

# ANNEX 5: KEY VARIABLES

## Use and activities

Concept	Questions / Response options	Summaries / variable names
Number of places where the internet is used	At school or college Living room (or other public room) at home At a friend's home Own bedroom (or other private room) at home At a relative's home In an internet café In a public library or other public place When 'out and about'	The number out of eight response options/ DPplaceNM
Number of devices used to access the internet	Shared PC Own PC Television set Mobile phone Games console Own laptop Shared laptop Other handheld or portable device (e.g. iPod Touch, iPhone or Blackberry)	The number out of eight response options/ DPdeviceNM
Estimated minutes online each day	About how long do you spend using the internet on a normal school day / normal non-school day?	DCtimeuse

## Digital literacy

Concept	Questions / Response options	Summaries / variable names
Digital skills	Bookmark a website Block messages from someone you don't want to hear from Find information on how to use the internet safely Change privacy settings on a social networking profile Compare different websites to decide if information is true Delete the record of which sites you have visited Block unwanted adverts or junk mail/spam Change filter preferences	The number out of eight response options/ DPskillsNM
Range of online activities	Used the internet for school work Played internet games on your own or against the computer Watched video clips Visited a social networking profile Used instant messaging Sent/received email Read/watched the news on the internet Played games with other people on the internet Downloaded music or films Put (or posted) photos, videos or music to share with others Used a webcam Put (or posted) a message on a website Visited a chatroom Used file sharing sites Created a character, pet or avatar Spent time in a virtual world Written a blog or online diary	The number out of 17 response options/ DCactNM
Belief about internet abilities	I know lots of things about using the internet. 1 (not true) to 3 (very true)	DCwebableB

## Risky activities

Concept	Questions / Response options	Summaries / variable names
<b>Risky offline activities</b> (adapted from the Health Behaviour in School-aged Children survey; Currie et al., 2008)	Missed school lessons without my parents knowing Been in trouble with my teachers for bad behaviour Been in trouble with the police Had so much alcohol that I got really drunk (only asked of children aged 11+) Had sexual intercourse (only asked of children aged 11+)	The number out of three response options for 9-10 year olds and out of five response options for children aged 11+ / DCROB1NM DCROB2NM
<b>Risky online activities</b> (adapted from the UK Children Go Online survey; Livingstone & Helsper, 2010).	Looked for new friends on the internet Added people to my friends list or address book that I have never met face-to-face Pretended to be a different kind of person on the internet from what I really am Sent personal information to someone that I have never met face-to-face Sent a photo or video of myself to someone that I have never met face-to-face	The number out of five response options/ DCriskactNM

## Online risks

Concept	Questions / Response options	Summaries / variable names
<b>Online contacts</b>		
Online contacts	Can I just check, have you ever had contact on the internet with someone you have not met face to face before? yes/no	QC147
Meeting online contacts offline	And have you ever gone on to meet anyone face to face that you first met on the internet in this way? yes/no	QC148
Number of online contacts met offline	And how many new people have you met in this way in the last 12 months, if any? 1 to 2, 3 to 4, More than 10	QC149
<b>Seeing and receiving sexual messages</b>		
Receiving sexual messages	In the PAST 12 MONTHS, have you seen or received sexual messages of any kind on the internet? yes/no	QC167
Frequency of receiving sexual messages	How often have you seen or received sexual messages of any kind on the internet in the PAST 12 months? Every day or almost every day Once or twice a week Once or twice a month Less often	QC168
Types of sexual messages received The number out of five response options	I have been sent a sexual message on the internet, I have seen a sexual message posted where other people could see it on the internet, I have seen other people perform sexual acts, I have been asked to talk about sexual acts with someone on the internet, I have been asked on the internet for a photo or video showing my private parts	The number out of five response options/ QC169A-E

