



# **The Role of Parental Attachment and High Screen Use**

Edith Gunnarsdóttir

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Author: Edith Gunnarsdóttir  
ID number: 1208744709

Department of Psychology  
School of Business

### **Foreword**

Submitted in partial fulfillment of the requirements of the BSc Psychology degree, Reykjavik University, this thesis is presented in the style of an article for submission to a peer-reviewed journal.

### Abstract

Electronic screen use has increased among adolescents in recent years and high electronic screen use has been linked to negative psychological symptoms. The aim of the current study was to investigate the relationship between electronic screen viewing activities among 10 - 13 year old children and parental attachment. The current study analyzed cross sectional, population data from 2013 Youth in Iceland, with 11,267 participants (response rate of 90%). The questionnaire was administered in all middle schools in Iceland. Multiple linear regression model were used to analyze the data. The current results indicate that high electronic screen uses is linked to parental attachment, and high screen use is increasing, especially for boys. The findings in this study provide numerous risk factors that are associated with high electronic screen use. This study is the first of its kind to demonstrate relationship between electronic screen use and parental attachment.

*Key words: screen use, adolescents, support, monitoring, time with parents*

### Útdráttur

Skjánotkun hefur aukist hjá unglíngum á undanföörnum árum og hefur mikil skjánotkun verið tengd við neikvæð sálræn einkenni. Tilgangur rannsóknarinnar var að rannsaka samband milli skjánotkunar hjá 10 – 13 ára börnum og foreldratengsla. Í rannsókninni voru notuð fyrirliggjandi gögn, Ungt fólk 2013 með 11,267 þátttakendum (svarhlutfall 90%). Könnunin var lögð fyrir í öllum grunnskólum á Íslandi. Línuleg aðhvarfsgreining var notuð til að túlka niðurstöðurnar. Niðurstöður sýndu fram á að tengsl séu á milli mikillar skjánotkunar og foreldratengsla og að skjánotkun er að aukast og sérstaklega hjá strákuum. Þessi rannsókn er sú fyrsta sem sýnir fram á samband milli mikillar skjánotkunar og foreldratengsla.

*Lykilhugtök: skjánotkun, unglíngar, stuðningur, eftirlit, tími með foreldrum*

In recent years, technology advancement, including the internet, has and continues to affect people's lives. Electronic screen use has become an increasingly important part of daily life. It continues to have a great impact on people's lifestyles (Wang, Luo, Luo, Gao, & Kong, 2012). Internet use can be beneficial in many fields and in many forms: it for example, can help students with learning and carrying out tasks (Feldman D, Barnett T, Shrier I, Rossignol M, & Abenhaim L, 2003). Furthermore, it assists in gaining knowledge and information about work, school, travel, finances, hobbies, movies, restaurants, entertainments and activities (Norris & Jones, 1998). Internet use can also form strong social bonds online and expand social network (Kraut et al., 2002; Parks & Roberts, 1998). Many adolescents are using electronic screen as a fulfillment entertainment (Wang et al., 2012), and the total average of electronic screen use per day in the year 2012, was 6,9 hours for 8-12 year old American girls (Pea et al., 2012).

While studies have shown numerous positive effects of electronic screen use, prior studies have also revealed several downsides associated with hours spent in front of electronic screen (Page, Cooper, Griew, & Jago, 2010; Wang et al., 2012; Yang, Helgason, Sigfusdottir, & Kristjansson, 2013). Hence, studies have shown a clear link between high electronic screen use, psychological symptoms and psychological distress (Mathers et al., 2009; Primack BA, Swanier B, Georgiopoulos AM, Land SR, & Fine MJ, 2009; Tonioni et al., 2012). In a study by Yang et al. (2013), on high electronic screen use and mental well being of 10-12 year old Icelandic children, the results showed that the more hours spent in front of electronic screen, the more likely adolescents were to experience negative psychological symptoms such as: feeling lonely, sad, inactive and sleeping problems. In another study, 30% of American adolescents who used the internet for more than three hours

