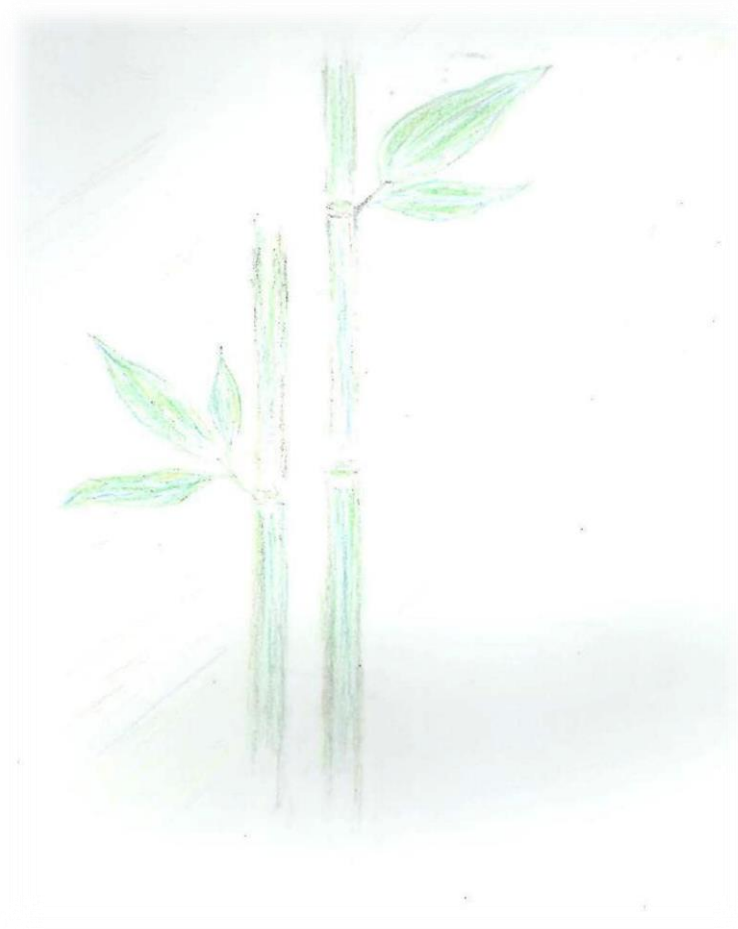


Introduction to Dohsa-hou -  
An Integrated Japanese  
Body-Mind Therapy



OSAKA UNIVERSITY

GRADUATE SCHOOL OF HUMAN SCIENCES

PROF. OSAMU IMURA'S LABORATORY OF CLINICAL PSYCHOLOGY

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## Preface

More than 40 years have passed since I began practicing Dohsa-hou. When I was an undergraduate student at Kyushu University, I came across a TV program wherein Prof. Gosaku Naruse was demonstrating the application of this method to children with disabilities. I was so inspired by this that I decided to adopt Dohsa-hou as my research topic and carry out some experiments involving it. Later on, when I began working at the university, my research topic changed, but I continued practicing Dohsa-hou with my students. I even managed to organize monthly Dohsa-hou meetings at the University of the Ryukyus and Osaka University. Although exceedingly difficult in the beginning, with time increasingly more of my students began showing a willingness to study Dohsa-hou and voluntarily organize monthly meetings and Dohsa-hou camps.

Then, in 2010, Velizara Chervenkova, a Japanese government scholarship student from Bulgaria joined our department. Although initially her research topic was related to another Japanese psychotherapeutic approach, Naikan therapy, she showed interest in Dohsa-hou when I introduced it to her and readily agreed to participate in a one-week summer camp on the island of Ishigaki, Okinawa prefecture. However, as Dohsa-hou was a completely new approach to her, she had certain doubts to whether it was a psychotherapy at all.

The following year, Velizara Chervenkova entered the three-year doctoral course on clinical psychology at Osaka University. Later on, her research topic expanded to encompass Morita therapy. Focusing her doctoral research on these three Japanese psychotherapies, she managed to successfully graduate and obtain a Dohsa-hou trainer certificate from the Japanese Association of Rehabilitation Psychology. Soon afterwards, in March 2014, she returned to Bulgaria.

I do not know to what extent the trainer certificate was acknowledged in Bulgaria, but before long Velizara Chervenkova was employed at a day-care center for children with disabilities in her hometown of Sofia. There, she had the opportunity to apply Dohsa-hou.

In December 2014, Osaka University launched a policy of employing foreigners who obtained their PhDs here. I informed Velizara Chervenkova of this opportunity and she agreed to return to Japan and take charge of a one-year project. The project, “Experimental Research on the International Development of Clinical Dohsa-hou – Aiming at Bulgaria”, was financed by the Human Science Project of the Graduate School of Human Sciences, Osaka University, and it was based on the following four

pillars: (i) carrying out a Dohsa-hou workshop in Bulgaria; (ii) preparing a Dohsa-hou guidebook in Bulgarian; (iii) inviting a Bulgarian clinical psychologist to train and practice Dohsa-hou in Japan; and (iv) compiling an English-language book about Dohsa-hou. Fortunately, we were able to readily accomplish the first three aims. It is with the preparation of the present book that our project will be considered successfully completed.

I want to emphasize that Velizara Chervenkova was the primary contributor to this project. I hope that our joint efforts will spread not only to Bulgaria, but also throughout the world, and therefore support the psycho-physical growth of children with disabilities and helping them and their families live happily.

*December 2015*

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## Part I

### The Birth and Development of Dohsa-hou

*Osamu Imura*

#### 1. What is Dohsa-hou?

##### 1.1. The Birth of Dohsa-hou

Dohsa-hou was born in the mid-1960s in Japan. At that time, Gosaku Naruse—a hypnosis researcher (now Professor Emeritus at Kyushu University) - and his research team, decided to hypnotize a boy with cerebral palsy. In doing so, they found out that the excessive tension in his body had actually been preventing him from moving freely. However, the results of the hypnosis were temporary and once the boy was awoken from the hypnosis session, the tension returned. The researchers therefore needed to reduce tension levels without using hypnosis. In other words, they needed to invent a formal technique for relaxation.

However, this did not mean that the hypnosis-related research was vain. Although temporary, the reduced tension levels observed during the hypnosis session revealed that brain damage is not the sole reason for the impaired body movements. In other words, the researchers emphasized that the influence of psychological factors underlying the body movements and the process of how one learns to move are no less important. This case study was presented by the Japanese NHK TV channel and, as a result, many parents of children with disabilities showed a great willingness to take part research and practice relating to this new approach.

##### 1.2. From Dohsa Exercises to Dohsa-hou

As far as Dohsa-hou is aimed at improving the body movements, at its inception, Dohsa-hou was called “Dohsa exercises” or “psychological rehabilitation” and it focused mainly on the application of relaxation techniques. Through proper relaxation, many children with physical impairments became able to stand upright or even start

walking.

As the approach evolved, children with more severe disabilities, such as bed-ridden children who could not sit upright or stand, began taking part in the therapeutic sessions. Out of work with such children, the so-called *tate-kei* tasks, which refer to how the trainer literally “shapes” the trainee’s sitting or upright posture, were born. After shaping the trainee’s posture, the trainer loosens his/her hold and elicits a reaction from the trainee. An important observation born from these tasks was that providing excessive support prevented the trainees’ independent movements from emerging, whereas insufficient support made the trainee’s body shape collapse.

Using this delicate trainer-trainee relationship, the trainer could shape the trainee’s body axis so that the trainee could properly stand on his/her knees and adopt an upright posture. Children shed their downcast expressions and came alive. For example, when one of the children adopted an upright posture, his mother noticed for the first time how large his eyes actually were.

Later on, children with severe multiple disabilities, as well as children with autistic disorders and attention-deficit hyperactive disorder (ADHD) began taking part in Dohsa-exercise therapeutic sessions. Their participation highlighted how important bodily movements, in addition to posture, are to the communication and understanding of others’ intentions. Around this time, the approach began gaining popularity under the name of “Dohsa-hou”.

## **2. Development of Dohsa-hou**

As Dohsa-hou proved to be effective for variety of disabilities, some researchers began applying it to adults diagnosed with schizophrenia and depression (Shimizu, 1987; Ikeda, 1992; Takamatsu, 1992; Tsuru, 1987, 1995). Among them, Tsuru carried out pioneering experimental research on patients with schizophrenia, which was born out of the observation that most such patients often exhibited excessive tension and twisted postures. As these patients continued to practice Dohsa-hou, they began noticing this excessive tension and not only managed to improve their postures but also observed positive changes in their social behavior. For example, one patient who did not communicate at all with other people, began talking to hospital staff and started to readily engage in group activities.

Tsuru (2007) interpreted her results from the standpoint of the active experience of reality and the opportunity for self-control that Dohsa-hou affords. More specifically, in performing Dohsa-hou tasks, patients with schizophrenia began to move by themselves,

which helped them to improve their sense of reality and allow unreal sensations to naturally fade away.

Nowadays, Dohsa-hou can be applied to an even broader scope of problems, such as eating disorders (Hoshino, 1999), tics (Yoshikawa, 2000; Furukawa & Imura, 2001), and borderline disorders and obsessive-compulsive neuroses (Hatanaka, 1995, 1998; Kubota, 1992). In addition, Dohsa-hou has been applied to promote the psycho-physical health of elderly people and healthy adults (Nakajima, 1995; Imura & Kinjyo, 2005). In so doing, Dohsa-hou has attracted the interest of foreign students and specialists in education – mainly those from Asia, who have begun to apply the method in their native countries (e.g. South Korea, Thailand, Cambodia, India, and Iran).

In Japan, two organizations have been established to promote the development and spread of Dohsa-hou: The Japanese Association of Rehabilitation Psychology, which is involved in research and support of children and adults with disabilities, and the Association of Japanese Clinical Dohsalogy, which targets people with mental disorders and psychological problems.

Nobody expected that Dohsa-hou, created more than 40 years ago in a university laboratory, could receive such attention from society and develop into a fully-fledged therapeutic approach.

### **3. Outline of Dohsa-hou**

According to Tsuru (2007), in contrast to most psychotherapeutic approaches which use words as their main intervention tool and means of communication between therapist and client, Dohsa-hou uses body movements. Naruse (2000), in turn, suggested that Dohsa-hou which primarily targets the psychological aspects of an individual, should be called “Dohsa therapy”. According to him, the aim of Dohsa-hou is not to ensure proper performance of a movement that is difficult for the client to perform, but rather to elucidate the various experiences a client can have while putting effort into performing that movement. In other words, the real aim is to make it clear to the client that these experiences are necessary, effective, and, ultimately, therapeutic. Therefore, it is important to clarify the purposes of the Dohsa-hou for each client, namely whether it is to support the development of clients with disabilities or clients with psychological problems.

Considering this, we can define Dohsa-hou as an original Japanese theoretical and practical system applied in clinical psychology and disability rehabilitation that uses body movement as its main instrument. This system was developed and introduced by



Gosaku Naruse and his research team. As previously mentioned, at its inception Dohsa-hou was mainly meant to help improve the body movements of clients with cerebral palsy and other motor dysfunctions. With time, however, its scope has broadened to cover people with other physical disabilities, psychological problems and even healthy people.

Dohsa-hou has three major pillars, which are discussed in detail below: (i) relaxation techniques for reducing psycho-physical tension; (ii) *tate-kei* techniques, which address one's ability to appropriately respond to gravity; and (iii) communication techniques, which are aimed at promoting understanding of others' intentions and achieving joint attention.

### 3.1. Relaxation techniques

Relaxation techniques play a very important role in Dohsa-hou. If they are not applied correctly, however, often introducing and performing *tate-kei* techniques might become difficult for both therapist and client. In Dohsa-hou, relaxation refers to the support that the therapist (trainer) provides to the client (trainee) in the latter's attempt to move certain parts of his/her body. However, relaxation becomes difficult when the client reaches the limits of his or her range of movement. As such, the therapist begins to regularly press on that body part and wait until the client relaxes it on his/her own. This helps the body part become more flexible and thereby extend more easily compared to before. As the relaxation progresses in this fashion, the support provided by the therapist continues. This whole process is repeated two or three times on a given setting. However, if relaxation shows no sign of progress, the therapist might find it better to temporarily abandon this task. An important aspect of the Dohsa-hou, however, is that the trainer's support must not provoke passiveness from the trainee as self-relaxation is one of the approach's main characteristics.

As the relaxation techniques aim to eliminate excessive tension, it is important to notice which parts of the client's body are prone to accumulating such tension and to identify the specifics of his/her posture. For example, children with disabilities often accumulate tension mainly in their necks and shoulders, hip joints, knees, and ankles. When the tension in these regions is too strong, an individual's whole body posture becomes awkward.

Three types of awkward postures commonly prevail among children with disabilities:

→ Shoulders rounded and lower back hiked up

- Shoulders rounded and middle protruding
- Upper body and waist twisted and bottom hiked up.

All three types are characterized by partially bent knees and equinus. Among people with mental disorders, the awkward postures are less extreme but follow the same trend as the above patterns. Incorrect postures are observed among healthy people as well with tension easily accumulating in the shoulders and waist.

When the Dohsa-hou relaxation techniques are applied, many clients report feeling ponderous as well as certain tension and discomfort. In some cases clients who have especially strong tension realize that they have hardly been aware of it. “Oh, is my body really that stiff?” is an exclamation often heard during a Dohsa-hou session. As the therapist presses on stiff body parts, the client may feel a slight pain. When this pain becomes a more pleasant sensation, it is a sign that the relaxation is progressing and a sense of overall well-being is often experienced. As a result, many clients report feeling that their bodies have become lighter or warmer. With the relaxation, clients’ bodies become more flexible and their posture improves. Additionally, clients become calmer and find it easier to follow the therapist’s instructions. Furthermore, all of these positive physical changes are often accompanied by psychological changes such as a sense of security and comfort.

### 3.2. *Tate-kei* techniques

The next major component of Dohsa-hou is the so-called *tate-kei* techniques. They seek to help clients maintain an appropriate posture in defiance of gravity. The *tate-kei* techniques include sitting (*agura-zai*), kneeling (*hiza-dachi*), standing (*ritsui*), and walking (*hokou*). At the beginning of Dohsa-hou’s development, the first two techniques were given little attention, as the trainees primarily had mild disabilities. However, later on, trainees who could barely maintain a sitting posture began taking part in the sessions, which prompted the development of *tate-kei* techniques.

Take the sitting posture as an example: here, the trainer props up the trainee’s waist, back, and head to help him/her maintain that position. Then, the trainer loosens his/her support. In most cases, trainees immediately lose their posture, but manage to stabilize their bodies maintain that new posture. In such cases, the role of the therapist is very important – he/she must help clients activate their inner power and respond appropriately to gravity’s pull by keeping their body axis upright. This key principle applies to other *tate-kei* techniques such as *hiza-dachi* and *ritsui*.

When the client shifts from a sitting to an upright posture, increasingly more joints

are involved, which thus requires the appropriate tension and relaxation of certain body parts. Although this is not a problem for healthy people, for those with disabilities such a simple act can be quite challenging.

Various posture improvements can be observed after using *tate-kei* techniques. For example, protruded chins retract, rounded shoulders and humped backs straighten, and hiked up waists settle into their appropriate position. Additionally, individuals' overall expression becomes more sophisticated. For instance, some trainees report being able to get up more easily than before and that with the improvement of their postures, the world around them appears brighter. As such, *tate-kei* not only helps improve posture, but also helps cultivate certain psychological changes such as strengthened willpower, a more proactive attitude, awakened senses, and a heightened sense of reality. For example, one boy suffering from severe anxiety accompanied by tics reported that before employing *tate-kei*, he had felt unstable; after however, he felt that his feet were firmly on the ground, which calmed him considerably (Furukawa & Imura, 2001)<sup>1</sup>.

As far as *tate-kei* is aimed at the developmental support of children with disabilities, some people doubt if this is an attempt to put them into the frame of the healthy people. However, if we observe children who try to stand up or to walk (even if they fail to do it properly), their faces beaming with joy, we cannot but agree that on a genetic level every human being strives to respond to the gravity force through a proper body posture.

### 3.3. Communication techniques

To help communicate with children with whom communication is normally difficult, such as those with autism or severe intellectual disabilities, researchers have devised a task called *ude-age* ("lifting of the arm"). This task was introduced by Konno (1982) and Ohno (1984), and was originally aimed at children with autism. In this task, the trainee is supine and the trainer takes his/her arm and helps him/her lift it up. Although it seems very simple, it is anything but among or hyperactivity disorders. Such children often find it difficult to follow the trainers' instructions and movements, and to concentrate continuously on their own bodies or their interaction with the trainer. Nevertheless, with the repetitious application of that task, most trainees begin concentrating on their own arms and start to make eye contact with the trainer increasingly often. Eventually, they become able to move their arms by themselves or with only minimal support from the trainer and a few instructions.

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<sup>1</sup> For further details on this case, see Chapter 4.3.

Dohsa-hou tasks are a mutual act between the trainer and the trainee, which makes trainer-trainee communication exceedingly important. This explains why not only *ude-age*, but other tasks such as *kukan-no-hineri* and *se-sorase* are applicable to children with autism or hyperactivity disorders. However, *ude-age* remains arguably the most important task for them, as human constantly use their hands and arms to touch, grasp objects, and even to give handshakes, one of the main social gestures. When stretching them out, individuals' hands and arms can be easily observed. These details suggest the importance of the *ude-age* task when joint attention between trainer and trainee is sought. Of course, besides *ude-age*, Dohsa-hou incorporates other communication enhancement techniques that are not necessarily aimed at improving body movements. These techniques, which can be summarized with the term "communication movement techniques", include having the trainer and trainee jumping simultaneously or touching their palms together and then moving in a certain direction, doing a seesaw on the floor, etc.

All of the above communication tasks can result in a mutual connection and understanding between trainer and trainee: more specifically, trainees' responses to the trainer's instructions suggest that they have understood the trainer's intentions implied through the task. For example, for children with severe intellectual disabilities, verbal communication can be very difficult, but when they respond to the trainer's handshake, they can be said to have understood the trainer's intentions. This is valid also for a well-accomplished *ude-age* or seesaw task. In other words, these techniques are highly effective tools because they enable communication with children who are otherwise hard to be approached through body movements.

#### **4. Applicability and Therapeutic Mechanisms of Dohsa-hou**

##### **4.1 Applicability of Dohsa-hou**

In the table below, we summarize the applicability of Dohsa-hou with reference to the author's hitherto experience and the bibliography cited. As Dohsa-hou was launched to predominately aid the rehabilitation of children with cerebral palsy, and the method has proven very effective for them: after eliminating with their excessive tension, trainees shift to the performance of *tate-kei* tasks, which eventually result in proper body movement and improved posture.

Table 1: Applicability and effectiveness of Dohsa-hou for different types of disabilities and diseases

Disability/Disease type	Applicability and outcomes
*	*
Cerebral palsy	⊙ Children with cerebral palsy were the Dohsa-hou's original target
Autism	○ There are other, more effective methods; Dohsa-hou has proven to have medium to low effectiveness
ADHD	○ Relaxation techniques are effective for the control of impulsive behavior
Learning disabilities	? There are likely other, more effective methods for supporting the development of learning potential
Intellectual disabilities	△ For light cases; ⊙ For severe cases Dohsa-hou is very effective in improving communication
Schizophrenia	○ For patients with chronic passive behavior
Depression	○ Both relaxation and <i>tate-kei</i> tasks have proven effective to some extent
Psychosomatic disorders	⊙ The presence of physical complaints makes Dohsa-hou easily applicable
Eating disorders	○ Effective for the correction of body image
Elderly care	○ Effective for posture improvement and prevention of falls

⊙ High applicability; ○ applicable; △ depends on the client; ? no case studies available

Autistic disorders are characterized by difficulties in joint attention, which Dohsa-hou tasks have proven effective in helping correct, especially among clients with retarded verbal abilities. However, for better results, combined application of other methods is well-justified.

In cases of ADHD with highly impulsive behavior, Dohsa-hou, particularly the relaxation techniques, has proven effective in minimizing overall psycho-physical tension. This can be explained by the fact that the self-control one exercises over one's body is directly related to one's self-control over the mind.

Regarding the use of Dohsa-hou for learning disabilities, currently no case studies or other such studies are available on the subject. Moreover, the author has no experience in this field, so he cannot draw any precise conclusions on the topic. However, it is possible that Dohsa-hou is effective for cases of disordered spatial cognitive functions.

Intellectual disabilities like those related to Down syndrome have been shown to benefit from Dohsa-hou (Tanaka, 1984). Although not as severe as cerebral palsy, people with Down syndrome often have incorrect postures. Therefore, posture improvement and improved self-control is essential for them.

Among people with schizophrenia, both mental and physical tension is often observed. Through Dohsa-hou relaxation, this tension can be eased and their interpersonal relationships and social functioning can be improved (Tsuru, 1982).

Dohsa-hou is also effective for the rehabilitation of depressive, psychosomatic and eating disorders. In many such cases, mental strain and problems related to family relationships can trigger the symptoms of these disorders. With the application of Dohsa-hou, the symptoms fade away within a relatively short.

Finally, Dohsa-hou has proven effective even in the field of elderly care (Adachi, 2013).

How can these almost magical changes be explained? In the next section, we will discuss in detail the effectiveness of Dohsa-hou.

#### 4.2. Therapeutic Mechanisms of Dohsa-hou

Now we will attempt to outline the therapeutic mechanisms of Dohsa-hou with reference to Gosaku Naruse's (2000) conception of the method. Body movement is a voluntary action performed by individuals. Since birth, every human being moves in one or another way in response to his or her immediate surroundings. However, when performing a Dohsa-hou task, a discrepancy between the hitherto-prevailing movement experience and the new Dohsa-hou experience can arise. More specifically, this process refers to one's ability to notice this discrepancy and then consciously move in accordance with the task.