<b>Sexual images</b>		
Seeing sexual images	Have you seen these kinds of things [images that are obviously sexual] on any websites in the past 12 months? yes/no	QC131
Types of sexual images	Which types of website have you seen things like this [ANY KIND OF SEXUAL IMAGES] on in the LAST 12 MONTHS?  Images or video of someone naked, Images or video of someone's 'private parts', Images or video of someone having sex, Images or video of movies that show sex in a violent way, Something else	The number out of five response options/ QC133A-E
<b>Bullying</b>		
BULLYING (introduction)	Sometimes children or teenagers say or do hurtful or nasty things to someone and this can often be quite a few times on different days over a period of time, for example. This can include:  <ul style="list-style-type: none"> <li>teasing someone in a way this person does not like</li> <li>hitting, kicking or pushing someone around</li> <li>leaving someone out of things</li> </ul> When people are hurtful or nasty to someone in this way, it can happen:  <ul style="list-style-type: none"> <li>face to face (in person)</li> <li>by mobile phones (texts, calls, video clips)</li> <li>on the internet (e-mail, instant messaging, social networking, chatrooms)</li> </ul> Cyberbullying (victim of)...	
Being cyberbullied	Has someone acted in this kind of hurtful or nasty way to you in the past 12 months? At any time during the last 12 months, has this happened...By mobile phone calls, texts or image/video texts? yes/no [AND/OR] At any time during the last 12 months, has this happened on the internet? yes/no	QC114B and/or QC115
Online bullying (victim of)...		
Being bullied online	Has someone acted in this kind of hurtful or nasty way to you in the past 12 months? At any time during the last 12 months, has this happened on the internet? yes/no	QC115
Types of being bullied online	And in which ways has this [SOMEONE HAS DONE NASTY OR HURTFUL THINGS TO YOU ON THE INTERNET] happened to you in the LAST 12 MONTHS?  Nasty or hurtful messages were sent to me, Nasty or hurtful messages about me were passed around or posted where others could see, I was left out or excluded from a group or activity on the internet, I was threatened on the internet, Other nasty or hurtful things on the internet	The number out of five response options/ QC117A-E

Number of items reflecting negative user generated content	<p>Hate messages that attack certain groups or individuals</p> <p>Ways to be very thin (such as being anorexic or bulimic)</p> <p>Ways of physically harming or hurting themselves</p> <p>Talk about or share their experiences of taking drugs</p> <p>Ways of committing suicide</p>	<p>The number out of five response options/ DC142NM</p>
Number of items reflecting data misuse	<p>Somebody used my password to access my information or to pretend to be me</p> <p>Somebody used my personal information in a way I didn't like</p> <p>I lost money by being cheated on the internet</p>	<p>The number out of three response options/ DC143NM</p>
Has experienced any of seven online risks	<p>Online contacts, Meeting online contacts offline, Receiving sexual messages, Seeing sexual images, Being bullied online, Has come across one or more negative user generated content, Has experienced personal data misuse of any kind</p>	<p>DCirisk2</p>

## Online perpetrators

Concept	Questions / Response options	Summaries / variable names
Cyberbullying others	<p>Have you acted in a way that might have felt hurtful or nasty to someone else in the PAST 12 MONTHS? In which of the following ways have you acted like this in the past 12 months...? By mobile phone calls, texts or image/video texts [AND/OR] On the internet yes/no</p>	<p>QC127B and/or QC127c</p>
Online bullying others	<p>Have you acted in a way that might have felt hurtful or nasty to someone else in the PAST 12 MONTHS? In which of the following ways have you acted like this in the past 12 months...? On the internet yes/no</p>	<p>QC127c</p>
Sending sexual messages	<p>In the PAST 12 MONTHS, have you sent or posted a sexual message (example: words, pictures or video) of any kind on the internet? This could be about you or someone else. yes/no</p>	<p>QC179</p>
Has done either of the two things associated with being a perpetrator	<p>Online bullying others, Sending sexual messages</p>	<p>DCiperp2</p>

## Harm from online risks

(overall, sexual images, sexual messages, meeting online contacts offline, being bullied online)

