of Romantic Involvement, F(1, 85) = 5.80, p= .02,  $\eta^2$  = .06. When we controlled for this covariate, the outcome of monitoring of Romantic Involvement remained significant, F(1, 85) = 8,53, p = .004,  $\eta^2 = .09$ . The effect size of this difference between early and late adolescents was medium. This means that although the covariates have a significant influence on these issues they do not change the direction of the correlations of online behavior and romantic involvement.

We computed a Pearson product-moment correlation coefficient to assess the relationship between the adolescents' reports of overall monitoring by parents and adolescents' privacy boundaries (Hypothesis 2). Results can be found in Table 3. We found no significant correlation between the two variables, but there was a trend in a negative direction, r = -.19, p = .07, n = 89. This effect was small. The more monitoring the respondents reported, the less rigid the respondents' privacy boundaries were. We computed the same test for Hypothesis 3, in which we expected a negative correlation between the privacy boundaries of the adolescent and the willingness to disclose. The results of the test showed a significant correlation in negative direction, r = -.50, p < .01; n = 89. This was a large effect size. The more disclosure to their parents adolescents reported, the less rigid privacy boundaries they had. The results of the repeated measures ANOVA can be found in Table 4.

#### **Privacy Boundaries**

To test whether late adolescents overall reported more rigid privacy boundaries than early adolescents (Hypothesis 4), we performed a repeated measures ANOVA. The results of this ANOVA can be found in Table 5. We found in Mauchly's test that the assumption of sphericity had been violated for the main effect of Age Group,  $\chi^2(5) = 18.09$ , p < .01. Therefore, we corrected degrees of freedom using Greenhouse-Geisser estimates of sphericity ( $\epsilon = .88$ ). We found a significant main effect of Age Group, F(1, 87) = 3.95, p = .05. Early adolescents (M = 2.92) set less rigid privacy boundaries than late adolescents (M = 3.22), see Figure 2. There was also a main effect of Issues, F(3, 261) = 50.64, p < .001. This means that the issues significantly differ from each other. There was no interaction effect, which means that the issues do not differ from each other, nor do they differ significantly for the two age groups.

The results showed that adolescents would set less rigid privacy boundaries for Online Behavior than the other three issues (M = 2.39, SE = .11), followed by Romantic Involvement privacy boundaries (M = 3.14, SE = .09). Privacy boundaries of Friendship were more strict than privacy boundaries of Finances (M = 3.52, SE = .10, and M = 3.22, SE = .09, respectively). The p-values were <.001, except for the comparison of privacy boundaries of Finances and Romantic Involvement (p = .28).

For the issues of Friendship, Finances, and Romantic Involvement, we hypothesized that early adolescents have more permeable privacy boundaries than late adolescents (Hypothesis 5). We hypothesized that early adolescents have less permeable privacy boundaries than late adolescents when it comes to their online behavior (Hypothesis 6). To test hypothesis 5 and 6, we used a repeated-measures ANOVA. We found a significant difference in Age Group for privacy boundaries of Finances, t(87) = -2.42, p = .02,  $\eta^2 = .06$ . This was a medium effect. Early adolescents (M = 3.01, SD = .80) had more permeable privacy boundaries for Finances than late adolescents (M = 3.44, SD = .87). Friendship and Romantic Involvement did not have significant values.

We then conducted an ANCOVA in order to control for a covariate to be included in the significant issue, Finances. The covariate, having a part time job, was significantly related to Finances, F(1, 86) = 13.48, p < .001,  $\eta^2 = .14$ . The effect size was large. When the test corrected for having a part time job, there was no age difference in Finances, F(1, 86) = .23, p = .64. This means that having a part-time job contributed to setting more rigid privacy boundaries for the issue Finances.

For privacy boundaries of Online Behavior, there was a trend with Age Group, t(87) = -1.79, p = .08,  $\eta^2 = .04$ . This effect size was small. Early adolescents (M = 2.19, SD = 1.02) had more permeable privacy boundaries for Online Behavior than late adolescents (M = 2.58, SD = 1.03). There was no significant difference of Age Group on

privacy boundaries of Friendship and Romantic Involvement, t(87) = -1.25, p = .21; t(87) = -.84, p = .41, respectively.

#### **Privacy Boundaries and Gender**

To test whether the Privacy Boundary hypothesis is different for boys and girls, we added the between-group factor Gender in the repeated measures ANOVA. The output in Mauchly's test showed that the assumption of sphericity had been violated for the main effect of Issues,  $\chi^2(5)=19.20$ , p=.002. Therefore, we corrected degrees of freedom using Greenhouse-Geisser estimates of sphericity ( $\varepsilon=.86$ ). There was a three-way interaction for Issues, Gender and Age, F(3, 22)=3.61, p=.02,  $\eta^2=.04$ , this effect size was small. This means that the privacy boundaries for Issues differed by gender across the two age groups. Issues did not interact with Gender, F(3, 216)=.39, p=.73. When we looked at the specific issues we found a significant Gender difference in Privacy Boundaries for Friendship, t(1)=2.68, p=.01,  $\eta^2=.08$ . This was a medium effect. Girls (M=3.62, SE=.15) had more rigid privacy boundaries than boys (M=3.29, SE=.14). We found a three-way interaction effect for Friendship, t(1)=-2.17, p=.03,  $\eta^2=.05$ , this was a medium size of effect. This means that the differences in privacy boundaries for Friendship differed by gender across the two age groups.

