

Reactions of non-abused children aged 3–9 years to the Sexual Knowledge Picture Instrument: an interview-based study

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ABSTRACT

Background The Sexual Knowledge Picture Instrument (SKPI) is a child-friendly picture book that was developed as a diagnostic tool for sexual abuse in young children and is currently being validated. The aim of the current study was to explore the verbal and non-verbal reactions of non-abused Dutch children, aged 3–9 years, to the SKPI and to assess differences in reactions between genders and age groups.

Methods and analysis Subject recruitment took place at preschools and primary schools. All children underwent a recorded video semi-structured interview with the SKPI. Interview recordings were scored by an independent rater who used scoring lists for verbal and non-verbal reactions. Non-parametric tests were used in statistical analyses.

Results Of the 90 children (median age 5 years) participating in the study, most correctly named the genitals and their non-sexual functions. Only 34 showed an understanding of the picture depicting adult sexuality, with just one child describing a sexual function. Girls (n=45) gave more correct answers (median 87%) than boys (n=45, median 78%; p=0.006). Giggling was the most frequently observed non-verbal reaction, with a total of 186 instances in 54 children.

Conclusion Non-abused children up to 9 years of age showed only limited knowledge of the sexual function of the genitals and hardly any insight into adult sexuality.

INTRODUCTION

The estimated worldwide prevalence of child sexual abuse (CSA) ranges between 0.4% and 31%.^{1–3} The consequences of CSA can be major, affecting both short-term and long-term health and having both physical (from acute injuries to life-long chronic diseases) and psychosocial (eg, depression, anxiety disorders, post-traumatic stress disorder (PTSD), substance abuse and difficulties in forming intimate and trusting relationships) manifestations.^{4–7} In order to offer timely and appropriate care for victims, it is necessary for medical and psychological care professionals to recognise CSA early.

What is known about the subject?

- Regardless of the prevalence and devastating consequences of sexual abuse in young children, cases often go unrecognised by medical and psychological professionals.
- To date, no validated diagnostic instruments are available for evaluating cases of suspected sexual abuse in young children.
- Hardly any information is available on the sexual knowledge of non-abused children up to 9 years old.

What this study adds?

- Non-abused children up to 9 years of age showed only limited knowledge of the sexual function of the genitals.
- Non-abused children up to 9 years of age showed hardly any insight into adult sexuality.

Related physical injuries might heal quickly, and young children in particular experience many barriers to disclosing abuse.^{8–10} Symptoms of PTSD and age-inappropriate sexual behaviour and knowledge are considered the most commonly identified signs of CSA.¹¹

Meanwhile, research on adult survivors of CSA shows that some of the cues the survivors gave as young children, such as telling about the abuse ‘in their own words’ or showing non-verbal and behavioural signs, remained unidentified by professional caregivers over time.^{9 12–14}

The Sexual Knowledge Picture Instrument (SKPI) is a child-friendly picture book that was developed for professionals to assess a child’s knowledge of intimate body parts, intimacy, and adult sexuality, and to observe their non-verbal reactions at the same time.¹¹ The pictures show daily routines in the lives of most children, gender differences, body



parts and their functions, and normal intimate behaviour between children and/or adults. A manual for professionals was also developed. The manual contains instructions, a semi-structured interviewing protocol, and a scoring list for the evaluation of verbal and non-verbal reactions of the child. The SKPI is currently being validated in a study to determine its value as a diagnostic tool for CSA in young children.¹⁵ The main hypothesis in this study is that abused children can be distinguished from non-abused children by their verbal and non-verbal reactions to the instrument, and that looking at the pictures may lower the burden for abused children to disclose.¹⁵

As a first step in the validation of the SKPI, the current study investigated the verbal and non-verbal reactions to the SKPI in a group of non-abused Dutch children between the ages of 3 and 9. The aim of this study was to establish 'normal' values of verbal and non-verbal responses to the SKPI. We expected to see no non-verbal responses related to stress or discomfort during the interviews. An additional aim of the current project was to compare the sexual knowledge of boys and girls. The hypothesis was that we would find no differences in the sexual knowledge of young, non-abused boys and girls.

In our validation study currently being conducted, the reactions of the non-abused children will be compared with the verbal and non-verbal reactions of a group of (alleged) victims of CSA and the inter-rater and intrarater reliability of the SKPI are investigated.

METHODS

Study population

Children between the ages of 3 and 9 years were included in the study. Recruitment took place by approaching parents from multiple schools and preschools across the country. Current or earlier sexual abuse in children was ruled out as much as possible by administering parental questionnaires that included questions about any history of (suspected) abuse. Other child-based exclusion criteria were a visual or cognitive impairment, a previous interview with the SKPI or a diagnosis of a psychiatric/behavioural disorder.

Study procedures

For a detailed description of the procedure for child interviews with the SKPI, we refer to the published protocol of the validation study.¹⁵

The first two pictures of the SKPI show ordinary home situations for most Dutch children. With the accompanying questions, these images allow the child to become more comfortable. The rater is able to observe and score the child's 'baseline' non-verbal behaviour.

The following 13 pictures and questions assess the child's verbal sexual knowledge and non-verbal reactions across five topics: gender differences (pictures 3, 4, 6), male and female genitals and buttocks and their functions (pictures 4, 5, 7, 8), adult intimacy (pictures

9, 10) and child/child or child/adult intimacy (pictures 11–15).

Each verbal reaction in response to the questions is scored as 'correct', 'incorrect', 'refusal to answer' or 'other ...'. Some of the correct answers are further separated into different options (eg, with or without mentioning the genitals, or adding a sexual function of the genitals). To determine a verbal score for each individual child, correct and incorrect answers were scored as 1 and 0, respectively. Total scores were calculated for each of the five topics. For the non-verbal test score, the rater could check for 24 different non-verbal reactions in the child as they responded to each picture.

In the current study, the recorded video child interviews were scored by an independent rater (SvD). Coded data were collected in Castor EDC, a General Data Protection Regulation (GDPR) compliant encrypted digital database.¹⁶

Patient and public involvement

During the design of the study, parents/caregivers from (potential) subjects assisted us in creating a recruitment strategy and helped to ensure that the methods selected were appropriate. We intended to share the final results of the study with all parents/caregivers and will continue involving them in the development of an appropriate method of dissemination of the study results.

Statistical analysis

All data were analysed using SPSS (V.25.0, IBM). Categorical variables were reported as numbers and percentages. The Mann-Whitney U test was used to compare the scoring results between boys and girls. P values <0.05 were considered statistically significant.

RESULTS

A total of 171 preschools and primary schools were approached and informed about the study. Thirty-one schools (18%) gave permission to inform the parents of the students, and 89 children were recruited to participate in the study. Seven children, recruited from the personal networks of the researchers, were added. Of these 96 children, 6 children were excluded based on the exclusion criteria (n=3) or technical problems during the interview (n=3).

Baseline characteristics

The total study group consisted of 90 children. Ages were evenly distributed, with a median (IQR) age of 5 (4–7) years. The group consisted of 45 boys and 45 girls. Eighty-nine children, 85 mothers and 86 fathers were born in the Netherlands. Ten children spoke a second language (ie, Amharic (Ethiopia), English, German, Indonesian, Spanish and Swedish). During the first 22 interviews, a preliminary version of the manual, which did not contain questions 8 and 10, was used. Sometimes a question could not be asked, for example, if the child persistently wanted

Table 1 Median (IQR) number of correct answers per topic for the total study group and for each gender and age group

Topic: possible range	Gender differences 0–6	Genitals and functions 0–10	Adult intimacy 0–2	Child-adult intimacy 0–5	Total 0–23
Total (n=90)	5 (4–6)	8 (6–10)	1 (1–2)	4 (3–5)	19 (17–21)
Girls (n=45)	6 (5–6)	9 (7–10)	2 (1–2)	4 (4–5)	20 (18–21)
Boys (n=45)	5 (4–6)	7 (5.5–10)	1 (1–2)	4 (3–5)	18 (14–20)
P value (Mann-Whitney test)	0.012	0.056	0.060	0.071	0.006
3 years (n=9)	3.5 (3–4.25)	4.5(2–9)	1 (1–1.25)	2 (1–3))	12.5 (7.5–16.25)
4 years (n=19)	5 (4–6)	8 (6–9)	1 (1–2)	4 (3–4)	19 (15–20)
5 years (n=22)	6 (5.75–6)	8.5 (6–10)	1 (1–2)	4 (3.75–5)	20 (17.75–21.25)
6 years (n=15)	5 (4–6)	8 (7–9)	2 (1–2)	4 (3–5)	18 (17–21)
7 years (n=12)	6 (5–6)	10 (8.25–10)	1 (1–2)	4 (4–5)	21 (19.25–22)
8 years (n=12)	4.5 (4–6)	9.5 (7–10)	1 (1–2)	5 (4–5)	19.5 (18–21)

to continue to the next picture (this particular reaction was scored as a non-verbal reaction).