per day reported depressive symptoms following the DM-IV (Ybarra, Alexander, & Mitchell, 2005). A longitudinal study, carried out over seven year on 4.142 American adolescents showed association between high electronic screen use and development of depressive symptoms in adolescents such as: feeling sad, depressed, tired of doing things and feeling disliked by others (Primack et al., 2009). Electronic screen use can be a mediator for other negative well being like: not feeling normal, feeling less social success, having friends whom parents perceive as bad influence and poor sleep (Pea et al., 2012). In a study by Costigan et al. (2013), the results showed an association between high electronic screen use and sleep problems, musculoskeletal pain and depression. Studies have shown an association between high electronic screen use and poor sleep habits, poor diet and possibility of being overweight due to less physical activity, and poorer mental and physical health (Chahal, Fung, Kuhle, & Veugelers, 2013; Hamer, Stamatakis, & Mishra, 2009). There is also higher risk of developing internet addiction, the younger children start using electronic screen (Chahal et al., 2013; Do, Shin, Bautista, & Foo, 2013; Wang et al., 2012). The results of a study on internet addiction conducted by Tonioni et al. (2012), confirmed that hours spent online, avoiding relationships and lack interest in communicating are associated with psychological symptoms such as anxiety and depression and is also associated with internet addiction.

There are still unexplained relationships between high electronic screen use and mental well being of adolescents. Many questions remain unanswered about the processes through which electronic screen use and psychological symptoms interact. There is a possibility that high electronic screen use is a mediator for negative well being and psychological symptoms in adolescence or maybe they spent so many hours in front of electronic screen because they were sad or lonely. However, further

studies are required to understand how high electronic screen use is correlated with the development of depressive symptoms, and if adolescents are using electronic screen use to cope with underlying negative symptoms.

Furthermore is it interesting to look at why adolescents spend so many hours in front of electronic screen. So far no research has been carried out to explain what factors are associated with high electronic screen use in adolescents. Prior studies have shown that high electronic screen use has been related with numerous behaviour problems (Mistry, Minkovitz, Strobino, & Borzekowski, 2007). We can see the potential harmful effect of high electronic screen use on the well being of adolescents and how it can change their behaviour in a negative way. Therefore it is important to understand what possible risk factors for such behaviour are, and why adolescents choose to spend so many hours in front of electronic screen.

Numerous studies have been conducted on problem behaviour and adolescents (Intravia, Jones, & Piquero, 2012; Alfgeir Logi Kristjansson, James, Allegrante, Sigfusdottir, & Helgason, 2010; Alfgeir Logi Kristjansson, Sigfusdottir, James, Allegrante, & Helgason, 2010; Sigfusdottir, Farkas, & Silver, 2004). It is interesting to know whether there are similar factors explaining these different forms of behaviour. These factors that are associated with problem behaviour in adolescents are for example: depressed mood, delinquent behaviour and substance use (Alfgeir L. Kristjansson, Sigfusdottir, Karlsson, & Allegrante, 2011; Alfgeir Logi Kristjansson, James, et al., 2010; Alfgeir Logi Kristjansson, Sigfusdottir, et al., 2010; Sigfusdottir et al., 2004). These studies have shown that parental attachment and high monitoring on behalf of parents is associated with less likelihood of problem behavior. In a study (Alfgeir Logi Kristjansson, James, et al., 2010) from Youth of Iceland, that was conducted on 3000 9<sup>th</sup> and 10<sup>th</sup> graders, the results showed that high parental

monitoring was associated with less likelihood of problem behaviour like smoking or alcohol use. Parental support is also associated with less likelihood of delinquent acts in the form of substance use among adolescents (Alfgeir L. Kristjansson et al., 2011; Sigfusdottir et al., 2004). If social control is not maintained, “children naturally tend to engage in deviant behaviour. Thus delinquency occurs because of weak bonds” Hirschi (1969). The development through adolescence is a time of significant change. During this change, adolescents experience confusion about adults role and difficulty in foreseeing the future and that can have numerous effect and can increase deviant behaviour (Hamburg & Takanishi, 1989). In studies of adolescents attitudes and behaviour, the family has been the central attention (Gecas & Seff, 1990). There are significant changes in the parents and the adolescent’s relationships, regarding communication and monitoring. Those adolescents who are at most risk are those that spend less time with their parents, have less support from parents, less attachment and less monitoring from parents (Larson, Richards, Moneta, Holmbeck, & Duckett, 1996; Loeber et al., 2000). Parental monitoring is very important, because if adolescents have less monitoring they, are at more risk for deviant behaviour (Dishion, Nelson, & Bullock, 2004; Gibbs, Giever, & Martin, 1998).