Because we found a three-way interaction for Issues, Gender and Age Group we compared the age group differences for boys and girls separately. We did not find a significant main effect of Age Group for either boys or girls, F(1, 37) = 2.71, p = .11, F(1, 47) = .17, p = .68 respectively. For boys, we found a significant large effect of Issues, F(1, 35) = 13.13, p > .001,  $\eta^2 = .53$ , and no interaction effect of Issues and Age Group, F(1, 35) = 1.59, p = .21. This means that boys have different privacy boundaries for the four separate issues. Boys would set significant less rigid privacy boundaries for Online Behavior than the other three issues (M = 2.19, SE = .15, p < .001). Privacy boundaries for Finances (M = 3.01, SE = .12) were more strict than privacy boundaries for Romantic Involvement, this was not significant (p = 1.00). Privacy boundaries for Finances were also more strict than Friendship privacy boundaries, which was a significant difference (p = .01) (p = 3.07, p = .12) and p = 3.40, p = .13 respectively). Romantic Involvement privacy boundaries were more strict than Friendship privacy boundaries (p = .03).

For girls we also found a significant large effect of Issues, F(1, 45) = 17.64, p < .001,  $\eta^2 = .54$ , and an interaction effect of Age Group and Issues with a large effect size, F(1, 45) = 3.49, p = .02,  $\eta^2 = .19$ . Girls would set significant more permeable privacy boundaries for Online Behavior than the other three issues (M = 2.56, SE = .16, p < .001). Privacy boundaries for Romantic Involvement (M = 3.21, SE = .13) were less rigid than privacy boundaries for Finances (M = 3.44, SE = 0.30) which was not significant (p = .18) and Friendship privacy boundaries (M = 3.64, SE = .15), which was a significant

difference (p=.02). Friendship privacy boundaries were significantly more rigid than Finances privacy boundaries (p=.84). For boys, Romantic Involvement privacy boundaries were more rigid than Finance privacy boundaries, this was the other way around for girls. The interaction plots can be found in Figure 1 (boys) and Figure 2 (girls). The privacy boundaries of girls differ on the four issues and interact with age.

#### **Discussion**

This questionnaire study investigated whether late adolescents have more or less permeable privacy boundaries than early adolescents towards their parents. Finding an answer to this question might contribute to the understanding of parents of the developing privacy boundaries of their growing adolescent. We assumed that the privacy boundaries would differ per issue a child is dealing with. This is based on the social domain theory, in which it is stated that there are four social domains: the prudential, moral, conventional and personal domain (Smetana, Grusec, & Kuczynski, pp. 162-192; Smetana et al., 2006). Adolescents less likely disclose to parents about personal issues, because these are matters that are directly related to themselves (Smetana et al., 2006). We examined four specific issues: online behavior, friendship, finances, and romantic involvement. We found that, for these four issues, late adolescents had less permeable privacy boundaries towards their parents than early adolescents. For finances, this difference was significant. For online behavior we found a trend. This means that there was a difference that was too small to generalize to the larger community. For girls, we found a significant interaction effect of age on the issue Friendship.

Parents mostly adjust the use of monitoring strategies to the age of their child (Stattin & Kerr, 2000). Adolescents are under less direct supervision of their parents as they grow older (Kerr, Stattin, & Burk, 2010), they also become more autonomous. We hypothesized that early adolescents would report more overall monitoring than late adolescents (Hypothesis 1). In this study, this hypothesis was supported. Not only did the amount of monitoring differ between age groups, but we also found differences for the amount of monitoring per issue and an interaction effect of issues and age group. For all four issues early adolescents reported more monitoring than late adolescents. For online behavior and finances the effect sizes were large, for friendship and romantic involvement they were medium. Overall, according to adolescents, parents monitored finances most of the four issues. For romantic involvement the adolescents reported the least monitoring. A possible explanation for our finding that finances were monitored most can be that finances are believed to become more a personal issue when the adolescent grows older (Smetana & Daddis, 2002). Finances probably move from a multifaceted issue to a more personal issue. Because we interviewed a single reporter in our investigation, the reported monitoring is only from the adolescents' viewpoint. We can't say that much about the actual monitoring parents exert. This is a possible

explanation for why our results show finances as monitored most, instead of, for instance, romantic involvement, which is mostly seen as a more private issue than finances (Smetana et al., 2009). For online behavior the covariate having a computer in the bedroom was added as a covariate, we found that this covariate did not influence the direction of the difference between early and late adolescents. This means that early adolescent still reported more monitoring after controlling for this covariate. For romantic involvement we added two covariates, having a relationship and having ever kissed. These two covariates did not influence the direction of the difference between early and late adolescents either. This means that for romantic involvement as well early adolescents remained reporting more monitoring than late adolescents after controlling for the covariates.