Concept	Questions / Response options	Summaries / variable names
Experience of harm on the internet (overall)	In the past 12 months, have you seen or experienced something on the internet that has bothered you in some way? For example, made you feel uncomfortable, upset, or feel that you shouldn't have seen it. Yes/no	QC110
Experience of harm (specific risk)	And in the LAST 12 MONTHS has [the risk] bothered you in any way? For example, made you feel uncomfortable, upset [...]yes/no	QC134, QC152, QC171
Intensity of harm (specific risk)	Thinking about the last time you were bothered by [experiencing the risk], how upset did you feel about it (if at all)? 0 (not at all upset) to 3 (very upset)	QC118, QC135, QC160, QC172
Duration of harm (sexual images, sexual messages, being bullied online)	How long did you feel like this [upset] for? 1 (I got over it straight away) to 4 (I thought about it for a couple of months or more).	QC119, QC136, QC173
Duration of harm (meeting online contacts offline)	How long did you feel like this [upset] for? 1 ( <i>I got over it straight away</i> ) to 3 ( <i>I felt like that for a few weeks</i> ).	QC161
Harm index (sexual images, sexual messages, being bullied online)	Intensity x duration0 (low) – 12 (high)	QC118*QC119, QC135* QC136, QC172* QC173
Harm index (meeting online contacts offline)	Intensity x duration0 (low) – 9 (high)	QC160* QC161

## Mediation

Concept	Questions / Response options	Summaries / variable names
Active mediation of internet use	<p><i>Does your parent/do either of your parents sometimes... sit with you while you use the internet?</i></p> <p><i>stay nearby when you use the internet?</i></p> <p><i>encourage you to explore and learn things on the internet on your own?</i></p> <p><i>do shared activities together with you on the internet?</i></p> <p><i>Does your parent/do either of your parents sometimes.../ Have any teachers at your school ever done any of these things?</i></p> <p><i>talk to you about what you do on the internet?</i></p>	<p>Either number of available response options OR if at least one of them was chosen or not/</p> <p>DC327NM</p> <p>DP220NM</p>
Active mediation of internet safety	<p><i>Does your parent/do either of your parents sometimes.../ Have any teachers at your school ever done any of these things? Have your friends ever done any of these things?</i></p> <p><i>Helped you when something is difficult to do or find on the internet</i></p> <p><i>Explained why some websites are good or bad</i></p> <p><i>Suggested ways to use the internet safely</i></p> <p><i>Suggested ways to behave towards other people online</i></p> <p><i>Helped you in the past when something has bothered you on the internet</i></p> <p><i>Does your parent/do either of your parents sometimes.../ Have any teachers at your school ever done any of these things?</i></p> <p><i>In general, talked to you about what to do if something on the internet bothered you</i></p>	<p>Either number of available response options OR if at least one of them was chosen or not/</p> <p>DC329NM</p> <p>DP222NM</p>
Restrictive mediation	<p><i>Parents CURRENTLY allow them to do them only with permission/supervision, or never allow.</i></p> <p><i>Use instant messaging</i></p> <p><i>Download music or films on the internet</i></p> <p><i>Watch video clips on the internet</i></p> <p><i>Have your own social networking profile</i></p> <p><i>Give out personal information to others on the internet</i></p> <p><i>Upload photos, videos or music to share with others</i></p> <p><i>Have any teachers at your school ever done any of these things?</i></p> <p><i>Made rules about what you can do on the internet at school</i></p>	<p>Either number of available response options OR if at least one of them was chosen or not/</p> <p>DC328NM</p> <p>DP221NM</p>
Parental monitoring	<p><i>Does your parent/either of your parents sometimes check any of the following things afterwards?</i></p> <p><i>Which websites you visited</i></p> <p><i>The messages in your email or instant messaging account</i></p> <p><i>Your profile on a social networking or online community</i></p> <p><i>Which friends or contacts you add to your social networking profile/instant messaging service</i></p>	<p>Either number of available response options OR if at least one of them was chosen or not/</p> <p>DC330NM</p> <p>DP223NM</p>