By drawing on studies on negative effects of electronic screen use as well as studies showing that adolescents that are less attached to their parents are in general more at risk for problem behaviour. However, it is important to understand what possible risk factors are associated with high electronic screen use. Therefore, the aim of the current study was to investigate the association between parental attachment and the amount of time spent on electronic screen-viewing activities among 10 – 13 year old children. Based on the above literature it was hypothesized that: less attachment on behalf of parents, the more hours spent on electronic screen use.

## Methods

### Participants

Participants in this study were 11,267 5<sup>th</sup> – 7<sup>th</sup> graders, who were 10 – 13 years of age, from all the primary schools in Iceland 2013 (Palsdottir, Sigfusdottir, Sigfusson & Kristjansson, 2013). The response rate was 90%, 49.5% were boys and 49% girls, 1.5% did not specify their gender. There were also 10,829 5<sup>th</sup> – 7<sup>th</sup> graders who were 10 – 13 years of age in all the primary schools in Iceland 2007 (Gudmundsdottir, Kristjansson, Sigfusdottir & Sigfusson, 2007). Response rate were 81.7%, boys were 48.8% and girls 47.9% and 3.3% did not specify their gender.

### Procedure

The current study used cross sectional data from the 2013 and 2007 Youth in Iceland study. The survey was conducted by the Icelandic Center for Social Research and Analysis (ICSRA) in collaboration with the Icelandic Ministry of Education, Science and Culture. The survey was a questionnaire of 60 questions. Teachers distributed the questionnaire and all the children in 5<sup>th</sup> – 7<sup>th</sup> grade who were in class that day participated in the survey. The survey was anonymous and when they were finished they sealed the questionnaire in blanked envelop. The questionnaire was followed by instructions to avoid any misunderstanding (see appendix A and B p: 22, 23).

### Measurements

The measurements in this present study were a questionnaire that was conducted by the Icelandic Centre for Social Research and Analysis (ICSRA) in collaboration with the Icelandic Ministry of Education, Science and Culture. The questionnaires were since 2013 and 2007. The questionnaire from 2013 contained 56 questions and in this study, twelve questions were selected, number 1, 3, 4, 6, 7, 9, 10,



11, 12, 13, 15, and 52 (see appendix D, p: 26). The questionnaire from 2007 contained 60 questions but in this study, one question was used, number 56 (see appendix C, p: 24). The questionnaire from 2007 was only used to compare screen use among children from 2007 and 2013.

### *Variables*

Variables in the present study measured: electronic screen use, family structure, parental support, parental monitoring and time with parents. Variables from 2013, 52a, 52b, 52c, 52d and 52e were computed into one variable, screen use. Variables 6, 7, 9 and 10 were computed into one variable, time with parents. One variable was used from 2007, number 56.

### *Control variables*

Control variables were two. Participants were asked if they were a boy = 1 or girl = 2. Participants were asked about family structure. Response options were 1 = I live with both parents, 2 = I live equal alternating with father and mother, 3 = I live with my mother not my father, 4 = I live with my father not my mother, 5 = I live with my mother and her partner, 6 = I live with my father and his partner, 7 = I live on my own and 8 = another arrangement.