There is another type of experience that occurs during the implementation of a Dohsa-hou task or immediately after it, namely the subjective senses of relaxation, reality, autonomy, and security. This is especially important when Dohsa-hou is implemented as a form of psychotherapy. In such cases, Naruse suggests that Dohsa-hou should be called "Dohsa therapy". It is not rare for anxiety, fears, and obsessions to become chronic and even turn into habits appearing at the physical level, which in turn

can result in excessive tension and awkward posture and movements. Thanks to the relaxation and *tate-kei* techniques, excessive tension is alleviated, the posture is corrected, and one's mind becomes more flexible and free of obsession.

Naruse further suggests that body movement itself is a meaningful therapeutic experience and is one of the factors contributing to the relatively quick changes reported by many Dohsa-hou clients and specialists.

As already mentioned, Dohsa-hou is applicable to people with intellectual disabilities with whom verbal communication is difficult, as well as people of different nationalities who do not understand other languages. In this sense, Dohsa-hou is a completely original approach that contrasts with traditional counseling and psychotherapeutic methods, which are based on conveying feelings and thoughts verbally. Notably, it seems as though even Sigmund Freud and Carl Gustav Jung never considered body movement to have a therapeutic meaning.

Considering all of the above, identifying the precise therapeutic mechanisms of Dohsa-hou would be quite interesting. Indeed, although the method has continually proven effective, there remain numerous questions as to why it is so effective. Unfortunately, the method cannot be universally applied – there are clients for whom it is very effective, but there are also clients for whom it is entirely ineffective. Furthermore, there are clients whose condition improves merely due to their experience of movement and the subjective sense of relaxation and security resulting therefrom. As a result of the psycho-physical changes they experience, they begin to talk about their family problems and psychological conflicts.

In that sense, what is unique about Dohsa-hou is that it offers what no other psychotherapeutic approach has considered before, namely that both mental and physical problems can be dealt with directly approaching the body. Dohsa-hou started with the aim of improving the body movements and posture of children with disabilities, but eventually expanded to the fields of developmental, mental, and psychosomatic disorders. As already mentioned, when the method was pioneered nobody imagined that it would develop in this way.

As Naruse (2000) noted, Dohsa-hou provides a meaningful therapeutic experience which alone is very likely related to positive outcomes. In addition, the opportunity for self-management and self-choice afforded by Dohsa-hou fosters one's self-healing power. For example, many clients with eating disorders have a poor body image. They desire to be thinner than necessary. However, through Dohsa-hou, such clients are given the opportunity to experience positive physical sensations, which can help to reduce their obsession with and aversion towards their bodies and thereby gradually accept

themselves. Such outcomes can be achieved through verbal counseling or therapy, but these methods take much longer to achieve effects and may require more effort than Dohsa-hou (Hoshino, 1999). However, the pre-verbal and non-verbal experiences related to Dohsa-hou are yet to be properly theorized.

## 5. Conclusion

As already mentioned in the preface, more than 40 years have passed since I began practicing Dohsa-hou. Without my even noticing, it has become my life's work. Currently, I am supervising a monthly public course at Osaka University under the name of "Dohsa-hou for the Psycho-physical Growth of Children and Adults with Disabilities". Many students help me in this initiative, and I am continuing to study Dohsa-hou together with the disabled children, their caregivers, and other specialists. From now on, I would like to keep on introducing the fascinating world of Dohsa-hou to as many people as possible.

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## **Part II**

### **The Practice of Dohsa-hou**

#### **Chapter 1**

### **When Immovable Bodies Start to Move – Dohsa-hou for Children with Cerebral Palsy**

*Shinnosuke Harada*

#### **1. Cerebral Palsy – General Outline and Characteristics**

According to the cerebral palsy study group from the Japanese Ministry of Health, Labour and Welfare, cerebral palsy is a non-progressive brain disorder occurring in the time from conception to the fourth week after birth. It manifests as permanent abnormality of body posture and movements identifiable as early as the child's second year of age. Progressive disorders, episodic motor dysfunctions, and motor development delay that can be overcome in the future, are usually excluded from its definition (Japanese Association of Rehabilitation Medicine, 2014).

As mentioned above, cerebral palsy is a brain disorder. The brain is composed of the cerebrum, interbrain, midbrain, and brain stem (which comprises the cerebellum, medulla oblongata, and pons). Together with the spinal cord, it forms the central nervous system. Motor disability resulting from spinal cord disorders cannot be classified as cerebral palsy.

Although “cerebral palsy” is the generic term, the disorder can be classified into several types depending on its associated neurophysiological symptoms and other characteristics. Therefore, due attention to the type of cerebral palsy is needed when developmental support and rehabilitation is provided.

Although there are a variety of classification systems for cerebral palsy, in the table below we introduce those distinguishable in terms of the affected brain area:

Table 2: Types of cerebral palsy (adapted from Kifune, 2011)

Cerebral Palsy Type	Affected Brain Area
*	*
Spastic	Pyramidal system, mainly the motor cortex
Athetoid	Extrapyramidal system, mainly the basal ganglia
Ataxic	Extrapyramidal system, mainly the cerebellum
Mixed Type	Includes symptoms of all of the above types, but most often of the spastic and athetoid ones

When we move, motor organs such as our arms and legs receive “orders” transmitted through the pyramidal and extrapyramidal systems. Dysfunction of the pyramidal system impairs voluntary movements and results in paralysis, while dysfunction of the extrapyramidal system results in a wide range of involuntary movements (i.e. the person can move, but not smoothly and often awkwardly).

Therefore, knowing the characteristics of each type of cerebral palsy is essential for the implementation of appropriate rehabilitation.

## 2. Common Approaches to Management of Cerebral Palsy

When discussing the possible approaches for managing cerebral palsy, it is important to be aware that this condition cannot be treated by either or by brain operation. Hence, rather than “treatment”, it is better to approach management of the disease from the perspective of “developing”.

The brain is a network of myriad neurons, functioning together; therefore, even if one area damaged, others can compensate for the dysfunction quite well. Approaches based on the above idea of “developing”, are collectively called “therapeutic education”. Among them, the major types are physiotherapy, occupational therapy, and speech- and auriculotherapy, in addition to orthotic treatment (which involves the use of special shoes, chairs, and walking canes); and orthopedic surgeries (for improving the condition of deformed joints). However, the latter two types of therapy are only supplementary measures.

### 3. Major Approaches to Management of Cerebral Palsy in Japan:

In the table below, we introduce some of the major approaches for managing cerebral palsy in Japan according to the “Cerebral Palsy Rehabilitation Guideline (Second Edition)” published by the Japanese Association of Rehabilitation Medicine (2014).

Table 3: Major approaches for rehabilitation of cerebral palsy and evidence for their effectiveness as summarized by the Japanese Association of Rehabilitation Medicine (2014).

Approach	Evidence
*	*
Neuro-developmental treatment (NDT)	<ul style="list-style-type: none"> <li>• Improvements can be expected in the range of motion of knee and ankle joints when the person takes an upright position or walks</li> <li>• The therapeutic effect for motor activities and abnormal motor responses remain unclear</li> </ul>
Vojta therapy	When applied from the early postnatal period, Vojta therapy can be helpful for improving upright posture and walking capacity, but there is insufficient scientific evidence for its efficacy
Sensory integrative therapy	<ul style="list-style-type: none"> <li>• This is an approach targeting sensory dysfunctions, which often occur in conjunction with motor dysfunction</li> <li>• It is often applied in combination with NDT</li> <li>• Although its effects have been described in many papers, these effects were confounded</li> </ul>

### 4. Philosophy and Diagnostic Basis of Dohsa-hou in Management of Cerebral Palsy

According to the theory of Dohsa-hou, cerebral palsy causes a disability in body movement as a self-driven psychological process (Naruse, 1985). Movement, as Naruse defines it, is physical activity rooted in voluntarily and autonomously realized of one’s

intention. For example, when we shake hands with someone, we must first extend our arm and then complete the action in accordance with our intention. This is the so called *intention-striving-body movement* process. For people with cerebral palsy, however, such a simple action is “contaminated” by unnecessary movements such as the bending of the elbow and or wrist, or lifting the arm too high. In the end, most people with cerebral palsy can barely manage to perform a handshake. This means that even if the person has an intention to perform a certain movement, he/she cannot make full use of his/her body to realize that intention. In other words, there is no appropriate effort to underlie the realization of the body movement.

### 5. “One day we will walk together!” – A Dohsa-hou Case Study

In the present case, the author introduces his therapeutic work with a 14-year-old boy with ataxic cerebral palsy during a six-day Dohsa-hou camp<sup>2</sup>. The boy (hereafter referred to as A) was diagnosed with cerebral palsy immediately after birth. Six years ago, he started participating in Dohsa-hou camps. The boy does not suffer from intellectual problems and can communicate verbally, but standing up and walking by himself is difficult. To aid him, he uses crutches for both hands.

At the time of the intake, A could stand up walk, but had to rely on his crutches to do so, instead of his own legs. His mother, who accompanied him to the camp, hoped that beside improvement of his motor functions, her son would achieve some personal growth through overcoming his tendency to give up quickly on activities he believes himself bad at.

At the time of A’s intake, the author made the following assessment:

*Ritsui*: A cannot stand up by himself. When he attempts to do so, he usually opens up his toes, bends his knees inward, and steps predominantly on the inner part of his soles. His waist bends backwards, so whenever he fears that he is losing balance, he bends his upper body in order to keep his posture. As his left leg is paralyzed, his body visibly leans rightward.

*Agura-zai*: A’s hip joints are too stiff to allow him spread his laps, so he cannot sit cross-legged very easily.

*Hiza-dachi*: A can keep this position by himself, but after about 3 seconds, he falls forward. As with *ritsui*, in *hiza-dachi* he bends his upper body in order to keep his balance.

*Hokou*: When A walks, he relies entirely on his crutches; he cannot easily step or

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<sup>2</sup> For further details on the Dohsa-hou camps, see Chapter 5.1.

walk by himself. Because of this, he stoops down and his waist bends backwards. When A walks without crutches while being supported by the therapist, he can hardly stretch his legs forward to take a step.

### Camp Day 1

After relaxing A's chronically strained upper body, we shifted to the task of moving his waist backward-to-center during *hiza-dachi* with A's upper body straightened up. Whenever A tries to do so, his upper body bends forward and his bottom sticks out. The trainer must then prop A's torso to prevent it from falling forward and push his bottom slightly down so that it does not stick out. With this, A manages to move by himself with his bottom downward.

As for the task of bringing back the waist to the normal position, because A bends his chest and back, he cannot perform this task very easily. As such, the trainer must prop A's upper body in such a way that the chest and back are prevented from bending, and then instruct him to move his waist. A initially said he did not understand, but after exercising several times together with the trainer, he gradually began to grasp the essence of the task and became able to perform it.

### Camp Day 2

During the second camp day, A started moving his waist better during *hiza-dachi* and said that he had begun to understand it quite well. As mentioned before, A's paralyzed left leg made him lean greatly rightwards, so the trainer helped him shift his weight leftwards by supporting his left side and then performing the waist moving task. Repeating the exercise, A managed to put power into his left knee so that when he next tried to bring back his weight to the center, he could move his waist smoothly and thereby center his waist. From this position, the trainer loosened his hold and A managed to perform and maintain *hiza-dachi* by himself. Additionally, he managed to move his bottom downwards along with his waist, while keeping his waist straight. He said that he got a clear sense of his left side and that he was very happy that even without support he could maintain his posture and not fall forward.

The next task was shifting his weight from side to side while in *hiza-dachi*. For A, leaning leftward was quite frightening because of his palsied left leg, and even if he managed to lean somehow, he could hardly maintain the posture by himself. Again, the trainer propped up A's upper body and helped him repeatedly shift his weight to the left. With the trainer's support, A reported feeling safe and began moving his waist quite smoothly. The trainer therefore gradually loosened his hold, allowing A to begin moving

his waist leftward by himself. These efforts eventually resulted in his ability to relatively freely shift his weight from side to side.

### Camp Day 3

As A had managed to shift his weight while in *hiza-dachi*, the next task was walking in this position. Compared to walking upright, A had little fear of falling while walking on his knees. The trainer therefore decided to introduce this task as a preliminary step toward normal walking.

The process of walking on one's knees is similar to that of normal walking, wherein the weight is shifted from one knee to the other when making a step. For A, the instant he shifted weight from one knee to the other and tried to make a step, his waist and bottom curved, his torso bent forward, and he lost his balance. Thus, the trainer had to support his torso and waist. A responded to this support by strengthening his waist, which naturally caused his upper body to straighten. The next time he attempted to take a step while on his knees, he managed to straighten his waist on his own.

The trainer instructed him to pause between each step and attend to whether his waist and torso are straight correcting the posture as needed. By repeating this exercise several times by himself, A eventually managed to walk about 2 m. After doing so, he said that he was very happy.

### Camp Day 4

On the fourth day, we practiced tasks from *ritsui*. A's first goal was to maintain this posture by himself. As mentioned above, when in *ritsui*, A's knees bent inwards and his waist easily curved. As such, the trainer instructed him to move his knees forward, hoping that this task would help A step firmly on the ground and keep an upright posture with his knees straightened. Performing this task requires one to bring one's knees forward and become aware of how one's body weight shifts entirely onto the soles, before returning to the upright posture. Through this task, A was able to experience what it means to step firmly on the ground and thereby experience the feeling of straightening his entire body.

The trainer helped A place his feet properly and blocked his waist so that it did not curve. When A first attempted to perform the task, he tensed up his waist as if to oppose the trainer's support, but this tension gradually diminished, allowing A to experience what it is like to firmly step on the ground with his weight properly distributed between his soles. When he tried to straighten his knees, he managed to do it very well and thereby create a more stable *ritsui* position than before. A said that he felt that he knew



what it means to stand up by himself. After repeating the task several times, the trainer loosened his hold and made A perform it by himself. Although he wobbled a lot, A nevertheless managed to maintain this posture for about 40 seconds. Additionally, with the trainer's help, A tried to walk; although it was quite difficult for him to shift his weight from one leg to the other, he managed to step firmly on the ground. After the end of the session, A walked using his crutches, but this time did not rely that much on them. Instead, he stepped firmly on the ground and walked almost completely straightened from waist-to-head.

### Camp Day 5

To help A further improve his walk, the trainer instructed him to shift his weight from side to side while in *ritsui*. Although A's palsied left leg prevented him from leaning leftward, A was no longer afraid of doing so. The trainer was able to feel A's self-confidence in this respect. Then, the trainer instructed A to adopt *ritsui* and, while propping up his waist, he encouraged A to move it from left to right, shifting his weight to each side as he moved. A responded well to this support, and eventually managed to move his waist and shift his weight by himself. When A again attempted to walk, he managed to shift his weight more smoothly as compared to the day before, to such an extent that the trainer's support was no longer needed.

During the meal after the end of the session, A put his hands on the table and, to the great surprise of his mother, managed to stand up by himself. Then, he walked with his crutches, lifting their tips off the floor from time to time.

### Camp Day 6

During the last session, A was able to perform *hiza-dachi*, maintain *ritsui* by himself, and, walk upright. Specifically, he managed to walk on his knees for 7 meters – from one wall of the training room to the other – and maintain *ritsui* for more than one minute. Furthermore, he managed to walk some 5 meters while the trainer was holding only his hand, and another 2 meters all on his own.

A said that he would like to walk again with the trainer. Furthermore, he said that one day, when he could walk properly, he would like to go for a stroll outside together with the trainer. Promising each other that one day they would walk together, the trainee and trainer finished the six-day camp.

## **6. Discussion**

Maintaining an upright posture – and therefore creating a straight axis from sole to

head – is humankind’s most effective response to gravity (Naruse, 2014). However, for people with cerebral palsy “building up” this axis is quite difficult. When observing their sitting, kneeling, and upright postures, it is easy to see that they respond to gravity by bending their bodies to the left or right, curving their spines, or tensing their arms excessively. In other words, they struggle to keep up their bodies upright in defiance to gravity. Furthermore, whenever they must maintain a posture, they seem to struggle considerably - there are cases when even a several-second effort makes them sweat all over.

Therefore, practicing *agura-zai*, *hiza-dachi*, and *ritsui*, and “building up” their body’s axis, helps people with cerebral palsy expand their range of movement and stimulates their interest in the surrounding environment. These offer perhaps the greater benefit to the self-confidence and sense of security of people with cerebral palsy.

#### 6.1. Physical changes observed in A over the six-day camp

A’s main task during the six-day camp was *tate-kei* while performing *hiza-dachi*, *ritsui*, and *hokou*. At the very beginning, A’s waist was heavily curved and his torso bent forward. Additionally, when he bent his knees while standing up or walking, he adopted postures similar to when he was supporting himself with his crutches. When he was not using crutches, he strained his upper body and could barely maintain the posture by himself.

Through the Dohsa-hou sessions, A managed to straighten up his waist, “step” firmly on his knees while in *hiza-dachi* and eventually maintain a well-balanced posture by himself. This suggests that A became aware of his body axis while in *hiza-dachi*. This seemed similarly true when in *ritsui*, which requires the waist and knees to be straightened up and the feet to step firmly on the ground. The latter tasks A managed to perform and maintain by himself for more than a minute; as for weight shifting, A surprisingly managed to overcome his insecurity about his palsied left leg and shift his weight onto it. Thanks to this, he became able to not only stably maintain *hiza-dachi* and *ritsui*, but also to begin walking while in these postures.

#### 6.2. Psychological changes observed in A during the six-day camp

At the intake, A’s mother referred to her son’s tendency to soon give up on a task he believes himself to not be good at. The trainer assumed that was likely related to A’s low self-confidence, namely A could not maintain a self-image compatible with the ability to overcome his own clumsiness, which caused him to give up hopes for the future. However, interestingly, this character tendency that A’s mother spoke about was not

observed during the six-day camp – on the contrary, A boldly confronted the difficulty of moving his own body in different ways. Through this experience, A began to hope that his ability to move could expand. This was demonstrated by the fact that A diligently worked to be able to walk firmly with his crutches off the floor and that he said he wanted to walk by himself in the future and go for a stroll with the trainer.

In Dohsa-hou, improvement of body posture and movements is essential, but is not the goal in itself. Nevertheless, through such improvements, positive changes in the trainee's self-image can be expected. It is good to keep in mind the words of Dohsa-hou's founder, namely that movement is an integrated activity of both body and mind (Naruse, 2014).

For the author, the present case was a valuable experience that will not soon be forgotten. The author wholeheartedly thanks A and his mother, as well as the camp's supervisors and manager.

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## Chapter 2

### When Gene Imbalance Does Not Matter – Dohsa-hou for Children with Down syndrome

*Yuki Nihei*

#### 1. Down syndrome – A General Outline

Down syndrome is an inborn disorder caused by the presence of partial or full third copy of the 21<sup>st</sup> chromosome. Currently, the reasons for such an abnormality are unknown. In recent years, the disorder can be diagnosed as early as fetal period.

Down syndrome affects one of every 700-800 persons, regardless of nationality and climate; however, late birth is considered a possible risk factor. People with Down syndrome have several identifiable physical features, including rounded heads, flat faces, slanted eyes, small noses, and large tongues (Dictionary of Psychology, 1999). In addition, they have intellectual disability – most often moderate. They also have higher risks of inborn cardiac diseases, small stature, cervical spine instability, low muscle tone, obesity, and ophthalmologic and auditory complications. Of course, these symptoms do not necessarily present all in one individual.

In general, people with Down syndrome are gentle in nature and easily develop friendly relationships, but can sometimes be rather stubborn and have a tendency to develop obsessions. With the advancement of medical science, their average life-span has extended to up to 50 years, but they nevertheless remain prone to contacting infectious and other diseases. However, thanks to their extended life-span, more accurate research on the social adjustment of youths and adults with Down syndrome can be carried out.

#### 2. Rehabilitation of Down syndrome

In most cases, a diagnosis of Down syndrome is possible immediately after birth. Immediately informing the parents and helping them obtain proper treatment and rehabilitation are effective for improving growth (Encyclopedia of Education of Children with Disabilities, 1997). Treatment and rehabilitation commonly include

physical approaches such as physiotherapy and infant gymnastics, which have been demonstrated to effectively promote children's motor development, as well as verbal and overall communication skills. As the child grows, approaches should ideally be tailored to the individual child. Because many children diagnosed with Down syndrome suffer from cardiac diseases, some require surgical operations.

Early rehabilitation can help some children with Down syndrome attain proper psycho-physical development and thereby allow them to enter normal schools. However, children with retarded intellectual development must often go to special-needs schools. Fortunately, an increasing number of people with Down syndrome graduate school and being working not only at special-purpose workshops, but also, with certain support, at public enterprises.

### **3. Use of Dohsa-hou for the Rehabilitation of Down syndrome**

Dohsa-hou has proven quite effective for the rehabilitation of Down syndrome because it helps the child (i) maintain proper sitting and standing postures, as well as walking in the later stages of development, and (ii) promotes emotional and behavioral development (Kikuchi, 2012). As Dohsa-hou directly targets the client's body, it is generally considered a physical rehabilitation method, despite the fact that it triggers emotional and behavioral changes favorable not only to children with Down syndrome, but also to those with autism and learning disabilities (Sato, 1992; Tetsu, 2009). However, what mechanism underlies these changes?

In Dohsa-hou, physical, emotional, and behavioral assessments are made and then appropriate tasks are implemented with the support of a trainer. Through the mutual efforts in the trainer-trainee pair, the trainee can develop a greater sense of self-control and satisfaction when he/she overcomes certain challenges, performs the required tasks well, and is praised by the trainer. The process is considered the foundation of Dohsa-hou and it underlies the method's apparent benefits on the emotional and behavioral levels.