Verbal scoring

Table 1 shows the median (IQR) total score and median (IQR) score for each topic for the total sample and divided by gender or age in years. The Mann-Whitney test was used to compare the medians from boys and girls.

Girls had more correct answers than boys in all topics, as is illustrated in table 1.

Table 2 shows the number of children in the total study population, and boys and girls separately, who gave a correct answer to each of the individual questions. Questions answered correctly more than 95% of the time and less than 75% of the time in the total sample are marked green and orange, respectively.

Eighty-nine children were able to identify the dressed boy and girl, and 81 knew their own gender. Forty-one children correctly explained how the boy and girl were different, and four children named genital differences. While most children showed adequate knowledge of the urinating function of the female and male genitals, only one 6-year-old girl added sexual functions. The correct function of the female breasts (breastfeeding) was given by 53 children.

Eighty-eight children showed insight into the situation of the kissing adults and described the characters on the picture as ‘being in love’, ‘getting married’, ‘hugging’ or ‘kissing’. Thirty-four children gave a correct ‘sexual’ connotation to the situation in picture 10. Five children refused to answer and 51 showed no, or very basic, insight (eg, a description, such as, ‘Mummy and daddy are lying down, looking at each other’).

The complete verbal scoring result table, a ranking of the scorings per question and the elaborated verbal reaction tables from the total sample, for boys and girls and for different age groups are available as online supplemental appendices 1–3, respectively.

Non-verbal scoring

Table 3 displays the most frequently observed non-verbal reactions (at least 20 times in total), for each picture. A complete table that displays the observed frequency of all 24 non-verbal reactions that could be scored for each picture is available as an online supplemental appendix 4.

Picture 4 (naked boy and girl) elicited the highest number of reactions (n=56, in 40 children), followed by picture 7 (naked man and woman) (n=53, in 35 children).

Giggling was the most frequent non-verbal reaction. Giggling was observed 186 times in 54 children, usually as a reaction to pictures 4 and 5 (front and back of naked boy and girl), pictures 6 and 7 (naked man and woman), picture 10 (man and woman making love) and picture 11 (children’s play). This was followed by excessive movements (eg, wiggling legs/feet or fidgeting with fingers), which was recorded 80 times in 26 children as ‘unable to sit quietly’. It is important to notice that, just as trying to turn to the next page, this reaction was mostly seen in children who demonstrated the same behaviour when shown the first two (baseline) pictures, which lacked any sexual connotations.

Five children walked away during the interviews. Two children (ages 3 and 4) walked away after looking at the baseline pictures, one child (age 4) when seeing picture 7 (naked man and woman) and one child (age 4) when seeing picture 10 (man and woman making love). Five possible non-verbal reactions were never observed: ‘crying’, ‘looking angry’, ‘sitting in a hunched way’, ‘hiding face (in clothes/hair)’ and ‘not able to score because child refuses to participate’.

The complete, elaborated non-verbal reaction table, showing the non-verbal reactions of each individual child to each picture is available on request from the authors.

DISCUSSION

We aimed to reveal the verbal and non-verbal reactions of non-abused Dutch children 3–9 years of age to the SKPI to gain insights into their sexual knowledge. The second aim was to compare the sexual knowledge of boys and girls and children of different ages. The results of this study will also be used in a validation study comparing the reactions of the non-abused participants in this study with the verbal and non-verbal reactions of a group of (alleged) victims of CSA.

With a median of 19 correct answers out of 23, we showed that most non-abused young Dutch children had knowledge of gender differences, genitals and their functions and intimacy. When comparing the different topics present in the SKPI, children had more limited

knowledge of the sexual function of the female (child and adult) genitals than of the male genitals. On the topic of adult intimacy, while picture 9 (kissing man and woman) was often interpreted correctly, picture 10 (man and woman making love) was mostly described without any sexual connotation. Children showed more insight into the intimate situations between children and between adults and children (picture 11–15). Of these pictures, picture 12 (doctor examining a child) and 15 (crying child in bed) were the most challenging to participants. These two pictures may have been too difficult for the children to interpret properly. For example, some children justifiably interpreted picture 12 as a father changing the diaper of a toddler, which was considered correct in this study.

Table 2 Number of children answering each SKPI question correctly, including a breakdown of the total sample into boys and girls

Topic	Question	Total (n=90)	Boys (n=45)	Girls (n=45) n ^{/N}
Gender differences	1. Identification dressed boy/girl	89 ^{/89}	44 ^{/44}	45 ^{/45}
	2. Explanation gender dressed boy/girl	76 ^{/83}	34 ^{/40}	42 ^{/43}
	3. Identification own gender	81 ^{/84}	39 ^{/42}	42 ^{/42}
	4. Explanation own gender	41 ^{/81}	15 ^{/40}	26 ^{/41}
	<i>Incl. genital differences</i>	4		4
	5. Identification naked boy/girl	89 ^{/89}	44 ^{/44}	45 ^{/45}
	6. Explanation gender difference naked boy/girl	79 ^{/88}	36 ^{/44}	43 ^{/44}
	<i>Incl. genital differences</i>	72	33	39
Children's genitals and their functions	7. Naming of girl's genitals	59 ^{/80}	24 ^{/39}	35 ^{/41}
	8. Function of girl's genitals*	59 ^{/64}	28 ^{/32}	31 ^{/32}
	<i>Incl. sexual function</i>	1		1
	9. Naming of boy's genitals	79 ^{/81}	39 ^{/40}	40 ^{/41}
	10. Function of boy's genitals*	62 ^{/64}	31 ^{/32}	31 ^{/32}
	<i>Incl. sexual function</i>	1		1
Adult's genitals and their functions	11. Naming of breasts	79 ^{/89}	36 ^{/44}	43 ^{/45}
	12. Function of breasts	53 ^{/88}	21 ^{/44}	32 ^{/44}
	13. Naming of female genitals	66 ^{/90}	28 ^{/45}	38 ^{/45}
	14. Function of female genitals	79 ^{/85}	37 ^{/42}	41 ^{/43}
	<i>Incl. sexual function</i>	1		1
	15. Naming of male genitals	83 ^{/90}	40 ^{/45}	43 ^{/45}
	16. Function of male genitals	82 ^{/88}	38 ^{/43}	43 ^{/45}
<i>Incl. sexual function</i>	1		1	
Adult intimacy	17. Insight kissing adults	88 ^{/90}	43 ^{/45}	45 ^{/45}
	18. Insight adults making love	34 ^{/90}	14 ^{/45}	20 ^{/45}
Child intimacy	19. Insight children's play	72 ^{/90}	34 ^{/45}	38 ^{/45}
	20. Insight doctor examining child	48 ^{/90}	26 ^{/45}	22 ^{/45}
	21. Insight male bent over girl in bed	74 ^{/90}	37 ^{/45}	37 ^{/45}
	22. Insight female washing boy in shower	84 ^{/90}	40 ^{/45}	44 ^{/45}
	23. Insight crying child in bed with female	62 ^{/90}	25 ^{/45}	37 ^{/45}

*Question missing in primary version of the manual.