### *Dependent variable*

In the questionnaire from 2013 there were five questions about electronic screen use and the average time respondents usually spent each day on the following activities: TV/DVD/VCR, playing internet computer games, playing computer games not on the internet, using internet communication or chatting channels and other computer use. Response options were 1 = no time, 2 = ½ - 1 hour, 3 = about 1 hour, 4 = about 2 hours, 5 = about 3 hours, 6 = about 4 hours, 7 = about 5 hours, 8 = 6 hours or more. Responses in this analysis were submitted together, with minimum = 1 and

maximum = 36. To compare screen use from 2007 and 2013, new screen use variable from 2013 was coded into three groups with 1 = 0-1 hour per day, 2 = 2-3 hours per day and 3 = 4 hours or more per day. In the questionnaire from 2007 there were five questions about electronic screen use and the average time respondents usually spent each day on the following activities: TV/DVD/VCR, playing the internet computer games, playing computer games not on the internet, using internet communication or chatting channels and other computer use. Response options were 1 = no time, 2 = ½ - 1 hour, 3 = about 1 hour, 4 = about 2 hours, 5 = about 3 hours and 6 = 4 hours and more. Responses in this analysis was coded into three groups with 1 = 0 -1 hour per day, 2 = 2 - 3 hours per day and 3 = 4 hours or more per day.

#### *Independent variables*

##### *Parental support*

For parental support two questions were used. Participants were asked how often do you get help from your father, mother or siblings and the response options for that were 1 = I don't have to do homework, 2 = never, 3 = almost never, 4 = seldom, 5 = sometimes and 6 = often. Responses in this analysis were reversed into 1 = 6, 2 = 5, 3 = 4, 4 = 3, 5 = 2 and 6 = 1. They were asked, "How easy or hard is it to get from your parents" caring and warmth and advice. Response options were 1 = very hard, 2 = hard, 3 = easy and 4 = very easy. Responses in this analysis were reversed so 4 = very hard.

##### *Parental monitoring*

For parental monitoring three questions were used. Participants were asked how well do these statements apply to you: my parents know my friends and my parents know my friends parents. The response options were 1 = very well, 2 = rather well, 3 = rather poorly and 4 = very poorly. Participants were asked "how often are

you home alone after school". The response options were 1 = never, 2 = almost never, 3 = seldom, 4 = sometimes and 5 = often.

#### *Time with parents*

For time with parents four questions were used. How often do you watch TV with your father or mother, how many times do you engage in sports or outdoor activities with your father or mother, how often are you with your parents after school and how often are you with your parents on weekends. The response options were 1 = never, 2 = almost never, 3 = seldom, 4 = sometimes and 5 = often. Responses in this analysis were submitted with minimum = 1 and maximum = 17

#### **Design and data analysis**

Design of this current study was a questionnaire from 2013 and twelve questions were used and questionnaire from 2007 and one question was used. Data analysis was performed with IBM statistic SPSS version 22. Person  $r$  bivariate correlations and multiple linear regression was used.

#### **Results**

The descriptive statistics for the variables in the study are shown in Table 1. Table 2 shows the five categories of electronic screen use among boys and girls in the study. Excessive use (4 hours or more) for using the internet in 2007 was 4% for boys and 2.9% for girls, but in 2013 it is 9.2% for boys and 4% for girls. Playing computer games on the internet in 2007 it was 5.9% for boys and 1.4% for girls, but in 2013 it is 7.9% for boys and 1.3% for girls. Playing non-internet computer games in 2007 was 5.1% for boys and 1.2% for girls, but in 2013 it is 8.3% for boys and 1.7% for girls. For other computer use in 2007 it was 2.8% for boys and 1% for girls, but in 2013 it is 3.6% for boys and 1.3% for girls.

Table 1

*Descriptive statistics of the study variables*

	<i>N</i>	<i>Range</i>	<i>MD</i>	<i>SD</i>
Control Variables				
Gender	11,132	1-2	1.50	0.50
Family structure	11,143	1-2	1.29	0.45
Dependent variable				
Screen use	10,404	1-36	7.54	5.28
Independent variables				
Support from parents				
Help from parent regarding homework	11,154	1-6	2.69	0.91
Caring and warmth	11,888	1-4	1.37	0.60
Parental monitoring				
Your parents know your friends	10,888	1-4	1.49	0.61
Your parents know your friends parents	10,333	1-4	1.81	0.76
How often are you alone after school	11,152	1-5	3.24	1.22
Time with parents	10,951	1-17	4.62	2.41