Going back to the characteristics of Down syndrome, postural impairments include protruding chin, abdomen, and bottom, and a rounded back. In addition, people with Down syndrome tend to walk with long steps and sit with their legs open. They usually also have quite low muscle tone in their abdomens, backs, and legs, which makes their overall appearance rather loose. However, during Dohsa-hou sessions they might oppose the trainer's support with unexpected tension (Tanaka, 2014). Additionally, as mentioned above, they tend to be friendly and cheerful, but may strongly reject

activities that they do not want to do and often behave rather selfishly when in a group (Eyelseg & Kanno, 2012). In other words, while they can generally communicate well with others, they may have difficult collaborating with them.

Therefore, Dohsa-hou can be very effective for people with Down syndrome in the sense that it helps them “hear” and understand others’ (i.e. the trainer’s) instructions, follow these instructions and control their own emotions. This is especially the case when tasks such as *kata-biraki* and *se-sorase* are performed (Kikuchi, 2012). These tasks are in the correction of, for example, a highly rounded back or a protruding bottom, but because they are often completely new to trainees, they may evoke fear and physical discomfort. By successfully overcoming such fear and discomfort, trainees might eventually understand that collaborating with other people (again, in that case, the trainer) is not necessarily bad, and can even be interesting. This, in turn, might help them better adjust to their surrounding environment on a daily basis and also moderate their characteristic stubbornness.

#### **4. Dohsa-hou Case Study**

In this study, the author presents the therapeutic process of a 20-year-old female with Down syndrome over a six-day, overnight Dohsa-hou camp. The author was her trainer.

##### **4.1. Case outline**

The trainee (hereafter referred to as B) was a 20 year-old woman with Down syndrome. At the time of the study, she lived with her father (aged 69 years) and mother (aged 59 years). B was diagnosed with Down syndrome two weeks after birth. It took nearly one year for her mother to accept the news – during that period she mother cried almost incessantly. At the age of two, B successfully underwent a surgical operation for patent ductus arteriosus.

Throughout her childhood, B was physically quite weak and her body was relatively small for her age. Between two and four years of age, she was hospitalized because of severe pneumonia several times. Afterwards, she grew up healthily with no serious medical problems. She graduated from a special-needs high school and is now working at a workshop folding boxes.

In her junior high-school years, B participated in two Dohsa-hou camps of three days each. Then, after graduating school, she began to regularly attend Dohsa-hou

monthly meetings. The present study describes her first six-day Dohsa-hou camp.

Over the camp's six days, a total 15 sessions were carried out, three per day. Her mother's requested goal for this camp included improvement of B's posture and gait, and helping achieve a more relaxed state of mind.

B was chubby. She had verbal communication skills, and could properly write her name with characters. During the Dohsa-hou sessions, she sometimes did not want to move merely out of stubbornness, whereas at other times she was highly motivated and tried her best to perform the tasks. She often referred to the camp schedule in order to understand what followed next.

#### 4.2.Dohsa-hou sessions

##### Camp Day 1 (intake/ 1<sup>st</sup> to 3<sup>rd</sup> sessions)

At intake, the trainer managed to outline the specifics of B's posture, most of which were typical for people with Down syndrome: B's chin, abdomen, and bottom were protruding, and her back and waist were curved. Her entire body was quite tense, evoking an impression of inflexibility. Probably because of her job at the box-folding workshop, her shoulders were especially stiff. While in *hiza-dachi*, she pointed the tips of her toes and could not maintain the posture for long. Because of her stiff shoulders and curved waist, most of her body weight was focused in her upper body, making it difficult to support and her lower body unstable. While in *ritsui*, her legs, especially the ankles, were stiff, and she had back knees. Because of this, B felt that her feet did not properly make contact with the ground, making her gait awkward and her behavior restless.

After the assessment, the trainer applied *se-sorase*, *kata-age-sage*, *ude-age*, and *kukan-no-hineri*. The main problems with the first session were that when she reported feeling pain or when the session was about to end, she began to twist her body and attempt to run away. In *ude-age*, she moved with her own pace and could not match with the trainer's very well. She also tended to count the seconds until the end of the session.

After the intake, the trainer and the trainee enter the bathroom together, but B was extremely interested in her surroundings and other people in the area; she barely paid any attention to her trainer. Furthermore, she attempted to get into the bathtub while covered in soap foam. This is one of the situations illustrating the trainer's belief that, as discussed above, B could communicate but could not easily collaborate with others.

After the first day, the trainer set the following two main goals for the duration of

the camp: (i) help B calm down through relaxation of shoulders and ankles, which could promote feeling of well-being and connectedness to the ground, and (ii) help B properly respond to even more difficult tasks and instructions and persist with them, thereby cultivating a sense of achievement and joy in collaborating with others.

#### Camp Day 2 (2<sup>nd</sup> to 4<sup>th</sup> sessions):

Relaxing the stiffest parts of her shoulders was designated as main task of the day. At the beginning of the second session, B claimed to feel sleepy because she had woken up earlier than usual. She did not respond to the trainer's instructions; she merely looked at her watch and schedule without moving. When the trainer invited her again, she responded by beginning to hum. During the third session, she failed to heed the trainer's instructions that going to the toilet would be possible only after the session had ended by leaving the training room several times to go to the toilet. No matter how hard the trainer tries, B reacted stubbornly and did not attempt to engage in the tasks. Thus, the second and third sessions were of little benefit. The trainer, nevertheless, attempted to stand in B's shoes and understand the way she felt in an attempt to build a more trusting relationship. The trainer therefore said to B that it was indeed rather difficult to be in a completely new environment. B nodded silently in agreement.

In the following group therapy, the trainer played together with B and encouraged her to complete whatever tasks she faced with. As B often referred to the schedule during this time, the trainer decided to do it together with her. Then, they both sang a song from the Disney fantasy movie *Frozen*.

In contrast to the two morning sessions, during the fourth session B was very motivated. She managed to follow the trainer's instructions and did not leave to go to the toilet. While in *ude-age*, she managed to relax more and to follow the trainer's instructions properly. At the end of the sessions she exchanged a high-five with the trainer and expressed a feeling of achievement. However, towards the end of the session she began talking about the fact that the session would end and that she needed to go to the toilet. The trainer, however, mentioned that there were around 10 minutes left in the sessions. At the point, although B left the therapeutic mat, she did not leave the room. Again the trainer and B exchanged high-fives, which become their ritual at the end of each session.

#### Camp Day 3 (5<sup>th</sup> to 7<sup>th</sup> sessions):

To create a better relationship with B, the trainer introduced, along with the shoulder relaxation task, a number of *tate-kei* tasks such as *ritsui* and *hiza-dachi*. As on the



previous day, during the fifth session, B reported feeling sleepy. Then, the trainer decided not only to give B verbal instructions about the required tasks, but also began to tickle her. This playful element enlivened B enough to motivate her to perform the tasks. While in *kata-age-sage* and *kata-biraki*, B managed for the first time to pay attention to her own body and move on her own.

During the fifth session, she was very motivated and wanted to perform tasks such as *ude-age* and *hiza-dachi* by herself. In *ude-age*, she followed the trainer's instructions to move her arm slowly. However, while in *se-sorase*, she reported feeling pain. B also found it was difficult to relax and entrust her body to the trainer. At that point, the trainer decided to start counting down from five and closed the task with "Finished!". B responded with a joyful expression and again exchanged a high-five with the trainer.

During the group therapy, B was very motivated to participate and readily responded to the trainer's invitations. She took the trainer by the hand at one point and, at the end of the day, cheerfully said "Good bye, trainer!" Thus, the trainer-trainee relationship had clearly improved.

#### Camp Day 4 (8<sup>th</sup> to 10<sup>th</sup> sessions):

Because B's shoulders were stiff, the trainer decided to focus on relaxing them, as well as on the proper performance of *tate-kei* tasks. During the eighth session, probably because of fatigue accumulated over the previous three camp days, B fell asleep. However, in the following session she cheered up again and once again became motivated. Compared to the previous day, B performed *ude-age* more smoothly with proper pauses in between. Her shoulders, too, became more relaxed and their movement range expanded.

As for *ritsui*, B's stiff ankles, back knees, and protruding bottom did not allow her to maintain the posture properly. Because of this, the trainer needed the support of a sub-trainer. With two trainers helping, B again attempted to maintain the posture, but appeared troubled. The trainers tried to reassure her by saying that they would support her and helped her bend her hip joints and knees. Despite reacting with little delay to the instructions, B managed to perform the task well enough.

During the break, B tore off the paper name tag, but after the trainer reproached her, she drew a new one with the trainer's help and instructions. Later on, during the evening party, B began to dance with the others on the stage and even took on leading role in the short play presented by her group. Her mother was surprised to see her like this. She said that B used to love to have an audience, but had recently lost her self-confidence. The trainer was also happy to see B so.

### Camp Day 5 (11<sup>th</sup> to 13<sup>th</sup> sessions)

B managed to fulfill one of the main tasks of the six-day camp, namely to maintain stable *ritsui* and *hiza-dachi*. During the 11<sup>th</sup> session when the trainer said it would be the last day with three sessions, B nodded cheerfully. Despite feeling sleepy, B did her best during the sessions. Again, although she occasionally attempted to run away, especially when a task was difficult for her, she managed to concentrate much better than before and responded with a serious look on her face. Even the task that she found most difficult to perform - *se-sorase* - she managed to perform well by entrusting her body to the trainer and relaxing properly. While she was shifting body weight in *hiza-dachi*, her knees began to redden and she began patting them. The trainer praised her at that point, saying that reddish knees were sign that she had done her best. B agreed.

### Camp Day 6 (14<sup>th</sup> and 15<sup>th</sup> sessions/parent guidance)

In the last session, the trainer and B reviewed all of the tasks she had previously performed, including *ude-age*, *kukan-no-hineri*, *ritsui*, *hiza-mage*, *hiza-dachi*, and *se-sorase*. B liked repeating the tasks. While performing *ude-age*, she managed to match the trainer's pace almost perfectly. The trainer praised her when this occurred, saying that it was the best *ude-age* that B had ever performed. B was all smiles. During the parent guidance session (i.e. the last one), the trainer informed B's parents about the tasks, focusing mainly on *ude-age* and *kukan-no-hineri*, and how they could practice these tasks at home with B. The parents try performing the tasks themselves and then practice together with B for a while.

## **5. Discussion**

In the following section, we review the therapeutic process of the six-day camp and discuss its outcomes. On the first day of the camp, the trainer set the goals of helping B relax and perform some of the more difficult Dohsa-hou tasks in order to cultivate a sense of achievement. However, B found it difficult to follow the trainer's instructions. She also did not concentrate and often attempted to leave or actually left the room, or constantly looked at the schedule during the sessions. However, as this was the first day of a six-day camp, B likely felt anxious and afraid that she would be forced to do something unpleasant or painful. As a result, it became difficult for her to become engaged in performing the tasks and experience their therapeutic meaning.

Therefore, establishing a trust relationship with B was essential for ensuring that the

camp had a successful outcome: to do so, the trainer confirmed the schedule together with B and sung a song from an animated movie with her. As a result, B calmed down and her motivation for practicing Dohsa-hou increased. The trainer also praised B whenever she performed well and they exchanged high-fives as a sign of B's achievement. B became more self-confident and began controlling her moods and emotions. In a sense, she understood that collaborating with other people was not a bad experience - on the contrary it could be very funny.

B's parents were happily surprised to see their daughter dancing and playing the leading role in the group's play during the evening party on the fourth day of the camp. The restoration of B's self-confidence seemed to be a major change for her.

Observing these positive changes over the course of a camp is one of the great pleasures of practicing Dohsa-hou.

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## Chapter 3

### When We Share Each Other's Worlds - Dohsa-hou for Children with Autism

*Eri Teruta*

As mentioned previously, Dohsa-hou was developed in the 1960s as a method of psycho-physical rehabilitation for children and adults with cerebral palsy. It has since evolved into a general approach to managing a wide spectrum of disabilities and disorders, including psychiatric ones. Among these, Dohsa-hou has been used in the rehabilitation of individuals with Autism Spectrum Disorder (ASD) since the pioneering research of Konno and Ohno in 1977. Today, Dohsa-hou is commonly used for the rehabilitation of a variety of developmental disorders.

#### 1. Characteristic of ASD

ASD is a neurodevelopmental disorder first described in 1943 by the American child psychiatrist Leo Kanner as “early infantile autism”. ASD may or may not be accompanied by intellectual or verbal development disorders, depending on the case. Because individuals’ symptoms and level of disability can vary sustainably between individuals after its onset, the disorder was eventually conceptualized as a “spectrum”. According to Wing and Gould (1979), ASD includes diffuse (i) social deficits, (ii) communication difficulties, and (iii) stereotyped or repetitive behaviors and interests. The pathogenesis of ASD is usually attributed to a combination of genetic and environmental factors, but further research on its precise causes and optimal treatment are forthcoming.

#### 2. Rehabilitation of ASD

Although numerous medical treatments for ASD are available, there is no basic treatment at present. Therefore, providing tailored support to each person with the disorder is essential. There are a number of to the rehabilitation of ASD in the fields of education, social welfare, and medicine.

Dohsa-hou has been almost exclusively applied in the first two fields, especially in school education. Japanese special-needs schools typically group children according to

their various impairments, i.e. visual and auditory impairments, physical disabilities, poor health, and intellectual disorders. Children with ASD are most often relegated to the last of these groups. During their education, these children are taught self-care activities, wherein Dohsa-hou is almost exclusively used.

According to the guidelines of the Ministry of Education, Culture, Sports, Science and Technology, self-care classes aimed to promote the following (i) health maintenance, (ii) psychological stability, (iii) quality-interpersonal relationships, (iv) reacting properly to the immediate surroundings, (v) physical exercise and (vi) communication skills. As Dohsa-hou aims to enhance not only at the performance of proper physical movements, but also psychological stability and establishing interpersonal relationships with the trainer, it is considered a highly appropriate and effective approach for use in special-needs schools.

Dohsa-hou is available not only at schools for children with ASD, but also for children and their caregivers at Dohsa-hou camps and monthly meetings.<sup>3</sup>

### **3. What Does Dohsa-hou Aim to Achieve in ASD Rehabilitation?**

As children with ASD generally do not suffer from severe physical impairments, Dohsa-hou targeting this group is not generally used to improve their bodily movements, as it would be for children with, for example, cerebral palsy. Instead, Dohsa-hou is used to address the disorder's core problem – poor communication and interpersonal relationships.

According to Sigman (1994), people with ASD have difficulty in establishing joint attention with others and cultivating relationships of mutual love and understanding. Morisaki (2004) echoed this statement, adding that children with ASD do not often attend to the mere existence of other people, and most of them are restless and find it difficult to calm down. Morisaki goes on to say, Dohsa-hou for children with ASD is primarily used to help them (i) relax and calm down, (ii) be able to settle their own behavior, (iii) become aware of the self-other relationship, and (iv) develop joint attention. Application of Dohsa-hou is well-justified for use with children with ASD because it can easily account for individual differences – which is necessary, given the considerable variation in impairments between individuals with ASD – and is uniquely suited to address the above four points.

### **4. Outcomes of Dohsa-hou in ASD Rehabilitation**

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<sup>3</sup> For further details on Dohsa-hou camps and monthly meetings, see Chapter 5.1.

There are several key studies on detailing the outcomes of Dohsa-hou application for rehabilitation of individuals with ASD. Among them, Konno and Ohno (1977, 1990) reported that Dohsa-hou was effective in helping children with ASD calm down and begin to communicate with greater ease. Several studies have reported that Dohsa-hou can make children act friendlier and be more self-motivated (Oda & Tani, 1994; Sasagawa et al., 2000), and, among children with verbal disabilities, can make them begin talking and communicating using simple words (Yamashita, 1986; Morisaki, 2002; Koga & Tanaka, 2003).

To what can all these positive outcomes be attributed? As Dohsa-hou is based on the trainer-trainee relationship through the medium of the body (Morisaki, 2009), communication between these two parties is based on actual physical sensations. For people with ASD, it is insufficient to merely call these children's attention to or promote an interest in others. However, direct physical contact may help such children attend to their own sensations and ultimately to the person standing right in front of them. Furthermore, when the trainer praises children for doing well on certain Dohsa-hou tasks, these children's motivation to pursue further achievement increases.

All of these characteristics of Dohsa-hou can become a basis for the establishment of an interpersonal relationship with the trainer, including becoming aware of his/her existence and sharing joint attention with him/her, which may ultimately stimulate verbal development. Furthermore, Dohsa-hou allows the trainer to focus his/her attention on the trainee's intentions as manifested through physical movement. For example, by observing the trainee's movements, the trainer might learn that the trainee simply does not like the task and is opposing it; that the trainee is simply not interested, and so on. In so doing, the trainer can then reconsider what Dohsa-hou tasks and support would be most appropriate for the trainee. Throughout this process, the trainee becomes aware of the other – namely the trainer – and that this other understands his/her feelings and intentions. The existence of the other and the support provided by this other ultimately help the trainee calm down and feel more secure.

## **5. Dohsa-hou Case Study**

The present case was carried out during a four-day Dohsa-hou camp, wherein the author participated as trainer.

### **5.1. Case outline**

The trainee introduced in this case (hereafter referred to as C) was a 7-year-old girl

diagnosed with ASD accompanied by intellectual impairments. She commuted to a special-needs school.

C was tall for her age at the time of the camp and well developed physically. She did not speak, but could convey her meaning by pointing to letters of the alphabet and through specific gestures and vocal expressions. C was relatively susceptible to verbal instructions and responded appropriately to them, but found it difficult to focus her attention. Furthermore, her awareness of others was quite poor. The only person she looked at in order to communicate with was her mother. She was not afraid of strangers and did not oppose cooperating with others, but her responses were often incomplete and depended on her moods.

C was delivered by Cesarean section and had a good nutritional status at birth; she had no need of an infant incubator and experienced no other complications aside from joint dislocation on both sides, which was successfully treated through surgical operation. C started walking at the age of 18 months, but because her left leg rotated internally, she often stumbled and fell. Two years before taking part in the camp, she was diagnosed with joint laxity, which required her to regularly undergo medical checkups. This condition did not affect her physical movements much, but she could not easily maintain certain postures that intentionally adopted. At the time of the camp, she underwent physiotherapy on a fortnightly basis. Four years before the camp, she began participating in monthly Dohsa-hou meetings.

During the camp's first session, the trainer made a Dohsa-hou assessment while referring to the Standing-Gait Scale and the Schema of Body Dynamics, which are measured used in Dohsa-hou<sup>4</sup>.

→ *Agura-zai* – while in *agura-zai*, C's knees could reach the floor and her hip joints were quite flexible. She could keep her upper body upright while sitting. Neither excessive tension nor notable curves were observed in her back and shoulders. Her body weight tended to shift to the left.

→ *Hiza-dachi* – C could maintain the posture by herself, but leaned constantly to the left while doing so. She could stretch her ankles, but her posture was not very stable.

→ *Ritsui* - C's left leg rotated internally and the outside of her left sole was quite hard. Her right leg, too, slightly rotated inward. She had back knees.

→ *Hokou* - When walking with her left leg first, she moves as if grinding while on a snowboard, shifting her bodyweight to the left. She could only stay for a short time on her right leg and did not step on it properly, predominantly using its external side.

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<sup>4</sup> See Appendix 2.



Specifics of C's disability: C managed to follow the camp schedule that her mother had prepared for her and establish a daily rhythm at the camp. However, when the situation around her changed suddenly, she began crying and fretting. She was especially persistent in performing activities she loved, and, no matter the situation, she acted as she wished. As her mother reported, C rarely kept calm during medical checkups or when at the hairdresser.

Because C acted one-sidedly and often could not control her behavior when desired something or to go somewhere, the trainer concluded that it would be difficult to fit in with her environment. Regarding her physical condition, she tended to shift her bodyweight to the left, and rotate her left leg inwards. With this in mind, the trainer decided that practicing appropriate shifting of bodyweight from *agura-zai* and waist movements from *hiza-dachi* would help C feel more stable when she was standing up or walking. Additionally, to help C learn to engage in joint attention and cooperate with trainer, the trainer decided introduce *ude-age*.

## 5.2.Dohsa-hou Sessions

### Camp Day 1

→ Intake. While the trainer was talking with C's mother, C was unable to keep calm and constantly attempted to attract her mother's attention. She then said "song" to the trainer by pointing to a list of characters. Although she had not sufficiently calm down, the trainer eventually told her that it was time for Dohsa-hou and she seemed to understand. However, soon after she began doing what she wanted. It appeared that she found it more difficult to follow the trainer's instructions than to actually engage in the tasks. As such, it seemed important to help her shift her focus to her body and maintain that focus.

→ Session 2 (*ude-age*, *kukan-no-hineri*, bodyweight shifting, back and shoulders relaxation, and *hiza-mage*).When the trainer invited C to perform *ude-age*, she took the trainer's hand, shook it, and lifted it up. The trainer attempted to hold her back. C could not maintain eye contact or concentrate. In an attempt to draw her attention, the trainer said "Touch!" while raising a hand in front of C's face, searching for a response. C then touched the trainer's hand, which the trainer praised her for. The trainer then began to move her hand to the left and right. Although C's attention was initially attracted to the trainer's moving hand, before long her attention was recaptured by external stimuli and she stopped responding.

The trainer then took C by the hands and invited her to attempt the same movement (i.e. left-to-right motion) that she had demonstrated previously. Because the stimulus had changed, C manages to refocus her attention. Using this opportunity, the trainer made C lie on the floor as C could easily look at her hands from that position. From that posture, the trainer introduced *ude-age*. However, C could no longer concentrate and made almost no further self-movements. C's attention span towards her own hand was too limited; however, when the trainer invited her verbally to try to continue attending to her hand, C responded. However, her elbow and wrist were too loose, which caused them to bend while she moved her hands, and C could not keep her hand raised on her own.

### Camp Day 2

Throughout the second day, the trainer attempted to dedicate more time to helping C concentrate and control her behavior.

