## **High-Functioning Autistic Children**

### - From a clinical psychologist's perspective -

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### Problem Behaviors of High-Functioning Autistic Children Observed at Mainstream Schools

High-functioning autistic children attending regular classes show the following problem behaviors. First, they have problems related to academic ability. In many cases the children have discrepancies among academic ability and do poorly in subjects with the exception of the specific subjects which they are interested in. It is difficult to estimate their true academic skills even within the same subject—for example, in mathematics they may be good at calculation problems but poor at word problems.

Secondly, problems are observed with regard to learning behavior. The children have difficulty with group activities and have inadequate behaviors during classes. They are unable to sit quietly and listen to the teacher's explanations, and they act without compunction in ways that make people want to turn their eyes away, such as doing whatever they like or joking around to an excessive degree.

Thirdly, they show the problem in interpersonal relationships. Troubles frequently occur between the children and their friends; they isolate themselves, are disliked by people around them, and become the target of bullying. These problems are frequently observed.

Fourthly, the children display behavior that is difficult to comprehend. They have been observed

to talk to themselves in situations where talking is inappropriate, suddenly raise a queer voice, get into panic, or inflict injury on themselves or others.

These problem behaviors displayed by high-functioning autistic children tend to be interpreted as problems with disciplinary issues or the children's own emotional control, and have been dealt with using methods centered on guidance aimed at raising the child's own awareness, represented by admonishment and reprimanding. However, methods such as these which are effective with normal children have little effect with high-functioning autistic children, and there are many teachers who are at a loss as how to understand and deal with these problem behaviors.

# Characteristics of the Cognition of High-Functioning Autistic Children Underlying Learning Difficulties

People diagnosed with high-functioning autism have become adults and proactively spoken about their inner worlds.<sup>1</sup> This has enabled us to understand the difficulties faced by the people with high-functioning autism living and functioning within society. In particular, the following can be given as characteristics of cognition that underlay the problem behaviors observed among high-functioning autistic children in learning situations.

First, the children's hyper-sensibility is recog-

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nized. Children with hyper-sensibility hear music and teachers' voices, which are pleasant sounds to normal children, as unpleasant noise, and they try to block out the noise by covering their ears with their hands and crouching in the corner of the room. In the cases with tactile hyperesthesia, socks and stand collars feel like chains tightly binding the body. For children with gustatory hyperesthesia or olfactory hyperesthesia, the taste, texture, and smell of school lunches bring on a battle with the impulse to vomit.

Secondly, the children's difficulty in selective attention to external stimuli is recognized. Even in the hushed silence of classrooms, mixed with the voice of the teacher who is leading the class, there are also various other sounds; the sounds that can be heard from the hallway or sporting field, the sound of moving desks and chairs, the sound of the teacher writing on the blackboard, and the whispered voices of students talking to others sitting next to them. Normal children are able to focus on the voice of the teacher from among these various miscellaneous sounds and listen with concentration. However, for highfunctioning autistic children with selective attention functioning problems, the noise comes to the fore, and in some cases the sound is felt as if they were taking a class under a bullet train overpass.

Furthermore, there are high-functioning autistic children who demonstrate difficulty in integrating stimuli entering via different modalities, for example the stimuli entering via audition and vision simultaneously. While normal children sense the teachers' actions and words based on the diagram written on the blackboard as a careful explanation, for high-functioning autistic children, this becomes an experience in which completely separate content is presented all at once.

Thirdly, there are large discrepancies among various aspects in cognitive development. When the Wechsler Intelligence Scale—which can assess intra-individual difference in cognitive development—is administered to high-functioning autistic children, the immensity of the variation is very large. It is not uncommon that the child who demonstrates skills equal to those of adults for certain subtests, shows infant-level skills for problems in other subtests. Presenting them with learning tasks without considering the intra-individual difference in abilities provides high-functioning autistic children with painful experiences that

force them to accomplish tasks beyond their understanding.

It is not necessarily the case that these characteristics apply to all high-functioning autistic children. When the behavior of the high-functioning autistic children is difficult to comprehend, observing the children afresh from these perspectives can in some cases lead to innovative changes in intervention plans.

# Manifestation of Secondary Disorders and the Difficulty of Its Treatment

It is possible to infer that, by being placed for long periods in learning environments that are appropriate for normal children but inappropriate for children with high-functioning autism, they come to formulate the following worldview: "School is boring, frightening, or an incomprehensible place. Teachers and classmates are enemies that make strange sounds, give orders that are impossible to keep up with, and put a pressure on to do things that are naturally impossible to do. I am different from other people, an inferior person who cannot do anything." That is to say, by living in an inappropriate environment, high-functioning autistic children form negative values about themselves, others, and the world, and finally may develop secondary disorders such as staying away from school, neurosis, or depression.

