

Supplementary Material

## **Development of an Autism Subtyping Questionnaire Based on Social Behaviors**

Fan-Chao Meng<sup>1,2,3,4#</sup>, Xin-Jie Xu<sup>5#</sup>, Tian-Jia Song<sup>1,2,3,4</sup>, Xiao-Jing Shou<sup>1,2,3,4</sup>, Xiao-Li Wang<sup>6</sup>, Song-Ping Han<sup>7</sup>, Ji-Sheng Han<sup>1,2,3,4\*</sup>, Rong Zhang<sup>1,2,3,4\*</sup>

1 Neuroscience Research Institute, Peking University, Beijing 100083, China

2 Key Laboratory for Neuroscience, Ministry of Education of China, Peking University, Beijing 100083, China

3 Key Laboratory for Neuroscience, National Committee of Health and Family Planning of China, Peking University, Beijing 100083, China

4 Department of Neurobiology, School of Basic Medical Sciences, Peking University, Beijing 100083, China

5 Central Laboratory, Research Center for Translational Medicine, Department of Scientific Research, Peking Union Medical College Hospital, Chinese Academy of Medical Science and Peking Union Medical College, Beijing 100730, China

6 Division of Maternal and Child Health, School of Public Health, Peking University Health Science Center, Beijing 100083, China

7 Wuxi Shenpingxintai Medical Technology Co., Ltd., Wuxi 214000 China

#These authors contributed equally to this work.

\*Corresponding authors.

Below is a part view of the Beijing Autism Subtyping Questionnaire. The Beijing Autism Subtyping Questionnaire is under the copyright of Peking University. To obtain the complete version, please contact Prof. Rong Zhang (email: zhangrong@bjmu.edu.cn).

Subject # \_\_\_\_\_

## Beijing Autism Subtyping Questionnaire

Date: \_\_\_\_\_

Name of child: \_\_\_\_\_

Sex of child: \_\_\_\_\_

Age of child: \_\_\_\_\_

Office use only:

ID Number:

Scorer:

Diagnosis:

Copyright © 2016 Peking University.

Not to be reproduced in whole or in part without written permission.

All rights reserved.

## Beijing Autism Subtyping Questionnaire

### Instructions:

The groups of items presented below are designed to give us an idea of a child's behavior in typical, day-to-day situations. For each group of items, please take the time to give us two types of information.

**First**, for each group, rate how well each item describes the way your child behaves in everyday activities. Use the scale below:

This child shows this behavior:

Never	Very Rarely	Rarely	Some-times	Frequently	Very Frequently	Always
0	1	2	3	4	5	6

**Second**, for each group, select the one item that best describes your child. For instance, if you thought item #A in Group 1 was the most descriptive of the way your child behaves, you would put a "A" at the end of the page.

Note that some of the groups of questions might seem redundant. Please answer all questions even if you have answered similar questions earlier in the questionnaire.

Thank you for your help.

This child shows this behavior:

Never	Very Rarely	Rarely	Sometimes	Frequently	Very Frequently	Always
0	1	2	3	4	5	6

**Group #1.**

Again, please rate each item according to the scale above. Then, at the end of this group of items, please choose the **one** item that best describes your child.

Rating:

A.\_\_\_\_ When my child is with unfamiliar adults or children he/she does not start interactions, but he/she will interact with others if they pull him/her into activities. He/she will play with others as long as others direct the play but will wander off at the end of a game unless redirected by the other people.

B.\_\_\_\_ When my child is with unfamiliar adults or children he/she readily approaches others to interact and responds easily to others. His/her manner of interacting is generally appropriate (not awkward or unusual).

C.\_\_\_\_ When my child is with unfamiliar adults or children he/she either fails to respond **or** turns or walks away from others when others approach. He/she only approaches other people to obtain something that he/she needs **or** to play physical games (for example, roughhousing or tickling); otherwise, he/she does not approach others to interact.

D.\_\_\_\_ When my child is with unfamiliar adults or children he/she does approach others to interact but is awkward or unusual in his/her manner of doing so. He/she is not able to change his/her speech or behavior to adapt to others and continues to pursue his/her own topics or favorite activities, even in the face of active discouragement.

\_\_\_\_ Which of the items in the group above best describes your child?

This child shows this behavior:

Never	Very Rarely	Rarely	Sometimes	Frequently	Very Frequently	Always
0	1	2	3	4	5	6

**Group #2.**

A.\_\_\_\_ My child does not have difficulty imitating others' actions and creatively engages in make-believe play in an appropriate manner.

B.\_\_\_\_ My child mimics the actions of others but he/she does so without real understanding. He/she mimics other children who are using creative make-believe play, but he/she does not create his/her own make-believe play.

C.\_\_\_\_ My child does not mimic others' actions (i.e., does not imitate facial expressions or simple motions) and does not engage in pretend play.

D.\_\_\_\_ My child does not have difficulty imitating other people. He/she creates his/her own make-believe play, but this make-believe play lacks real variation or feeling (for example, he/she may pretend that a block is a cookie, but he/she repeats this behavior without changing it or without showing any real feeling).

\_\_\_\_\_ Which item above best describes your child?