→ Session 3 (*ude-age*, *kukan-no-hineri*, bodyweight shifting, and waist movement). As compared to the previous day, C was able to better respond to the trainer's instructions, put greater effort into the activities, and relax properly. However, she found it difficult to maintain the same pace throughout an entire movement. In *ude-age*, the first task was merely to prevent the elbow and wrist from bending, after which the control extended to the fingertips.

→ Session 4 (*ude-age*, *kata-age*, bodyweight shifting, and *hiza-mage*). In this session C often pointed to her list of characters and was not able to concentrate very well. She strongly resisted the trainer's instructions, so the trainer decided to sing for a while. Then, while still singing with a low voice, the trainer gradually shifted to the task at hand (*ude-age*), to which C responded appropriately. In order to help C concentrate, the trainer showed with her index finger "number one", which drew C's attention. C then touched the trainer's finger and imitated the gesture. With trainer and trainee's fingers touching in that way, the *ude-age* progressed smoothly; C eventually managed to stretch out her wrist and fingertips. Whenever C became distracted, the trainer increased the number of fingers she help up by one in order to recapture C's gaze.

→ Session 5 (*ude-age*, *kukan-no-hineri*, *zenkutsu*, bodyweight shifting, and *fumi-shime*). In the previous session, *ude-age* had gone smoothly because C had imitated the trainer. However, in the fifth session, the trainer became confused by the feeling of control she had over C. In the middle of an attempt to perform *ude-age* again, C stopped and looked

at the trainer without expression. Then, she attempted to lower her arm to the floor, turned away, and attempted to get up; however, the trainer held her back.

Confused, the trainer invited C to try to create another shape with her fingers by molding her own fingers into the shape of a “fox”. C gazed at her fingers and began moving her hands in response. The trainer then said “Hello!” while mimicking the image of the “fox”. C started imitating her and moved closer. The trainer again said “Hello!” and moved her fingers to make it appear as if the fox was “bowing”. C began to laugh and attempted to match the mouth of her own “fox” with that of the trainer. The trainer said “Smooch!”, causing C to start laughing again. Using the situation, the trainer gradually shifted to *ude-age*. This time C managed to concentrate for longer and perform the movement more smoothly, while gazing at the trainer’s face and fingertips. At the end of the session, the trainer praised C for having worked hard and exchanged a high-five with her. C beamed at the trainer.

Over the camp’s first day, C clearly did not accept the trainer. She was anxious and did not manage to maintain any of the requested postures appropriately. On the second day, however, the trainer repeated a number of different tasks with different movements and she eventually managed to perform one of them rather well. Additionally, in the short breaks during each session, C played constantly with the trainer, and as a result, stopped insisting on doing only what she wanted, developed a richer expression, and laughed merrily.

### Camp Day 3:

→ Session 6 (*ude-age*, *kukan-no-hineri*, *zenkutsu*, bodyweight shifting, and *fumi-shime*). During this session, while C performed *ude-age*, the trainer instructed her on when to start and stop, which worked very well - through this method C managed to stretch her wrist and fingertips. However, her elbow still bent easily and she could not control it. Thus, the trainer instructed her to stop for a while and try to stretch her elbow; this was the first time that C managed to fully control the movement of her elbow. Then C and the trainer played more using the “fox”-shape fingers mentioned above. The trainer praised C, after which they attempted *ude-age* again. This time, C managed to maintain posture longer.

→ Session 7 (*ude-age*, *zenkutsu*, bodyweight shifting, and *fumi-shime*). Probably because C had put more effort into the previous session, she could not stop laughing during this session. Although she involved herself in the tasks to some extent, it was

never completely and she made fewer self-movements overall. In *ude-age*, once she retracted her arm, she could not stretch it again easily. Because the movement span of her arms was quite limited, the trainer instructed her to repeatedly raise and lower them. This helped C concentrate and ultimately succeed in completing *ude-age* appropriately.

Outside of the sessions, C became more communicative and approached the trainer more often. Looking at her look and gestures, the trainer attempted to identify how C felt and verbalize it. C responded to this by gazing at the trainer's face. During this time, C made greater eye contact with the trainer even when they were not close to each other.

→ Session 8 (*ude-age*, *zenkutsu*, bodyweight shifting, *hiza-dachi*). Due to personal reasons, the trainer could not participate in this session, so it was led by a sub-trainer. They performed *ude-age* twice per arm; although C did touch the sub-trainer's hand, she could not perform the task properly.

#### Camp Day 4:

→ Session 9 (*ude-age*, *zenkutsu*, bodyweight shifting, *hiza-mage*, and *fumi-shime*). During this session, C was quite relaxed. She managed to concentrate from the very beginning and held her gaze at the trainer for longer. Additionally, she understood when each movement began and finished, and easily matched the trainer's pace without opposition. As she repeats the tasks, she looked more increasingly often at the trainer's face and listened to the trainer's instructions. Outside the sessions, she similarly understood the verbal instructions more easily than before.

→ Session 10 (final session/parent guidance and effect measurement). During the final session, the trainer informed C's mother on what they had done during the camp's four days and also instructed her on what tasks would be most appropriate for C to continue performing at home. The mother herself attempted some of the tasks that C had been performing throughout the camp. In *ude-age*, the mother was impressed with C's concentration and with the fact that C was constantly gazing at her. She also noticed that her daughter smiled more often and was calmed as compared to before the camp.

## **6. Outcomes of Dohsa-hou camp**

At the very beginning of the camp, communication with C was limited to her conveying what she wanted. However, with repetition of the Dohsa-hou tasks, C began to pay greater attention to the trainer's instructions and better understand the trainer's intentions. More specifically, Dohsa-hou was most effective when the trainer (i) waited for the correct time and then instructed C to repeat a certain task; (ii) showed C that she

understood C by attempting to verbalize C's feelings; and (iii) gave instructions or attempted to convey what she wanted C to do when C was sufficiently calm. Additionally, joint attention was established between C and the trainer, verbal communication became easier, and C showed a greater willingness over time to communicate with the other trainees participating in the camp. This last outcome is especially common for many previous case studies.

### **7. Dohsa-hou Tasks and Their Variants for Children with ASD**

Morisaki (2009) introduced a variety of specific Dohsa-hou tasks for children with ASD. The most often applied tasks for such cases were *ude-age*, *kukan-no-hineri*, and *se-sorase*. Although these tasks are not necessarily required, they have proven highly effective for ASD and easy for children with this condition to understand.

All three tasks aim to improve body posture and movement, and help the trainee become more aware of other people's existence, calm down, and eventually control his/her behavior. Although repeating the same task numerous times is not necessarily effective, the trainer must devise and attempt different task combinations or variations in accordance with the trainee's specific characteristics, such as attention span (Morisaki, 2009).

A notable characteristic of children with ASD undergoing Dohsa-hou is that they often do not cooperate with the trainer and try to play the truant. Therefore, in addition to the application of concrete techniques, the trainer's personality, attitude, and way of supporting the trainee are considered very important. In order for the trainee to accept the trainer and understand his/her instructions, the trainer should not forcibly move the trainee's body or hurry the trainee; instead, the trainer should be patient and attempt to show the child that he/she understands and accepts the trainee. It is thus exceedingly important to wait for the right moment when they can reach out to each other.

The above key points must be considered important to foster the psycho-physical development of children and adults with ASD.

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## Chapter 4

### When the Body Opens the Door to the Soul - Dohsa-hou for Patients with Psychiatric and Neurotic Disorders

#### 4.1. Schizophrenia

*Yumiko Hibi*

##### **1. Schizophrenia – General Outline and Characteristics**

Schizophrenia is a psychiatric condition that greatly influences affected individual's social lives. Its onset is most often during puberty and young adulthood, with an etiology that includes both a genetic predisposition, for example vulnerability, and psychosocial and environmental factors such as stress. With the advancement of biological studies of the brain, schizophrenia has been found to relate to abnormalities in neurotransmitters, brain morphology or brain blood flow, eye movements, certain event-related potentials, and cognitive functions. However, these abnormalities are likely related to the genetic vulnerability mentioned previously; whether they are direct causal factors has yet to be determined.

The initial stage of the disease, also known as prodromal stage, is characterized by insomnia, a vague sense of anxiety, difficulty concentrating, depressive moods, and acoustic hyperesthesia. These symptoms are soon followed by typical psychiatric symptoms, including positive and negative symptoms, and cognitive, perceptive, emotional, and motivational dysfunctions. Positive symptoms include hallucinations and delusions, disconnected speech, which is indicative of difficulties in thinking; and incoherent and catatonic behavior. Negative symptoms, by contrast, include flat affect, difficulties in abstract thinking, desultory conversations, lowered motivation, anhedonia, and social withdrawal. All these symptoms can lead to poorer interpersonal relationships and decline in occupational and daily-life functioning.

Recently, the number of patients with typical symptoms was found to be relatively low and symptoms appear to be milder than what has been previously found.

Schizophrenia does not progress uniformly. From the prodromal stage onwards, positive symptoms pass through a distinctive acute phase, but after a period of rest and convalescence, symptoms shift predominantly to the negative cluster. Relapse is highly common; furthermore, the disease often progresses in a wave-like manner.



## **2. Common Therapeutic and Care Approaches to Schizophrenia**

As with patients with somatic disease, individuals diagnosed with schizophrenia possess disabilities often requiring welfare services. Together with medical intervention to complement patients' innate vulnerability, stress-coping measures such as psychosocial rehabilitation and daily-life support are often essential. Additionally, team-based approaches are also necessary.

### **2.1 Medical treatment**

Medical treatment of schizophrenia predominantly includes use of antipsychotic drugs, which can reduce the frequency and severity of hallucinations and delusions, as well as constrain psychomotor excitation, aggressive behavior and feelings of frustration. However, antipsychotics have certain side effects, such as Parkinsonian symptoms, upward rolling of the eyes, dystonia wherein the patient's neck distinctively sticks out, drowsiness, and mouth dryness. Recently, atypical antipsychotic drugs were introduced; compared to conventional antipsychotics, these have fewer side effects and can influence some of the negative symptoms such as flat affect and lowered motivation. Depending on their need, patients with schizophrenia also often take anxiolytics, sleep medications, or antidepressants alongside antipsychotics.

### **2.2 Psychosocial treatment**

→ Psychotherapy: This type of therapy involves encouraging the patient to regularly take his/her medications, and to provide him/her with concrete advice regarding daily-life problems and general psychological support. It is important for therapists to keep an appropriate distance from and develop a confidential relationship with patients, who are often sensitive to human interactions and require a sense of security.

→ Occupational therapy: This approach helps patients improve both their physical condition and social adjustment through participation in different daily-life activities, including non-verbal ones, and interpersonal exchanges.

→ Psychoeducation: This treatment helps both patients and their families cope more effectively with the disease and its related disabilities. Psychoeducation can specifically help people better understand the progress of the disease, the requisite medical treatment, and relapse prevention. It also turns their attention to societal resources they can tap.



→ Social skills training: Considered a cognitive-behavioral approach, social skill training centers on evaluating patients' social skills and helping them relearn these skills as needed. It uses teaching, modelling, role-play, and feedback to help people effectively apply these social skills in their daily lives.

→ Other approaches: As mentioned above, schizophrenia is related to various cognitive impairments, including attention and concentration deficits, memory declines, and overall psychomotor difficulties. Because disruption of cognitive function is strongly related social functioning, in recent years, clinicians have been focusing on developing so-called "cognitive rehabilitation" methods.

### 2.3 Hospitalization

Currently, most patients with schizophrenia receive outpatient treatment, but hospitalization may be needed depending on the severity and characteristics of their symptoms. One of the advantages of hospitalization is that patients' living environment is highly controlled and conducted to their recovery – in other words, they have ample opportunity to rest, and undergo regular medical examinations and intervention. In addition, it eases the burden on patients' families.

### 2.4 Mental disorder rehabilitation

All of the approaches described previously can be considered methods of mental disorder rehabilitation. Mental disorder rehabilitation can be provided in a variety of forms (e.g. daily-life support, occupational trainings, and self-help groups) and in different settings (e.g. in-patient and outpatient treatment, daycare or home-visit nursing). As most patients with schizophrenia require long-term treatment and support, comprehensive care for patients' social lives is essential.

## **3. Philosophy and Diagnostic Basis of Dohsa-hou for Schizophrenia**

Mitsuyo Tsuru, a Japanese Dohsa-hou specialist, has carried out a variety of practical Dohsa-hou studies among patient with schizophrenia and has found that many such patients employ strong defense mechanisms and suffer considerable mental strain when interacting with the world. This mental strain, Tsuru suggests, inevitably manifests in impairments in bodily functioning (1982, 1995). More specifically, due to the strong psychophysical tension, patients with schizophrenia typically have rather

twisted postures and move somewhat awkwardly. With clinical Dohsa-hou, not only can such individuals begin to attend more to their own tension thus improve their body posture and movements, but also their self-motivated actions increase and social connectedness improves. Tsuru (2007) discussed these changes from the standpoint of patients' subjective and actual experiences that occur through Dohsa-hou (2007).

#### **4. Dohsa-hou Case Study**

##### **4.1. Case outline**

The client introduced in this case is a girl who was aged 18 years at the time of her initial visit. During her elementary school years, she was not very eager to approach her classmates or talk with them. One year before her initial visit to our center, she passed her university entrance exams by recommendation. Soon after, she began to frequently lapse into silence and spent long hours writing her blog. Around that time, she began exhibiting delusions, so she was taken to a psychiatric clinic. Examinations via computed tomography examination revealed no brain abnormalities.

In March of the same year, she graduated high-school, and in April became a university student. However, not long after she withdrew temporarily for "having no self-confidence". In September, her family doctor recommended that she begin visiting a psychiatric daycare center. It was here that the author, who worked as the center's clinical psychologist at that time, met the client.

In his report to our center, the family doctor pointed out that the client's positive symptoms were in remission, and that she tired easily, found it difficult to concentrate, and considered herself no good at cultivating interpersonal relationships. At the time of her first visit, the client was already taking Abilify 6 mg/day.

##### **4.2. Situation at the daycare center (the client situation before introducing Dohsa-hou; X stands for the year the client first visited our center)**

Initially, because the client was tired and sleepy, she said she liked the loose pace of the center's life. She rarely exhibited any active behavior or speech, and she only listened during the meetings. In January X+1, while the client was sitting during meetings or other activities, her head began to move as if it was being pulled backwards and her neck started to spasm or "wobble". Before that, her neck had spasmed on occasions, but not to a worrying extent. In May of that same year, she reported feeling afraid to take up any other path in life than studying at university and that when she was anxious, words stopped coming to mind. She further said that she had talked to her

mother about her life worries related to her life at the daycare center, and that she had followed her mother's advice. After July, she began taking part in sports and other activities, and whenever she made a mistake, she adopted a regretful look on her face, which accorded with her increased motivation and enriched emotional expression.

Around that time, we started Dohsa-hou. The client visited the center three days a week.

#### → Diagnosis

The client's mother consulted the family doctor regarding her daughter's neck spasms, but the client herself did not appear to find them uncomfortable. Although her neck spasmed almost constantly, the movements subsided entirely when she concentrated. This suggests that the spasms were psychological in nature. Additionally, the client solved personal problems by always considering her mother's opinion on the issue, although the mother herself may have been somewhat overprotective. Considering the above, the client appeared to have a poor sense of her own existence and individuality, and she seemed to have had mainly passive experiences until her visit to the center. Therefore, it was suggested that Dohsa-hou would help her move and gain a greater sense of control over her own body, which could possibly help her develop her independence.

#### → Posture and Body Dynamics

The client often slightly moved her neck backwards. To eliminate these movements, she strained her neck and shoulders, giving her a somewhat hunched posture. In addition, she exhibited tension in her hands and fingers and her waist was visibly curved.

We began Dohsa-hou once a week for 15-30 minutes, during the lunch break of the center.

#### 4.3. Dohsa-hou Practice (from September X + 1 to March X + 3; a total 24 sessions)

The therapist first introduced Dohsa-hou to the client in September X + 1. The client showed interest in the practice and asked if they could begin it that very same day. After two trial sessions, the client showed a willingness to continue.

First Period (September ~ November X + 1; 1<sup>st</sup> to 11<sup>th</sup> sessions) – Emergence of the sense of individuality and time for encountering her own body.

In the first session, the therapist introduced *kata-age*. The therapist began supporting the client's neck, but when encouraging the client to relax the tense parts of her body,

the client's neck began to spasm. At the end of the session, the therapist was impressed by the client's refreshed look.

At the beginning of the second session, the client showed further interest and asked if there were tasks she could perform by herself. While performing *ude-age*, she managed to relax the root of her neck and noticed that the direction in which she lifted her arm was now different. At that time, the client's Abilify dosage was decreased by half every other day, which led her neck spasms to noticeably subside.

From the third session onward, the therapist focused on *kukan-no-hineri* to help the client relax some of her tensed body parts. During the third and fourth sessions, the client managed to relax on her own via *kukan-no-hineri*. The fourth session was attended by the client's mother, who was interested in whether her daughter could practice the tasks she was learning at home. The mother sat next to her daughter and held her neck. At this point, the client said that sometimes she felt that her neck was tired, and gave a bashful smile. Once again, the therapist perceived that the distance between the parent and child might have been too short.

During the sixth session, the client said that she had recently noticed that her neck muscles were aching and that whenever she moved her neck, she straightened it. Because client's neck spasms made it difficult to perform Dohsa-hou tasks while sitting, the therapist decided to introduce *ude-age* from the prone position, which the therapist believed would help the client focus her attention on the way her neck felt. While performing this task during the seventh session, the client noticed that her shoulder was in a different way compared to before and that her neck spasms were troubling her somewhat.

In the ninth session, the client felt that she focused too much weight into the rear of her head, as if she was pressing it against the carpet, and in the 11<sup>th</sup> session she felt as if she were fighting with the carpet. These sensations suggest an emerging self- and body-awareness. Additionally, during the tenth session, the client mentioned that she had noticed only recently that her neck was spasming. Before the therapy started, she was completely unaware of it.

After performing *kata-biraki* during the tenth session, the client said that although her neck as no longer moving backwards, she did not know when to move it. In the meantime, her mother again consulted the family doctor on the client's neck spasms; the doctor to half her daily dosage of Abilify to 3 mg. However, the client did not feel any improvement. During the 11<sup>th</sup> session, while lying on the floor, the client reported that the feeling of her neck being pressed against the carpet was gone.

Second Period (November ~ December X + 1; 12<sup>th</sup> to 16<sup>th</sup> sessions) – Searching for a “resting place” for her neck.

During the 12<sup>th</sup> session, the client had the same feeling as if her neck was being pulled backward as before, but this time she reported the movement as feeling slightly different – namely, it was “unconscious”, as if she was searching for a “resting place”. In the 13<sup>th</sup> to 15<sup>th</sup> sessions, she reported how neck movements varied on a day to day basis. When the client performed *ude-age* in the supine position, the therapist encouraged her to relax the tense parts of her body as if in search of a “resting place” for her neck. At the end of the task, the neck movements subsided which the client realized occurred whenever she raised her chin.

Soon after the 13<sup>th</sup> session, the client reported that she had started a short-term part-time job. In the following session, she noticed that the moment she lay down on her face to perform *ude-age*, her neck would immediately stop moving. While saying this, she opened her eyes widely, showing an expression of astonishment. Then she began attempting to verify her own body senses and said that whenever she became aware of them, the neck movements subsided. However, she admitted that it would be better if they subsided even when she was not aware of them. She also said that she did not understand this very well. Upon finishing the *ude-age* task, she noticed that whenever she relaxed her shoulders, her neck also relaxed.

Several days after the 14<sup>th</sup> session, the client said that the people from her part-time job probably believed her to have some disability because of her neck spasms. During the 15<sup>th</sup> session, she said that she was considering telling them the truth. Around that time (December X + 1), she began approaching and talking with the people from the daycare center more often. After the 16<sup>th</sup> session, she said her shoulders were better, but that the feeling was difficult to maintain, as it was primarily due to the magnetic analgesic plasters she put on her neck and shoulders, and the occasional massage. She further added that her neck still stopped spasming when she became aware of it, and more recently it appeared to stop even when she was unaware. Soon after, following her mother’s advice, she consulted the family doctor about her neck problem. The doctor decided to replace Abilify with Seroquel.

Third Period (January ~ March X + 2; 17<sup>th</sup> to 24<sup>th</sup> sessions) – Time to control herself.

During the 17<sup>th</sup> session, the client attempted to bend her body forward while sitting on the floor, but when she attempted to return to the upright sitting position and straighten her back, she found that she strained her neck and considered it difficult to find a “resting place” for it. When she lay prone on the floor, her neck stopped spasming,

which she felt was happening naturally.

From the 19<sup>th</sup> session onward, her neck spasming became increasingly difficult to notice, and the client reported that it felt much better than before. However, again, when she tried to bend forward while sitting on the floor, her chest bent inwards and she strained her arms and shoulders. The therapist therefore began to support her hip joints and torso during this movement. In the following session, the client no longer strained her upper body and noticed that her neck was much better.

From the 22<sup>nd</sup> to 24<sup>th</sup> session, when the client was performing *ude-age* and *kata-biraki*, she managed to relax by herself and consciously control her body. Several days later, she reported that she was going to begin a long-term part-time job and would therefore like to come to the center only once a week.

#### 4.4. The situation at the daycare center (September X+1~March X+2)

From October X+1 onwards, the client's attention span expanded considerably, and she began following the movements of the ball when playing sports and invited other clients of the center to play with her. Additionally, she began behaving more actively. For example, she showed a greater willingness to help with the cooking program. Furthermore, the center's dance therapist reported that even when she was outside of the group, she looked quite peaceful.

In December of the same year, the client became more talkative, but when she needed to speak at group meetings, she became nervous and her neck began spasming again. During one of the sessions in January X+2, the client reported feeling sleepy because life at the center was occasionally boring. Although at the beginning she had enjoyed the pace of the daycare center, she now felt it too boring. She was also about to start a long-term part-time job.

