



Instructions for the ABILHAND-Kids-CP questionnaire

The ABILHAND-Kids questionnaire

The ABILHAND-Kids-CP questionnaire was developed as a measure of manual ability in a sample of children with Cerebral Palsy (Neurology 2004; 63: 1045-52). It explores the most representative inventory of manual activities. Some items derived from the ABILHAND questionnaire, a manual ability scale developed for adult patients (Arch Phys Med Rehabil 1998; 79: 1038-42) (Stroke 2001; 32: 1627-34). Other items were selected from existing scales or were devised to extend the range of activities. The parents reported a finer perception of their children's manual ability than the children themselves, leading to a wider range of measurement, a higher reliability ($R = 0.94$) and a good reproducibility over time ($R = 0.91$). ABILHAND-Kids-CP was therefore exclusively build on the parents' perceptions. The 21 items of ABILHAND-Kids-CP defined a valid and reliable manual ability scale. ABILHAND-Kids-CP was originally developed using the Rasch measurement model. It allows to convert ordinal scores into linear measures located on a unidimensional scale.

Procedures

Parents are asked to fill in the questionnaire by estimating their child's ease or difficulty in performing each activity, when the activities are done:

- Without other technical or human help (even if the child actually uses help in daily life);
- Irrespective of the limb(s) actually used to do the activity;
- Whatever the strategy used (any compensation is allowed).

Parents are asked to provide their perceived child's difficulty on a three-level scale: "Impossible", "Difficult", or "Easy". Activities not attempted in the last 3 months are not scored and are entered as missing responses (tick the question mark). For any activity the four potential answers are:

- Impossible: the child is unable to perform the activity without using any other help;
- Difficult: the child is able to perform the activity without any help but experiences some difficulty;
- Easy: the child is able to perform the activity without any help and experiences no difficulty;
- Question mark: the parents cannot estimate the difficulty of the activity for their child because he/she has never done the activity. However, if the activity was never attempted because it is impossible, then it must be scored as "Impossible" rather than "Question mark".

The instructions are given to the parents only at the beginning of the test. Five items are used for training in order to help the parents in feeling each level of the rating scale and in using the whole amplitude of the response scale.

Activities order

The activities of the ABILHAND-Kids-CP questionnaire are presented in a random order to avoid any systematic effect. Ten different random orders of presentation are used. The rater must select the next one of the 10 orders for each new assessment, no matter which child is tested.

Package content

- 1 instruction sheet;
- Testing forms in 10 random orders (10 sheets).

**Manual Ability Measure**

Patient : _____

Date : _____

	How DIFFICULT are the following activities?	Impossible	Difficult	Easy	?
1	Opening a jar of jam				
2	Putting on a backpack/schoolbag				
3	Opening the cap of a toothpaste tube				
4	Unwrapping a chocolate bar				
5	Washing the upper-body				
6	Rolling-up a sleeve of a sweater				
7	Sharpening a pencil				
8	Taking off a T-shirt				
9	Squeezing toothpaste onto a toothbrush				
10	Opening a bread box				
11	Unscrewing a bottle cap				
12	Zippering-up trousers				
13	Buttoning up a shirt/sweater				
14	Filling a glass with water				
15	Switching on a bedside lamp				
16	Putting on a hat				
17	Fastening the snap of a jacket				
18	Buttoning up trousers				
19	Opening a bag of chips				
20	Zippering-up a jacket				
21	Taking a coin out of a pocket				



Manual Ability Mesure

Patient : _____

Date : _____

	How DIFFICULT are the following activities?	Impossible	Difficult	Easy	?
1	Opening a jar of jam				
2	Squeezing toothpaste onto a toothbrush				
3	Putting on a hat				
4	Buttoning up trousers				
5	Zippering-up trousers				
6	Washing the upper-body				
7	Buttoning up a shirt/sweater				
8	Putting on a backpack/schoolbag				
9	Opening a bag of chips				
10	Sharpening a pencil				
11	Fastening the snap of a jacket				
12	Zippering-up a jacket				
13	Unscrewing a bottle cap				
14	Opening a bread box				
15	Unwrapping a chocolate bar				
16	Opening the cap of a toothpaste tube				
17	Taking a coin out of a pocket				
18	Switching on a bedside lamp				
19	Filling a glass with water				
20	Taking off a T-shirt				
21	Rolling-up a sleeve of a sweater				

