# Questions documentation 16-years Mobile Phone Questionnaire (YQ3)

# The Norwegian Mother, Father and Child Cohort Study (MoBa)

## Adolescent questionnaires series (MoBaYoung)

This document describing the instruments used to construct the questionnaire has not been finally quality assured. The document may contain some minor inaccuracies and will be subjected to revision. If you have any comments that may improve this document, contact mobaadm@fhi.no.

Version	Date	Performed by	Description
1.0	15.1.2023	Ragnhild Brandlistuen	Original version
1.1	01.2.2023	Coordinator MoBa	Layout

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#### MODEL STRUCTURE OF WHAT IS PRESENTED PER INSTRUMENT / SECTION

#### Instrument

#### 1. Name of original instrument/question:

Original name of scale (*no name* if only single question) List wording of questions included in the section (with number from questionnaire in front) and write response categories (with values used in the dataset)

#### 2. Description of original scale or selection of items used

Description of analytical approaches for selecting just a sample of items from a scale If single question. NOT RELEVANT

If selection of established short version, make referral to literature and/or use Where does the Q/scale come from, what is it meant to measure. Description of number of items, subscales. Where the Q/scale has been used and any information that give insight into what instrument this is.

Primary references of the instrument as well as important secondary publications if relevant.

#### **3.** Rationale for choosing the instrument:

What is it meant to measure and IF RELEVANT: Why this is a good measure.

#### 4. Modifications:

Describe modifications during the study from one version to another. Write if omitted or added from one version to another

**NOTE 1:** There are three versions of this questionnaire (A, B and C). This instrument documentation is based on version C, as per 02.01.2023. The questionnaire may be subject to further changes.

If you have any comments that may improve this document, please contact mobaadm@fhi.no.

#### **Questions about friendship**

Q		Response options	Variable name
Versi	on C		
1	How many friends do you have that you are close to/can talk about proble	ems with?	YC10
	How well do the following statements correspond for you?		
2	I find it quite hard to make friends		YC11
3	I have a lot of friends	1 Corresponds very poorly	YC12
4	Other teenagers find it hard to like me	<ul> <li>2 Corresponds quite poorly</li> <li>3 Corresponds quite well</li> <li>4 Corresponds very well</li> </ul>	YC13
5	I am popular with other teenagers		YC14
6	I feel socially accepted among others		YC15

Name of original Scale: Questions adapted from the Self-perception Profile for Adolescents; Scale for Social Competence

**Description of original scale:** The Self-perception Profile for Adolescents; Scale for Social Competence (Harter, 1988) was revised and adapted by Wichtstrøm for use in the Young in Norway surveys (Strand & von Soest, 2008; Wichstrøm, 1995).

*Psychometric Information:* The Norwegian version was validated in a representative sample of adolescents aged 13 to 20, and indicated good reliability, convergent validity and factorial validity (Wichstrøm, 1995).

#### Base Reference/Primary Citation:

Harter, S. (1988). Manual for the Self-Perception Profile for Adolescents. Denver, CO: University of Denver.

Harter, S. (2012). Self-perception profile for adolescents: Manual and questionnaires. Denver, CO: University of Denver, Department of Psychology.

Wichstrøm, L. (1995). Harter's Self-Perception Profile for Adolescents: Reliability, validity, and evaluation of the question format. Journal of personality assessment, 65(1), 100-116.

Strand, N. P., & von Soest, T. (2008). Young in Norway–Longitudinal. Documentation of design, variables, and scales. Oslo, Norway: NOVA, NTNU.

**Rationale for choosing the instrument:** These items reflect general self-perception of social competence that is associated with social success. Question 2-6 is repeated from the 14-year adolescent questionnaire.

Revision during the data collection period: No revisions have been made.

#### Questions about school attendance and sense of belonging

Q			Response options	Variable name
Vers	ion C			
7	Do you go to	o school?	1 Yes 2 No	YC16
7.1	Version C	If no, please describe: This element will only be displayed if the "No" option is selected in question "7. Do you go to school?"	<ol> <li>I work</li> <li>I'm ill and can't go to school</li> <li>I'm an apprentice/doing a internship (unpaid)</li> <li>I'm taking time off</li> <li>Other</li> </ol>	YC17
	Versions A and B	If no, please describe:	<ol> <li>I work</li> <li>I'm ill and can't go to school</li> <li>Other</li> </ol>	YC106
7.2	(If yes) Wha	t grade are you in?	1 Grade 10 2 VG1 general studies	YC18

