

A brief introduction to the Japanese body psychotherapy Dohsa-hou and its application for student-athletes

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Abstract: In recent years there is a growing body of research detailing the close interconnection between body and mind. Dohsa Therapy (DT) also known as Dohsa-hou is a body psychotherapy which was originally developed in Japan as a functional training for cerebral palsy (CP) patients. In the 1960s Naruse and his colleagues developed a set of movement exercises, called Dohsa Training, to help children with CP. Based on the practice and research of Dohsa Training, Naruse recognized the effect of body movement on the mind and the effectiveness of Dohsa Training as a psychological intervention. Gradually, the Dohsa-hou practitioners have expanded the scope of application from clients with physical disabilities to those with psychological problems. Most recently, it was reported that DT was applied to student-athletes (SAs) as part of a university counseling service (UCS) program. Previously SAs were characterized by their limited usage of UCS, however, after being introduced to DT, their usage increased significantly. This article presents an introduction of Dohsa-hou including its brief history, theory, and application for SAs.

Keywords: Dohsa-hou, body psychotherapy, student-athletes, university counseling services, experiential treatment theory

Introduction

Currently, there is a growing body of research detailing the close interconnection between body and mind (Shafir et al., 2016). In Japan, a method of body psychotherapy called Dohsa-hou (literally, “movement methodology”) has a 60-year history providing psychological treatment for children with cerebral palsy (CP). Recognizing the psychological impact of movement, proponents of Dohsa-hou have expanded the scope of application from

clients with physical disabilities to those with psychological problems. Among those with psychological problems are athletes. Hoshino (1988) noted that children with CP and some athletes have similar self-control problems with bodily movements, although to varying degrees. Recently, Kaneko et al. (2019) reported that the application of Dohsa Therapy (DT) to student-athletes (SAs) resulted in an increased use of university counseling services. This article presents an introduction of Dohsa-hou including its brief history, theory, and

application for SAs.

History

How Dohsa Training began

Kobayashi (1966) reported one of the first case studies in Japan in which hypnosis was used to help a female CP patient with motor dysfunction. In the training, the harder the CP patient tried to open her hands, the more tightly her fingers became clenched. Generally speaking, patients with CP have problems with motor coordination when performing voluntary movements. In a hypnotic state, however, she was able to stretch her fingers. Moreover, with a post-hypnotic suggestion, she was able to stretch her fingers even after awakening. The patient said, “I saw my palm for the first time in my life!” (M. Tsuru, personal communication, January 22, 2017) She continued this functional training using hypnosis, and later could perform fine motor skills, such as ironing laundry and using a sewing machine.

Previously, brain lesions associated with CP were not repairable and it was general knowledge that the disorder was considered permanent. Yet, impaired movement was improved under training in a hypnotic state. Kobayashi (1966) speculated that hypnosis, a psychological intervention, helped the CP patient not only release excessive muscle tension and assist in the movement of various body parts, but also allowed the patient to move past the deeply held belief that she could not control her body movements. Having recognized the importance of this case study, Naruse started a research project that studied how functional training with hypnosis could improve the motor dysfunction of patients with CP. After a TV program in

the 1960s presented the training with hypnosis showing its surprising effect on a boy who previously only walked on his toes becoming able to walk with his soles on the floor, increasingly, more parents of children with CP asked for the training (Ono et al., 1992).

In the early days, the training was focused on the improvement of a motor function while relieving tension by hypnosis. However, the effect of this training sometimes did not last without hypnosis and the relaxation effect diminished with repetition of the training. Therefore, it was necessary to develop a training program that would produce the same effect without utilizing hypnosis. Ultimately, Naruse discovered that patients had to relieve the tension on their own, and others could not relieve it for them. In other words, the patients needed to gain the ability to self-control muscle tone and body movements. Then, Naruse modified the procedure of progressive muscle relaxation developed by Edmund Jacobson to relieve muscle tension and produced a training method known today as Dohsa Training (Naruse, 1995).

To meet the needs of many CP children, Naruse and his team started a Dohsa Training camp that was designed as a weeklong, one-on-one training program in which 30 children with CP together with their parents and 30 trainers participated. This training camp became the model of an effective training method for children suffering from CP in Japan. In 1971 the Ministry of Education implemented the area of “nursing and training” into the curriculum of special schools for physically handicapped or developmentally disabled children. Dohsa Training was utilized as a psychological method by many special education teachers (Tsuru, 2007). Consequently, Dohsa Training has spread

rapidly in special schools throughout Japan.