## 5. Discussion

To stop the involuntary movements of her neck, the client hunched her shoulders and strained them together with the neck. Because it was a habit, she was unaware of it and did not feel uncomfortable with it at all. During the first period of the Dohsa-hou sessions, the client began exhibiting greater self- and body-awareness both within the sessions (4<sup>th</sup> to 11<sup>th</sup>) and in her daily life.

In Dohsa-hou, the therapist must respond to the client's body awareness and support him/her in the process of using the appropriate amount of tension for each task. This is how body awareness communication begins to flow between the therapist and client.

In the present case, with her emerging self- and body-awareness, the client came to realize that her neck spasming was her own problem. This attitude change revealed her capacity to view this involuntary neck movement as simply an aspect of her of her own self. Such a change cannot, however, be developed further if the client lacks body awareness.

Over the second period, the client searched for a “resting place” for her spasming neck, unlike in the first period when she merely felt troubled by it. That is, she tried to exercise self-control.

However, searching for a “resting place“ did not make it clear who the active agent was in that situation – namely, the neck or the client herself. The therapist therefore decided to help the client cultivate her self-control by focusing on her spasming neck. Although it was not completely fulfilled, even by the 14<sup>th</sup> session the client still reported how it would be better if her neck did not move even when she was unaware of it. This statement suggests that her body-awareness had stabilized by that point. Later on, in the 16<sup>th</sup> session, the client said that sometimes her neck stopped spasming even when she was not aware of it. This suggests that she was able to unconsciously control her body. At that time, however, she reported a negative attitude towards massage and the use of analgesic plasters, which are both passive coping strategies for tension, while Dohsa-hou is an active one. After that session, she herself consulted the family doctor about her spasming neck, which was an active problem-solving strategy.

As compared to the first period, the client was more active in the daycare center and had started a short-term part-time job during the third period, which further contributed to expanding her active attitude. Around that time, her attitude towards the daycare center changed – she found it more boring compared to when she had first started.

The client’s symptoms began to subside over the study period compared to before she had started Dohsa-hou, and she became more motivated and her emotional expression became richer. Additionally, the client’s experience of being able to consciously control her spasming neck further promoted her body-awareness and helped develop a sense of individuality.

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## 4.2. Depression

*Haruo Fujino*

### 1. Depression – General Outline and Characteristics

Depression is a psychiatric disorder with a much greater prevalence compared to other psychiatric conditions, and it inflicts serious social problems.

In our daily lives, we experience a vast range of emotions such as joy and sadness. However, for depressed patients, emotional experiences are far less diverse, and predominantly being limited to sadness, hopelessness, and sense of guilt. Most depressed patients exhibit much slower thinking and are plagued constantly by pessimistic thoughts such as “I am a dud”. Additionally, their facial expressions are often stiff, and their mental climates are marked by severe feelings of hopelessness about the future and suicidal tendencies.

The key symptoms of depression are depressive moods and a loss of interest or pleasure. Depressive mood refers to any prolonged experience of sadness and melancholy, whereas the loss of interest and pleasure - known as anhedonia – refers to a decline or total loss of interest in various aspects of life once found enjoyable, such as hobbies that the person considered important. These symptoms are often accompanied by physical symptoms such as a loss of appetite, disrupted sleep, and high fatigability, as well as the above-mentioned psychological symptoms such as feelings of guilt, slowed thinking, and suicidal ideations. Most diagnostic guidelines consider depressive moods and anhedonia as the core symptoms of depression.

Perhaps one of the most severe complications of depression is suicidal tendencies. This is a heavy, but important topic that cannot be tiptoed around. Many patients with depression often use phrases indicative of suicidal ideation, such as “The mere fact that I exist burdens the people around me” or “I want to vanish from this world forever”. In fact, one of the most important risk factors for an actual suicide attempt is a mood disorder. Therefore, ensuring their safety is a top priority in the treatment of patients with moderate to severe depression.

Another characteristic of depressive symptoms is their high likelihood of recurrence. Although the recurrence rate varies depending on the duration of the follow-up period, one study showed that more than half of patients who underwent treatment for depression relapsed within two years of completing the treatment (Vittengl et al., 2007). As such, relapse prevention is another pillar of antidepressive treatment.

Epidemiological studies have shown that the lifetime prevalence of depression among the general population varies by country and region, but tends to average at around 16 percent (Kessler et al., 2005). This suggests that depression is by no means a rare disorder, and that many people will experience it at some point in their lives.

The etiology of depression is considered based in both biological and psychosocial factors. Among the biological factors, impaired regulation of neurotransmitters such as serotonin and noradrenaline are often suggested to be the main reason for onset of depressive symptoms. However, the pathogenic mechanism behind this impairment has yet to be fully elucidated. Regarding the psychosocial factors, changes in the environment or interpersonal relationships are most often blamed for the onset of depression (e.g., moving, getting married, giving birth, being fired or changing jobs, etc.). A combination of innate vulnerability and environmental changes is believed to be the cause of most cases of depression.

## **2. Common Therapeutic Approaches to Depression**

Although there are a variety of treatments for depression, most center on the combined use of a medical intervention and psychotherapy. The treatments often factor in five key points: ample rest, environmental restructuring, psychotherapy, daily life adjustment, and pharmacological treatments, mainly antidepressants. In most cases, ample rest, both physical and mental, is strongly recommended. Rest is considered an appropriate starting point for most patients because it can help them gradually become active again. More specifically, continuing exposure to grueling stress is likely to result in ineffective treatment and a failure to improve symptoms, no matter what treatment is being used. Therefore, it seems appropriate to accurately assess the patient's environment before working out a therapeutic plan. In this sense, environmental restructuring refers to eliminating potential burdens in the environment. However, this is not always easy to do.

The guidelines of the UK's National Institute for Health and Care Excellence (NICE, 2009) recommend that treatment of adult depression should be tailored to the severity of the symptoms manifested. For example, mild to moderate depression would require low-intensity psychosocial intervention, psychological intervention, or medication. In that sense, mild depression does not require chronic medical intervention, while the moderate to severe cases require both medical and psychological intervention.

Psychological treatment is another pillar of intervention for depression. Such treatments include cognitive behavior therapy (CBT), psychoanalytic psychotherapy,

and various other well-structured approaches, as well as psycho-educational therapy and supportive psychotherapy. Additionally, as mentioned earlier, relapse prevention is highly important after the symptoms subside, and certain kinds of psychological intervention should be applied to this end.

Regarding medical treatment, selective serotonin reuptake inhibitors, serotonin noradrenergic reuptake inhibitors, and noradrenergic and specific serotonergic antidepressants are among the most often used medications. Another medications include tricyclic antidepressants, atypical antipsychotics, and, for severe cases, lithium. However, the effectiveness of these drugs when considering their side effects remains controversial.

Rarely are any of the above approaches used independently; rather, they are typically used in combination with other approaches, and this is one of the unique aspects of depression treatment. When patients' suicidal ideation worsens or they have a history of suicide attempts, a protective environment must be secured, such as via hospital admission or some other means.

Therapists must accept the extreme sadness and melancholy of depressive patients, but, at the same time, must do their best to prevent these patients from committing suicide. Therefore, it is important for patients to understand the therapist's intentions for treatment and for these intentions to be convincing. Even when only a medical intervention is used, the therapist-patient relationship is highly important for the effectiveness of the treatment (Donker et al., 2009).

### **3. Philosophical and Diagnostic Basis of Dohsa-hou for Depressive Disorders**

Patients with depression or depressive tendencies share some specific bodily postures, such as arched backs and shoulders that curve inwards. Thus, they often appear as if they want to shut themselves out from the world. Additionally, as we mentioned before, most individuals with depression exhibit physical symptoms, which are often accompanied by tension and stiff body movements (Ookawa, 2005). However, patients themselves are often unaware of their own physical condition and, especially with chronic cases, rarely notice the severe tension in their bodies. Therefore, their body movements are coarse and, due to the long lasting tension the patients are unaware, even awkward.

Patients with depression are often largely unaware of their body axes, which results in an inability to experience sense of stability; hence, these patients often feel that their self-efficacy is low. These findings reflect the relation between the psychological and

physical characteristics of depressive patients, and which is exactly the relation exploited in Dohsa-hou for fostering psychological changes through manipulation of the body.

#### **4. Dohsa-hou Case Study**

The client was a married woman in her fifties. For more than 10 years at the time of the study, she had been suffering depression and had only recently decided to seek treatment through Dohsa-hou. She visited the psychological consultation center together with her husband. Up until the study period, she had been taking antidepressants, but they had had little effect; as such, her condition had gradually progressed.

She had a job in the past, but a change in her interpersonal relationships and living conditions had stimulated her depressive disorder such that she had to quit. Although she had undergone medical intervention and hospital treatment, her depressive mood and emotional instability nevertheless persisted.

At the time of the study, she was visiting a psychiatric clinic and was taking antidepressants, antipsychotics, and mood stabilizers.

During the first interview, the client demonstrated a depressive-like facial expression and muttered continually under her breath. When the Dohsa-hou session began, her upper body, back, and waist were extremely strained, and when she adopted *agurai-zai* and attempted to bend forward, she reported being unable to move forwards. The therapist felt the same – although he attempted to support her movement, he found it difficult to cultivate the feeling that she was the initiator of the relaxation and movement.

The first time, she managed to slightly relax her shoulders and happily noticed that the tension had eased – in other words, she experienced how the tension in her body was changing. However, when she adopted *ritsui*, she was unable to stabilize her body axis, and she found it difficult to stop her body from shifting from front to back. Because she was facing difficulty in controlling her body, the scope of actions that she was able to perform while standing was very limited.

Considering all the above, it appeared that the client's extreme tension had become her physical and mental armor protecting her from the outer world. As this attitude had likely been present for quite a long time, the extreme tension in her body had become chronic. However, it was believed that mere physical relaxation could help her remove this armor, which she had been using as a means of support for some time. Instead of this armor, she needed to find support in her own center. Additionally, helping her

become aware of her own physical body could possibly mediate her cognitive and physical experiences. The therapist carried out the Dohsa-hou treatment with the above assessments in mind.

During the interview, the client talked about her instable moods, which made her nervous and treat her husband harshly, as well as her inability to perform her household duties. She also talked about how she had needed to readjust her medication because of the various side effects. In most of the sessions, Dohsa-hou was conducted after discussing her present situation.

One of the tasks the client performed during the Dohsa-hou sessions was to take *agura-zai* and from this position lift up and then bring down and relax her shoulders. Although she was aware of how much strength she required to perform this task, when she needed to relax, she did not know what to do. The therapist supported her back and attempted to help her move her shoulders properly.

While the client performed the *kata-age* task, the therapist helped her by showing her the direction of the proper movement whenever the client found it difficult to perform by herself. During this time, whenever the client made even a small movement all on her own, or experienced a sense of relaxation, the therapist encouraged her with feedbacks like “Just like that”, “That’s right” and “Now it is relaxed”. After several sessions, the client felt she was moving by herself and that she was beginning to understand.

The relaxation tasks mainly comprised relaxation of the back and waist through bending forward from *agura-zai*; relaxation of the shoulders and its surrounding areas; and *kukan-no-hineri*. Before starting the Dohsa-hou treatment, she client mentioned that she had occasionally slept all day long as a result of her depressive moods, but after several sessions she said that she felt capable of preparing meals and had become more active in her daily life. Around that time, in addition to the relaxation techniques, the client was gradually able to perform tasks related to “building up” her body axis, and she tried to do so while shifting her weight from *agura-zai* and *ritsui* , and also while trying to perform *fumi-shime*.

On the sixth month of our therapeutic work, the client noticed that the tension in her body that had been present before, even when she had slept, was much weaker now, and that she had slept completely through one night without waking up. She also reported feeling motivated to go outside.

Around that time, the way she experienced her body during the relaxation and other techniques changed. The tension she had previously experienced was weaker than before and even when some parts of her body remained strained, she was able to attend

to them and relax by herself. In the process of turning her attention to her own body and relaxing, she once said in a relieved voice that she had finally felt her own body. During one of the sessions, while she was trying to straighten her waist in *agura-zai*, she was leaning noticeably to the right. When the therapist pointed out this, the client was surprised and said that she had thought she was completely straight. When she tried to shift her weight to the proper position, she mentioned that it felt unpleasant. Additionally, when she moved to the right, as she was used to, she said that she felt safe; in contrast, the left side was “scary”.

After the client finished the weight shifting task, the therapist believed that the client was feeling safe and proceeded to end the session. As the client’s weight was approaching the center point, her sense of stability during *ritsui* increased. Although the stiffness in the center of her body remained, her peripheral muscles gradually relaxed. Around that time, her facial and emotional expressions become richer. In addition, the client herself verbalized that the tension in her upper body was probably because she had not wanted to open up to the world outside.

One year after we started Dohsa-hou, the client was clearly able to relax herself more often than previously and her sense of security deepened as she mastered the control and shifting of her weight while in *agura-zai* and *ritsui*. Her center of gravity, which has previously leaned noticeably rightward, had nearly returned to the center of her body, which helped stabilize her better when she stood. The client also became more aware of her own way of standing up and of the location of her center of gravity. Furthermore, she said that she felt comfortable with her posture, but that it would be frightening if it moved a little forward. At this point, she realized the scope of her own bodily control, and was able to step firmly on the ground and stand up.

During the sessions, when she was trying to relax her shoulders in *ritsui*, she managed to decrease the unnecessary tension and perform integrated tasks. Additionally, she said that she had found a way to cope with the nervousness in her daily life – whenever she felt this way, she just directed her attention to her body and attempted to relax it.

In the 16<sup>th</sup> month of our therapeutic work, the client still exhibited tension in her chest area, but she was able to attend to and relax a much greater number of body parts than in the past. Regarding her daily life, she was capable of effectively performing the household duties that her apathy had prevented her from completing previously. Additionally, her willingness to go outside and engage in various activities had also grown. While her mood waves persisted, the days that she felt stable had increased. According to the client herself, the numerous positive changes had been confirmed by

her husband as well.

## 5. Discussion

In this case, the Dohsa-hou was started with shoulder relaxation and *zenkutsu* from *agura-zai*, in order for the client to experience the process of self-relaxation. Additionally, the client aimed to relax by consciously attending to certain body parts. At the very beginning of the therapy, the client could not feel her own tension; with time, however, she gradually became aware of it and, with the support of the therapist, she began to do it herself.

Tension is a psychophysiological function that serves to protect the individual from external threats and stimuli. In that sense, it can be considered a defensive reaction. High tension, in other words, is indicative for excessive emotional or physical pain and, at a certain point, tension becomes the default defensive response to the pain. Notably, this coping strategy can be difficult to let go of and therefore carries the risk of becoming chronic. This armor-like condition shuts the person off from the world, making him/her withdraw to seek safety, and, ultimately, dampens the richness of his/her inner world. In other words, high tension is indicative of a person's desperate effort to protect him or herself from an invasive or threatening external world. However, as mentioned above, this defensive reaction can "petrify" and become a sort of armor. Instead of piling up tension to protect oneself, tapping into one's own strength through "building up" the body's axis and creating a strategy that relies on self-activity may have a greater therapeutic effect (Koga, 2001).

As for the *tate-kei* tasks in the present case, the therapist focused on *fumi-shime* and weight shifting while in *agura-zai* and *ritsui*. At the very beginning, the client's *agura-zai* deviated considerably from the center, and when the therapist drew her attention to it, she reported extreme discomfort when the weight was in the actual center. Although acknowledging the client's discomfort, the therapist continued administering the Dohsa-hou tasks. In other words, although the therapist stepped into the client's shoes and tried to imagine what she was experiencing, he continued to support her movements and conveyed repeatedly through these movements and verbal responses that he understood her experiences. The client advanced with the therapist's support and the scope of her movements gradually expanded. In this case, the transformation of the client's experiences occurred in parallel with the increased sense of stability in the client's daily life and decline of her depressive symptoms.

Relaxation is a psychological intervention often applied to patients with psychiatric disorders. Autogenic training (AT) and progressive muscle relaxation (PMR) are the



most popular techniques. However, how do these differ from Dohsa-hou? In both AT and PMR, muscle relaxation is the ultimate goal – in other words, the focus is on the physiological responses. In Dohsa-hou, however, muscle relaxation is not a goal in itself, but a result. In Dohsa-hou, the client must attend to his/her own body and actively strives to move and relax - the ultimate goal is to “bring out” his/her self-effort (Fujino, 2013). In this way, a more proactive attitude is encouraged in the person, which in turn can lead to increased feelings of self-efficacy.

Through the Dohsa-hou sessions, the client in the present case began to attend more to her own body movements to consciously coordinate them. As a result, her body awareness in daily-life increased, thus contributing to the maintenance of her inner transformation. As for the changes in her daily-life behavior, which was greatly influenced by her mood, they were probably the result of the client’s using the Dohsa-hou therapy to tap into her own inner power and thus to her own way of being. Thanks to this, she began to turn her attention to her own experiences, including the transformative ones.

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## 4.3. Tics

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### 1. What Are Tics Like?

Tics refer to sudden, rapid, repetitive, and non-rhythmic movements, actions, or voice productions. Tic syndromes include Tourette syndrome, which is characterized by chronic motor tics accompanied by vocal tics, or only vocal tics (APA, 2014). If such behavior continues for more than a year and its onset was before age 18, then it is considered a tic syndrome. All other tics are considered temporary.

Tics manifested as a single repetitive movement include excessive blinking, shoulder shrugging, or extension of limbs, while vocal tics include throat clearing and sniffing. Multiple motor tics manifest as simultaneous head rotation and shoulder shrugging that can continue for several seconds, while multiple vocal tics include the repetition of a word, echolalia, and coprolalia.

The onset of a tic syndrome is usually between 4 and 6 years of age, and occurs in every three to eight persons per 1,000. Men have two to four times the risk of women. People with tic syndromes also have greater risk of ADHD and obsessive-compulsive disorders. Constitutional and environmental factors are usually highlighted as the main causes, but in the case of Tourette syndrome, some genetic mutations are likely responsible.

### 2. Treatment of Tic Syndromes

Tic syndromes can be treated using both medical and psychotherapeutic approaches. According to Kanou (2007), tics were once considered psychogenic disorders; however, with the advancement of research - mainly on Tourette syndrome - they have come to be understood as neurobiological diseases related to multiple genetic mutations and environmental factors. Some researchers assume the imbalance of neurotransmitters such as dopamine or abnormalities in the circuitry connecting the cortex, striatum, and thalamus could be key factors relating to syndrome onset. According to Kanou (2005), family guidance, psychoeducational interventions, and environment adjustment are

essential for rehabilitation of tic syndromes. In severe cases, the application of antipsychotic drugs such as Haloperidol, Pimozide, and Risperidone has proven effective.

Regarding the psychotherapeutic approaches, play therapy and behavioral therapy are the most often applied approaches. Play therapy often adopts a psychoanalytical perspective, wherein tics are interpreted as automatisms through which the libido is replaced by muscular eroticism; manifestations of hatred and aggression; a conflict between infant impulses and the superego, etc. (Chihara, 1992). Through play therapy, a variety of emotions, including aggression and anger, can be expressed, which in turn can help to alleviate symptoms.

Behavioral therapy for tic syndrome, in contrast, follows Yates' classical theory of conditional inhibition (Yates, 1958). This model includes intentional repetition of the tic, followed by a reactive inhibition. Then, the client is asked to take a short break from the intentional repetition, which is followed by a conditional inhibition. The additive effects of these two inhibiting factors can make symptoms subside (Kuno, 1983). However, Yates' model has some notable flaws, which helped other approaches, such as the Cognitive-Behavioral Intervention for Tics (CBIT), to thrive. The CBIT model focuses helping individuals to attend to the situation and their mood when the tic manifests; then, relaxation and proper body movements that rival the tic are essential. In other words, the CBIT aims to boost the capacity for voluntary tic control.

### **3. Dohsa-hou for Tic Treatment**

Information on the treatment of tic using Dohsa-hou is available in the case studies by Yoshikawa (2000). He has carried out a total seven case studies with widely varying number of Dohsa-hou sessions per client. Of these seven cases, five suffered from single motor tics, while the remaining two had multiple tics (both motor and vocal). Yoshikawa applied the key Dohsa-hou tasks, including *kukan-no-hineri*, *agura-zai*, and *zenkutsu*, as well as relaxation of the ankles. For the client with a facial tic, face relaxation was also applied. The two clients with multiple tics showed notable improvement after the Dohsa-hou treatment, but relapsed before long. However, one of them took part in another two sessions after the relapse, which helped the tics subside completely.

Yoshikawa claimed that these positive outcomes occurred within such a short period because Dohsa-hou helped to increase client's self-control. Indeed, assuming that tics

result from insufficient control of one's body, then the results could be explained by the experience provided by Dohsa-hou through its *intention-striving-movement* model and the gradual introduction of increasingly difficult tasks (Yoshikawa, 2000).

Another author who has studied this field is Fujioka (1995).

#### **4. Dohsa-hou Case Study**

The client presented in this case study (hereafter referred to as K) is a 17-year-old male who lived with his parents and elder brother at the time of the study. He was born normally, but at the age of one developed a fever with temperature of 39°C and convulsions. His parents immediately took him to the hospital, where they were advised to check him for cerebrospinal meningitis. However, as the high temperature soon faded, they did not do it. After this episode, K grew up healthily.

However, when he was in fifth grade (i.e. elementary school), he developed a tic that involved him shaking his head and turning it suddenly rightwards. The tic worsened during a certain period when he was cutting paper with scissors, which led him to being bullied by his classmates. However, the tic soon improved, and K did not mind the bullying.

The tic worsened considerably when K was anxious, as well as when he attempted to voluntarily inhibit it. Medical checkups showed no abnormalities. Later on, K visited a psychosomatic medicine clinic and was prescribed Rivotril and Cercine, which helped temporarily alleviate his symptoms, but not offer a complete cure. As a side effect of the medicines, K constantly felt sleepy and gave up taking them. Then, in a university hospital, he underwent behavioral therapy.