	This element will only be displayed if the "Yes" option is selected in question "7. Do you go to school?"	3 4 5 6 7 8	VG1 vocational studies VG2 general studies VG2 vocational studies VG3 general studies VG3 vocatonal studies Other	
	What do you think about your school? Tell us how much you agree with	these	e statements.	
7.3	I like being at school			YC19
7.4	I feel safe when I am at school		Agree a lot	YC20
7.5	I feel like I belong at this school	2	Agree a little Disagree a little Disagree a lot	YC21
7.6	Teachers at my school are fair to me	4		YC22
7.7	I am proud to go to this school			YC23

**Description of original scale:** The measure of student sense of school belonging was selected from the Norwegian PIRLS 2016 questionnaire https://www.idunn.no/file/pdf/67034010/klarframgang.pdf. The English version is found here: PIRLS questionnaires (Progress in Reading Literacy Study; <u>http://timssandpirls.bc.edu/pirls2016/international-results/pirls/school-climate/student-senseof-belonging/</u>). Five questions are rated on a 4-point scale from 'completely agree' to 'completely disagree'.

Base Reference/Primary Citation:

PIRLS Norway: <u>https://www.idunn.no/file/pdf/67034010/klar-framgang.pdf</u> PIRLS International Study Center: <u>http://pirls2016.org/pirls/school-climate/student-sense-of-belonging/</u>

#### Additional references:

Wang, M.T. & Degol, J.L. (2016). School Climate: A Review of the Construct, Measurement, and Impact on Student Outcomes. *Educational Psychology Review*, 1–38.

Thapa, A., Cohen, J., Guffey, S. & Higgins-D'Alessandro, A. (2013). A Review of School Climate Research. *Review of Educational Research*, 83(3), 357–385.

TIMSS: http://timss2015.org/timss-2015/mathematics/school-climate/students-sense-of-schoolbelonging/?tab=2

**Rationale for choosing the instrument:** Questions were included to measure the adolescents' sense of belonging to the school, which is often found to relate to both academic and social-emotional outcomes in adolescence (Thapa, Cohen, Guffey & Higgins-D'Alessando, 2013; Wang & Degol, 2016)

**Revision during the data collection period:** YC17 was only included in version C. YC106 was included in versions A and B and replaced with YC17 in version C.

#### **Questions about Academic Engagement**

Q		<b>Response options</b>	Variable name
Versi	on C		
	How do you normally behave at school?		
7.8	I listen intently when the teacher talks or gives directions		YC24
7.9	Follow the teacher's directions (e.g. find the necessary materials, starts quickly with the tasks, do what I am told without lingering)	_	YC25
7.10	Show good work effort (e.g. do my best, am engaged, stick to the task, do one thing at a time)	1 Rarely/never	YC26
7.11	Sit in my seat and work when it is expected (e.g. complete tasks, work with concentration)	2 Sometimes 3 Almost always	YC27
7.12	Ask for help in an appropriate way (e.g. raise my hand or show signs of needing help, seek the teacher, wait my turn)		YC28
7.13	Behave as expected in the classroom		YC29

Q		Response options	Variable name
7.14	Follow the rules even when encouraged by peers to break them		YC30

**Description of original scale:** Elementary Social Behaviour Assessment; academic engagement scale. The Scale was defined to identify specific, observable prosocial skills and behaviours that predict students' learning and school adjustment. The original scale consists of 12 items concerning social skills within the classroom, and has been validated in the US (Pennefather & Smolkowski, 2015). The scale was translated and adapted to the Norwegian setting, and were assessed to measure two factors: academic engagement' and 'peer social relations' (Arnesen et al, 2017). This section uses a version of the Academic Engagement factor of the scale, adapted to fit self-rating by the student.

*Psychometric Information*: The Academic engagement scale showed excellent score- (.92) and test-retest reliability (.78) in elementary school. The scale correlated with the social skills subscale of the Social Skills Rating Scale at both two time points, and for both early elementary and late elementary school (range r=.60 to r=.68) indicating adequate criterion validity (Arnesen et al., 2017).

Base Reference/Primary Citation: Arnesen, A., Smolkowski, K., Ogden, T., & Melby-Lervåg, K. (2017). Validation of the Elementary Social Behavior Assessment: Teacher Ratings of Students' Social Skills. *Emotional and Behavioural Difficulties*. doi: 10.1080/13632752.2017.1316473

Pennefather, J., and K. Smolkowski. 2015. "Validation of the Elementary Social Behavior Assessment: A Measure of Student Prosocial School Behaviors." Assessment for Effective Intervention 40: 143–154. doi:10.1177/1534508414557562.