We also predicted that there was a positive association between privacy boundaries and monitoring (Hypothesis 2). We found that the more monitoring the respondents reported, the less rigid the privacy boundaries of the adolescents were. This effect, however, was not significant but a trend with a small size of effect. We expected that this association would be in the opposite direction, because if parents monitor more, the reaction of adolescents would be to set more rigid privacy boundaries (Kakihara et al., 2010). We only found a small trend and thus cannot make firm conclusions about this hypothesis. Why our results show the opposite direction is something that should be addressed in future research. For disclosure (Hypothesis 3), we predicted that there would be a negative relationship with privacy boundaries. As predicted, the adolescents who disclosed more to their parents had less rigid privacy boundaries. This makes sense, since adolescents choose to disclose, themselves. When adolescents set rigid privacy boundaries, it is not likely that they will disclose much. However if the privacy boundaries are more permeable, adolescents will be willing to disclose (Arnett, 2010; Keijsers et al., 2009).

When we focused on the privacy boundaries of adolescents and their age, we expected that late adolescents would, overall, have more rigid privacy boundaries (Hypothesis 4). This hypothesis was supported with the results of our study. This makes sense, regarding the growing need of autonomy when the adolescent ages (Masche, 2010). Moreover, when the adolescent gets older, he thinks it is less legitimate for parents to control him (Darling et al., 2008) and as a result set more rigid privacy boundaries. In the adolescents' view, prudential, moral and conventional topics shift to the personal domain as they get older (Randolf, 2007; Smetana et al., 2009). Also, the aging adolescent increasingly asserts autonomy over multifaceted issues (Smetana et al., 2006). For all respondents, privacy boundaries for Finances were most rigid, followed by Friendship, Romantic Involvement, and last Online Behavior.

For Finances, Friendship and Romantic Involvement, we hypothesized that early adolescents have more permeable boundaries of privacy than late adolescents (Hypothesis 5). Only for finances, we found a significant difference between early and late adolescents for their privacy boundaries. Late adolescents had more rigid privacy boundaries than early adolescents on this subject. A possible explanation for our finding is that we found a significant covariate, having a part time job. When corrected for having a part time job, there was no longer an age difference. The adolescents that had a part time job had significantly more rigid privacy boundaries. Thus, having a part time job contributes to the difference in privacy boundaries for finances between early and late adolescents. This might be influenced by youths' feeling of having earned the money themselves, which gives them the feeling of growing independence and therefore think it's their own to decide what to do with it (Shim, Barber, Card, Xiao, & Serido, 2010).

For the issue Online Behavior we found a trend, early adolescents had more permeable privacy boundaries than late adolescents. This contradicts our hypothesis because we expected that early adolescents would have more rigid privacy boundaries than late adolescents (Hypothesis 6). Probably, the monitoring associated with early adolescents using the computer for school related issues, is seen as less invasive than previous research of claimed it to be (Aslanidou & Menexes, 2008). The more rigid privacy boundaries of late adolescents for online behavior could be explained by their use of the computer for more personal issues and the fact that older adolescents are more likely to have their own computer in their bedroom (Aslanidou & Menexes, 2008; Rosen et al., 2008).

When we looked at boys and girls separately, the main effect of age group was not found. However, we did find interaction for Age Groups, Issues, and Gender. For girls, the privacy boundaries for Friendship were more permeable for late adolescents, although not significant. This was a surprising result, that didn't occur for the other issues, nor for boys and the issues. We also found that boys overall had more permeable privacy boundaries for friendship than girls.

For girls there was a significant interactive effect for the issue Friends. This might be explained by the fact that girls friendships change over age. For older girls there was less commitment in the friendships and it takes more effort to maintain the friendship (Oswald, 2003). This differs from boys' friendships, because the intimacy in friendships of boys is traditionally lower than for girls (Jones, 1989). This means that there is no necessity for late female adolescents or adolescent boys to set (high) privacy boundaries towards their parents.

#### Strengths and limitations

A strength of this study is that we developed a new questionnaire to assess the degree of privacy boundaries for two adolescent age groups. Furthermore we focused on four specific issues that, to our knowledge, were not previously investigated.

There were also some limitations in our study. First of all, our research is a correlational study. Therefore we can't make conclusions about what causes the behavior of the adolescents and what the consequences of this behavior is. Another limitation is the fact that this study is a single reporter study. We did not use other informants, for instance the parents, which makes the results single-sided, and therefore doesn't give a complete image. Furthermore, we did not research the privacy boundaries towards fathers and mothers separately, nor the relationship with the parents. This all can influence the amount of disclosure towards parents (Bar-Haim, Aviezer, Berson, & Sagi, 2002). Therefore, our conclusions about boundaries are too common. Although we had previously run a pilot version, some adolescents had problems understanding certain questions. This could have influenced our data.

#### **Future research**

As our conclusions are based on single reporters, future research should include more reporters, for instance parents. Moreover, running more pilots to acquire a more reliable questionnaire is recommended. In future research, the focus could be on the unclear result of the differences between boys and girls for the issue Friendship. We did not expect this difference to exist, so in a future study, this deserves more theoretical research. Another interesting investigation could be to look for possible ways for parents to deal with the decreasing disclosure of their aging adolescent. This future study could be about different ways of communicating with the adolescent. We found that less monitoring by parents was linked to more strict privacy boundaries by adolescents. Following on this, another interesting study could be about the influence of parental monitoring on the privacy boundaries of adolescents.