Table 3 Number of children from the total sample (n=90) that showed a non-verbal reaction to each picture

Picture reaction	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Silent/saying little	5	2	1	3	3	1	2	2	4	1	3	2	2	1	1
Speaking softly	6	2	1	4	1	1	2	1	1	1	1	1	2	1	1
Other voice	1	1	1	3	3	3	6	1	–	2	3	3	2	3	–
Giggling	5	8	5	29	24	9	21	16	14	16	19	3	6	6	5
To next picture	7	9	3	3	1	4	4	2	5	4	5	5	3	6	7
Avoiding eye contact	1	1	2	2	2	2	2	1	1	1	1	1	2	1	2
Distracting	1	5	3	1	1	5	2	1	4	1	3	2	3	2	4
Not able to sit quietly	6	6	1	5	3	8	6	5	7	6	6	2	5	6	8

Reactions to the baseline pictures are marked in grey.

Although we expected to find similar knowledge in girls and boys, we did find some differences. However, the median age of girls in our sample was higher (6 years vs 5 years), and only two girls were 3 years old, compared with six of the boys.

Using a similar picture instrument as the SKPI in a study 20 years ago, Brilleslijper-Kater *et al* did not find differences in sexual knowledge between boys and girls.¹⁷ It is important to recognise the different age range (2–6 years) in the previous study and the relatively small sample sizes of both studies.

With a median of 12.5 correct answers out of 23, the number of correct answers was clearly the lowest in the 3-year-old group. However, the median number of correct answers was similar for the older age groups. The limited sizes of the different age groups did not allow us to investigate further the age-related differences in sexual knowledge.

Overall, the children seemed relaxed during the interviews, and did not show non-verbal reactions that could be clearly related to stress or discomfort.

Giggling was by far the most common non-verbal reaction. Although giggling at the introduction pictures was observed in 12 children, this was also the most frequent reaction to the pictures that showed nudity.

Strengths and limitations of this study

Before using and scoring the SKPI, all interviewers and the rater were trained by a child psychologist, enabling them to conduct the interview and to use the scoring forms in a uniform and reliable way. Still, the use of the SKPI may have limitations. For example, it relies on whether or not the child is following the given instructions and willing to demonstrate (all) his/her knowledge.

The recruitment of children in the study was difficult; the majority of schools we approached indicated that the sensitivity of the topic was their main reason not to facilitate our study. Even if the schools were willing to facilitate recruitment, few parents were interested in participating with their child. As a result, the sample size of our study (n=90) was smaller than the intended study size (n=100). The small sample size also prevented a more detailed

comparison of the sexual knowledge between children of different ages.

Except for the previous study by Brilleslijper-Kater *et al* using a similar instrument, we did not find any information in the literature regarding other studies, or other methods to explore sexual knowledge in young, non-abused children.

Furthermore, the generalisability of our findings to the general population in the Netherlands is limited. Despite our attempts to reach parents and children with different ethnic and cultural backgrounds, we were not able to include many children with non-Dutch backgrounds, even though they form an important part of the Dutch population.

Current or earlier sexual abuse of the children was ruled out using the parental questionnaire. However, it is impossible to completely rule out CSA. If the responses to the questionnaires did not give any warning signs, we assumed the child did not experience CSA.

Implications for the validation study

In the next step for the determination of the diagnostic accuracy and the value of the SKPI, the scorings from the current sample of non-abused children will be compared with the scorings from a sample of suspected victims of sexual abuse. The scorings will be evaluated by a blinded, independent rater. We will determine if any differences are present between the groups, suggesting that suspected victims have more or less knowledge of adult sexuality, by comparing total verbal scoring results. It may also be relevant which, and how many, non-verbal reactions are shown by suspected victims and if reactions absent from the current study are noted in the case group.

CONCLUSION

Non-abused Dutch children, aged 3–9 years, who were interviewed with the SKPI demonstrated knowledge of gender differences and children's genitals. They showed only limited knowledge of the sexual function of the genitals or insight into adult sexuality. The girls in this study,



who were slightly older on average than the boys, gave more correct answers than the boys on most questions.

Giggling was the most common non-verbal reaction and was mostly observed in response to the pictures that showed nudity.

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Contributors AHT, KvH, SB-K, RvR, JBvG, and HvdL conceived of the study and initiated the study design. KvH and SvD performed data collection, data analysis and interpretation, and KvH drafted the article. HvdL provided statistical expertise in clinical trial design and conducted the primary statistical analysis. All authors contributed to refinement of the study protocol and critical revision of the article, and all of them approved the final manuscript.

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Competing interests None declared.

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Data availability statement Data may be obtained from a third party and are not publicly available. All data relevant to the study are included in the article or uploaded as supplementary information. Data may be obtained from a third party and are not publicly available. All study data will be stored according to Good Clinical Practice guidelines. Coded data from the subject scoring and questionnaires will be stored in the online study database from Castor Castor Electronic Data Capture. For privacy reasons, the video recordings will be stored in a separate, locked database on the Amsterdam UMC data server in which it can only be approached by the coordinating researcher and one of the local coinvestigators. The recordings will be erased 1 year after the study's final analysis.

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Scoring result table - Complete sample

RECORD #	CHILD #	F/M	AGE (Y)	TOPIC 1: GENDER	TOPIC 2: GENITALS	TOPIC 3: ADULT INTIMACY	TOPIC 4: CHILD-ADULT INTIMACY	TOTAL SCORING
110010	1	F	8	4	7*	2	5	18*
110013	2	M	6	3	6*	2	2	13*
110014	3	M	6	4	7*	2	6	18*
110015	4	M	5	4	6*	2	2	14*
110016	5	M	8	4	6*	1	4	15*
110017	6	M	4	4	1*	1	3	9*
110018	7	F	6	6	7*	2	5	20*
110019	8	F	4	3	1*	1	2	7*
110021	9	M	5	6	5*	2	4	17*
110022	10	M	5	5	5*	2	1	13*
110024	11	F	8	2	7*	2	5	19*
110031	12	F	3	4	4*	2	3	13*
110032	13	M	6	4	5*	1	3	13*
110034	14	M	3	3	2*	1	0	6*

Scoring result table - Complete sample

110035	15	F	6	6	8*	2	5	21*
110036	16	F	6	4	7*	1	5	17*
110037	17	F	6	6	8*	1	2	17*
110038	18	F	8	6	6*	1	5	18*
110039	19	F	4	6	8*	1	4	19*
110040	20	M	4	4	5*	2	4	15*
110041	21	M	3	3	3*	1	1	8*
110042	22	M	6	5	7*	2	4	18*
110047	23	F	6	5	10	2	4	21
110048	24	M	4	5	10	2	3	20
110049	25	F	8	5	10	1	3	19
110051	26	F	7	5	10	2	4	21
110052	27	F	5	6	10	2	4	22
110053	28	M	3	6	9	1	3	19
110054	29	F	6	5	9	2	4	20
110055	30	F	4	6	7	2	5	20
110056	31	F	8	5	10	2	4	21
110058	32	M	4	5	8	1	4	18
110059	33	M	4	4	6	1	4	15
110060	34	M	4	6	6	0	2	14
110061	35	F	3	4	9	1	1	15
110062	36	M	8	4	10	1	5	20