#### **Rationale for choosing the instrument:**

The scale was chosen as a brief measure of academic engagement in the classroom setting, relevant for learning and school adjustment. The measure was also included in the 14-year adolescent questionnaire.

Revision during the data collection period: No revisions were made

#### **Questions about School Performance**

Q		Re	sponse options	Variable name
Versio	on C			
7.15	How were you graded in your previous half-year assessment (term gr	rade	e)?	
	In Norwegian	1	1	YC31
	In Math	2	2	YC32
	In English	3	3	
		4	4	
		5	5	
		6	6	
		7	Did not receive grade	YC33

#### **Questions about Special need Education**

Q		<b>Response options</b>	Variable name
Versio	on C		
7.16	Do you (or did you previously) receive special education?	Yes	YC34
		No	10.54
	Please select the grade and subject in which you received special	Grade 8 Math	YC35
	education (table shown)	Grade 8 Norwegian	YC36
		Grade 8 English	YC37
		Grade 8 Other subject	YC38
		Grade 9 Math	YC39

		<b>Response options</b>	Variable
rsi	on C		
	This element will only be displayed if the "Yes" option is selected in	Grade 9 Norwegian	YC40
	question "7.16 Do you (or did you previously) receive special	Grade 9 English	YC41
	education?"	Grade 9 Other subject	YC42
		Grade 10 Math	YC43
		Grade 10 Norwegian	YC44
		Grade 10 English	YC45
		Grade 10 Other subject	YC46
		VG1 Math	YC47
		VG1 Norwegian	YC48
		VG1 English	YC49
		VG1 Other subject	YC50
		VG2 Math	YC51
		VG2 Norwegian	YC52
		VG2 English	YC53
		VG2 Other subject	YC54
		VG3 Math	YC55
		VG3 Norwegian	YC56
		VG3 English	YC57
		VG3 Other subject	YC58
	How was the special education normally organized? This element will only be displayed if the "Yes" option is selected in question "7.16 Do you (or did you previously) receive special education?"	<ol> <li>In class</li> <li>In smaller groups</li> <li>Alone with special educator/assistant</li> </ol>	YC59
	<ul> <li>Have you been considered for special education by the "pedagogisk psykologisk tjeneste" (special needs assessment service)</li> <li>This element will only be displayed if the "No" option is selected in question "7.16 Do you (or did you previously) receive special education?"</li> </ul>	1 Yes 2 No 3 Don't know	YC60

#### Description of original scale: MoBa specific single questions

**Revisions:** Questions about special need education was included in version C.

#### **Questions about Relations with parents**

Q		Response options		Variable name
	Here follows statements about how adolescents can feel about their paren family.	nts. N	Mark how often you feel this	way in your
8	My parents understand me	1	Never	YC61
9	I get along well with my parents	2	Now and then Often Almost all the time	YC62
10	My parents like me	3		YC63
11	I like my parents	4		YC64

#### **Description of original instrument:**

The Self-Description Questionnaire II-Short (SDQII-S; Marsh et al., 2005) is a modified questionnaire from the original SDQII. The short version contains 51 items from the original 102-item questionnaire, measuring multi-dimensional self-

concept in adolescences. SDQII-S contains 11 self-concept factors including 3 academic sub-scales, 7 psychosocial scales (including Parent Relations as selected in this section), and one global self-concept measure.

#### Psychometric Information (sample, reliability, validity):

SDQII-S's 11-factor structure was analysed for internal consistency reliability. Based on the sample, Cronbach's Alpha reliability estimates range from .80 to .89 (Marsh et al., 2005)

#### Base Reference/Primary Citation:

Marsh, H. W., Ellis, L. A., Parada, R. H., Richards, G., & Heubeck, B. G. (2005). A short version of the self-description questionnaire II: Operationalizing criteria for short-form evaluation with new applications of confirmatory factor analyses. Psychological Assessment, 17, 81-102.

#### **3.** Rationale for choosing the questions:

The items in this section can be used to tap perceptions of parent relationships.