K was introduced to the authors by the psychosomatic medicine clinic. We decided to meet once a month for a Dohsa-hou session. His treatment continued for two and a half years with a total 27 sessions.

##### **4.1. Specifics of K's posture and tension distribution:**

K had a considerable amount of tension in his neck and when performing *kukan-no-hineri* to the left. When sitting on the floor with his legs stretched out, he could barely bend forward, while his knees could not rest on the floor and his back was hunched. Additionally, his pelvis bent backwards, and when sitting cross-legged for *se-sorase*, his left side was very stiff and he found it difficult to relax to the right. Furthermore, his right ankle was difficult to relax. When taking *hiza-dachi*, his chin protruded, his back hunched, and his waist curved. Notably, although the issues he

wanted to resolve were the head and neck tics, his tensed and incorrect posture resembled that of a person with cerebral palsy.

#### 4.2. Dohsa-hou sessions and interview process

In the next sections, we present the interviewing process we used with K, including the implementation of Dohsa-hou. At the time of intake, he came with his parents. We asked about his early developmental history and the history of his present condition, explained Dohsa-hou, and provided some simple demonstrations of some Dohsa-hou techniques.

With the consent of both K and his parents, we began full-fledged Dohsa-hou from the session following the interview. The body movement assessment at intake was carried out by Imura, while the first 16 sessions were led by Furukawa and supervised by Imura. In the remaining sessions (17<sup>th</sup> to 27<sup>th</sup>), Imura was in charge of the relaxation techniques, while Furukawa as in charge of the *tate-kei* techniques.

#### First Session

K entered the consulting room with a cheerful greeting. When asked how he felt, he answered that he was better and was finding it easier to relax compared to the intake. Furthermore, his voice was now clearer and firmer.

When asked to bend forward with his legs slightly open, his pelvis moved backward. The trainer then asked him to stretch out his arms from this position. Although K was trying his best, his head began to tremble and his back hunched. The trainer instructed him that there was no need to do his best, but merely to relax; while this occurred, he trainer was supporting him so that he did not fall backwards. However, K tensed up his hands and arms and bent his upper body forwards as if to fall. The trainer instructed him that there was no need to bend further and again instructed him to relax his hands and arms. At that moment, his neck began trembling with tic-like movements, although this did not spoil his performance of the Dohsa-hou task.

Then K sat on the ground with his legs slightly open and bent his upper body forward, and then to the left and to the right. K said that his left leg hurt when he bent to that side. After repeating this movement several times, he managed to relax his upper body; as a result, the pain subsided. Eventually he could go further when bending from that position. However, when bending his upper body from *agura-zai*, his bottom did not quite remain on the floor. As the middle of his back was quite stiff, he was only able to perform *se-sorase* with difficulty. While sitting, his chin protruded and the trainer helped him retract it. However, at that moment he tensed up his neck, which caused the tic to worsen noticeably. Then, the trainer took K's chin in his hand and instructed K to

relax it; however, the tics did not subside.

K then performed *kukan-no-hineri* rather well, and no tics appeared during the practice. He then returned to the sitting posture and attempted to fix it under the trainer's instructions to throw his chest out and raise his head. However, the tics reappeared at this point, only subsiding when the trainer supported the back of K's head. The trainer also supported K's chin, which brought K's overall posture to a nearly perfect example of *kukan-no-hineri* is near the perfect one; but still, K's habit of thrusting out his chin remained.

Thinking that it would be helpful for K to put some muscle into his waist and lower body, the therapist blocked his chin with his hands, and pressed his shoulders down with his arms while instructing him to straighten his waist. However, K leaned backward and was unable to perform a stable sitting posture.

Then, the trainer introduced *hiza-dachi*. K's waist curved, and his hip joints could barely bend forward, while his chin protruded severely. When he attempted to shift his body weight, he found it especially difficult to do so on the left side.

After the end of the session, the therapist asked K about his general condition of late. He reported enjoying his school life; but said it would be nice if the if the tics disappeared. Furthermore, he said that he was sensitive to sounds, so when the trainer instructed him in a louder voice, his tics were more likely to appear. He also mentioned that he believed that the muscles of his whole body would ache in the day following the session. All of this he said with a bright and benign expression.

After the end of each session, the two trainers held a brief meeting. During the first meeting, they theorized that (i) relaxation techniques and (ii) posture correction would have positive effects on the tics, while (iii) through the performance of Dohsa-hou tasks, K's sense of self-control would likely increase.

### Second to Tenth Session

During the second session, K repeatedly performed *kukan-no-hineri*, *zenkutsu* with open legs, and moving his hip joints from *hiza-dachi*. When he attempted to correct his protruding chin, the tics reappeared, but aside from this, the tics or related problems were not observed. The interview after the session was attended by K's mother. When asked how it felt to come to the center, K said that at that time he had seen no significant change in his condition. His mother said the tics were more likely to appear when he was tired. K added that when he moved his head a little forward, the tics did not appear. The therapist praised him for his means of overcoming the tics and added that control over his waist and hip joints was also important. This comment seemed to

increased K's motivation for practicing Dohsa-hou,

The third interview was attended by K's father. The therapist asked him about K's tics while at home, and the father said that the tics have had almost disappeared; before, they had been quite visible, but now they were hardly noticeable when they did appear. Laughing, K said that he was perfect.

During the session, he enjoyed performing *kukan-no-hineri* and said that it felt very good. The lower parts of his scapulae were stiff and ached when he attempted to perform *se-sorase*.

At the fourth session, K said that his tics had worsened because of his forthcoming school graduation, where he would deliver a speech in front of his entire class. The tics appeared frequently while he performed the Dohsa-hou tasks. Because the tics had almost subsided completely, the therapist felt sympathetic towards K.

During the fifth session, K again attempted to perform *zenkutsu*. Although he opened his legs wider, his back remained hunched and he barely moved his hip joints. Even with the trainer's support, he could not relax his back. After the end of the session, the interview was again attended by K's father. He said that when he was teaching his son to drive, K tended to direct the car leftwards. K explained that his left waist had begun to hurt because of the driving. To confirm this, the therapist instructed K to try to shift his weight onto his left buttock while in *agura-zai*. In doing so, K found it easy to lift his right buttock. The therapist thus confirmed that K's upper body tended to lean leftwards, which was why it felt easier for him to lift his right buttock. When the therapist attempted to block his upper body to avoid leaning leftwards, it did not move at all.

During the therapist meeting, the main topic was the fact that each time K attempted to consciously suppress his head and neck tics, they worsened considerably. One of the goals of the following sessions became the relaxation of K's waist and hip joints, as well as movement self-control. From then on, the therapists suggested alternation of relaxation and *tate-kei* tasks.

During the seventh session, the tics did not appear at all. K said that he had gotten his driver's license.

In the eighth session, K said that he had tried to relax his hip joints at home by bending forward with his legs open. At the end of the session, he said that he felt good.

The same tasks were repeated from the ninth to tenth sessions.

### Eleventh Session

Almost one year had passed since the therapy began. To stabilize his upright posture,

K practiced standing-on-one-leg posture at home. When he attempted to bend forward from the sitting posture, his groin hurt and the neck tics appeared. However, he could adopt an upright sitting posture, smoothly control his pelvis when moved forward and backward, and maintain up his neck and head in a proper upright position. He could also move his waist smoothly while in *kata-hiza-dachi*, a task that had previously been impossible for him. He could also control his hip joints well.

When K attempted to shift his body weight to the sides, any movement to the left side was not smooth and his range of movement was rather limited. At the same time, his upper body, mainly his neck and shoulders, tensed up. When asked how this felt, K said that he felt tension in his right waist. When the therapist instructed to not put that much strength there and to move slowly, he managed to perform the movement properly. Then, without the therapist's support, K managed to shift his bodyweight onto his sides. When he shifted to the left leg, his left hip joint protruded a little and the left leg appeared unstable. Following the therapist's instructions to stretch his left hip joint and try to shift his body weight to the left and front, K was able to perform the task step by step.

To confirm the results, the therapist asked K to lift his right knee while shifting his weight onto the left leg. This did not go well, but when instructed to lift the knee from the waist, he managed to do it properly. At the end of the session, K stood up on one leg. He was stable and did not wobble at all. He said that the weak point was the stiffness in his hip joints – he would like to be able to move them more freely. He added that his parents had noticed that the tics had subsided.

K continued that he had decided to leave his present high school and shift to a vocational training school. His hands had become stronger, as well; he gave a strong handshake to the therapist.

From the 12<sup>th</sup> to 16<sup>th</sup> sessions, the same tasks were repeated.

### Seventeenth and Eighteenth Sessions

The therapist helped K perform the following task: bending the upper body from a sitting posture, with legs closed and opened, *kukan-no-hineri*, *se-sorase*, and a proper sitting posture. As K was progressing in terms with the relaxation of the hip joints, he found it much easier to bend forward. In *kukan-no-hineri*, K was able to relax his left side, but it took longer to do than his right one; nevertheless, managed to reach the floor with the back of his shoulder. At that moment, his waist ached somewhat, which was probably a result of the tension left in his hip joints. While in *se-sorase*, he showed no tics and his knees were sufficiently relaxed. When the trainer instructed K to adopt the



proper sitting posture, K's back and chin visibly protruded, so the trainer blocked his waist, which helped him straighten his back; however, his chin still protruded. The therapist then supported his chin, but because K was straining to maintain the posture, facial twitches appeared several times. As compared to before, the tics appeared rarely and were difficult to notice, but had not completely disappeared. They were especially evident when K moved his neck and head.

Then the other therapist then applied several *tate-kei* techniques. When he was trying to shift his bodyweight to the left in *hiza-dachi*, K's waist twisted a little and began to curve on the left side. When he attempted to straighten up his upper body from *hiza-dachi*, his waist curved again. The therapist thus blocked his abdomen and bottom, and instructed him to move his hip joints. K managed to perform this movement rather well, but still his back began to curve. When the therapist blocked his back, K's waist curved again. This task appeared quite difficult for K, so the therapist used it as well as several other *tate-kei* techniques also during the 18<sup>th</sup> session.

#### Nineteenth to Twenty-Sixth Session

The therapist applied a variety of relaxation techniques during this session. K could easily bend forward from *agura-zai*, and his back no longer curved when doing so, unlike before. However, when being forwards while sitting on the floor with his legs opened, the backs of knees began to hurt and his back curved. The therapist helped him bend forward and he managed to relax a little. In *kukan-no-hineri*, K no longer showed a difference between movements on his left and right side. In *se-sorase*, K's chin was tense, but not to the same degree as before. The therapist instructed him to try to relax it. Then, the therapist rested his arms on K's back shoulders and took K's chin in his hands, while giving K the same instructions. K reacted quite slowly, but he eventually managed to relax and became aware that the tic-like tension had always been under his own control.

Considering that this was the final stage of the therapy, the therapist suggested Dohsa-hou tasks that K could practice by himself, including *se-sorase* while sitting on a chair with a backrest or keeping his upper body straight while sitting on any type of chair. K managed to relax his upper body while sitting, but nevertheless found the tasks difficult.

Then, the other therapist applied *tate-kei* techniques such as having K shift his weight to the left from *hiza-dachi*. However, moving the left hip joint appeared difficult for K, and his upper body curved while doing this. When he tried to stand firmly on the floor in *ritsui*, he noticed that his left foot stepped firmly on the floor, but his

bodyweight was predominantly on the outside of the foot, whereas the inside of the foot did not touch the floor. The reason for this was that he probably could not easily move his waist leftwards.

During the 20<sup>th</sup> session, K practiced relaxation while bending forward and controlling the movements of his chin while sitting. As his back knees were stiff, he attempted to relax them, too.

During the 26<sup>th</sup> session, the therapists repeated relaxation and *tate-kei* tasks, most of which were focused on the smooth movement of the left side of his waist and his left leg.

### Session 27<sup>th</sup> (final)

The final session began with relaxations techniques such as the opening of the legs, *kukan-no-hineri*, and *zenkutsu* while K sat on the floor and or in a chair. K managed to relax his neck and chin while keeping his upper body straight. However, when he turned his head to the left, his chin protruded somewhat and tensed. Then, the therapist instructed him to intentionally push his chin out and then bring it back to the correct position. K said that it was difficult to bring his chin back, but was nevertheless able to do it well when the trainer provided some slight support for his neck.

To be able to perform this by himself in the future, the therapist instructed K to sit on a chair, lean back against the backrest, and hang his head backwards while controlling the movements of his chin in an attempt to relax. K managed to relax properly and maintain the correct posture, but was still somewhat tense. However, he was much less so compared to when he had first come for a consultation, and no tics appeared. K said that he felt that his body lighter after each Dohsa-hou session, and that his family had noticed that his tics had disappeared.

Then the other therapist instructed K to keep his body straightened while sitting on a chair and in *hiza-dachi* and *ritsui*. While sitting on the chair, K tended to lean forward, so the therapist blocked his back and waist. With his back blocked, K managed to maintain the proper position, but when his waist was blocked, his upper body tensed and it became difficult for him to perform the task. The same task was also difficult from *hiza-dachi*. The therapist therefore instructed K to go down on all fours on the floor and move only his back – followed by only his waist – up and down. The movements of K's back were smooth, but that of his waist appeared difficult for him. As he repeated the movements, however, they improved. When K adopted *hiza-dachi* again, his posture was much more stable and nearer to being completely correct. In *ritsui*, K attempted to bend forward while the therapist offered slight support onto his back,

aiming to extend his hip joints and keep his waist straightened. Although not perfect, the posture K took was better than previously. In *ritsui*, he attempted to shift his bodyweight in four directions, but when he shifted it to the right-front diagonal, he was not able to maintain an upright posture and some slight tics appeared. However, he managed to control them and return to the proper position.

At the end of the session, K said that he had started a part-time job and enjoyed his own income. He had also gotten a girlfriend. We finished the session on the condition that should his tics resurface, he would contact us. Several months later, we received a New Year's greeting card from him, saying that he was doing alright. This was the last time we had heard from him as of this writing.

## 5. Discussion

K demonstrated persistent movement tics not accompanied by vocal tics. Although somewhat shy, he was a bright and kind young man. His family was concerned about him and had taken him to several hospitals and medical clinics. We got the impression that his family had good interrelationships and no conflicts. His parents said that K had been bullied occasionally by his classmates when his tics had first manifested, but he had not minded it. However, as he did not appear to want to reflect on that time, it was unclear to what extent this event influenced his inner life. Still, it cannot be concluded that this was the key factor behind his prolonged tics.

As confirmed in Yoshikawa's reports (2000), in that case, too, the tics subsided noticeably soon after the introduction of *Dohsa-hou*. In *Dohsa-hou*, the therapist chooses the appropriate therapeutic tasks and supports the client in his/her conscious implementation of these tasks (Naruse, 1988). With this in mind, we might tentatively conclude that K managed to eliminate his tics because of an improved sense of self-movement and self-control.

However, his incorrect posture, and the chronic tension in his knees, hip joints, and back were difficult to cope with. All these improved over the course of the treatment, but - in contrast to the cases presented by Yoshikawa - they had not fully disappeared by the end. As K had undergone various medical checkups, such as an electroencephalogram and brain magnetic resonance imaging, and none of them had shown any abnormality, we ruled out the possibility for a cerebral-palsy-like central nervous system disorder. How, then, could K's incorrect posture and chronic tension be explained?

A clue for a possible explanation appeared during the second session, when K said that the tics were rather faint when he leaned his head forward. Thus, to inhibit his tics, K had formed the habit of thrusting his chin out, which simultaneously made his overall posture awkward, with the left side of waist shifting backwards and his knees heavily bent. As a result, his body had become unstable, which reinforced his psychological strain and prevented him from properly controlling his tics. Therefore, we might conclude that the rapid improvement of his tics observed during the first few sessions was a result of decreased tension thanks to the relaxation techniques. However, for K, this was insufficient and we needed to devise an approach towards his improper posture. This distinguishes our case from the cases presented by Yoshikawa (2000). For that purpose, after the tics had significantly subsided, we repeatedly applied *hiza-dachi* and *ritsui*. In addition, K practiced Dohsa-hou by himself at home, which probably helped him further develop a sense of body awareness and help him control his tics. The technique for self-relaxing his neck that we introduced to him in the final session also likely contributed to the favorable results.

In the end, we thank K for his cooperation.

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## Chapter 5 Application of Dohsa-hou in Japan and Abroad

### 5.1. Dohsa-hou Camps and Monthly Meetings in Japan

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#### 1 Dohsa-hou Camps

Intensive group training in Dohsa-hou is carried out throughout the year in the form of weekly or monthly meetings or so-called “Dohsa-hou camps”. The duration of the camps may vary from overnight (comprising two days of sessions) to a whole week.

##### 1.1. The Significance of Camps as Intensive Group Trainings

Dohsa-hou camps are currently organized throughout Japan, wherein teachers from special-needs schools, welfare service workers, clinical psychologists, and researchers can receive training. Furthermore, unlike when Dohsa-hou was first developed, participants are not limited to children and adults with physical disabilities; they can include people with other disabilities as ASD and ADHD.

As compared to the regular meetings, which take place over a whole or half of a day and which typically contain up to two Dohsa-hou sessions, the camps allow for a far greater number of sessions to be held continuously. Therefore, camps can help trainees progress to the next level of their development and achieve more significant changes. Additionally, as all of the participants in the camp live together, the trainers and supervisors can observe not only the way the trainees perform the Dohsa-hou tasks during the sessions, but also how they live in a daily life-like environment, assess their overall potential, and devise ways for further improvement of their main problems. Additionally, camps afford a good opportunity for the trainees themselves to obtain more knowledge about themselves and perform the necessary tasks for their improvement. Finally, the trainees’ parents/caregivers can temporarily detach from their daily routine, exchange information with other parents, and share each other’s worries. For both them and their children, camp participation becomes a long-awaited annual event.

## 1.2. History of Dohsa-hou camps

The first Dohsa-hou camps was organized in 1967 at St. Lucia Hospital in Kurume City, Fukuoka Prefecture (Naruse, 1987). Six years later, in 1973, the first seven-day/-six-night camp was held, which was then followed by the first six-day/-five-night camp in 1992. Currently, short-term camps - four-day/-three-night, two-day/-one-night, and one-day camps - are also carried out. Most camps are held during the extended vacations of Japanese schools, although recently the number of short-term camps held outside of these vacations has been on the rise.

## 1.3. Camp management

The Psychological Rehabilitation Research Institute organizes camps that attract participants from all over Japan. Once participants finish their theoretical and practical training, they are able to disseminate knowledge of Dohsa-hou to their hometowns. There, they can establish parental associations, and with the help of Dohsa-hou supervisors and trainers, organize various activities related to the psychological rehabilitation of people with disabilities. The camps are one such activity.

Camps not only provide participants with opportunity to practice Dohsa-hou exercises, but also offer group therapy, parental meetings, and education for trainers, and can be settings for scientific research. Camp management is therefore carried out with these main pillars in mind. The key figures of an individual camp are the camp's chief, the general instructor, and a number of supervisors. There are also managers and sub-managers, who are responsible for the integrated control of the camp's various activities, as well as people in charge of group therapy and daily life guidance, time-keepers, etc. The supervisors typically take primary responsibility for the psychological rehabilitation training, but the work of those who remain "behind the scenes" – namely, those responsible for the preparation of meals, baths, and accommodation; organization of group activities and meetings, etc., is also essential. According to the Dohsa-hou's philosophy, all camp participants should play a certain role in relation to camp planning, management, maintenance, or development. In other words, they do not merely "participate" - each of them, in a sense, "creates" the camp.

However, even if each participant understands his/her role, if there is a gap in the understanding between parents and trainers regarding the children's, the camp cannot proceed smoothly (Shomonkai, 1989). However, every camp has unique characteristics depending on the area in which it is held. For example, some camps were established solely because parents had a strong desire to do so, and such camps are often not strongly influenced by the trainers; the opposite is also true, and it notable that camps

established by trainers often become battlefields of misunderstanding and conflicting goals between parents and trainers. In such situations, it is important that both sides be aware of each other's goals and communicate these goals frankly to each other. To this end, many camps hold "get-together" parties where people can freely share their previous camp experiences and discuss the upcoming camp. In this sense, the establishment of a good relationship between trainers and parents is a key aspect of camp planning and management.

In addition to the establishment of both the camp's framework and content, every camp requires finances and location, as well as trainees, trainers, and supervisors, which all depend on the specifics of the country or local area.

#### 1.4. Accredited Camps

Once a year, camps accredited by the Japanese Association of Rehabilitation Psychology are held throughout Japan. Accredited camps are those whose programs meet certain requirements and, as such, are allowed to issue completion certificates to trainers and supervisors. Of course, participants might already be qualified as trainers or supervisors through certificates issued by the Japanese Association of Rehabilitation Psychology.

To be accredited, a camp must meet the following requirements regarding the camp's supervisors, program, and training for trainers:

- The camp must be planned and managed by several supervisors (for short-term camps, an overnight stay is not necessary)
- The camp must have several trainers that are responsible for and guide the Dohsa-hou sessions
- The camp must provide both theoretical and practical training for its trainers.
- The camp must be involved in clinical research, case studies included.

As mentioned above, each camp has its own characteristics and specific atmosphere, which reflects the spirit of the local area and its peoples. However, most of the accredited camps stick to similar schedules, which include the following key activities:

- Getting up
- Morning meeting
- Breakfast
- *Dohsa-hou session* ①
- *Training for trainers*
- *Dohsa-hou session* ②



- Lunch
- Nap
- *Group therapy*
- *Dohsa-hou session* ③
- Dinner
- Bath
- *Team meetings*
- *General meeting (of the camp's chief, manager, team supervisors, and trainers)*
- Bed

The activities written in italics are necessary for all accredited camps. However, there is no stringent rule regarding the number of Dohsa-hou sessions held within a day. The above schedule pertains to every day at the camp, excluding the first and last when the opening ceremony and intakes, and effect measurement and parental instructions are carried out, respectively.