Scoring result table - Complete sample

110063	37	M	3	3	2	1	2	8
110064	38	F	5	6	9	1	4	20
110065	39	F	6	4	10	2	5	21
110066	40	M	5	6	10	1	3	20
110067	41	M	6	5	8	2	5	20
110068	42	M	3	5	6	2	3	16
110070	43	F	4	5	10	2	4	21
110071	44	F	7	6	10	2	4	22
110072	45	F	4	5	9	1	5	20
110073	46	M	6	5	8	1	4	18
110074	47	M	8	4	9	1	4	18
110075	48	F	4	6	9	2	5	22
110078	49	F	7	5	8	1	4	18
110079	50	M	5	5	7	2	5	19
110081	51	M	5	6	7	2	4	19
110083	52	M	6	5	9	1	2	17
110084	53	M	8	4	10	2	5	21
110085	54	F	5	6	9	2	4	21
110087	55	F	7	6	10	2	5	23
110088	56	F	7	5	10	1	4	20
110089	57	M	5	6	10	1	5	22
110090	58	M	8	6	10	1	5	22

Scoring result table - Complete sample

110091	59	M	5	6	10	1	4	21
110092	60	M	3	4	5	1	2	12
110095	61	F	6	6	10	2	5	23
110098	62	F	7	6	8	1	4	19
110099	63	M	5	6	10	1	5	22
110100	64	F	7	6	9	2	5	22
110102	65	F	5	6	6	2	3	17
110103	66	M	5	6	6	1	5	18
110104	67	F	5	6	8	2	4	20
110107	68	M	4	6	10	1	3	20
110108	69	F	4	5	6	2	5	18
110109	70	F	4	6	8	1	4	19
110110	71	M	5	4	4	1	3	12
110111	72	F	5	6	8	1	5	20
110112	73	M	4	6	10	2	4	22
110113	74	M	4	4	7	1	4	16
110117	75	F	4	6	9	1	4	20
110118	76	F	5	6	8	1	4	19
110122	77	F	7	6	10	1	3	20
110123	78	M	8	6	9	1	4	20
110124	79	M	7	6	10	1	5	22
110125	80	F	4	5	7	1	4	17

Scoring result table - Complete sample

110128	81	M	3	3	1	0	1	5
110129	82	M	5	6	9	1	5	21
110131	83	F	5	6	10	1	5	22
110134	84	F	5	6	10	1	4	21
110137	85	M	5	5	10	2	5	22
110138	86	F	7	5	10	2	5	22
130007	87	F	7	5	6	1	2	14
130011	88	M	3	2	10	1	4	17
130012	89	M	8	6	10	1	5	22
130013	90	F	7	6	10	1	4	21
TOPIC 1 = MAX 6								
TOPIC 2 = MAX 10								
TOPIC 3 = MAX 2								
TOPIC 4 = MAX 5								
* = Q 8 & Q 10 MISSING (= TOPIC 2 MAX 8, TOTAL MAX 21)								

Ranking per question - total sample, boys and girls

topic	question	correct answers (/out of)	total	boys	girls	ranking total	ranking boys	ranking girls	difference (girls - boys)
gender differences	1. identification dressed boy/girl	89 /89	1	1	1	1	1	1	0
	2. explanation gender dressed boy/girl	76 /83	0,915 663	0,85	0,976 744	12	13	7	-6
	3. identification own gender	81 /84	0,964 286	0,928 571	1	6	6	4	-2
	4. explanation own gender	41 /81	0,506 173	0,375	0,634 146	23	23	22	-1
	4a. Incl. genital differences	4 /81	0,097 561	0	0,153 846	25	25	25	0
	5. identification naked boy/girl	89 /89	1	1	1	2	2	2	0
children's genitals and their functions	6. explanation gender difference naked boy/girl	79 /88	0,897 727	0,818 182	0,977 273	14	15	6	-9
	6a. Incl. genital differences	72 /88	0,911 392	0,916 667	0,906 977	13	7	15	8
	7. naming of girls genital	59 /80	0,737 5	0,615 385	0,853 659	18	19	16	-3
	8. function of girls genital	59 /64	0,921 875	0,875	0,968 75	11	12	10	-2
	8a. Incl. sexual function	1 /64	0,016 949	0	0,032 258	26	26	26	0
	9. naming of boys genital	79 /81	0,975 309	0,975	0,975 61	4	3	8	5

Ranking per question - total sample, boys and girls

	10. function of boys genital	62 /64	0,968 75	0,968 75	0,968 75	5	4	9	5
	10a. Incl. sexual function	1 /64	0,016 129	0	0,032 258	27	27	27	0
adults genitals and their functions	11. naming of breasts	79 /89	0,887 64	0,818 182	0,955 556	15	16	13	-3
	12. function of breasts	53 /88	0,602 273	0,477 273	0,727 273	21	22	21	-1
	13. naming of female genital	66 /90	0,733 333	0,622 222	0,844 444	19	18	18	0
	14. function of female genital	79 /85	0,929 412	0,880 952	0,953 488	9	11	14	3
	14 a. incl. Sexual function	1 /85	0,012 658	0	0,024 39	28	28	28	0
	15. naming of male genital	83 /90	0,922 222	0,888 889	0,955 556	10	9	11	2
	16. function of male genital	82 /88	0,931 818	0,883 721	0,955 556	8	10	12	2
	16a. Incl. sexual function	1 /88	0,012 195	0	0,023 256	29	29	29	0
adult intimacy	17. insight kissing adults	88 /90	0,977 778	0,955 556	1	3	5	3	-2
	18. insight adults making love	34 /90	0,377 778	0,311 111	0,444 444	24	24	24	0
child intimacy	19. insight childrens play	72 /90	0,8	0,755 556	0,844 444	17	17	17	0
	20. insight doctor examining child	48 /90	0,533 333	0,577 778	0,488 889	22	20	23	3

Ranking per question - total sample, boys and girls

21. insight male bent over girl in bed	74 /90	0,822 222	0,822 222	0,822 222	16	14	19	5
22. insight female washing boy in shower	84 /90	0,933 333	0,888 889	0,977 778	7	8	5	-3
23. insight crying child in bed with female	62 /90	0,688 889	0,555 556	0,822 222	20	21	20	-1

Verbal reactions per question - total sample, boys and girls, and per year of age

Verbal reactions - total sample

Knowledge of gender (picture 3 and 4):

SKPI questions	Answers	N (%)
1. Correct gender identification dressed boy/girl	Yes	89 (99)
	No	1 (1)
	Refuses to answer	-
	Other answer	-
Total N		90 (100)
2. Explanation gender difference dressed boy/girl	Non-genital	76 (92)
	Genital	-
	Incorrect	6 (7)
	Refuses to answer	-
	Other answer	1 (1)
Total N		83 (100)
Missing		7
3. Correct identification own gender	Yes	81 (96)
	No	2 (2)
	Refuses to answer	-
	Other answer	1 (1)
Total N		84 (100)
Missing		6
4. Explanation own gender	Non-genital	37 (46)
	Genital	-
	Non-genital and genital	4 (5)
	Incorrect	20 (25)
	Refuses to answer	-
	Other answer	20 (25)
Total N		81 (100)
Missing		9

5. Correct identification naked boy/girl	Yes	89 (100)
	No	-
	Refuses to answer	-
	Other answer	-
Total N		89 (100)
Missing		1
6. Explanation gender difference naked boy/girl	Non-genital	7 (8)
	Genital	62 (70)
	Non-genital and genital	10 (11)
	Incorrect	5 (6)
	Refuses to answer	3 (3)
	Other answer	1 (1)
Total N		88 (100)
Missing		2

Knowledge of genitals boy and girl and their functions (picture 4):

SKPI questions	Answers	N (%)
7. Correct knowledge of girl's genital	Yes	59 (74)
	No	18 (23)
	Refuses to answer	1 (1)
	Other answer	2 (3)
Total N		80 (100)
Missing		10
8. Correct function of girl's genital	Yes, functional	58 (91)
	Yes, functional and sexual	1 (2)
	No	5 (8)
	Refuses to answer	-
	Other answer	-
Total N		64 (100)
Missing		26
9. Correct knowledge of boy's genital	Yes	79 (98)
	No	1 (1)
	Refuses to answer	1 (1)
	Other answer	-

Total N		81 (100)
Missing		9
10. Correct function of boy's genital	Yes, functional	61 (95)
	Yes, functional and sexual	1 (2)
	No	2 (3)
	Refuses to answer	-
	Other answer	-
Total N		64 (100)
Missing		26