The correlation in Table 3 demonstrates that screen use is related to gender ( $r = -.31, p < .01$ ), boys tend to engage in high screen use. Screen use is related to family structure ( $r = .08, p < .01$ ), if adolescents are living with both parents, the less screen use they engage in. Screen use is related to caring and warmth ( $r = -.13, p < .01$ ), less caring and warmth adolescents receive the more screen use they engage in. Screen use is related to advice about homework ( $r = .07, p < .01$ ), your parents know your friends ( $r = .13, p < .01$ ), your parents know your friends parents ( $r = .14, p < .01$ ), how often are you alone after school ( $r = .13, p < .01$ ) and time with parents ( $r = .08, p < .01$ ).

Table 4 shows the result from the multivariate linear regression model for control variables and screen use. In Model 1 with the control variables the results show that screen use is related with family structure ( $\beta = -3.18, p < .01$ ). In Model 1, the results showed that the Model 1 explained 10% for the screen use.

Table 2

*Participants by gender and their frequency of various form of electronic screen use for the years 2013 and 2007*

Characteristics	2007		2013	
	Boys %	Girls %	Boys %	Girls %
Hours per day watching TV/DVD				
0 - 1 hour per day	57.3	65.9	66.7	75.7
2 - 3 hours per day	36.1	30.2	26.9	21.0
4 hours or more per day 2013	6.6	3.8	6.4	3.2
Hours per day using internet				
0 - 1 hour per day	84.0	81.9	67.1	80.3
2 - 3 hours per day	12.1	15.2	23.7	15.6
4 hours or more per day	4.0	2.9	9.2	4.0
Hours per day playing games on the internet				
0 - 1 hour per day	76.7	89.8	76.5	94.0
2 - 3 hours per day	17.4	8.8	15.6	4.7
4 hours or more per day	5.9	1.4	7.9	1.3
Hours per day playing non-internet games				
0 - 1 hour per day	78.3	94.5	73.2	94.0
2 - 3 hours per day	16.6	4.3	18.5	4.4
4 hours or more per day	5.1	1.2	8.3	1.7
Hours per day on other computer use				
0 - 1 hour per day	90.6	94.5	88.5	94.0
2 - 3 hours per day	6.6	4.5	7.9	4.7
4 hours or more per day	2.8	1.0	3.6	1.3

Table 3

*Pearson r bivariate correlation for all the variables in the study*

Variables	Screen use
Gender	-0,31**
Family structure	0,08**
Help regarding homework	0,07**
Caring and warmth	-0,13**
Your parents know your friends	0,13**
Your parents know your friends parents	0,14**
How often are you alone after school	0,13**
Time with parents	0,08**

Note. \*\*Correlation is significant at the 0,01 level (2-tailed)

Table 4

*Linear regression model 1, for control variables and screen use*

Model	Screen use			$R^2$
	<i>Standardized</i>	<i>Unstandardized</i>	<i>SE</i>	
Model 1: control variables				0.10
Constant		11.13	0.22	
Gender	-0.31*	-3.18	0.10	
Family structure	0.08*	0.90	0.11	

*Note.* \*  $p < .01$ 

Table 5 shows the result from the multivariate linear regression model 1 for control variables, dependent variable and independent variables. In Model 2 the results show that screen use is significant related with, how often are you alone after school ( $\beta = 0.09, p < .01$ ), parents knowing their friends parents ( $\beta = 0.08, p < .01$ ), with caring and warmth ( $\beta = 0.06, p < .01$ ), family structure ( $\beta = 0.05, p < .01$ ) and parents know your friends ( $\beta = 0.03, p < .01$ ). The results in Model 2 showed that Model 2 explained 13% in screen use.