#### 4. Revision during the data collection period: None

#### **Questions about Parent-child conflict**

Name of original scale: The Parent-Child Conflict Scale, the Parental Environment Questionnaire (PEQ)

Q		<b>Response options</b>	Variable name						
	Have you been bothered by any of the following during the last two weeks?								
12	My parent often criticises me	1 Never	YC65						
13	My parent often irritates me	2 Now and then	YC66						
14	My parent often hurts my feelings	3 Often	YC67						
15	My parent and I often get into arguments	4 Almost all the time	YC68						

**Description of original instrument**: The Parent-Child Conflict Scale, the Parental Environment Questionnaire (PEQ) The items are selected from the Parent-Child Conflict Scale in the Parental Environment Questionnaire, developed for use by

the Minnesota Twin Family Study (MTFS; see Elkins, McGue and Iacono, 1997). The Parent-Child Conflict Scale comprised 12 items, of which 4 are selected for use in this section. Each item is evaluated on a 4-point Likert scale (1-4 points for replies from "never" to "almost all the time").

#### Psychometric Information (sample, reliability, validity):

Burt et al. (2006) examined 486 monozygotic twin pairs, assessed at ages 11, 14 and 17 years. The internal consistencies for this scale at age 11 years ranged between .81 and .88 for twin and parent informants.

#### Base Reference/Primary Citation:

Burt SA, McGue M, Iacono WG, Krueger, RF. Differential parent-child relationships and adolescent externalizing symptoms: Cross-lagged analyses within a monozygotic twin differences design. Dev Psychol. 2006; 42(6): 1289-1298.

Elkins IJ, McGue M, Iacono WG. Genetic and environmental influences on parent-son relationships: evidence for increasing genetic influence during adolescence. Dev Psychol. 1997; 33(2): 351-363.

#### **Rationale for choosing the questions:**

The items in this section can be used to tap perceptions of the parent-child conflict.

#### Revision during the data collection period: none

#### Questions about Physical activity and exercise

Q	<b>Response options</b>	Variable Name
Version C		

16	How often do you exercise? (on average)	1	Never	
		2	Less than once a week	
	By "exercise" we mean e.g., taking a walk, go skiing,	3	Once a week	
	bicycling, swimming, or sport activities.	4	2-3 times a week	
		5	4-6 times a week	
		6	Every day	YC69
16.1	How hard do you exercise? (rate on average)	1	I take it easy without getting	
			sweaty or out of breath	
	This item is only shown if options 2-6 is selected in	2	I train hard so that I get sweaty	
	question "16. How often do you exercise? (on		and out of breath	
	average)"	3	I train until I'm completely exhausted	YC70
16.2	For how long do you usually exercise? (rate on average)	1	Less than 15 minutes	
		2	15-29 minutes	
	This item is only shown if options 2-6 is selected in	3	30  minutes - 1  hour	
	question "16. How often do you exercise? (on	4	More than 1 hour	YC71
1( )	average)"			
16.3	Do you consider yourself a top athlete ("toppidrettsutøver")?			
	· · · · /	1	Yes	
	This item is only shown if options 2-6 is selected in	2	No	
	question "16. How often do you exercise? (on			
	average)"			YC72
17.	Do you attend organized activities (sport teams or other	1	Yes	
	memberships)?	2	No, but I used to	
		3	No	YC73
17.1	How old were you when you stopped?			
		1	Below 6 years	
	This item is only shown if options 2 is selected in	2	years	
	question "17. Do you attend organized activities (sport	3	years	
	teams or other memberships)?"	4	years	
		5	years	
		6	years	
		7	years	
		8	years	
		9	years	
		10	years	
			years	
			years	
		13 14	years 18 years	YC74
18	How many hours a week do you actively attend gym class at school?	14		10/4
		1	1 hour	
	This includes selected subjects involving physical	$\begin{vmatrix} 1 \\ 2 \end{vmatrix}$	hours	
	activity or athlete classes ("praktiske idrettsfagtimer"	$\begin{vmatrix} 2\\ 3 \end{vmatrix}$		
			hours	
	This element will only be displayed if the "Yes" option	45	5 or more hours	
	is selected in question "7. Do you go to school?"		5 of more nours	VC75
19.	Do you walk or ride your bike to school and/or	1	Yes	YC75
	activities?	2	No	YC76
19.1	How many hours a week have you walked or ride your bike to school and/or to attend activities?			
		1	Less than 1 hour	
	This element will only be displayed if the "Yes" option	2	1-2 hours	
	is selected in question "19. Do you walk or ride your	3	3-4 hours	
	bike to school and/or activities?"	4	5 or more hours	
				YC77