Adult sexual body parts and functions (picture 7):

SKPI questions	Answers	N (%)
11. Correct knowledge of breasts	Yes	79 (89)
	No	7 (8)
	Refuses to answer	1 (1)
	Other answer	2 (2)
Total N		89 (100)
Missing		1
12. Correct function of breasts	Yes	53 (60)
	No	30 (34)
	Refuses to answer	2 (2)
	Other answer	3 (3)
Total N		88 (100)
Missing		2
13. Correct knowledge of female genital	Yes	66 (73)
	No	20 (22)
	Refuses to answer	1 (1)
	Other answer	3 (3)
Total N		90 (100)
14. Correct function of female genital	Yes, functional	78 (92)
	Yes, functional and sexual	1 (1)
	No	6 (7)
	Refuses to answer	-
	Other answer	-

Total N		85 (100)
Missing		5
15. Correct knowledge of male genital	Yes	83 (92)
	No	3 (3)
	Refuses to answer	2 (2)
	Other answer	2 (2)
Total N		90 (100)
16. Correct function of male genital	Yes, functional	81 (92)
	Yes, functional and sexual	1 (1)
	No	4 (5)
	Refuses to answer	-
	Other answer	2 (2)
Total N		88 (100)
Missing		2

Adult intimacy (picture 9 and 10):

SKPI questions	Answers	N (%)
17. Insight 'intimate' description kissing man and woman	Yes	88 (98)
	No	2 (2)
	Refuses to answer	-
	Other answer	-
Total N		90 (100)
18. Insight 'sexual' description man and woman having intercourse	Yes	34 (38)
	No	47 (52)
	Refuses to answer	5 (6)
	Other answer	4 (4)
Total N		90 (100)

Normal child-adult intimacy (picture 11-15):

SKPI questions	Answers	N (%)
19. Correct description girl touching/pointing at boy's genital	Yes	72 (80)
	No	16 (18)
	Refuses to answer	-
	Other answer	2 (2)

Total N		90 (100)
20. Correct description doctor examining child	Yes	48 (53)
	No	38 (42)
	Refuses to answer	1 (1)
	Other answer	3 (3)
Total N		90 (100)
21. Correct description male hanging over girl in bed	Yes	74 (82)
	No	13 (14)
	Refuses to answer	-
	Other answer	3 (3)
Total N		90 (100)
22. Correct description female washing boy's genital in shower	Yes	84 (93)
	No	6 (7)
	Refuses to answer	-
	Other answer	-
Total N		90 (100)
23. Correct description crying child in bed with female	Yes	62 (69)
	No	24 (27)
	Refuses to answer	-
	Other answer	4 (4)
Total N		90 (100)

Verbal reactions - boys and girls

Picture 3 and 4 - Knowledge of gender identity

SKPI questions	Answers	N (%) - Boys	N (%) - Girls
1. Correct gender identification dressed boy/girl	Yes	44 (98)	45 (100)
	No	1 (2)	-
	Refuses to answer	-	-
	Other answer	-	-
Total N		45 (100)	45 (100)

2. Explanation gender difference dressed boy/girl	Non-genital	34 (85)	42 (98)
	Genital	-	-
	Incorrect	6 (15)	-
	Refuses to answer	-	-
	Other answer	-	1 (2)
Total N		40 (100)	43 (100)
Missing		5	2
3. Correct identification own gender	Yes	39 (93)	42 (100)
	No	2 (5)	-
	Refuses to answer	-	-
	Other answer	1 (2)	-
Total N		42 (100)	42 (100)
Missing		3	3
4. Explanation own gender	Non-genital	15 (38)	22 (54)
	Genital	-	-
	Non-genital and genital	-	4 (10)
	Incorrect	14 (35)	6 (15)
	Refuses to answer	-	-
	Other answer	11 (28)	9 (22)
Total N		40 (100)	41 (100)
Missing		5	4
5. Correct identification naked boy/girl	Yes	44 (100)	45 (100)
	No	-	-
	Refuses to answer	-	-
	Other answer	-	-
Total N		44 (100)	45 (100)
Missing		1	-
6. Explanation gender difference naked boy/girl	Non-genital	3 (7)	4 (9)
	Genital	26 (59)	36 (82)
	Non-genital and genital	7 (16)	3 (7)
	Incorrect	5 (11)	-
	Refuses to answer	3 (7)	-

	Other answer	-	1 (2)
Total N		44 (100)	44 (100)
Missing		1	1

Picture 4 -Genitals and their functions

SKPI questions	Answers	N (%) - Boys	N (%) - Girls
7. Correct knowledge of girl's genital	Yes	24 (62)	35 (85)
	No	12 (31)	6 (15)
	Refuses to answer	1 (3)	-
	Other answer	2 (5)	-
Total N		39 (100)	41 (100)
Missing		6	4
8. Correct function of girl's genital	Yes, functional	28 (88)	30 (94)
	Yes, functional and sexual	-	1 (3)
	No	4 (13)	1 (3)
	Refuses to answer	-	-
	Other answer	-	-
Total N		32 (100)	32 (100)
Missing		13	13
9. Correct knowledge of boy's genital	Yes	39 (98)	40 (98)
	No	1 (3)	-
	Refuses to answer	-	1 (2)
	Other answer	-	-
Total N		40 (100)	41 (100)
Missing		5	4
10. Correct function of boy's genital	Yes, functional	31 (97)	30 (94)
	Yes, functional and sexual	-	1 (2)
	No	1 (3)	1 (2)
	Refuses to answer	-	-
	Other answer	-	-

Total N		32 (100)	32 (100)
Missing		13	13

Picture 7 - Adult sexual body parts and their functions

SKPI questions	Answers	N (%) - Boys	N (%) - Girls
11. Correct knowledge of breasts	Yes	36 (82)	43 (96)
	No	6 (14)	1 (2)
	Refuses to answer	1 (2)	-
	Other answer	1 (2)	1 (2)
Total N		44 (100)	45 (100)
Missing		1	-
12. Correct function of breasts	Yes	21 (48)	32 (73)
	No	19 (43)	11 (25)
	Refuses to answer	1 (2)	1 (2)
	Other answer	3 (7)	-
Total N		44 (100)	44 (100)
Missing		1	1
13. Correct knowledge of female genital	Yes	28 (62)	38 (84)
	No	14 (31)	6 (13)
	Refuses to answer	1 (2)	-
	Other answer	2 (4)	1 (2)
Total N		45 (100)	45 (100)
14. Correct function of female genital	Yes, functional	37 (88)	41 (95)
	Yes, functional and sexual	-	1 (2)
	No	5 (12)	1 (2)
	Refuses to answer	-	-
	Other answer	-	-
Total N		42 (100)	43 (100)
Missing		3	2
15. Correct knowledge of male genital	Yes	40 (89)	43 (96)
	No	2 (4)	1 (2)
	Refuses to answer	2 (4)	-
	Other answer	1 (2)	1 (2)

Total N		45 (100)	45 (100)
16. Correct function of male genital	Yes, functional	38 (88)	43 (96)
	Yes, functional and sexual	-	1 (2)
	No	3 (7)	1 (2)
	Refuses to answer	-	-
	Other answer	2 (5)	-
Total N		43 (100)	45 (100)
Missing		2	-

Picture 9 and 10 - Adult intimate behaviour

SKPI questions	Answers	N (%) - Boys	N (%) - Girls
17. Insight 'intimate' description kissing man and woman	Yes	43 (96)	45 (100)
	No	2 (4)	-
	Refuses to answer	-	-
	Other answer	-	-
Total N		45 (100)	45 (100)
18. Insight 'sexual' description man and woman having intercourse	Yes	14 (31)	20 (44)
	No	27 (60)	20 (44)
	Refuses to answer	2 (4)	3 (7)
	Other answer	2 (4)	2 (4)
Total N		45 (100)	45 (100)