**Manual Ability Mesure**

Patient : _____

Date : _____

	How DIFFICULT are the following activities?	Impossible	Difficult	Easy	?
1	Putting on a backpack/schoolbag				
2	Washing the upper-body				
3	Putting on a hat				
4	Taking a coin out of a pocket				
5	Opening a bread box				
6	Taking off a T-shirt				
7	Buttoning up trousers				
8	Opening a jar of jam				
9	Filling a glass with water				
10	Sharpening a pencil				
11	Zippering-up trousers				
12	Fastening the snap of a jacket				
13	Unscrewing a bottle cap				
14	Buttoning up a shirt/sweater				
15	Unwrapping a chocolate bar				
16	Zippering-up a jacket				
17	Squeezing toothpaste onto a toothbrush				
18	Switching on a bedside lamp				
19	Opening the cap of a toothpaste tube				
20	Rolling-up a sleeve of a sweater				
21	Opening a bag of chips				



Manual Ability Mesure

Patient : _____

Date : _____

	How DIFFICULT are the following activities?	Impossible	Difficult	Easy	?
1	Buttoning up trousers				
2	Unwrapping a chocolate bar				
3	Zippering-up a jacket				
4	Squeezing toothpaste onto a toothbrush				
5	Filling a glass with water				
6	Sharpening a pencil				
7	Opening a bag of chips				
8	Fastening the snap of a jacket				
9	Opening a bread box				
10	Washing the upper-body				
11	Putting on a backpack/schoolbag				
12	Zippering-up trousers				
13	Putting on a hat				
14	Opening the cap of a toothpaste tube				
15	Taking a coin out of a pocket				
16	Taking off a T-shirt				
17	Rolling-up a sleeve of a sweater				
18	Buttoning up a shirt/sweater				
19	Unscrewing a bottle cap				
20	Switching on a bedside lamp				
21	Opening a jar of jam				



Manual Ability Mesure

Patient : _____

Date : _____

	How DIFFICULT are the following activities?	Impossible	Difficult	Easy	?
1	Opening a bag of chips				
2	Rolling-up a sleeve of a sweater				
3	Putting on a hat				
4	Taking off a T-shirt				
5	Zippering-up a jacket				
6	Putting on a backpack/schoolbag				
7	Squeezing toothpaste onto a toothbrush				
8	Taking a coin out of a pocket				
9	Switching on a bedside lamp				
10	Sharpening a pencil				
11	Washing the upper-body				
12	Opening a bread box				
13	Opening the cap of a toothpaste tube				
14	Zippering-up trousers				
15	Fastening the snap of a jacket				
16	Unscrewing a bottle cap				
17	Opening a jar of jam				
18	Filling a glass with water				
19	Buttoning up trousers				
20	Unwrapping a chocolate bar				
21	Buttoning up a shirt/sweater				

**Manual Ability Mesure**

Patient : _____

Date : _____

	How DIFFICULT are the following activities?	Impossible	Difficult	Easy	?
1	Fastening the snap of a jacket				
2	Opening a bread box				
3	Unwrapping a chocolate bar				
4	Washing the upper-body				
5	Opening a jar of jam				
6	Opening a bag of chips				
7	Taking a coin out of a pocket				
8	Squeezing toothpaste onto a toothbrush				
9	Putting on a backpack/schoolbag				
10	Buttoning up trousers				
11	Zippering-up a jacket				
12	Zippering-up trousers				
13	Rolling-up a sleeve of a sweater				
14	Buttoning up a shirt/sweater				
15	Taking off a T-shirt				
16	Opening the cap of a toothpaste tube				
17	Sharpening a pencil				
18	Switching on a bedside lamp				
19	Filling a glass with water				
20	Putting on a hat				
21	Unscrewing a bottle cap				