20.1	For approximately how many hours do you sit still on a			
	normal weekday (include school and spare time)?	1	1 hour	
		2	2 hours	
	On your computer, watching TV, pad, reading,	3	3 hours	
	car/bus/train-driving etc.			
		23	23 hours	
		24	24 hours	YC78
20.2	For approximately how many hours do you sit still on			
	your day off?	1	1 hour	
		2	2 hours	
	On your computer, watching TV, pad, reading,	3	3 hours	
	car/bus/train-driving etc.			
	-	23	23 hours	
		24	24 hours	YC79

**Description of original scale:** The questions were selected by a group of experts on physical activity and were based on items previously used in the YoungHUNT4 study (age 13-19 years). Similar questions were also included in the 14-year questionnaire. https://www.ntnu.no/hunt/unghunt

#### Base Reference/Primary Citation:

Sagatun A. Søgaard AJ. Bjertness, E. Selmer, R. Heyerdahl, S. The association between weekly hours of physical activity and mental health: A three-year follow-up study of 15-16-year-old students in the city of Oslo, Norway. BMC Public Health 2007, 7:155.

Revisions: Question 19 (YC76 YC77) was included in version C.

#### Questions about Activities in leisure time

Q		Response options	Variable name
	Outside school hours, during one week, for how many days do you usually do the following?		
21	Hang out with friends		YC80
22	Exercise (e.g. soccer, skiing, running, dance, gymnastics)	1 Never / seldom	YC81
23	Other organized activities (e.g. drama, music, politics, volunteer work)	2 1 day 3 2-3 days	YC82
24	Stay at home all night	-4 4-5 days	YC83
25	Read a book, listen to audio book	-5 - 6-7  days	YC84
26	Work	5 0-7 days	YC85
	Outside school hours: for approximately how many hours per week do you		
	spend time on the following activities:		
27	Watch movies/series/TV	1 Never/seldom	YC86
28	Do homework	2 Less than 1 hour	YC87
29	Play games (on PC, TV, tablet, mobile etc.)	3 1-2 hours	YC88
30	Relax with PC, mobile or tablet (irrespective of activity)	4 3-4 hours	YC89
31	Communicate with friends on social media	5 5-6 hours	YC90
32	Spend time outdoors (irrespective of activity)	6 7 hours or more	YC91

Description of original scale: MoBa specific single questions. The questions were also included in the 14-year questionnaire.

#### Psychometric Information: Not relevant.

#### **Rationale for choosing the instrument:**

These questions were developed to get information about the child's activities in leisure time, including physical and social activities, doing homework, playing games, etc. Items were selected to resemble the 14-year measure.

#### **Revision during the data collection period:**

No revisions have been made.

#### Questions about Social media use

Q		<b>Response options</b>	Variable name
	Regarding social media use, how often do you use it for the following?		
33	Use social media in relation to school/studies		YC92
34	Post status updates, pictures or videos of myself/friends		YC93
35	Make plans with friends, organize my daily life	1 Several times a day	YC94
36	Chat with friends (individually or in groups)	2 Daily	YC95
37	Check out what's happening among friends, groups I am part of or cultural events	3 Weekly 4 Seldom	YC96
38	Posts links or comments on issues or debates related to society, culture or politics	5 Never	YC97
39	Read news		YC98
	To what degree is the following true for you?		
40	Social media steel focus from more important things	1 Not at all	YC99
41	I find other people's use of smart phones in social settings bothersome	2 Just a little	YC100
42	I see myself as addicted to social media	3 Sometimes	YC101
43	I find that other people's posts (pictures/status updates), make me less satisfied with myself and my life	4 Quite a lot 5 Very much	YC102
44	My phone is always on, also after I go to bed		YC103

**Description of original scale:** These questions were developed by a team of Social Media experts at the University of Bergen and first used in Shot 2018, (Students' Health and Wellbeing Study), a survey of approximately 50,000 Norwegian college and university students (ages 18–35), both in Norway and studying abroad (Sivertsen et al., 2019b) <u>https://www.fhi.no/cristin-prosjekter/aktiv/shot-2018-studentenes-helse--og-trivselsundersokelse-2018-/</u> According to (Kingsbury et al. 2021) the activity items can be categorized into:

- 1. *passive social* ("check out what's happening among friends, groups I'm in, or about cultural activities"), passive non-social ("read the news"),
- 2. active non-social ("use social media associated with my studies"),
- 3. *active social public* ("post status updates or pictures of myself/friends"; "post links or comments on issues or debates related to news, society, culture or politics") and
- 4. *active social private use* ("make appointments with friends organize my daily life"; "Chat with friends (individually or in groups)").