Picture 11-15 - Knowledge regarding differences between normal physical intimacy and sexual interactions

SKPI questions	Answers	N (%) - Boys	N (%) - Girls
19. Correct description girl touching/pointing at boy's genital	Yes	34 (76)	38 (84)
	No	10 (22)	6 (13)
	Refuses to answer	-	-
	Other answer	1 (2)	1 (2)
Total N		45 (100)	45 (100)
20. Correct description doctor examining child	Yes	26 (58)	22 (49)
	No	17 (38)	21 (47)
	Refuses to answer	-	1 (2)
	Other answer	2 (4)	1 (2)

Total N		45 (100)	45 (100)
21. Correct description male hanging over girl in bed	Yes	37 (82)	37 (82)
	No	7 (16)	6 (13)
	Refuses to answer	-	-
	Other answer	1 (2)	2 (4)
Total N		45 (100)	45 (100)
22. Correct description female washing boy's genital in shower	Yes	40 (89)	44 (98)
	No	5 (11)	1 (2)
	Refuses to answer	-	-
	Other answer	-	-
Total N		45 (100)	45 (100)
23. Correct description crying child in bed with female	Yes	25 (56)	37 (82)
	No	16 (36)	8 (18)
	Refuses to answer	-	-
	Other answer	4 (9)	-
Total N		45 (100)	45 (100)

Verbal reactions - age groups

Q1. Picture 3 - Gender dressed boy/girl

Age groups	Answers	N (%)
3 years	Correct	9 (90)
	Incorrect	1 (10)
	Refuses to answer	-
	Other answer	-
Total 3 years		10 (100)
4 years	Correct	19 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 4 years		19 (100)
5 years	Correct	22 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 5 years		22 (100)
6 years	Correct	15 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 6 years		15 (100)
7 years	Correct	12 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-

Total 7 years		12 (100)
8 years	Correct	12 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 8 years		12 (100)

Q2. Picture 3 - Gender difference dressed boy/girl

Age groups	Answers	N (%)
3 years	Other (correct) explanation	6 (60)
	Genital explanation	-
	Incorrect	4 (40)
	Refuses to answer	-
	Other answer	-
Total 3 years		10 (100)
4 years	Other (correct) explanation	16 (94)
	Genital explanation	-
	Incorrect	1 (6)
	Refuses to answer	-
	Other answer	-
Total 4 years		17 (100)
Missing		2
5 years	Other (correct) explanation	21 (100)
	Genital explanation	-
	Incorrect	-

	Refuses to answer	-
	Other answer	-
Total 5 years		21 (100)
Missing		1
6 years	Other (correct) explanation	11 (85)
	Genital explanation	-
	Incorrect	1 (8)
	Refuses to answer	
	Other answer	1 (8)
Total 6 years		13 (100)
Missing		2
7 years	Other (correct) explanation	12 (100)
	Genital explanation	-
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 7 years		12 (100)
8 years	Other (correct) explanation	10 (100)
	Genital explanation	-
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 8 years		10 (100)
Missing		2

Q3. Picture 3 - Identification own gender

Age groups	Answers	N (%)
3 years	Correct	5 (63)
	Incorrect	2 (25)
	Refuses to answer	-
	Other answer	1 (13)
Total 3 years		8 (100)
Missing		2
4 years	Correct	19 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 4 years		19 (100)
5 years	Correct	22 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 5 years		22 (100)
6 years	Correct	14 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 6 years		14 (100)
Missing		1
7 years	Correct	11 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 7 years		11 (100)

Missing		1
8 years	Correct	10 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 8 years		10 (100)
Missing		2

Q4. Picture 3 - Explanation own gender

Age groups	Answers	N (%)
3 years	Other (correct) explanation	1 (13)
	Genital explanation	-
	Incorrect	6 (75)
	Refuses to answer	-
	Other answer	1 (13)
Total 3 years		8 (100)
Missing		2
4 years	Other (correct) explanation	8 (42)
	Genital explanation	-
	Both	-
	Incorrect	5 (26)
	Refuses to answer	-
	Other answer	6 (32)
Total 4 years		19 (100)
5 years	Other (correct) explanation	15 (71)
	Genital explanation	-
	Both	2 (10)

	Incorrect	2 (10)
	Refuses to answer	-
	Other answer	2 (10)
Total 5 years		21 (100)
Missing		1
6 years	Other (correct) explanation	4 (29)
	Genital explanation	-
	Both	-
	Incorrect	3 (21)
	Refuses to answer	-
Total 6 years		7 (50)
		14 (100)
Missing		1
7 years	Other (correct) explanation	7 (70)
	Genital explanation	-
	Both	2 (20)
	Incorrect	2 (20)
	Refuses to answer	-
Total 7 years		-
		11 (100)
Missing		1
8 years	Other (correct) explanation	4 (50)
	Genital explanation	-
	Both	-
	Incorrect	2 (25)
Total 8 years		-
		6 (75)

	Other answer	2 (25)
Total 8 years		8 (100)
Missing		4

Q5. Picture 4 - Identification naked boy/girl

Age groups	Answers	N (%)
3 years	Correct	10 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 3 years		10 (100)
4 years	Correct	18 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 4 years		18 (100)
Missing		1
5 years	Correct	22 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 5 years		22 (100)
6 years	Correct	15 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 6 years		15 (100)
7 years	Correct	12 (100)

	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 7 years		12 (100)
8 years	Correct	12 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 8 years		12 (100)

Q6. Picture 4 - Explanation gender difference naked boy/girl

Age groups	Answers	N (%)
3 years	Other (correct) explanation	-
	Genital explanation	6 (67)
	Both	-
	Incorrect	3 (33)
	Refuses to answer	-
Total 3 years		9 (100)
Missing		1
4 years	Other (correct) explanation	3 (17)
	Genital explanation	10 (56)
	Both	2 (11)
	Incorrect	2 (11)
	Refuses to answer	-
	Other answer	1 (6)

Total 4 years		18 (100)
Missing		1
5 years	Other (correct) explanation	2 (9)
	Genital explanation	17 (77)
	Both	3 (14)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 5 years		22 (100)
6 years	Other (correct) explanation	1 (7)
	Genital explanation	11 (73)
	Both	1 (7)
	Incorrect	-
	Refuses to answer	2 (13)
	Other answer	-
Total 6 years		15 (100)
7 years	Other (correct) explanation	1 (8)
	Genital explanation	9 (75)
	Both	2 (17)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 7 years		12 (100)
8 years	Other (correct) explanation	
	Genital	9 (75)

	Both	2 (17)
	Incorrect	-
	Refuses to answer	1 (8)
	Other answer	-
Total 8 years		12 (100)

Q7. Picture 4 - Naming of girl's genital

Age groups	Answers	N (%)
3 years	Correct	3 (33)
	Incorrect	6 (67)
	Refuses to answer	-
	Other answer	-
Total 3 years		9 (100)
Missing		1
4 years	Correct	11 (69)
	Incorrect	4 (25)
	Refuses to answer	1 (6)
	Other answer	-
Total 4 years		16 (100)
Missing		3
5 years	Correct	15 (79)
	Incorrect	4 (21)
	Refuses to answer	-
	Other answer	-
Total 5 years		19 (100)
Missing		3
6 years	Correct	10 (71)
	Incorrect	3 (21)

	Refuses to answer	-
	Other answer	1 (7)
Total 6 years		14 (100)
Missing		1
7 years	Correct	11 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 7 years		11 (100)
Missing		1
8 years	Correct	9 (82)
	Incorrect	1 (9)
	Refuses to answer	-
	Other answer	1 (9)
Total 8 years		11 (100)
Missing		1

Q8. Picture 4 - Function of girl's genital

Age groups	Answers	N (%)
3 years	Functional	4 (67)
	Functional and sexual	-
	Incorrect	2 (33)
	Refuses to answer	-
	Other answer	-
Total 3 years		6 (100)
Missing		4
4 years	Functional	14 (93)
	Functional and sexual	-