It is important to recognize the problem behaviors shown by the children as their signals seeking help, and to identify the cause of the confusion and anguish. By improving the children's living environment and establishing appropriate conditions, it is possible that the frequency of problem behavior will decrease and the children positively undertake various tasks. However, if a problem behavior is repeated or the situation continues to be unaddressed, the problems will get more serious and intervention in those problems will become more difficult.

The difficulty of addressing problem behavior shown by high-functioning autistic children can be expressed as follows.

Firstly, because high-functioning autistic children have three symptoms namely sociality, language, and imagination, it is necessary for them to learn various skills, represented by social skills, required to adapt to the society piece by piece.

Secondly, due to the wide variation of the dis-

crepancies in cognitive development, appropriate learning skills must be adjusted and tailored to the individual child.

Thirdly, problem behavior such as thinking that "I won't have to do this if I behave violently" functions as a self-defensive mechanism and disturb learning activities. In other words, three different tasks need to be carried out in parallel; discovering an appropriate learning environment, accomplishing broad learning tasks including social skills, and addressing secondary disorders that obstruct their learning activities.

### Psycho-Educational Support for High-Functioning Autistic Children

The author has been providing high-functioning autistic children showing maladaptive behavior with psycho-educational support using learning materials at a children's hospital. An overview of this support were as follows.<sup>2</sup>

The purpose of the support is to improve the children's maladaptive behaviors, helping them to formulate appropriate interpersonal behaviors and learning behaviors in the learning situations, and enhance their academic ability.

First, the author conducted psychological assessments of the children in order to discover appropriate learning environments for each of them. After obtaining information about the child's early developmental history, current medical history, current environment and others, in each case, the author conducted two different types of psychological test (WISC-III and K-ABC) to observe the child's behavior in a learning situation.

In the process, we assess the current state of such factors as the intra-individual difference of the children's cognitive development, their information processing strategies, and their maladaptive and adaptive behaviors in learning situations.

Based on the results of this assessment, the teaching materials and teaching methods to be used and main points of support are made concrete. The basic aims of the support are to establish situations and tasks in which maladaptive behavior is unlikely to manifest, and which strengthen and increase the child's adaptive behavior. The basic stance of the instructor in this therapy is to maintain a strategy whereby the child obeys the therapist's instructions and completes the task, rather than simply observ-

ing and leaving the child to determine its own actions. The teaching materials used include Kanji character transcription, reading-comprehension tests, calculation problems, and word problems. Through the work of understanding the problems and solving them, the children's academic skills in Japanese language and mathematics were strengthened.

During the learning process, the children acquire the skills necessary in a learning situation, such as being seated, listening to explanations, looking at the blackboard, asking questions, raising their hands before speaking, and reading together with the instructor. We position teaching materials as media for social interaction, and while receiving the assistance of the therapist, the children increase their sense of self-efficacy and strengthened bonds of trust with other people through various experiences such as achieving success, receiving approval, and sharing the pleasure of achievement. It is important to set tasks that are easy for the children to understand and accomplish, and to accumulate positive experiences of social interaction.

After the child improves to learn in their relationship with the therapist, essay-writing was introduced. Because many high-functioning autistic children have difficulty with writing essays, the task was introduced in small steps as follows:

Firstly, the child is given a specific theme, the content of an essay is made in concrete terms together with actions. Secondly, the content of the essay is verbalized through discussions centered on the subject matter picked up by the child on the theme. Thirdly, the instructor takes a central role in putting down the essay content in writing using a word processor, with regard to the child's words. Fourthly, printed essay will be read aloud and transcribed. In addition, the content of the essay is to be expanded through discussion and added to from the viewpoint of other people.

By continuing the series of tasks, in addition to strengthening their linguistic expression skills, children come to monitor their own behavior and emotions, notice their own new emotions, and learn other people's feelings in a concrete way.

#### Conclusion

Classroom lessons comprise a heavy proportion of school life for children. It is the mission of schools to provide classes that high-functioning autistic children can also understand and truly participate in. Identifying high-functioning autistic children from those exhibiting problem behaviors in the classroom and providing advice regarding methods for addressing their behavior are important elements in consultation activities for school teachers.

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