#### Conclusion

Concluding, this study shows that early adolescents have more permeable privacy boundaries than late adolescents on our four researched issues. According to previous literature, this could be explained by the growing need for independence as adolescents age. Specifically, the privacy boundaries of finances and online behavior boundaries increased with age. For girls we found that the privacy boundaries differed on the four issues and interacted with age. For online behavior, finances, and romantic involvement, girls of 12 and 13 years old have more permeable privacy boundaries than girls of 16 and 17 years old. This is the opposite for friendship. For boys this effect was not present.

According to our findings, having a job makes the adolescents respond differently. With this qualifier the adolescents showed to have more rigid privacy boundaries. We can see this qualifier as a marker of autonomy and maturity. Parents can expect that their

child has less permeable privacy boundaries when he has an own job and adapt the amount of monitoring to it.

We recommend parents and caretakers to be open to the changing privacy boundaries of their developing adolescent. Adolescents become more independent and autonomous as they get older and parents can support them in this process on their way to becoming self-conscious adults. Moreover, in their early adolescence girls are likely to expect more privacy for their friendships than for their finances, while this becomes the other way around when they are in late adolescence. For both sexes, privacy for finances is more important than online behavior, friendship and romantic involvement.

#### References

- Arnett, J. J. (2010). Adolescence and emerging adulthood. New Baskerville: Pearson.
- Aslanidou, S., & Menexes, G. (2008). Youth and the internet: Uses and practices in the home. *Computers & Education*, 51, 1375-1391. doi:10.1016/j.compedu.2007.12.003
- Baarda, D. B., & De Goede, M. P. M. (2007). *Basisboek statistiek met spss. Handleiding voor het verwerken en analyseren van en rapporteren over (onderzoeks)-gegevens.* Groningen/Houten, The Netherlands: Noordhoff Uitgevers bv.
- Bar-Haim, Y., Aviezer, O., Berson, Y., & Sagi, A. (2002). Attachment in infancy and personal space regulation in early adolescence. *Attachment and Human Development*, *4*(1), 68-83. doi: 10.1080/14616730210123111
- Barnes, G. M., Hoffman, J. H., Welte, J. W., Farrell, M. P., & Dintcheff, B. A. (2006). Effects of parental monitoring and peer deviance on substance abuse and delinquency. *Journal of Marriage and Family*, 68, 1084-1104.
- Carver, K., Joyner, K., & Udry, J. R. (2003). National estimates of adolescent romantic relationships. In P. Florsheim (Eds.), *Adolescent romantic relations and sexual behavior: Theory, research, and practical implications* (pp. 23–56). Mahwah, NJ: Erlbaum.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences (2 ed.).* Hillsdale: Erlbaum.
- Daddis, C., & Randolph, D. (2010). Dating and disclosure: Adolescent management of information regarding romantic involvement. *Journal of Adolescence*, 309-320. doi:10.1016/j.adolescence.2009.05.002
- Darling, N., Cumsille, P., & Martínez, M. L. (2008). Individual differences in adolescents' beliefs about the legitimacy of parental authority and their own obligation to obey: A longitudinal investigation. *Child Development*, 79(4), 1103–1118. doi:10.1111/j.1467-8624.2008.01178.x
- De Kemp, R. A. T., Scholte, R. H. J., Overbeek, G., & Engels, R. C. M. E. (2006). Early adolescent delinquency: The role of parents and best friends. *Criminal Justice and Behavior*, *33*, 488-510. doi:10.1177/0093854806286208
- Fleming, M. J., Greentree, S., Cocotti-Muller, D., Elias, K. A., & Morrison, S. (2006).

  Safety in cyberspace: Adolescents' safety and exposure online. *Youth & Society,*38, 135-154. doi:10.1177/0044118X06287858
- Foley, C., Holzman, C., & Wearing, S. (2007). Moving beyond conspicuous leisure consumption: Adolescent women, mobile phones and public space. *Leisure Studies*, 26(2), 179-192. doi:10.1080/02614360500418555
- Furman, W. (2002). The emerging field of adolescent romantic relationships. *Current Directions in Psychological Science*, *11*, 177–180. doi:10.1111/1467-8721.00195