Table 5

*Linear regression model 2, for control variables, parental attachment and screen use*

Model	Screen use			$R^2$
	<i>Standardized</i>	<i>Unstandardized</i>	<i>SE</i>	
Model 2: control and attachment variables				0.13
Constant		7.60	0.31	
Gender	-2.90*	-3.00	0.10	
Family structure	0.05*	0.60	0.11	
Help from parent regarding homework	0.02	0.10	0.06	
Caring and warmth	-0.06*	-0.54	0.10	
Your parents know your friends	0.03**	0.21	0.10	
Your parents know your friends parents	0.08*	0.57	0.08	
How often are you alone after school	0.09*	0.38	0.04	
Time with parents	0.01	0.03	0.02	

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

### Discussion

The current study investigated the relationship between five measures of electronic screen use and parental attachment among 10 – 13 year old school children in Iceland. Parental attachment was measured as parental support, parental monitoring and time spent with parents. It was hypothesized that less attachment on behalf of parents, the more hours spent on electronic screen. The findings support the hypothesis and the findings consistently show that less parental attachment, the higher screen use is among 10 – 13 year old children.

Excessive use (4 hours or more) is more common among boys with the greatest difference found in the question about internet computer games (7.9% boys and 1.3% girls) and non-internet games (8.3% boys and 1.7% girls). That is consistent with other studies on high electronic screen use (Yang et al., 2013). But the least on the use of watching TV/DVD (6.4% boys and 3.2% girls) and other computer use (3.6% boys and 1.3% girls). The results also indicated that high screen use is increasing, especially for boys. Excessive screen use in 2007 for playing computer games on the internet for boys was 5.9% and playing non-internet computer games for boys was 5.1%. But in 2013, playing computer games on the internet for boys is 7.9% and playing non-internet computer games for boys is 8.3%. For using the internet in 2007 was 2.9% for girls but in 2013 it is 4%.

Parental monitoring has the most influence on screen use in the current study and the better the monitoring is on behalf of parents, lesser screen use is among adolescents. That is consistent with other results in studies for behavior problems. That is that high monitoring on behalf of parents is associated with less likelihood of problem behavior (Alfgeir Logi Kristjansson, James, et al., 2010). Parental support was also associated with screen use in the current study and that is consistent with

other results in studies for substance use in adolescents. That is to say that good parental support is important factors in prevention for substance use in adolescents (Alfgeir Logi Kristjansson, Sigfusdottir, et al., 2010). In the current study the results showed that the more parental support adolescent received the less screen use they engaged in. The findings also show that there is similar risk factor for high screen use and problem behavior and prior studies have showed that high electronic screen use has been related to numerous behavior problem (Mistry et al., 2007). Therefore we can draw the conclusion that high electronic screen use is in some way related with behaviour problem. But further studies need to be done on high electronic screen use to confirm that.

This study has some limitations. First, results are based on cross sectional data, thereby limiting the capacity for drawing causal inferences. Second, the model describes 13% in the screen use, there are other factors that could get more conclusive picture in high screen use. Despite these limitations, the study also has some strength. First the analysis is based on a large and representative sample with a high response rate. Second, the ICSRA has conducted school-based studies fore over 15 years and these questionnaires have all been tested for reliability and validity. For future research, the questions for screen use should include questions for screen use in phones, Ipad and Iphones. This equipment is very popular among adolescents.

High electronic screen use still remains unclear; the model in the current study only explains 13% in screen use. The current study provides understanding of high electronic screen use and parental attachment and numerous risk factors that are associated with high electronic screen use. It is important that future researches continue to explore high electronic screen use and other risk factors.



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## Appendix A

**Grunnskólanemar 2007****Trúnaðarmál****Fyrir nemendur í 5., 6. og 7. Bekk*****Til nemenda***

Í þessu hefti eru nokkrar spurningar sem þú ert beðin(n) að svara. Þær fjalla um líðan þína, skoðanir þínar á ýmsum málum og hvað þú hefur fyrir stafni í tómstundum.

Við flestum spurningunum eru nokkrir svarmöguleikar og þú þarft aðeins að velja einn þeirra. Þú þarft ekki að svara spurningunum en við vonum að þú svarir eftir bestu getu. Settu *kross* (x) í reitinn við það svar sem þú hefur valið. **Það þarf að nota penna.** Ef þú skiptir um skoðun og vilt breyta svari við einhverri spurningu er best að fylla reitinn alveg út þannig að næstum ekkert hvítt sjáist (■). Ef þér finnst einhver svarmöguleiki ekki eiga nákvæmlega við um þig merktu þá við þann svarmöguleika sem þér finnst komast næst. Við biðjum þig að svara öllum spurningunum eftir bestu getu.