	Incorrect	1 (7)
	Refuses to answer	-
	Other answer	-
Total 4 years		15 (100)
Missing		4
5 years	Functional	17 (94)
	Functional and sexual	-
	Incorrect	1 (6)
	Refuses to answer	-
	Other answer	-
Total 5 years		18 (100)
Missing		4
6 years	Functional	5 (71)
	Functional and sexual	1 (14)
	Incorrect	1 (14)
	Refuses to answer	-
	Other answer	-
Total 6 years		7 (100)
Missing		8
7 years	Functional	10 (100)
	Functional and sexual	-
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 7 years		10 (100)
Missing		2
8 years	Functional	8 (100)

	Functional and sexual	-
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 8 years		8 (100)
Missing		4

Q9. Picture 4 - Naming of boy's genital

Age groups	Answers	N (%)
3 years	Correct	9 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 3 years		9 (100)
Missing		1
4 years	Correct	15 (94)
	Incorrect	-
	Refuses to answer	1 (6)
	Other answer	-
Total 4 years		16 (100)
Missing		3
5 years	Correct	19 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 5 years		19 (100)
Missing		3
6 years	Correct	14 (93)
	Incorrect	1 (7)

	Refuses to answer	-
	Other answer	-
Total 6 years		15 (100)
7 years	Correct	11 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 7 years		11 (100)
Missing		1
8 years	Correct	11 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 8 years		11 (100)
Missing		1

Q10. Picture 4 - Function of boy's genital

Age groups	Answers	N (%)
3 years	Functional	5 (83)
	Functional and sexual	-
	Incorrect	1 (17)
	Refuses to answer	-
	Other answer	-
Total 3 years		6 (100)
		4
4 years	Functional	15 (100)
	Functional and sexual	-
	Incorrect	-

	Refuses to answer	-
	Other answer	-
Total 4 years		15 (100)
Missing		4
5 years	Functional	17 (94)
	Functional and sexual	
	Incorrect	1 (6)
	Refuses to answer	
	Other answer	
Total 5 years		18 (100)
Missing		4
6 years	Functional	6 (86)
	Functional and sexual	1 (14)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 6 years		7 (100)
Missing		8
7 years	Functional	10 (100)
	Functional and sexual	-
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 7 years		10 (100)
Missing		2
8 years	Functional	8 (100)

	Functional and sexual	-
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 8 years		8 (100)
Missing		4

Q11. Picture 7 - Naming of breasts

Age groups	Answers	N (%)
3 years	Correct	5 (56)
	Incorrect	4 (44)
	Refuses to answer	-
	Other answer	-
Total 3 years		9 (100)
Missing		1
4 years	Correct	16 (84)
	Incorrect	1 (5)
	Refuses to answer	1 (5)
	Other answer	1 (5)
Total 4 years		19 (100)
5 years	Correct	21 (96)
	Incorrect	1 (5)
	Refuses to answer	-
	Other answer	-
Total 5 years		22 (100)
6 years	Correct	13 (87)
	Incorrect	1 (7)
	Refuses to answer	-

	Other answer	1 (7)
Total 6 years		15 (100)
7 years	Correct	11 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 7 years		12 (100)
8 years	Correct	12 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 8 years		12 (100)

	Refuses to answer	-
	Other answer	-
Total 5 years		22 (100)
6 years	Correct	9 (60)
	Incorrect	6 (40)
	Refuses to answer	-
	Other answer	-
Total 6 years		15 (100)
7 years	Correct	10 (83)
	Incorrect	2 (17)
	Refuses to answer	-
	Other answer	-
Total 7 years		12 (100)
8 years	Correct	9 (75)
	Incorrect	2 (17)
	Refuses to answer	-
	Other answer	1 (8)
Total 8 years		12 (100)

Q12. Picture 7 - Function of breasts

Age groups	Answers	N (%)
3 years	Correct	2 (22)
	Incorrect	6 (67)
	Refuses to answer	-
	Other answer	1 (11)
Total 3 years		9 (100)
Missing		1
4 years	Correct	11 (61)
	Incorrect	4 (22)
	Refuses to answer	2 (11)
	Other answer	1 (6)
Total 4 years		18 (100)
Missing		1
5 years	Correct	12 (55)
	Incorrect	10 (46)

Q13. Picture 7 - Naming of female genital

Age groups	Answers	N (%)
3 years	Correct	4 (40)
	Incorrect	6 (60)
	Refuses to answer	-
	Other answer	-
Total 3 years		10 (100)
4 years	Correct	9 (47)
	Incorrect	7 (37)

	Refuses to answer	1 (5)
	Other answer	2 (11)
Total 4 years		19 (100)
5 years	Correct	18 (82)
	Incorrect	4 (18)
	Refuses to answer	-
	Other answer	-
Total 5 years		22 (100)
6 years	Correct	12 (80)
	Incorrect	2 (13)
	Refuses to answer	-
	Other answer	1 (7)
Total 6 years		15 (100)
7 years	Correct	12 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 7 years		12 (100)
8 years	Correct	11 (92)
	Incorrect	1 (8)
	Refuses to answer	-
	Other answer	-
Total 8 years		12 (100)

Q14. Picture 7 - Function of female genital

Age groups	Answers	N (%)
3 years	Functional	5 (63)

	Functional and sexual	-
	Incorrect	3 (38)
	Refuses to answer	-
	Other answer	-
Total 3 years		8 (100)
Missing		2
4 years	Functional	15 (83)
	Functional and sexual	-
	Incorrect	3 (17)
	Refuses to answer	-
	Other answer	-
Total 4 years		18 (100)
Missing		1
5 years	Functional	21 (100)
	Functional and sexual	-
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 5 years		21 (100)
Missing		1
6 years	Functional	13 (93)
	Functional and sexual	1 (7)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 6 years		14 (100)

Missing		1
7 years	Functional	12 (100)
	Functional and sexual	-
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 7 years		12 (100)
8 years	Functional	12 (100)
	Functional and sexual	-
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 8 years		12 (100)

Q15. Picture 7 - Naming of male genital

Age groups	Answers	N (%)
3 years	Correct	9 (90)
	Incorrect	-
	Refuses to answer	1 (10)
	Other answer	-
Total 3 years		10 (100)
4 years	Correct	14 (74)
	Incorrect	2 (11)
	Refuses to answer	1 (5)
	Other answer	2 (11)
Total 4 years		19 (100)
5 years	Correct	22 (100)

	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 5 years		22 (100)
6 years	Correct	14 (93)
	Incorrect	1 (7)
	Refuses to answer	-
	Other answer	-
Total 6 years		15 (100)
7 years	Correct	12 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 7 years		12 (100)
8 years	Correct	12 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 8 years		12 (100)

Q16. Picture 7 - Function of male genital

Age groups	Answers	N (%)
3 years	Functional	6 (67)
	Functional and sexual	-
	Incorrect	2 (22)
	Refuses to answer	-
	Other answer	1 (11)

Total 3 years		9 (100)
Missing		1
4 years	Functional	16 (84)
	Functional and sexual	-
	Incorrect	2 (11)
	Refuses to answer	-
	Other answer	1 (5)
Total 4 years		19 (100)
5 years	Functional	22 (100)
	Functional and sexual	-
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 5 years		22 (100)
6 years	Functional	13 (93)
	Functional and sexual	1 (7)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 6 years		14 (100)
Missing		1
7 years	Functional	12 (100)
	Functional and sexual	-
	Incorrect	-
	Refuses to answer	-

	Other answer	-
Total 7 years		12 (100)
8 years	Functional	12 (100)
	Functional and sexual	-
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 8 years		12 (100)

Q17. Picture 9 - Insight: kissing man and woman

Age groups	Answers	N (%)
3 years	Correct	9 (90)
	Incorrect	1 (10)
	Refuses to answer	-
	Other answer	-
Total 3 years		10 (100)
4 years	Correct	18 (95)
	Incorrect	1 (5)
	Refuses to answer	-
	Other answer	-
Total 4 years		19 (100)
5 years	Correct	22 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 5 years		22 (100)
6 years	Correct	15 (100)