**Manual Ability Mesure**

Patient : _____

Date : _____

	How DIFFICULT are the following activities?	Impossible	Difficult	Easy	?
1	Taking a coin out of a pocket				
2	Rolling-up a sleeve of a sweater				
3	Putting on a backpack/schoolbag				
4	Buttoning up a shirt/sweater				
5	Sharpening a pencil				
6	Switching on a bedside lamp				
7	Unwrapping a chocolate bar				
8	Putting on a hat				
9	Opening a jar of jam				
10	Unscrewing a bottle cap				
11	Filling a glass with water				
12	Fastening the snap of a jacket				
13	Zippering-up a jacket				
14	Buttoning up trousers				
15	Opening a bread box				
16	Squeezing toothpaste onto a toothbrush				
17	Zippering-up trousers				
18	Opening a bag of chips				
19	Taking off a T-shirt				
20	Washing the upper-body				
21	Opening the cap of a toothpaste tube				

**Manual Ability Measure**

Patient : _____

Date : _____

	How DIFFICULT are the following activities?	Impossible	Difficult	Easy	?
1	Sharpening a pencil				
2	Rolling-up a sleeve of a sweater				
3	Washing the upper-body				
4	Unscrewing a bottle cap				
5	Unwrapping a chocolate bar				
6	Putting on a hat				
7	Zippering-up a jacket				
8	Putting on a backpack/schoolbag				
9	Zippering-up trousers				
10	Squeezing toothpaste onto a toothbrush				
11	Fastening the snap of a jacket				
12	Switching on a bedside lamp				
13	Buttoning up a shirt/sweater				
14	Opening a jar of jam				
15	Opening the cap of a toothpaste tube				
16	Taking off a T-shirt				
17	Taking a coin out of a pocket				
18	Opening a bag of chips				
19	Buttoning up trousers				
20	Filling a glass with water				
21	Opening a bread box				

**Manual Ability Mesure**

Patient : _____

Date : _____

	How DIFFICULT are the following activities?	Impossible	Difficult	Easy	?
1	Rolling-up a sleeve of a sweater				
2	Washing the upper-body				
3	Opening the cap of a toothpaste tube				
4	Zippering-up trousers				
5	Unwrapping a chocolate bar				
6	Putting on a hat				
7	Unscrewing a bottle cap				
8	Fastening the snap of a jacket				
9	Zippering-up a jacket				
10	Opening a bag of chips				
11	Squeezing toothpaste onto a toothbrush				
12	Putting on a backpack/schoolbag				
13	Opening a bread box				
14	Taking off a T-shirt				
15	Filling a glass with water				
16	Buttoning up trousers				
17	Opening a jar of jam				
18	Sharpening a pencil				
19	Switching on a bedside lamp				
20	Buttoning up a shirt/sweater				
21	Taking a coin out of a pocket				



Manual Ability Mesure

Patient : _____

Date : _____

	How DIFFICULT are the following activities?	Impossible	Difficult	Easy	?
1	Buttoning up a shirt/sweater				
2	Taking a coin out of a pocket				
3	Switching on a bedside lamp				
4	Filling a glass with water				
5	Washing the upper-body				
6	Zippering-up a jacket				
7	Squeezing toothpaste onto a toothbrush				
8	Taking off a T-shirt				
9	Buttoning up trousers				
10	Opening a bag of chips				
11	Opening the cap of a toothpaste tube				
12	Opening a bread box				
13	Rolling-up a sleeve of a sweater				
14	Zippering-up trousers				
15	Opening a jar of jam				
16	Unwrapping a chocolate bar				
17	Sharpening a pencil				
18	Unscrewing a bottle cap				
19	Putting on a backpack/schoolbag				
20	Fastening the snap of a jacket				
21	Putting on a hat				