Engin sem þekkir þig, hvorki kennarar þínir né foreldrar, kunningjar eða vinir, munu nokkurn tíma fá að sjá svör þín eða fá að vita hvernig þú svaraðir. Gættu þess því að skrifa **ekki** nafn þitt á spurningarlistann eða umslagið sem honum fylgir.

Ef þú hefur einhverjar spurningar um spurningarlistann, lokaðu þá listanum þínum og réttu upp hönd. Kennari kemur þá með útfyllt eintak af spurningarlistanum til að aðstoða þig án þess að sjá þín svör.

Með kærri þökk fyrir þátttökuna,

***Starfsfólk Rannsókna & greiningar***

Appendix B

## Ungt fólk 2013

### Grunnskólanemar í 5., 6. og 7. bekk

#### Trúnaðarmál

##### *Til nemenda*

Í þessu hefti eru spurningar sem þú ert beðin(n) að svara. Þetta er ekki próf

Við flestum spurningunum eru nokkrir svarmöguleikar og þú þarft aðeins að velja einn þeirra. Þú þarft ekki að svara spurningunum en við vonum að þú svarir eftir bestu getu. Settu *kross* (x) í reitinn við það svar sem þú hefur valið. **Betra er að nota penna.** Ef þú skiptir um skoðun og vilt breyta svari við einhverri spurningu er best að fylla reitinn alveg út þannig að næstum ekkert hvítt sjáist (■). Ef þér finnst einhver svarmöguleiki ekki eiga nákvæmlega við um þig merktu þá við þann svarmöguleika sem þér finnst komast næst. Við biðjum þig að svara öllum spurningunum eftir bestu getu.

Engin sem þekkir þig, hvorki kennarar þínir né foreldrar, kunningjar eða vinir, munu nokkurn tíma fá að sjá svör þín eða fá að vita hvernig þú svaraðir. Gættu þess því að skrifa **ekki** nafn þitt á spurningarlistann eða umslagið sem honum fylgir.

Ef þú hefur einhverjar spurningar um spurningarlistann, lokaðu þá listanum þínum og réttu upp hönd. Kennari kemur þá með óútfyllt eintak af spurningarlistanum til að aðstoða þig án þess að sjá þín svör.

Með kærri þökk fyrir þátttökuna,

***Starfsfólk Rannsókna & greiningar***

## Appendix C

**56. Hversu mikinn tíma notar þú venjulega á hverjum degi í að: (Merktu í einn reit í hverjum lið)**

## a) Horfa á sjónvarp/video/DVD

- Nær engum tíma
- ½ - 1 klst.
- Um 1 klst
- Um 2 klst
- Um 3 klst
- 4 klst eða fleiri

## b) Vera á netinu (vefnum, leikjum eða spjallrásum)

- Nær engum tíma
- ½ - 1 klst
- Um 1 klst
- Um 2 klst
- Um 3 klst
- 4 klst eða fleiri

## c) Spila tölvleiki á netinu

- Nær engum tíma
- ½ - 1 klst
- Um 1 klst
- Um 2 klst
- Um 3 klst
- 4 klst eða fleiri

d) Spila tölvuleiki sem eru EKKI á netinu



- Nær engum tíma
  - ½ - 1 klst
  - Um 1 klst
  - Um 2 klst
  - Um 3 klst
  - 4 klst eða fleiri
- e) Nota tölvur í annað en vera á netinu eða spila tölvuleiki
- Nær engum tíma
  - ½ -1 klst
  - Um 1 klst
  - Um 2 klst
  - Um 3 klst
  - 4 klst eða fleiri

## Appendix D

**1. Ert þú strákur eða stelpa?**

- Strákur
- Stelpa

**3. Hverjir eftirtalinna búa heima hjá þér? (Merktu aðeins í EINN reit)**

- Ég bý hjá báðum foreldrum
- Ég bý nokkurn veginn jafnt **til skiptis** hjá föður og móður
- Ég bý aðallega hjá móður en ekki föður
- Ég bý aðallega hjá föður en ekki móður
- Ég bý hjá móður og sambýlismanni hennar
- Ég bý hjá föður og sambýliskonu hans
- Ég bý á eigin vegum
- Ég bý við annað fyrirkomulag