- Furnham, A. (2001). Parental attitudes towards pocket money/allowances for children. *Journal of Economic Psychology*, 22, 397-422. doi:10.1016/S0167-4870(01)00040-X
- Hale, W. W., Raaijmakers, Q. A. W., Gerlsma, C., & Meeus, W. (2010) Does the level of expressed emotion (LEE) questionnaire have the same factor structure for adolescents as it has for adults? *Social Psychiatry and Psychiatric Epidemiology*, 42(3), 215-220. doi:10.1007/s00127-006-0145-0
- Hawk, S. T., Hale III, W. W., Raaijmakers, Q. A. W., & Meeus, W. (2008). Adolescents' perceptions of privacy invasion in reaction to parental solicitation and control. *The Journal of Early Adolescence*, 28, 583-608. doi:10.1177/0272431608317611
- Kakihara, F., & Tilton-Weaver, L. (2009). Adolescents' interpretations of parental control: Differentiated by domain and types of control. *Child Development*, *80*(6), 1722–1738. doi:10.1111/j.1467-8624.2009.01364.x
- Kakihara, F., Tilton-Weaver, L., Kerr, M., & Stattin, H. (2010). The relationship of parental control to youth adjustment: Do youths' feelings about their parents play a role? *Journal of Youth and Adolescence, 39,* 1442-1456. doi:10.1007/s10964-009-947
- Keijsers, L., Frijns, T., Branje, S. J. T., & Meeus, W. (2009). Developmental links of adolescent disclosure, parental solicitation, and control with delinquency: Moderation by parental support. *Developmental Psychology*, 45, 1314-1327. doi: 10.1037/a0016693
- Kerr, M., Stattin, H., & Burk, W. J. (2010). A reinterpretation of parental monitoring in longitudinal perspective. *Journal of Research on Adolescence*, 20, 39-64. doi:10.1111/j.1532-7795.2009.00623.x
- Kerr, M., Stattin, H., & Trost, K. (1999). To know you is to trust you: Parents' trust is rooted in child disclosure of information. *Journal of Adolescence*, 22(6), 737-752. doi:10.1006/jado.1999.0266
- Laird, R. D., Criss, M. M., Pettit, G. S., Dodge, K. A., & Bates, J. E. (2008). Parents monitoring knowledge attenuates the link between antisocial friends and adolescent delinquent behavior. *Journal of Abnormal Child Psychology*, 36, 299-310. doi:10.1007/s10802-007-9178-4
- Masche, J. G. (2010). Explanation of normative declines in parents' knowledge about their adolescent children. *Journal of adolescence*, *33*(2), 271-284. doi:10.1016/j.adolescence.2009.08.002
- Mazur, M. A., Hubbard, A. S. (2004). "Is there something I should know?": Topic avoidant responses in parent-adolescent communication, *Communication Reports*, 17, 27-37. doi:10.1080/08934210409389371
- Oswald, D. L., & Clark, E. M. (2003). Best friends forever? High school best friendships

- and the transition to college. Personal Relationships, 10(2), 187 196. doi:10.1111/1475-6811.00045
- Petronio, S. (1994). *Privacy binds in family interactions: The case of parental privacy invasion.* In Cupach, W.R.E., & Spitzberg, B. H. E. (Eds.), The dark side of interpersonal communication (pp. 241-257). Hillsdale, NJ, England: Lawrence Erlbaum.
- Petronio, S. (2002). *Boundaries of privacy: Dialectics of disclosure.* SUNY series in communication studies. Albany, New York: SUNY Press.
- Petronio, S. (2007). Translational research endeavours and the practices of communication privacy management. *Journal of Applied Communication Research*, 35(3), 218-222. doi:10.1080/00909880701422443
- Petronio, S. (2010). Communication privacy management theory: What do we know about family privacy regulation? *Journal of Family Theory & Review, 2*, 175-196. doi:10.1111/j.1756-2589.2010.00052.x
- Pujazon-Zazik, M., & Jane Park, M. (2010). To tweet, or not to tweet: Gender differences and potential positive and negative health outcomes of adolescents' social internet use. *American Journal of Men's Health*, 4, 77-85. doi:10.1177/1557988309360819
- Randolph, D. (2007). Managing the boundaries of personal authority regarding late adolescent romantic relationships. Ohio State University: USA.
- Rosen, L. D., Cheever, N. A., & Mark Carrier, L. (2008). The association of parenting style and child age with parental limit setting and adolescent MySpace behavior. *Journal of Applied Developmental Psychology*, 29, 459-471. doi:10.1016/j.appdev.2008.07.005
- Schalet, A. T. (2000). Raging hormones, regulated love: Adolescent sexuality and the constitution of the modern individual in the United States and the Netherlands. *Body & Society*, 6, 75-105. doi:10.1177/1357034X0000600100
- Shim, S., Barber, B. L., Card, N. A., Xiao, J. J., & Serido, J. (2010). Financial socialization of first-year college students: The roles of parents, work, and education. *Journal of Youth and Adolescence*, *39*(12), 1457–1470. doi:10.1007/s10964-009-9432-x
- Smetana, J. G., Grusec, J. E., & Kuczynski, L. (1997). Parenting and the development of social knowledge reconceptualized: A social domain analysis. Parenting and children's internalization of values: A handbook of contemporary theory. (pp. 162-192). Hoboken, NJ, US: John Wiley & Sons Inc; US.
- Smetana, J. G., & Asquith, P. (1994). Adolescents' and parents' conceptions of parental authority and personal autonomy. *Child Development*, *65*(4), 1147-1162. doi:10.1111/j.1467-8624.1994.tb00809.x