#### 1.5. Camp Management outside of Japan

Besides Japan, Dohsa-hou camps are also held in South Korea, India, Iran, Malaysia, Thailand, and Cambodia. Most are managed by local Dohsa-hou trainers and supervisors who have received training in Japan. They are often visited and supervised by Japanese trainers and supervisors. However, unlike in Japan, the trainees in these camps are mainly children and adults with physical disabilities, most of them diagnosed with cerebral palsy. Trainees with ASD, ADHD, or Down syndrome are rarely seen.

The framework and content of the foreign camps are the same as those of the Japanese camps (i.e. with the necessary trainings, group therapy, etc.) so that they meet the requirements of the Japanese Association of Rehabilitation Psychology. In addition to overnight camps, there are also camps held at schools and daycare centers where participants gather only for lunch and do not stay overnight. In some of these countries, parents or school staff can participate as trainers as well. For example, in Thailand, a local parental association established a non-profit organization offering Dohsa-hou camps, which they popularize through television and radio.

Everybody engaged in Dohsa-hou can be considered to seek the growth and improvement of their children, and for many years have continually worked towards this enthusiastically. In summary, although holding a Dohsa-hou camp requires a suitable location, money, and people, the cooperation of supervisors, trainers, and parents can help build for trainees a firm base to optimize their practice of Dohsa-hou.

Not one person involved in a Dohsa-hou camp is likely to forget the face of a trainee with a physical disability who, on the last day of the camp, manages to stand up all by himself and take a step forward. It is for this very moment that we are all here working together.

## **2. Regular Meetings**

### 2.1. Monthly meetings

Monthly Dohsa-hou meetings aim to implement Dohsa-hou exercises on a regular basis. Their history and development correspond to that of the camps described above.

### 2.2. Significance of monthly meetings

One of the most important advantages of the monthly meetings is that they are helpful to families who, due to personal reasons, cannot generally participate in Dohsa-hou camps (Horie, in Naruse, 2001). Because camps are usually held in the spring (March and April) or summer (July and August), most of the trainees and their parents would only be able to participate once per year because, for example, both parents work full-time and can rarely take days off, or there is a younger child in the family and the mother cannot recruit other family members to care for that child. For these and other reasons, numerous families cannot always participate in camps. Therefore, Dohsa-hou trainings held once a month, usually on weekends, at nearby locations, would be very convenient for many families.

Another advantage is that both trainees and their parents/caregivers are able to receive professional help and support on a regular basis. Camp programs must include parent-child trainings (Horie, in Naruse, 2001). This is essential because even if a child performs well on certain tasks during the Dohsa-hou sessions, be it posture or movement, if that child cannot manage to maintain his/her improvement also in daily life, then everyone's efforts would be in vain (Naruse, 1973). Therefore, during the parent-child training, the parent must succeed the trainer's role in order to help the child maintain the camp outcomes in his/her daily life. However, even if the parent managed to successfully "inherit" the trainer's role and diligently practice Dohsa-hou with the child at home, the child would still not be able to participate in a camp more than once per year – in other words, the child could at most receive professional guidance once per year. This makes it somewhat easy for children to forget the knowledge and experience acquired during the camp. Furthermore, the child would not be provided with appropriate and timely support for his/her growth and change. Thus, regular meetings,

together with practicing Dohsa-hou at home, are essential, as they provide the opportunity for parents and children to receive professional support from trainers and supervisors on a regular basis.

In summarizing the above two advantages of monthly Dohsa-hou meetings, we can conclude that they function as waypoints between Dohsa-hou camps and daily life. As such, they not only help trainees maintain and further develop the results of their training, but they also offer a special space for them to experience Dohsa-hou. Furthermore, many parents and children who are attracted by Dohsa-hou have begun practicing it simply by attending one monthly meeting. Together with a unique atmosphere, which is typical for the annual camps, the monthly meetings also have a touch of the local community, as trainees can spend time with familiar trainers in their area.

### 2.3 Implementation of monthly meetings

#### → Program

The specific programs of monthly meetings may vary depending on the location. Some meetings start in the morning and last the entire day, whereas others start in the afternoon and last for half a day. The tables below show some examples of one-day and half-day programs.

Table 4: One-day program (Horie, in Naruse, 2001)

10:00~10:45	Training for trainer
10:45~11:00	Opening
11:00~12:00	Intake and First Dohsa-hou Session
12:00~12:30	Lunch
12:30~13:00	Group Nursing/Trainers' Meeting
13:00~14:00	Second Dohsa-hou Session
14:00~15:00	Group Therapy
15:00~16:00	Third Dohsa-hou Session and Parent-Child Training
16:00~16:15	Closing and Cleaning Up
16:15~17:00	Trainers' Meeting

Table 5: Half-day program (Horie, in Naruse, 2001)

13:00~13:30	Trainers' Meeting
13:30~13:45	Opening
13:45~14:30	First Dohsa-hou Session
14:30~15:30	Snack Break and Group Therapy
15:30~16:30	Second Dohsa-hou Session
16:30~16:45	Parent-Child Training
16:45~17:00	Closing and Cleaning Up
17:00~17:30	Trainers' Meeting

→ Management

One of the most important steps during the preparation of a monthly meeting is the pairing of trainers and trainees. A shortage of trainers is a common problem among monthly meetings (Maruyama, in Shomonkai, 1989). As a countermeasure, some meetings use parents/caregivers themselves as trainers, or university students, who receive academic credits in return. However, such countermeasures are not very reliable, given that many students move after graduation, while parents/caregivers get older.

As mentioned above, camps and monthly meetings require trainees and trainers, finances, and location. In Japan, special-needs schools, local public facilities, or university premises are often adopted for that purpose.

As for the management staff, monthly meetings are typically organized by the meeting's managers and staff from local parental associations. The latter plays a very important role because they encourage communication between parents/caregivers, allocate trainer duties, and contribute to the overall maintenance and development of monthly meetings. Managers, in turn, are responsible for the overall management and smooth flow of these meetings and the participation of all members – parents/caregivers and trainees, trainers, and supervisors.

→ Supervisors and group structure

Each group in a monthly meeting comprises three to five trainees (which is true of the camps, as well). Every group must have one supervisor. If a group has only one or two trainees, than it is impossible to perform group work; whereas if there are more than five trainees, then the supervisor often has too many responsibilities and thus cannot pay sufficient attention or provide enough support to each trainee-trainer pair.

→ Other ideas

Over the years, the local monthly meetings and the functions of their associated

parental associations undergo significant changes. Most meetings are considered “learning spaces” where both children and parents can experience Dohsa-hou. Additionally, most trainees are usually accompanied by their mothers, who are often the most involved in practicing Dohsa-hou at home with their children. As such, although the training sessions are officially called “parent-child training”, most people call them “mother training”. However, the understanding and cooperation of other family members such as the father, grandparents, and siblings is also very important. This is especially true for trainees who have grown up to the point where mothers can no longer perform the Dohsa-hou exercises with them.

For all of these reasons, in recent years, numerous monthly meetings have attempted to encourage the participation of other family members, and this would eventually improve the overall family atmosphere and provide further support for the trainee. In addition, monthly meetings often hold seasonal events such as Christmas and New Year’s parties, where trainees, parents, and trainers can temporarily leave behind their usual roles, deepen their friendships, and together find new ways of strengthening the group spirit.

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## 5.2. Introduction and Implementation of Dohsa-hou in Bulgaria – the Main Challenges, Outcomes and Perspectives

*Velizara Chervenkova*

As already mentioned in the preface, Dohsa-hou is quite popular in its native country and in some of its Asian neighbors, such as South Korea, Malaysia, Cambodia, and Thailand. However, it has yet to cross the borders of the Asiatic continent to Europe and the Americas.

To our knowledge, Dohsa-hou is almost completely unknown in Europe – both Western and Eastern. Bulgaria is the first European country to introduce this Japanese approach and apply it on a regular basis. The first Dohsa-hou sessions in Bulgaria took part at the “Sunflower” daycare center for disabled children in the capital, Sofia.

“Sunflower” is managed by International Social Service-Bulgaria, namely the local branch of the International Social Service (ISS), a non-governmental organization based in Geneva, Switzerland. The center opened in June 2013 at a completely renovated two-story building in a quiet residential area close to downtown Sofia, and has a capacity of 35 children aged between three and eighteen. It employs several specialists, including two clinical psychologists, two educationists, a speech therapist, and a medical rehabilitator. The activities they carry out on a daily basis include art therapy, occupational therapy, speech therapy, and physical rehabilitation. The specialists also provide diagnostics for the new applicants and counsel their parents/caregivers.

\*

According to data from the National Statistics Institute of Bulgaria, as of February 2011, there were a total of 474,267 people with some form of disability in the country, including 9,039 children aged sixteen years or below. Among these children, 44.7 pct (4,040 children) have been diagnosed with a severe disability. These children are cared for and provided rehabilitation services at different centers and institutions across the country, both governmental and non-governmental. As of 2012, there were a total 71 daycare centers throughout Bulgaria, with a total capacity of 1,868 children.

The approaches most often used in Bulgaria in the field of disability rehabilitation are (i) Vojta and Bobath therapies for the rehabilitation of motor dysfunctions, and (ii) psychological, social, and speech therapies for behavioral disorders and ASD (e.g.,

Applied Behavioral Analysis, Picture Exchange Communication System, etc.). However, a comprehensive approach that can be applied to a wide variety of disabilities has not yet been introduced and, generally, the overall rehabilitation and educational system aimed at children with disabilities in Bulgaria has yet be fully developed.

Therefore, with the assumption that Bulgaria would be an appropriate place for the introduction and implementation of Dohsa-hou as such a comprehensive approach, we began organizing Dohsa-hou sessions in “Sunflower” in July 2014.



Over the nine months that I worked at “Sunflower” (from July 2014 to March 2015), I performed Dohsa-hou twice weekly on a regular basis. Among the children I worked most often with, four had been diagnosed with cerebral palsy, two with developmental disorders, and one with autism.

As the rules of the daycare center stipulate that parents bring their children whenever possible, I decided to avoid setting up any strict regulations regarding the frequency of the therapeutic sessions and to carry them out whenever possible.

Since the very beginning, I was pleased to find myself approached by parents who showed a willingness to learn about this new method and eventually apply it themselves at home. They were searching for advice on daily-life issues related to their children’s upbringing, as well as professional feedbacks on their children’s general conditions and possibilities for future development. Although this interest was relatively short-lived and often merely related to an initial curiosity about a new approach, as time went by, it was replaced by positive feedback regarding the conditions of the children with whom I had worked most often.

Considering that Dohsa-hou was still completely new to Bulgaria and that the original approach is applied in a different way in Japan, I faced certain challenges while working at the center. First, there was my own lack of certainty, which resulted from the fact that I was applying the method outside Japan and had no direct supervision. Second, I found it quite difficult to synchronize my work and integrate it into that of my colleagues, both in regard to each individual child and the children in general.

Despite (or more likely because of) these challenges, my work at the daycare center was quite motivating and rewarding. In addition, I suggested to the center’s management that providing parental care in the form of counseling or Dohsa-hou sessions – both individual and group, would be essential not only for the parents themselves and for the enhancement of their family environment, but also for the overall

work at the center.

Although the center is intended only for childcare, my idea was welcomed very positively by the center's management. In order to launch the initiative in the most appropriate way, we examined the results of the questionnaires that we had handed out to all parents and caregivers. To our surprise, more than half of the people showed a willingness to participate in some form of counseling or therapy. However, before long I found that I needed to leave for Japan; thus, the initiative was not launched.



Below, I have presented some of the specifics of my work with the seven children with whom I worked over the period of my employment at the center. In the end of each summary, I point out the main effects and outcomes of the application of Dohsa-hou.

The summaries of each of the seven cases use information acquired from the daycare center's archive. These include prenatal, postnatal, and early childhood history; family background; results from medical examinations, and results from psychological assessments made by the center's specialists and by specialists visited by the child before his/her enrollment in "Sunflower".

→ D

D was a nine-year old boy diagnosed with spastic-dystonic cerebral palsy with persisting hyperkinesia, high tonus of the antigravity muscles, and flexed limb joints. D could pronounce some syllables, but they could not often be recognized as having communicative meaning. When I worked with him, he was living with his parents and elder brother.

D was the child with whom I carried out the most Dohsa-hou sessions over the period that I worked at the center - namely, a total of 29 sessions of approximately 60 minutes each. My general impression of D was of a calmed, bright and communicative child. He normally demonstrated a willingness to cooperate with the therapists, including myself, and did not get upset or become stressed when we needed to leave the common room and go to another room for a Dohsa-hou session. From the very beginning, we managed to establish a good therapeutic relationship, with D completely understanding my verbal instructions and trying his best to accomplish the tasks required. Most of the time, he kept remarkably good eye contact with me and often looked for other ways of communicating outside of the therapeutic tasks (e.g., stretching out his hand to me or pronouncing some inarticulate sounds that matched his gestures).



My primary work with D was aimed at (i) enhancing coordination of his hands and arms; (ii) decreasing the chaotic movements of his lower limbs, such as springing or leg crossing when walking; and (iii) general improvement of his spatial orientation and body coordination.

D performed the basic Dohsa-hou techniques such as *ude-age* and *kukan-no-hineri* very well. Probably because of that, he was able to obtain greater experience of his own body and began to search for new ways of moving in space. For example, when in a prone position, he began turning his body 90 degrees and tried to move in that way towards me. D was extremely happy when he managed to move from one end of the therapeutic mat to the other through this newly-discovered movement, i.e. rolling about on the mat. He had clearly experienced a sense of achievement, resulting from his own efforts and from his experience of moving his body himself, which is in contrast to being moved by others, which prevails in his daily life. Indeed, when I told him “You see, you can do it! Can’t you?” he looked at me and said a word that I interpreted as “I can” (i.e. *moga* in Bulgarian).

Another important experience for D was taking *agura-zai* – at the very beginning of his therapy, it was difficult for him to take this position and he clearly needed my support (especially in the waist and knees). However, as the therapy advanced, he managed to keep the posture longer and to look at the surrounding space with interest.

#### Outcomes of Dohsa-hou

As D performed *kukan-no-hineri* relatively well, he was able to relax sufficiently, which allowed us to try *agura-zai* and *hokou*. Particularly while he was walking, I observed improved bodyweight distribution, an increased sense of balance, and fewer “jumps” from the waist area.

My colleagues reported that his communication had improved, as he showed richer facial expressions and clearer gestures when he, for example, wanted to eat something or participate in a group activity.

With the above in mind, the prognoses for D’s future development are good. Nevertheless, greater effort is needed in (i) prompting his otherwise good communication skills and (ii) improving his gait.

#### → G

G was a 15-year-old girl diagnosed with severe cerebral palsy and West syndrome, who was completely incapable of social adaptation. Her limbs, especially her legs, were heavily bent and stiff, and she also had scoliosis. As with D, G could pronounce certain sounds, few of which are having communicative meaning. G lived with her parents and

two younger brothers.

I carried out a total 22 Dohsa-hou sessions with G of approximately 50 minutes each. G was a very delicate child who, despite her disease, had highly rich facial expressions and a high level of understanding of the surrounding environment. She often experienced extreme emotional outbursts, ranging from fear and “freezing on the spot” to uncontrollable excitement and exaltation, accompanied by numerous gestures and inarticulate sounds. However, unlike D, G was not always cooperative during our sessions, and following my instructions was not always easy for her. Oftentimes, she remained somewhat apathetic and acted as if she was consciously avoiding eye contact with me (she used to stare somewhere above her or through the window). Because of this, and probably because of other reasons as well, carrying out concrete therapeutic tasks was quite challenging for both of us. Often it seemed that G understood very well what she needed to do, but all she actually did was just smile indifferently.

#### Outcomes of Dohsa-hou

Considering all the above, in my work with G, I aimed mainly at (i) overall relaxation and diminishment of the spastic symptoms; (ii) helping her experience herself as an active agent in the surrounding environment; and (iii) balancing her extreme emotional outbursts.

Although relaxation appeared to be quite a difficult task for G, with time, the changes she was experiencing became increasingly visible. For instance, her relaxed posture made bringing her back to the wheelchair much easier than attempting to remove from it before a session. In addition, her overall appearance became brighter and more appeased.

In the later stages of our work together, I introduced *agura-zai*, which at the very beginning was something unimaginable, given her severely flexed legs and stiff hip joints. However, G seemed to enjoy the challenging task and, with time, even managed to keep her head raised up for some 30 seconds while she smiled around the room. This new experience seemed to gradually shake her out of her habitual movement patterns, her G-pattern sitting posture included, thanks to which her overall posture visibly improved and her limb movements became more coordinated and conscious.

#### → A

A was a 17-year-old boy suffering from internal hydrocephaly and *grand mal* seizures for which he took drugs. A could stand by himself, but his flexed hip and knee joints did not allow him to do it properly; hence, his gait was quite unbalanced. A lived

with his mother and her second husband, who also had a daughter together (A's step-sister). A's biological father had left when A was a child.

My initial impression of A was of a mild-tempered and easygoing boy. However, as my colleagues reported several times, this was likely the result of his recently increased dosage of anti-epileptic drugs. Usually, A sat on pillows on the floor of the common room, where he played with his favorite plastic animal figurines or flipped through a picture book about animals. When I approached him, he showed a willingness to communicate and play, but whenever I tried to take him to the other room for a session, he clearly pronounced "No!" while staring at me.

We nevertheless managed to carry out a total of 10 Dohsa therapy sessions of some 40 minutes each. However, he often displayed stubbornness during the sessions, refusing to complete even the most basic relaxation techniques.

With this in mind, I decided to aim more at improving his communication skills using body language – for example, stretching out his hands to indicate "Hello" and making eye contact, as well as verbal communication, such as "yes/no" questions.

#### Outcomes of Dohsa-hou

Until the end of my work with A, I found it difficult to say whether he disliked being touched by another person (although he always stretched out his hand to say "Hello") or whether he was afraid. For example, during the sessions, it was very difficult for A to shift from a sitting posture to lying down on the mat, and even when he managed to do so, he did not want to lower his head, as if he wanted to constantly stay alert. This, however, made his body even tenser and his posture stiffer.

Although the sessions did not apply the Dohsa-hou tasks in the way that they should be applied, A looked calmer after performing the tasks, and his gait also improved. More specifically, his knees did not stick to each other s much as before, his waist was straighter, and he looked forwards more often while walking instead of looking at the ground. It was also interesting to note that his hyper-salivation was alleviated immediately after a session.

#### **→ S**

S was a 4-year-old boy diagnosed with generalized developmental disorder. He began to walk at the age of 16 months after a short-term bout of physiotherapy and began to speak at the age of two with simple words such as "mama", "papa", "yes", and "no". His vocabulary did not expand much thereafter. S therefore communicated actively with gestures, but both his gross and fine motor skills were below average. When accompanied by his mother, he tended to adapt relatively easily to new

environments. S lived with his parents.

We had a total of seven Dohsa-hou sessions of about 30 minutes each. S was a mild-tempered child, who seemed to easily obey, become attached to others, and adapt. Often, after waking up from his usual midday nap, he approached me and asked about when we were going to have a session.

My goals in working with S were improving his communication and language skills through the play elements of Dohsa-hou, such as taking him in my lap and rocking together on the floor. He enjoyed it very much and always asked me to repeat it, but whenever I said it was enough, he obeyed and did not insist for more. During the sessions, I also tried to draw his attention towards his own body (e.g., through giving instructions such as “Let’s count how many fingers you have” or “Let’s stand up together and stay like this for 60 seconds”) and his immediate surroundings (e.g., trying to pronounce the color of the carpet or his shoes).

#### Outcomes of Dohsa-hou

After the sessions, S was always full of energy and usually approached his mother/father when they came to pick him up with enthusiasm and constant talk. Not all of his words were comprehensible, but his efforts were still worth noting.

#### →N

N was a five-year old boy suffering from severe spastic quadriplegia and microcephaly. His weight and height were far below the average (he looked almost like an infant), and he could barely even crawl. He was taken care of by his mother and elder brother. Several years before my work with him, his mother divorced his father because of domestic violence. She lives now with another man with whom she has had her third son. I received information that his mother abused alcohol. Moreover, N’s clothes often strongly smelled of cigarettes.

I had a total seven sessions with N of about 50 minutes each. It took time for N to get used to the new environment of the center – at the very beginning, he looked highly stressed and anxious. He often cried silently; only tears rolled down his contorted face. That was one of the first things that impressed me deeply about N – no matter how hard he tried, he did not utter a sound. He only clenched his small fists as if in silent agony. During our first session, I was not surprised to find that his diaphragm was extremely stiff, and that he had a very shallow breathing, accompanied occasionally by wheezes.

With all of this in mind, I attempted to relax his upper body and to make him delicately “shift” from his habitual semi-prone posture to an upright one, even for a few seconds.

During our sessions, there were times when it was difficult for me to understand if N was crying or laughing, since he performed both actions without making a sound and his facial expression was rather ambiguous. Additionally, he often clenched his fists and raised them in the air as if to strike someone. Anger, fear, and even horror and shock seemed to be the emotions underlying these actions.

#### Outcomes of Dohsa-hou

During one of the sessions, while trying to “destroy” the almost convulsive stiffness in N’s arms and upper body, I put him on my knee and attempted to apply *se-sorase* while gently pressing on his abdomen and diaphragm. On the third time, he cried out in a loud voice, which was the first time I had actually heard it. Immediately after, tears began rolling down his face. I tried to calm N down by wrapping him in a blanket and rocking him gently in my arms. Before long, N calmed down and his face broadened into a smile.

Over the next several sessions, N managed to perform a remarkably good *ritsui*, putting a considerable amount of strength into his legs.

#### **→ R**

R was a 9-year-old girl diagnosed with generalized developmental disorder. She could talk a little and perform daily activities such as putting on and taking off her clothes and shoes and washing hands. In the mornings, R commuted to a special-needs school, while in the afternoons she visited the daycare center. She lived with her parents.