Parents Technical mediation	<p><i>Does your parent/do your parents make use of any of the following...?:</i></p> <p>Parental controls or other means of blocking or filtering some types of website</p> <p>Parental controls or other means of keeping track of the websites you visit</p> <p>A service or contract that limits the time you spend on the internet</p> <p>Software to prevent spam or junk mail/viruses</p>	<p>Either number of available response options OR if at least one of them was chosen or not/ DC331NM DP224NM</p>
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## Psychological measures

SELF-EFFICACY (variable: DCSEMN)

Adapted from Schwarzer and Jerusalem (1995; 4 items,  $\alpha = .65$ )

*Item Property Analyses, Selection and Re-phrasing for the Adapted Self-Efficacy Scale*

Item	Original item phrasing	ITC original items	ITC selected items	Adapted item phrasing for EU Kids Online II
1	I can always manage to solve difficult problems if I try hard enough.	.39	-	-
2	If someone opposes me, I can find means and ways to get what I want.	.54	-	-
3	It is easy for me to stick to my aims and accomplish my goals.	.62	.60	It's easy for me to stick to my aims and achieve my goals.
4	I am confident that I could deal efficiently with unexpected events.	.58	.60	I am confident that I can deal with unexpected problems.
5	Thanks to my resourcefulness, I know how to handle unforeseen situations.	.59	.64	I can generally work out how to handle new situations.
6	I can solve most problems if I invest the necessary effort.	.31	-	-
7	I can remain calm when facing difficulties because I can rely on my coping abilities.	.54	-	-
8	When I am confronted with a problem, I can usually find several solutions.	.53	-	-
9	If I am in trouble, I can usually think of something to do.	.55	.51	If I am in trouble I can usually think of something to do.
10	No matter what comes my way, I'm usually able to handle it.	.62	.61	I can generally work out how to handle new situations.
Cronbach's $\alpha$		.84	.80	

Notes: A 3-point response scale was used (1 = *Not true*, 2 = *A bit true*, 3 = *Very true*), ITC: Corrected item-total correlation, original items 5 and 10 were combined for adapted item phrasing, all analyses were performed on selected cases of children 12- 15 years from a public data set (Schwarzer, 2006;  $N = 1254$ ).

### PSYCHOLOGICAL DIFFICULTIES (variable: DCSDQMN)

Adapted from Strength and Difficulties Questionnaire (SDQ; Goodman, 1998; 16 items,  $\alpha = .71$ ) using items measuring psychological difficulties only.

*Item Property Analyses and Selection for the Psychological Difficulties Scale (adapted from SDQ)*

Item	Item phrasing and variable names by subscale	ITC Pilot	ITC selected items in Full Sample
Emotional symptoms (DCSDQepMN)			
1	I get a lot of headaches, stomach-aches or sickness.	.40	.36
2	I worry a lot.	.48	.35
3	I am often unhappy, sad or tearful.	.34	.48
4	I am nervous in new situations, I easily lose confidence.	.36	.37
5	I have many fears, and I am easily scared.	.23	.40
Conduct problems (DCSDQcpMN)			
1	I get very angry and often lose my temper.	.61	.42
2	I usually do as I am told. (reversed)	.07	.06
3	I fight a lot, I can make other people do what I want.	.17	.27
4	I am often accused of lying or cheating.	.40	.41
5	I take things that are not mine from home, school or elsewhere.	.48	.26
Peer relationship problems (DCSDQppMN)			
1	I am usually on my own, I generally play alone or keep to myself.	.43	.26
2	I have at least one good friend. (reversed)	.20	.12
3	Other people my age generally like me. (reversed)	.32	.21
4	Other children or young people pick on me.	.52	.42
5	I get on better with adults than with people my own age.	.40	.28
Hyperactivity (DCSDQhpMN)			
1	I am restless, I cannot stay still for long.	.36	-
2	I am easily distracted, I find it difficult to concentrate.	.46	.37
3	I think before I do things. (reversed)	.34	-
4	I finish the work I'm doing, my attention is good. (reversed)	.19	-
Cronbach's $\alpha$		.77	.71

Notes: A 3-point response scale was used (1 = *Not true*, 2 = *A bit true*, 3 = *Very true*); ITC: Corrected item-total correlation; ITCs and Cronbach's  $\alpha$ s were computed for the full psychological difficulties scale; the full sample of 9-16 year olds was used for both analyses ( $N_{Pilot} = 76$ ,  $N_{Data} = 25142$ ).