- Smetana, J. G., & Daddis, C. (2002). Domain-specific antecedents of parental psychological control and monitoring: The role of parenting beliefs and practices. *Child Development*, *73*(2), 563-580. doi:10.1111/1467-8624.00424
- Smetana, J. G., Metzger, A., Gettman, D. C., & Campione-Barr, N. (2006). Disclosure and secrecy in adolescent-parent relationships. *Child Development, 77*, 201-217. doi:10.1111/j.1467-8624.2006.00865.x
- Smetana, J. G., Villalobos, M., Tasopoulos-Chan, M., Gettman, D. C., & Campione-Barr, N. (2009). Early and middle adolescents' disclosure to parents about activities in different domains. *Journal of Adolescence*, *32*, 693-713. doi:10.1016/j.adolescence.2008.06.010
- Stattin, H., & Kerr, M. (2000). Parental monitoring: A reinterpretation. *Child Development*, *71*(4), 1072–1085. doi:10.1111/1467-8624.00210
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using Multivariate Statistics* (5th ed.). Upper Saddle River, NJ: Pearson Allyn & Bacon.
- Tilton-Weaver, L., Kerr, M., Pakalniskeine, V., Tokic, A., Salihovic, S., & Stattin, H. (2010). Open up or close down: How do parental reactions affect youth information management? *Journal of Adolescence, 33,* 333-346. doi:10.1016.2009.07.011
- Van Seventer, D. (2010). Onderhandel maar met je kind over het zakgeld. Nibuddirecteur Gerjoke Wilmink over financiële opvoeding. Retrieved on 8 March 2011 from http://www.nibud.nl/fileadmin/user\_upload/Documenten/PDF/2010/ BankWereld\_2010.pdf

Table 1

Descriptive Statistics for Early and Late Adolescents

		Early A	dolescents				Late	Adolescents		
	N	Minimum	Maximum	М	SD	N	Minimum	Maximum	М	SD
Monitoring										
Online Behavior	47	1.33	4.67	2.89	.83	42	1.00	4.00	1.91	.71
Friendship	47	1.25	5.00	2.53	.95	42	1.25	3.50	2.15	.61
Finances	47	1.67	4.17	2.87	.64	42	1.00	3.80	2.03	.64
Romantic Involvement	47	1.12	3.75	2.41	.76	42	1.00	4.62	2.06	.77
Total	47	1.50	3.91	2.67	.58	42	1.27	3.48	2.11	.55
Privacy Boundaries										
Online Behavior	47	1.00	5.00	2.19	1.02	42	1.00	5.00	2.58	1.03
Friendship	47	1.75	5.00	3.40	.89	42	1.00	5.00	3.64	.94
Finances	47	1.67	5.00	3.01	.80	42	1.00	5.00	3.44	.87
Romantic Involvement	47	1.25	5.00	3.07	.79	42	1.00	5.00	3.21	.87
Total	47	1.90	4.86	3.02	.66	42	1.66	4.10	3.10	.52
Other Measures										
Intrusiveness	47	1.29	5.00	3.04	.87	42	1.29	4.29	2.59	.72
Disclosure	47	1.15	4.54	3.25	.76	42	1.23	4.77	3.09	.86

Table 2 *Age differences in Background Variables* 

Question	Chi <sup>2</sup>	df	p
I have my own computer with internet in my room	10.58	1	=.001
I have access to my own bank account	6.58	1	.01
I have a romantic relationship at the moment	8.36	1	=.01
I have once kissed someone	15.06	1	<.001
I have a part time job	21.01	1	<.001
I smoke	5.29	1	.02
I drink alcohol	37.50	1	<.001

Table 3

Correlations between Privacy Boundaries and Monitoring on the Issues

	1	2	3	4	5	6	7	8
Privacy Boundaries								
1.Online Behavior	-							
2.Friendship	.41**	-						
3.Finances	.46**	.54**	-					
4.Romantic Involvement	.51**	.58**	.64**	-				
Monitoring								
5.Online Behavior	17	26 <sup>*</sup>	39 <sup>**</sup>	29**	-			
6.Friendship	00	12	11	23 <sup>*</sup>	.37**	-		
7.Finances	16	12	40**	22*	.55**	.42**	-	
8.Romantic Involvement	11	14	17	32**	.45**	.51**	.48**	-

*Note* \* *p* < .05, \*\* *p* < .01

Table 4

Effect of Age Group and Issues on Monitoring in a repeated-measures design

Mangura	Λ/	Λ4	CE	df	_	n
Measure	N	М	SE	df	F	р
Between subjects						
Age Group						
Early adolescents	47	2.68		1		
Late adolescents	42	2.04		1	30.69	<.001
Error				87		
Gender						
Boys	39	3,15	.12	1		
Girls	49	2,95	.11	1	1,54	.22
Error		,		85	•	
Within subjects						
Issues	89				2.47	.07
Online behavior	89	2.40	.08	3		
Friendship	89	2.35	.09	3		
Finances	89	3.45	.07	3		
Romantic involvement	89	2.24	.08	3		
Interaction effects						
Age Group x Issues				1	5,65	.001
Error				85	3,03	.501
LITOI						

Table 5

Effect of Age Group, Issues and Gender on Privacy Boundaries in a repeated-measures design