With R, we had a total six of sessions of some 30 minutes each. It was difficult for her to stay for long in one place, but she still showing a willingness to being each session – at the beginning of each sessions, she would diligently take off her shoes and, visibly contented, placed them next to mine near the therapeutic mat.

Although R gave an impression of an active and curious child, it was more likely that she was timid and felt isolated. For people around her, her overactive behavior was difficult to bear - her actions ranged from helping the staff feed another child (without being asked to) to being physically aggressive towards staff or other children. However, I assumed that this behavior was her way of attracting attention and confirming that she was a part of the group, thus acting as a buffer against her sense of isolation.

#### Outcomes of Dohsa-hou

With the above assumptions in mind, I tried to assure R in our sessions that we have a time-space, which was only ours and where she was completely free to be herself. I also attempted to make her understand that what she has to express (although often

incomprehensible for me) was valuable and unique. Additionally, while trying to talk and play, we attempted to improve her body posture and gait by having her maintain *agura-zai* for a certain amount of time. Although we did not completely achieve this goal, R experienced what it felt like to stay with her back straightened. This, in turn, naturally “opened up” her shoulders and, as a result, her overall posture and expression improved. Immediately after a session, she walked more carefully instead of rushing ahead with huge steps and her head thrust unnaturally forward. She also seemed to be calmer and less prone to aggressive and overactive behavior.

### →M

M was a five-year-old girl diagnosed with autism. She was delivered via Caesarian section two days after her due date, and presented perinatal asphyxia. M looks calm, and has unstable eye contact and a neutral facial expression. She rarely responded to invitations to join an activity and became annoyed when someone attempted to join her in her activities. She could draw lines and circles, and recognized and name figures. M lived with her parents and elder brother at the time of my work with her.

We had a total four sessions of 50 minutes each. Although she showed a willingness from the beginning to join me for a session, she did not let go of the stuffed toys and pencils she usually held in her hands. During the sessions, however, she did not show any willingness to cooperate or to follow the instructions for the concrete therapeutic tasks. Instead, she preferred to remain immersed in her own activities, such as playing with the toys. Simultaneously, she was able to say several English words or phrases such as “dusky” and “I know you”. I tried to join with the tone of her communication by starting to talk in English, which impressed her somewhat; this was the first time I had noticed some change in her facial expression.

#### Outcomes of Dohsa-hou

I had few therapeutic sessions with M, so it was difficult to devise clear-cut therapeutic goals. However, at the beginning of the third and fourth sessions, she voluntarily let go of her toys and moved towards the mat, where she duly took off her shoes. During the fourth session, she very much enjoyed the exercise of me taking her in my lap and rocking together on the floor; this was one of the first times I had heard her laugh. After the end of that session, she went back to the common room and went to play with the other children there. This behavior contrasted very much with her usual behavior of isolated plays.



Considering the above outcomes of the introduction and short-term implementation of Dohsa-hou in Bulgaria, we can conclude that further activities towards the full-fledged implementation of Dohsa-hou in the country are well-justified.

However – and this pertains not only to Bulgaria – we should refer to some general principles regarding the therapeutic work with and overall care for children with disabilities. Therapists often discuss what approaches are most appropriate for given cases, how a given disability or symptoms should be alleviated or even overcome, how we should react in the face of a given event, and so on. However, they rarely spare the time and energy to plumb the essence of caregiving for children with disabilities and winnow out some of the more fundamental principles upon which long-lasting results can be expected.

Working with and caring for children with disabilities presents an array of challenges for therapists and caregivers. These challenges largely vary according to the severity of the disease/disability and the extent to which verbal communication is possible. However, some of the greatest challenges in this specific kind of work relate less to those in need – namely, the trainees – and much more to those working with them, i.e., the therapists and caregivers. Why? Because apart from the daily challenges that we encounter in our work with the children, the greatest challenge that we, the “normal” ones, must face is our own capacity to go beyond the differences that separate “us” from “them” and understand that we share a common humanity; in other words, that we belong to each other. As Nouwen points out, the mystery of life is that we discover this human togetherness not when we are powerful and strong, but when we are vulnerable and weak (Nouwen, 1994).

Apart from its unquestionable therapeutic effects – physical, psychological, and social, Dohsa-hou seems grounded within this important perspective of human nature that we all share. Using it as a starting point, we suggest that while working with and caring for children with disabilities, it is worthwhile to consider the following general principles:

→ It is preferable that we consider each child’s diagnosis as the primary reference point for his/her past, but this should not block our vision for his/her future. If these children remain trapped in their disease/disability, there would not be the life-changing contributions of people such as, for example, Andrea Bocelli and Stephen Hawking.

Therefore, let us avoid turning the diagnosis into a sentence and do our best to work with the living person and his potential, not with the diagnosis.



→ An obvious regression at a certain point of the therapy is not necessarily a negative sign and it should not scare or discourage therapists. On the contrary, there are cases when this is a good sign, because it shows there is movement; with movement, there is life. In other words, the person, as far as he/she is a living human being, is not hopelessly frozen in his/her disease or disability - the vital energy is there, it need only be unfrozen and revived.

Therefore, let us help children “taste” new experiences and duly integrate these experiences, instead of making children automatically repeat (and us together with them) the same stereotyped actions or phrases.

→ In some traditional cultures, those who are “different” are considered special. For example, in some communities in Benin, children born with anomalies are seen as protected by supernatural forces and are believed to bring good luck (Wa Munyi, 2012). In that sense, rather than a medical issue, disability is more or less a social issue – namely, it depends on the way the vast majority of people comprehend it. If, by chance, a birch tree happens to grow in a pine forest, all the pines around it will consider it awkward. However, it is still a tree, and no worse than the others; only its form, and hence, its way of existence, differs, but its very existence as a tree is an undeniable truth.

Therefore, it is preferable that we comprehend our relationship with children with disabilities as a ceaseless bilateral process. The mere fact that the child in front of us has a certain disability or disease should not place us in a “higher” position than that child as someone who knows more or can do better. If we do so, we remove all possibility of learning something from the children, such as the pure joy that they often lavishly share.

→ Emotions and one’s mental condition are directly reflected by one’s body posture, movements, and overall expression.

Therefore, in our daily work, we should observe not only the children, but also ourselves, and stay watchful for the relation between our own and their conditions. This specific type of alertness could be of great benefit in our work.

With the above points in mind, we can progress towards more comprehensive work and caregiving for children with disabilities, an essential part of which could be Dohsa-hou as an integrated body-mind therapy.



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## Postscript

The first time I encountered Dohsa-hou was almost six years ago when I attended a monthly Dohsa-hou meeting at Osaka University. Then, almost before I had realized it, I was allowed to participate as a trainer in a summer camp in Ishigaki, Okinawa prefecture. This was shortly after I had arrived in Japan, eager to carry out research that had nothing to do with Dohsa-hou. Furthermore, I had never, up until that point, been interested in working with children with disabilities.

It was Prof. Osamu Imura who gently introduced me to the fascinating world of Dohsa-hou. I can still vividly remember one of the first times we met at Osaka University. It was at a Dohsa-hou session, and when I entered the room, I saw Prof. Imura rolling on the floor, and playing and laughing with several children with disabilities.

As he himself pointed out in the Preface, I was indeed totally confused back then, wondering constantly if Dohsa-hou was a psychotherapy at all. However, as time went by, and I had increasingly more opportunities to participate in the Dohsa-hou monthly meetings and camps, I came to understand that although Dohsa-hou looks like a method of physical rehabilitation, it actually uses the body as a “door” to the mind. In so doing, it reflects the Eastern wisdom that body and mind cannot be separated – they are two sides of the same coin.

With such an experience, I returned to Bulgaria, where I was given the opportunity to introduce and practice Dohsa-hou on a regular basis with the children of the “Sunflower” day-care center. As mentioned earlier, I experienced several challenges related to this initiative, but I also observed new hope arising in many parents and the center’s staff.

I would like to use this opportunity to thank Prof. Imura for his skilled supervision, encouragement, and open-mindedness over the years. I thank also all my supervisors and colleagues, especially Assistant Prof. Haruo Fujino for his kind, timely, and unconditional support, and all my trainees and their caregivers in both Japan and Bulgaria. My special thanks further go to the “Sunflower” day-care center in Sofia, represented by Dr. Sabina Sabeva and Mrs. Iskra Vlahova, who spared no efforts on the smooth introduction of Dohsa-hou in Bulgaria.

I am indebted also to my colleague, Assistant Prof. Shoko Sugao, for drawing the illustrations for the present book with skillfulness and artistic imagination.

Now, as I have the chance to reflect, I can clearly see a long path that I have walked with joy and sadness, courage and uncertainty, fear and hope, all of which I have shared with the children I have worked with. I know that the publication of the present book is the start of yet another journey, one that is even more exciting and fruitful.

May this book bring hope and solace to everyone in need.

*January 2016*

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## Appendix 1

### Illustrated Glossary

**Agura-zai** (胡坐座位—“sitting cross-legged on the floor”) - this task helps the trainer check how flexible the trainee’s hip joints are, and if he/she can keep his back and head upright. The trainer puts his/her hands on the trainee’s shoulders and slightly pushes downward.

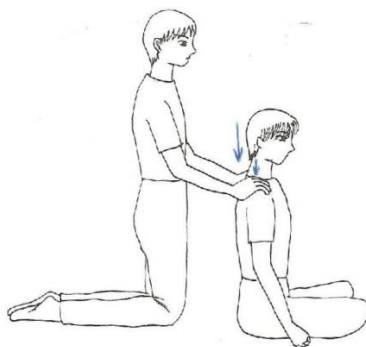


Illustration 1: Agura-zai

**Fumi-shime** (踏み締め—“placing the foot flat on the ground”) – this task is begun from *ritsui* to test the trainee’s ability to step properly on the ground and then move forward.

**Hiza-dachi** (膝立ち—“kneeling”) – this task is important for testing waist flexibility and for checking the condition of the hip joints and the client’s ability to stand upright. Sometimes *kata-hiza-dachi* (片膝立ち—“getting to one knee”) is also applied.

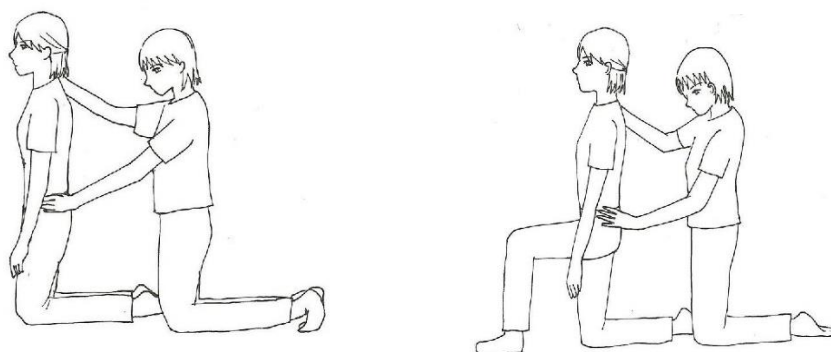


Illustration 2:

*Hiza-dachi* and *kata-hiza-dachi*

**Hiza-mage** (膝曲げ—“knees bending”) – through this task, which is applied from *ritsui*, the trainer checks if the trainee can keep his/her balance and return to a straightened posture.



Illustration 3: Hiza-mage

**Hokou** (歩行—“walking”) – this task is intended to test the trainee’s ability to properly shift his/her bodyweight from one leg to another while walking.

**Kata-age-sage** (肩上げ下げ—“lifting and lowering the shoulders”) – this task helps the trainee relax his/her shoulders and concentrate on the movement of a particular body part.

**Kata-biraki** (肩開き—“opening of the shoulders”) – the trainer “opens” the trainee’s shoulders and helps him/her relax them. This task can be applied while the trainee is sitting on a chair, or while in *agura-zai*.

**Kukan-no-hineri** (軀幹の捻り—“twisting of the torso”) – this task is performed on the floor while the trainee lies on his/her side. The trainer helps the trainee twist his/her torso so that the back of his/her shoulder reaches the floor. It is important that at this point the trainer blocks the trainee’s bottom by his/her knees, while slightly pressing the shoulder to the floor. This is a key relaxation technique.

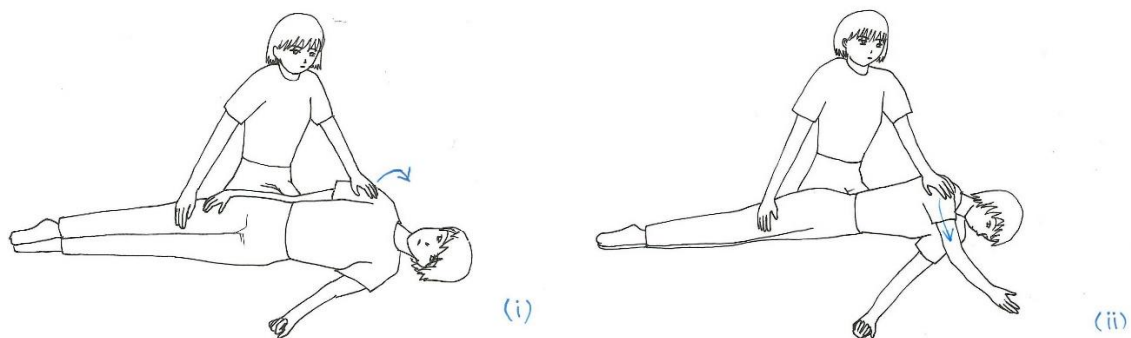


Illustration 4: *Kukan-no-hineri* to the back (i) and to the front (ii)

**Ritsui** (立位—“standing upright”) – using this simple task, the trainer can check to which side the trainee’s bodyweight tends to shift more, and if he/she can keep balance and stand upright. From this posture, *hiza-mage* is often applied.

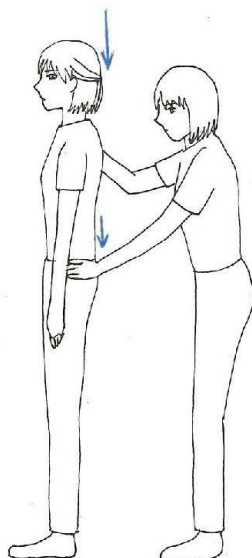


Illustration 5: *Ritsui*

**Se-sorase** (背反らせ—“leaning back”) – the trainee sits cross-legged and leans back against the trainer’s knees. The trainer also sits cross-legged and supports the trainee’s torso and head with his/her hands. Also a key relaxation technique, *se-sorase* tests the extent to which the trainee can entrust his/her body to the trainer.

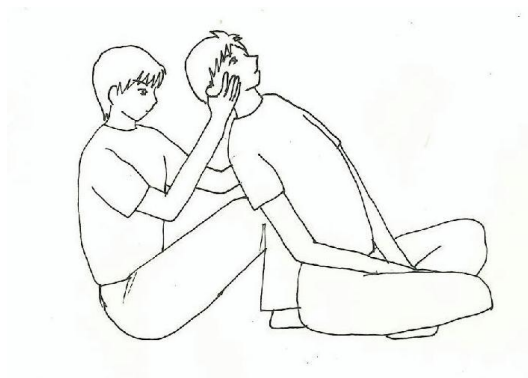


Illustration 6: Se-sorase

**Tate-kei** (タテ系—“straighten up”) - this is a general term for all tasks that test the trainee’s ability to stand upright and maintain their balance against gravity. These tasks are *agura-zai*, *hiza-dachi*, *ritsui* and *hokou*.

**Ude-age** (腕上げ—“arm lifting”) – this task can be performed while the trainee lies on the floor or sits in a chair. The trainer helps the trainee raise his/her arm through following the imaginary line of the arm’s proper movement. This is one of the core tasks for warming up and for establishing communication between trainer and trainee. *Ude-age* is also applied for the establishment of joint attention, which is especially important for the therapeutic work with children with ASD.



Illustration 7: Ude-age

**Zenkutsu** (前屈—“bending the upper body forward”) – this task, usually done while the trainer sits cross-legged (or in a chair), is intended to test the flexibility of his/her hip joints and the condition of his/her back, such as whether it curves too much or if there are any differences between the left and right sides. Also, *zenkutsu* is applied as a relaxation technique to the trainee’s hip joints.

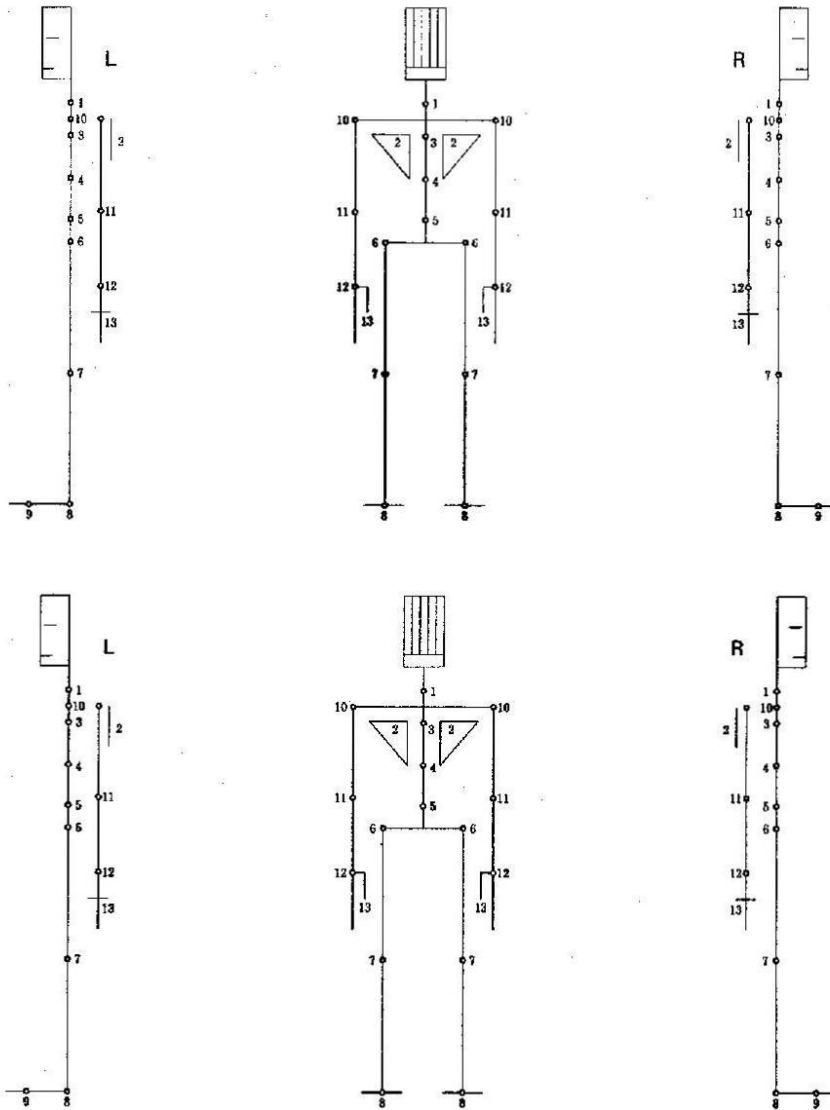


Illustration 8: Zenkutsu



## Appendix 2

### Schema of Body Dynamics



#### ASSESSMENT

##### I. Tension

Examine the resistance to examiner's hand. Direction and degree are represented by sign like as follows

i) region: ○      ii) direction: ↘    ↙

##### II. Joint for test

1. neck	2. scapula	3. breast	4. back	5. waist	6. hip	7. knee
8. ankle	9. toe	10. shoulder	11. elbow	12. wrist	13. hand	

## Appendix 3

### Dohsa-hou in Pictures



Prof. Osamu Imura (left), Prof. Gosaku Naruse (middle), and Prof. Mitsuyo Tsuru (right) with their students at the Clinical Dohsa-hou Conference held at Osaka University (October 2014)



Prof. Imura during the first Dohsa-hou seminar in Bulgaria, held at the “Sunflower” day-care center (March 2015)



After the end of the two-day seminar at the “Sunflower” day-care center. The center’s director, Iskra Vlahova (middle), is hugging her daughter Maria, who has deaf-blindness (October 2015)



Prof. Osamu Imura and Velizara Chervenkova during a Dohsa-hou session at a day-care center for children with disabilities in the town of Sevlievo, Bulgaria (October 2015)



After a Dohsa-hou seminar at “Maria’s World” – a community center for adults with mild intellectual disabilities in Sofia, Bulgaria (October 2015)



Prof. Osamu Imura and Militsa Gocheva, a clinical psychologist at the “Sunflower” day-care center in Sofia, Bulgaria, during her Dohsa-hou training in Japan (November 2015)





In India, Dohsa-hou is mainly provided at Balvantray Mehta Vidya Bahawan Anguridevi Shersingh Memorial Academy in New Delhi under the guidance of Prof. Susumu Harizuka (second from left, front row), January 2003



A moment from a therapeutic session at the school in New Delhi (September 2007)



A Dohsa-hou workshop in Cambodia led by Prof. Gosaku Naruse, October 2005  
(courtesy of Kouji Nakano)



Dohsa-hou sessions for adults with psychiatric and post-traumatic stress disorders in  
Cambodia, October 2005 (courtesy of Kouji Nakano)





Dohsa-hou session in the Thai province of Chachoengsao, where parents and caregivers participate as trainers of their children, December 2012 (courtesy of Kouichi Tani)



Dohsa-hou training for trainers in Bangkok led by both Japanese and Thai supervisors, September 2012 (courtesy of Kouichi Tani)



The book team (left to right, back row): Prof. Osamu Imura, Assistant Prof. Velizara Chervenkova, Assistant Prof. Haruo Fujino; front row: Yuki Nihei, Yumiko Hibi, Eri Teruta, and Shinnosuke Harada (January 2016)



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<sup>5</sup> In cases when English-language titles of Japanese books and articles were available, we used these titles as originally translated by their authors.

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