**4. Hversu oft færð þú hjálp frá pabba þínum, mömmu eða systkinum með námið þitt? (Merktu aðeins í einn reit)**

- Ég þarf ekki að læra heima
- Aldrei
- Næstum aldrei
- Sjaldan
- Stundum
- oft

**6. Hversu oft horfið þú á sjónvarp eða DVD með pabba þínum eða mömmu?****(Merktu aðeins í einn reit)**

- Aldrei
- Næstum aldrei
- Sjaldan
- Stundum
- Oft

**7. Hversu oft ert þú í íþróttum eða útivist (t.d á skíðum, í sundi, í göngutúr, á hestbaki, úti að hjóla, á skautum o.fl.) með pabba þínum eða mömmu?****(Merktu aðeins í einn reit)**

- Aldrei
- Næstum aldrei
- Sjaldan
- Stundum
- Oft

**9. Hversu oft ert þú með foreldrum þínum eftir skóla? (Merktu aðeins í einn reit)**

- Aldrei
- Næstum aldrei
- Sjaldan
- Stundum
- oft

**10. Hversu oft ert þú með foreldrum þínum um helgar? (Merktu aðeins í einn reit)**

- Aldrei
- Næstum aldrei
- Sjaldan
- Stundum
- Oft

**11. Hversu auðvelt eða erfitt væri fyrir þig að fá umhyggju og hlýju hjá foreldrum þínum? (Merku í einn reit)**

- Mjög erfitt**
- Frekar erfitt**
- Frekar auðvelt**
- Mjög auðvelt**

**12. Hversu vel eiga eftirfarandi fullyrðingar við um þig? (Merktu í EINN reit í hverjum lið)**

a) Foreldrar mínir þekkja vini/vinkonur mína(r)

- Á mjög vel við um mig
- Á frekar vel við um mig
- Á frekar illa við um mig
- Á mjög illa við um mig

b) Foreldrar mínir þekkja foreldra vini/vinkvenna minna

- Á mjög vel við um mig
- Á frekar vel við um mig
- Á frekar illa við um mig
- Á mjög illa við um mig

**15. Hversu oft er þú ein(n) heima eftir skóla? (Ekki með fjölskyldu). (Merktu****aðeins í EINN reit)**

- Aldrei
- Næstum aldrei
- Sjaldan
- Stundum
- Oft

**52. Hversu mikinn tíma notar þú venjulega á hverjum degi í að: (Merktu í einn****reit í hverjum lið)**

a) Horfa á sjónvarp/video/DVD

- Nær engum tíma
- ½ - 1 klst.
- Um 1 klst
- Um 2 klst
- Um 3 klst
- Um 4 klst
- Um 5 klst
- 6 klst eða fleiri

f) Vera á netinu (vefnum, leikjum eða spjallrásum)

- Nær engum tíma
- ½ - 1 klst
- Um 1 klst
- Um 2 klst
- Um 3 klst

- Um 4 klst
  - Um 5 klst
  - 6 klst eða fleiri
- g) Spila tölvleiki á netinu
- Nær engum tíma
  - ½ - 1 klst
  - Um 1 klst
  - Um 2 klst
  - Um 3 klst
  - Um 4 klst
  - Um 5 klst
  - 6 klst eða fleiri
- h) Spila tölvuleiki sem eru EKKI á netinu
- Nær engum tíma
  - ½ - 1 klst
  - Um 1 klst
  - Um 2 klst
  - Um 3 klst
  - Um 4 klst
  - Um 5 klst
  - 6 klst eða fleiri
- i) Nota tölvur í annað en vera á netinu eða spila tölvuleiki
- Nær engum tíma
  - ½ -1 klst
  - Um 1 klst

- Um 2 klst
- Um 3 klst
- Um 4 klst
- Um 5 klst
- 6 klst eða fleiri