Measure	Ν	М	SE	df	F	р
Between subjects						
Age Group						
Early adolescents	47	2.92		1		
Late adolescents	42	3.22		1	3.95	.05
Error				85		
Gender						
Boys	39	3,15		1		
Girls	49	2,95	.11	1	1,54	.22
Error				85		
Within subjects						
Issues	89				47.41	.00
Online behavior	89	2.39	.16	3		
Friendship	89	3.52	.14	3		
Finances .	89	3.22	.13	3		
Romantic involvement	89	3.14	.13	3		
Interaction effects						
Age Group x Issues				3	.95	.41
Error				216		
Gender x Issues				3	.39	.73
Error				216		
Age Group x Gender x Issues				3	3.61	.02
Error				22		

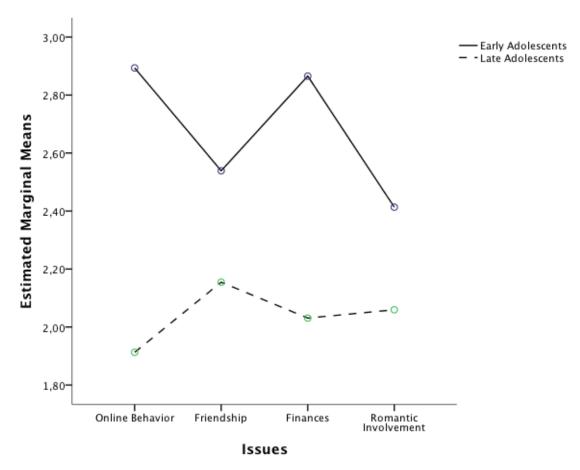


Figure 1. Interaction of Age Group and Issues for boys

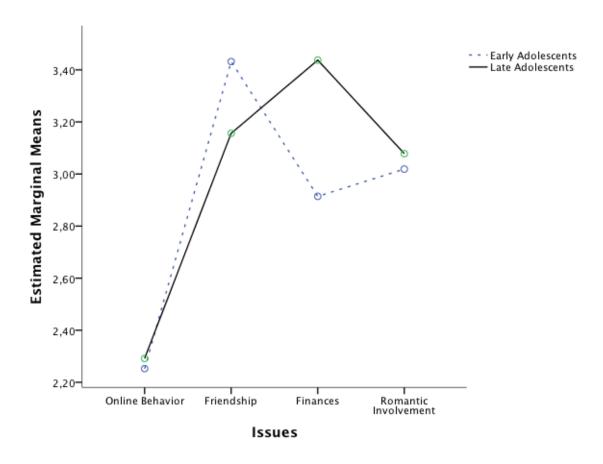


Figure 2. Interaction of Age Group and Issues for girls

# Appendix

1. Leeftijd:							
2. Geslacht: Jongen / Meisje							
3. Ik doe: b	brugklas / vmbo / havo / vwo						
4. Mijn moeder is geboren in							
5. Mijn vader is geboren in							
6. Ik ben geboren in							
7. De hoogste opleiding van mijn moeder is							
8. De hoogste opleiding van mijn vader is							
9. Mijn ouders zijn nog samen	ja	/	nee				
10. Ik woon bij mijn ouder(s)/verzorgers	ja	/	nee				
11. Ik heb Facebook of Hyves	ja	/	nee				
12. Ik heb een eigen computer met internet op mijn ka	amer ja	/	nee				
13. Ik heb toegang tot mijn eigen bankrekening	ja	/	nee				
14. Ik heb wel eens verkering gehad	ja	/	nee				
15. Ik heb nu verkering	ja	/	nee				
16. Ik heb wel eens gezoend	ja	/	nee				
17. Ik krijg zakgeld	ja	/	nee				
18. Ik heb een bijbaantje	ja	/	nee				
19. Ik rook	ja	/	nee				
20. Ik drink alcohol	ja	/	nee				

# **Privacy Invasion**Miin ouders...

Mijn ouders	Helem oneen				lemaal e eens
Bemoeien zich overal mee.	1	2	3	4	5
Controleren vaak wat ik aan het doen ben.	1	2	3	4	5
Steken altijd hun neus in mijn zaken.	1	2	3	4	5
Moeten alles van me weten.	1	2	3	4	5
Willen beslist weten waar ik heen ga.	1	2	3	4	5

Mengen zich ongevraagd in mijn privé-zaken.	1	2	3	4	5
Steken hun neus <u>niet</u> in mijn leven.	1	2	3	4	5
Hebben respect voor aspecten van mijn leven die ik privé vind.	1	2	3	4	5

### **Disclosure**

Ik zou mijn ouder(s)/verzorger(s) vertellen...