The item assessing social comparison on social media is used by itself "I find that what others post (photos/status updates) make me feel less satisfied with myself and my own life".

These questions are comparable to, though not as exhaustive as, the activities listed in the Passive and Active Facebook Use Measure (PAUM) used in other studies of social media use (Gerson et al., 2017).

#### **Base Reference/Primary Citation:**

Kingsbury, M., Reme, B. A., Skogen, J. C., Sivertsen, B., Øverland, S., Cantor, N., ... & Colman, I. (2021). Differential associations between types of social media use and university students' non-suicidal self-injury and suicidal behavior. *Computers in human behavior*, *115*, 106614.

Gerson, J., Plagnol, A. C., & Corr, P. J. (2017). Passive and active Facebook use measure (PAUM): Validation and relationship to the reinforcement sensitivity theory. *Personality and Individual Differences*, *117*, 81-90.

Psychometric Information: Not relevant.

#### **Rationale for choosing the instrument:**

These questions were included to get information about the adolescent social media use.

#### **Revision during the data collection period:**

No revisions have been made.

#### Questions about life satisfaction

Name of original instrument/question: The Cantril Self-Anchoring Striving Scale (Cantril ladder)

Q	<b>Response options</b>	Variable name	
	Below you see a scale from 0 to 10, where 0 is the worst and 10 is the best life for you.		

		1 0 – worst	
		2 1	
		3 2	
		4 3	
		5 4	
45	Where do you feel you stand at the present time?	6 5	YC104
		7 6	
		8 7	
		9 8	
		10 9	
		11 10 - best	

#### 2. Description of original scale or selection of items used

The Cantril Scale is a scale used to assess general life satisfaction (Cantril 1965). The original scale consists of the following: *Please imagine a ladder with steps numbered from zero at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time? (ladder-present). On which step do you think you will stand about five years from now? (ladder-future).* 

An adapted version for use among adolescents in the Health Behaviour in School-aged Children (HBSC) surveys has been validated in adolescent populations (Levin & Currie, 2014). In MoBa the adapted version of the Cantril scale was used to measure life satisfaction in the present.

#### Psychometric Information:

The Cantril Scale has shown good reliability in the Health Behaviour in School-aged Children (HBSC) surveys of adolescent samples, and showed good convergent validity with other emotional well-being measures, perceived health and subjective health (Levin & Currie, 2014). Data from the HBSC 2010 survey revealed that the mean Cantril Scale scores for all countries was 7.58 and that 28 of 31 countries had a mean value between 7 and 8 (Looze, Huijts, Stevens, Torsheim, & Vollebergh, 2018). Most HBSC studies have used a cut-off point of 0–5 versus 6–10 to categorise low vs. high score. Others applied scores of 9–10 as a distinct measure of high life satisfaction versus low and medium scores of 0–8 (Due et al. 2019).

#### **Base Reference/Primary Citation:**

Cantril, H. (1965). The pattern of human concerns. New Brunswick, NJ: Rutgers University Press.

Diener E, Emmons RA, Larsen RJ, et al. The Satisfaction With Life Scale. *J Pers Assess* 1985;49(1):71-5. doi: 10.1207/s15327752jpa4901\_13

Levin, K.A., & Currie, C. (2014). Reliability and validity of adapted version of the Cantril Ladder for use with adolescent sample. *Social Indicator Research*, *119*, 1047–63.

Gallup (2009). World Poll Methodology. Technical Report. Washington, DC.

Due, P., Eriksson, C., Torsheim, T., Potrebny, T., Välimaa, R., Suominen, S., ... & Damgaard, M. T. (2019). Trends in high life satisfaction among adolescents in five Nordic countries 2002–2014. *Nordisk välfärdsforskning/ Nordic Welfare Research*, 4(02), 54-66.

#### **3.** Rationale for choosing the instrument:

Life satisfaction is an important indicator when assessing positive mental health aspects in populations, including among adolescents. The Cantril scale is a widely used measure of life satisfaction. It is used in Gallup surveys across the globe as well as for adolescents in the Health Behaviour in School-aged Children (HBSC) survey in 42 countries/regions including in Norway. The measure was chosen in MoBa as an easy-to-use measure of life satisfaction for adolescents.

#### 4. Modifications:

No changes have been made