	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 6 years		15 (100)
7 years	Correct	11 (92)
	Incorrect	-
	Refuses to answer	-
	Other answer	1 (8)
Total 7 years		12 (100)
8 years	Correct	12 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 8 years		12 (100)

Q18. Picture 10 - Insight: man and woman having intercourse

Age groups	Answers	N (%)
3 years	Correct	3 (30)
	Incorrect	5 (50)
	Refuses to answer	1 (10)
	Other answer	1 (10)
Total 3 years		10 (100)
4 years	Correct	5 (26)
	Incorrect	11 (58)
	Refuses to answer	1 (5)
	Other answer	2 (11)
Total 4 years		19 (100)
5 years	Correct	9 (41)

	Incorrect	12 (55)
	Refuses to answer	-
	Other answer	1 (5)
Total 5 years		22 (100)
6 years	Correct	8 (53)
	Incorrect	7 (47)
	Refuses to answer	-
	Other answer	-
Total 6 years		15 (100)
7 years	Correct	5 (42)
	Incorrect	5 (42)
	Refuses to answer	2 (17)
	Other answer	-
Total 7 years		12 (100)
8 years	Correct	4 (33)
	Incorrect	6 (50)
	Refuses to answer	2 (17)
	Other answer	-
Total 8 years		12 (100)

Q19. Picture 11 - Insight: children playing

Age groups	Answers	N (%)
3 years	Correct	5 (50)
	Incorrect	5 (50)
	Refuses to answer	-
	Other answer	-
Total 3 years		10 (100)
4 years	Correct	15 (79)

	Incorrect	4 (21)
	Refuses to answer	-
	Other answer	-
Total 4 years		19 (100)
5 years	Correct	19 (86)
	Incorrect	3 (14)
	Refuses to answer	-
	Other answer	-
Total 5 years		22 (100)
6 years	Correct	11 (73)
	Incorrect	3 (20)
	Refuses to answer	-
	Other answer	1 (7)
Total 6 years		15 (100)
7 years	Correct	11 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 7 years		11 (100)
8 years	Correct	10 (83)
	Incorrect	1 (8)
	Refuses to answer	-
	Other answer	1 (8)
Total 8 years		12 (100)

Q20. Picture 12 - Insight: doctor examining child

Age groups	Answers	N (%)
3 years	Correct	4 (40)

	Incorrect	6 (60)
	Refuses to answer	-
	Other answer	-
Total 3 years		10 (100)
4 years	Correct	10 (53)
	Incorrect	7 (37)
	Refuses to answer	1 (5)
	Other answer	1 (5)
Total 4 years		19 (100)
5 years	Correct	9 (41)
	Incorrect	12 (55)
	Refuses to answer	-
	Other answer	1 (5)
Total 5 years		22 (100)
6 years	Correct	11 (73)
	Incorrect	4 (27)
	Refuses to answer	-
	Other answer	-
Total 6 years		15 (100)
7 years	Correct	7 (58)
	Incorrect	5 (42)
	Refuses to answer	-
	Other answer	-
Total 7 years		12 (100)
8 years	Correct	7 (58)
	Incorrect	4 (33)
	Refuses to answer	-

	Other answer	1 (8)
Total 8 years		12 (100)

Q21. Picture 13 - Insight: male bent over girl in bed

Age groups	Answers	N (%)
3 years	Correct	4 (40)
	Incorrect	6 (60)
	Refuses to answer	-
	Other answer	-
Total 3 years		10 (100)
4 years	Correct	17 (90)
	Incorrect	1 (5)
	Refuses to answer	-
	Other answer	1 (5)
Total 4 years		19 (100)
5 years	Correct	20 (91)
	Incorrect	2 (9)
	Refuses to answer	-
	Other answer	-
Total 5 years		22 (100)
6 years	Correct	13 (87)
	Incorrect	2 (13)
	Refuses to answer	-
	Other answer	-
Total 6 years		15 (100)
7 years	Correct	8 (67)
	Incorrect	2 (17)
	Refuses to answer	-

	Other answer	2 (17)
Total 7 years		12 (100)
8 years	Correct	12 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 8 years		12 (100)

Q22. Picture 14 - Insight: female washing boy in shower

Age groups	Answers	N (%)
3 years	Correct	7 (70)
	Incorrect	3 (30)
	Refuses to answer	-
	Other answer	-
Total 3 years		10 (100)
4 years	Correct	17 (90)
	Incorrect	2 (11)
	Refuses to answer	-
	Other answer	-
Total 4 years		19 (100)
5 years	Correct	21 (96)
	Incorrect	1 (5)
	Refuses to answer	-
	Other answer	-
Total 5 years		22 (100)
6 years	Correct	15 (100)
	Incorrect	-
	Refuses to answer	-

	Other answer	-
Total 6 years		15 (100)
7 years	Correct	12 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 7 years		12 (100)
8 years	Correct	12 (100)
	Incorrect	-
	Refuses to answer	-
	Other answer	-
Total 8 years		12 (100)

	Other answer	-
Total 5 years		22 (100)
6 years	Correct	7 (47)
	Incorrect	7 (47)
	Refuses to answer	-
	Other answer	1 (7)
Total 6 years		15 (100)
7 years	Correct	11 (92)
	Incorrect	1 (8)
	Refuses to answer	-
	Other answer	-
Total 7 years		12 (100)
8 years	Correct	10 (83)
	Incorrect	1 (8)
	Refuses to answer	-
	Other answer	1 (8)
Total 8 years		12 (100)

Q23. Picture 15 - Insight: crying child in bed with female

Age groups	Answers	N (%)
3 years	Correct	2 (20)
	Incorrect	6 (60)
	Refuses to answer	-
	Other answer	2 (20)
Total 3 years		10 (100)
4 years	Correct	12 (63)
	Incorrect	7 (37)
	Refuses to answer	-
	Other answer	-
Total 4 years		19 (100)
5 years	Correct	20 (91)
	Incorrect	2 (9)
	Refuses to answer	-

Non-verbal reactions per picture - scorings in the total sample (n=90)

Picture	1*	2*	3	4	5	6	7	8	9	10	11	12	13	14	15
Silent/ saying little	5	2	1	3	3	1	2	2	4	1	3	2	2	1	1
Speakin g softly	6	2	1	4	1	1	2	1	1	1	1	1	2	1	1
Other voice	1	1	1	3	3	3	6	1	-	2	3	3	2	3	-
Giggling	5	8	5	29	24	9	21	16	14	16	19	3	6	6	5
Looking disguste d	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Afraid/ frozen gaze	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
To next picture	7	9	3	3	1	4	4	2	5	4	5	5	3	6	7
Closing the book	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Walking away	-	2	1	-	-	-	1	-	-	1	-	-	-	-	-
Going to toilet	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Looking away	-	-	1	-	1	-	1	-	-	-	1	-	1	-	-
Avoiding eye contact	1	1	2	2	2	2	2	1	1	1	1	1	2	1	2

Non-verbal reactions per picture - scorings in the total sample (n=90)

Distracting	1	5	3	1	1	5	2	1	4	1	3	2	3	2	4
Making funny faces	-	1	-	1	1	3	2	3	1	-	1	2	1	1	1
Looking sad	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Crying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Looking angry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hunched sitting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Covering mouth	1	-	-	2	2	-	1	-	1	-	-	-	-	-	-
Covering eyes	-	1	-	2	-	1	-	-	-	2	1	-	-	-	-
Hiding face	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Putting head on table	-	-	-	-	-	-	3	1	3	1	1	1	-	-	2
Not able to sit quietly	6	6	1	5	3	8	6	5	7	6	6	2	5	6	8
Overall refusal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Reactions to the baseline pictures are marked in grey.