30. Over mijn vrienden 31. Of ik alcohol/drugs gebruik	1	2		Heler				
31. Of ik alcohol/drugs gebruik		_	3	4	5			
	1	2	3	4	5			
32. Over wat voor foto's/filmpjes ik plaats op Facebook of Hyves	1	2	3	4	5			
33. Over wat ik doe met degene op wie ik verliefd ben	1	2	3	4	5			
34. Wie degene is waarop ik verliefd ben	1	2	3	4	5			
35. Met wie ik praat op MSN	1	2	3	4	5			
36. Waar ik mijn geld aan uitgeef	1	2	3	4	5			
37. Wat ik bespreek op Facebook/Hyves/MSN	1	2	3	4	5			
38. Over wat ik doe met mijn vrienden	1	2	3	4	5			
39. Hoeveel ik verdiend heb met mijn bijbaantje	1	2	3	4	5			
40. Hoeveel iets gekost heeft	1	2	3	4	5			
41. Of ik al gezoend heb	1	2	3	4	5			
42. Hoe ver ik nu ben op seksueel gebied	1	2	3	4	5			

## **Monitoring**

De volgende vragen gaan over de dingen die je ouder(s)/verzorger(s) kunnen doen. Mijn ouder(s)/verzorger(s)...

	Hele niet		ıl		Hele	emaal wel
43. Houden mijn pinpas bij zich		1	2	3	4	5

44. Hebben regels over waar ik mijn zelf verdiende geld aan mag uitgeven	1	2	3	4	5
45. Geven me advies over sparen	1	2	3	4	5
46. Bekijken mijn bank/spaarrekening	1	2	3	4	5
47. Praten met mij over de veiligheid van het plaatsen van privégegevens op internet	1	2	3	4	5
48. Stellen regels op over hoe lang ik op internet mag	1	2	3	4	5
49. Kijken met me mee als ik op Facebook, Hyves of MSN zit	1	2	3	4	5
50. Vragen aan mij waar ik met mijn vrienden over praat	1	2	3	4	5
51. Stellen me vragen over alcohol- en drugsgebruik	1	2	3	4	5
52. Vragen me of ik aan vechtpartijen meedoe	1	2	3	4	5
53. Geven hun mening over de mensen met wie ik omga	1	2	3	4	5
54. Vragen me op wie ik verliefd ben	1	2	3	4	5
55. Vragen wat ik op een date ga doen (als ik een date zou hebben)	1	2	3	4	5
56. Luisteren mee als ik aan de telefoon ben met degene die ik leuk vind	1	2	3	4	5
57. Geven me seksuele voorlichting	1	2	3	4	5
58. Verplichten me om te vertellen wie degene is waarmee ik verkering heb/zou hebben	1	2	3	4	5
59. Zouden degene waarop ik verliefd ben, over zijn hobby's ondervragen als hij/zij bij mij thuis zou komen	1	2	3	4	5
60. Vragen of ik al gezoend of seks heb gehad	1	2	3	4	5
61. Vragen van welk geld ik iets gekocht heb	1	2	3	4	5
62. Vertellen ze wat voor type vriendje/vriendin ze in gedachte hebben voor mij	1	2	3	4	5
63. Stellen vragen over hoeveel ik aan vrienden uitleen	1	2	3	4	5
64. Vragen me wat ik met mijn vrienden doe	1	2	3	4	5

De volgende vragen gaan over onderwerpen waar jouw ouder(s)/verzorger(s) zich mee kunnen bemoeien en of jij dit terecht vindt of niet.

Ik vind dat mijn ouder(s)/verzorger(s) zich onterecht met me bemoeien, als ze...

	Helemaal niet			He	lemaal wel
65. Mijn pinpas bij zich houden	1	2	3	4	5
66. Regels opstellen over waar ik mijn zelf verdiende geld mag uitgeven	aan 1	2	3	4	5
67. Mijn bank/spaarrekening bekijken	1	2	3	4	5
68. Me vragen of ik wel eens aan vechtpartijen meedoe	1	2	3	4	5
69. Vragen stellen over hoeveel ik aan vrienden uitleen	1	2	3	4	5
70. Me advies geven over sparen	1	2	3	4	5
71. Praten met mij over de veiligheid van het plaatsen van privégegevens op internet	1	2	3	4	5
72. Regels opstellen over hoe lang ik op internet mag	1	2	3	4	5
73. Met me meekijken als ik op Facebook, Hyves of MSN	zit 1	2	3	4	5
74. Mij vragen waar ik met mijn vrienden over praat	1	2	3	4	5
75. Vragen wat ik doe met mijn vrienden	1	2	3	4	5
76. Me vragen stellen over alcohol- en drugsgebruik	1	2	3	4	5
77. Hun mening geven over de mensen met wie ik omga	1	2	3	4	5
78. Me vragen op wie ik verliefd ben	1	2	3	4	5
79. Vragen wat ik op een date ga doen (als ik een date zou hebben)	1	2	3	4	5
80. Mee luisteren als ik aan de telefoon ben met degene die leuk vind	e ik 1	2	3	4	5
81. Me vertellen wat voor type vriendje/vriendin ze voor n in gedachte hebben	nij 1	2	3	4	5
82. Me seksuele voorlichting geven	1	2	3	4	5
83. Me verplichten te vertellen wie degene is waarmee ik verkering heb/zou hebben	1	2	3	4	5
84. Willen weten van welk geld ik iets gekocht heb	1	2	3	4	5
85. Me vragen of ik al gezoend heb of seks heb gehad	1	2	3	4	5
86. Degene waarop ik verliefd ben ondervragen over zijn hobby's als hij/zij bij mij thuis zou komen	1	2	3	4	5