### SENSATION SEEKING (variable: DCsensationMN)

From Stephenson, Hoyle, Palmgreen, and Slater (2003; 2 items,  $r = .64$ ,  $p < .001$ ).

Item	Item phrasing
1	I do dangerous things for fun
2	I do exciting things, even if they are dangerous

Notes: A 3-point response scale was used (1 = *Not true*, 2 = *A bit true*, 3 = *Very true*)

# EXCESSIVE USE (variable: DCaddictMN)

Adapted from Šmahel, Vondráčková, Blinka, and Godoy-Etcheverry (2009; 5 items,  $\alpha = .77$ ).

Item	Item phrasing
1	I have gone without eating or sleeping because of the internet
2	I have felt bothered when I cannot be on the internet
3	I have caught myself surfing when I'm not really interested
4	I have spent less time than I should with either family, friends or doing schoolwork because of the time I spent on the internet
5	I have tried unsuccessfully to spend less time on the internet

Notes: A 4-point response scale was used (1 = *Never/almost never*, 2 = *Not very often*, 3 = *Fairly often*, 4 = *Very often*); items were only asked of 11-16 year olds.

## References:

- Currie, C., Gabhainn, S. N., Godeau, E., Roberts, C., Smith, R., Currie, D., Picket, W., Richter, M., Morgan, A., & Barnekow, V. (Eds.). (2008). *Inequalities in young people's health: Health behaviour in school-aged children (HBSC) international report from the 2005/2006 survey*. Copenhagen, Denmark: WHO Regional Office for Europe.
- Goodman R., Meltzer H., Bailey V. (1998) The Strengths and Difficulties Questionnaire: A pilot study on the validity of the self-report version. *European Child and Adolescent Psychiatry*, 7, 125-130. doi:10.1007/s007870050057
- ITU (2010). *Partnership on measuring ICT for development, core ICT indicators*. [http://www.itu.int/dms\\_pub/itu-d/opb/ind/D-IND-ICT\\_CORE-2010-PDF-E.pdf](http://www.itu.int/dms_pub/itu-d/opb/ind/D-IND-ICT_CORE-2010-PDF-E.pdf)
- Livingstone, S., and Helsper, E. J. (2007) Taking risks when communicating on the internet: The role of offline social-psychological factors in young people's vulnerability to online risks. *Information, Communication and Society*, 10(5), 619-643.
- Šmahel, D., Vondráčková, P., Blinka, L. & Godoy-Etcheverry, S. (2009). Comparing addictive Behavior on the Internet in the Czech Republic, Chile and Sweden. In G. Cardoso, A. Cheong, J. Cole (Eds.), *World wide internet: Changing societies, economies and cultures* (pp. 544-582). Macao : University of Macau.
- Schwarzer, R. (2006). *SPSS RAW DATA WITH 18,000 Participants*. Retrieved from [http://userpage.fu-berlin.de/~health/world\\_24nations\\_25nov2006.sav](http://userpage.fu-berlin.de/~health/world_24nations_25nov2006.sav)
- Schwarzer, R. & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright & M. Johnston (Eds.), *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). Windsor, UK: NFER-NELSON.
- Stephenson, M. T., Hoyle, R. H., Palmgreen, P., & Slater, M. D. (2003). Brief measures of sensation seeking for screening and large-scale surveys. *Drug and Alcohol Dependence*, 72(3), 279-286. doi:10.1016/j.drugalcdep.2003.08.003
- UNESCO (2006). International Standard Classification of Education I S C E D 1997, Re-edition. <http://www.uis.unesco.org/Library/Pages/DocumentMorePage.aspx?docIdValue=144&docIdFld=ID>