From Dohsa Training to Dohsa Therapy

From the 1970s, physically disabled children with developmental problems such as intellectual disabilities, autism or hyperactivity began to participate in the Dohsa Training programs (Ono et al., 1992). Konno (1977) reported that Dohsa Training could facilitate the improvement of hyperactive children on the control of their attention and behavior as well as body movements. Furthermore, Harizuka (1986) elaborated on the process of interaction between Dohsa-hou trainers and autistic/hyperactive children. Dohsa Training was based on the assessment of any possible changes in a child's movements and was conducted while checking how much the trainer needed to restrain the child and how freely the child could react. It was posited that such an interaction has allowed the child to learn how to adapt to the environment and relate to others. In response to these findings, some practitioners started applying Dohsa Training to the developmentally disabled children who were without physical disabilities.

In the mid-1970s, some practitioners initially even tried to apply Dohsa Training to neurotic clients with movement disorder such as graphospasm (writer's cramp) and paralysis. Later, the scope of application was further expanded to patients without apparent movement disorder, and those suffering from psychological problems such as depression, interpersonal tension, compulsive behaviors, anxiety and so on.

In the 1980s, Tsuru applied Dohsa Training to schizophrenic patients when she observed their bad posture and excessive muscle tension, hoping that relieving chronic tensions could make them

feel more relaxed in daily life (Ono et al., 1992). Surprisingly, when the patients continued Dohsa Training, their reality testing improved, and autistic behaviors decreased. Tsuru (1988) concluded that Dohsa Training provided a reality-based experience for patients with schizophrenia while also improving their ability to voluntarily regulate body movements. In conclusion, increased senses of self-control and reality were considered to be important factors for schizophrenic patients to be able to respond more adaptively to psychotic symptoms.

In one case for example, after 14 sessions, although the training did not completely stop the auditory hallucination itself, the patient no longer seemed to care about the hallucinatory voice and stopped trying to find the "person" who was speaking to her. At the end of her final session, she explained, "I'm hearing the voice, but I don't react to it. The voice is sometimes far away." (Tsuru, 1988, p.69)

Thus, Dohsa-hou practitioners expanded the application of Dohsa Training from physical disabilities to psychological problems. While the conventional use of *dohsa* exercises has been referred to as Dohsa Training or "psychological rehabilitation" aiming to improve clients' motor dysfunction, in 1987 Naruse decided to call the psychotherapeutic application of *dohsa* exercises as "Dohsa Therapy (DT)" (Tsuru, 2007). At present, "Dohsa-hou" is the general term used by both Dohsa-hou therapists and trainers. Although DT utilizes the *dohsa* exercises that are used in Dohsa Training, the main focus of DT is on the improvement of clients' psychological well-being rather than merely improved physical movement.

Theory

Dohsa is defined as a psychological activity in which the mind and body work integrally and cooperatively, producing adaptive and purposeful movements (Naruse, 2007). If we metaphorically compare a human body to a bicycle, just as a bicycle has all the mechanisms to move, a body has all the mechanisms to move, in order to live, from the moment of birth till death. However, unless someone or something applies force, neither the bicycle nor the body moves. So, it is the mind that generates the striving power to operate the body to perform the intended movement. In a deeper analysis, *dohsa* is considered as the entire process of bodily movements including the following elements: 1) Starting with the intention to achieve movement, 2) striving to manipulate the body parts to achieve that intention, and 3) ending with a concluding bodily movement (Naruse, 1975/1988) (Figure 1). Through years of practice and research of *Dohsa-hou*, Naruse hypothesized that because *dohsa* incorporates both body and mind processes, just as physical impairment causes impairment in *dohsa*, psychological maladaptation can also manifest itself in *dohsa* as poor posture and/or impaired movements. It was further speculated that a change in *dohsa* results in a change in psychological maladaptation as well (Naruse, 2007).

Naruse (1995) presented the experiential treatment theory, which focuses on the client's way of experience, not on the content of the experience. The aim of DT is to change the client's way of experience by

utilizing *dohsa*. In terms of the experiential treatment theory, the term "experience" means a "here and now feeling." In other words, "experience" includes not only verbal or conscious thoughts and cognitions but also non-verbal and unconscious bodily sensations.

Application for student-athletes

Although patients with CP struggle with motor coordination, the practice of *Dohsa-hou* revealed the importance of dealing with psychological issues such as incompetence and resistance caused by fear of change that the patient might possess (Hoshino, 2003). Obviously, improving motor coordination is very important for SAs as well, however, DT and physiotherapy differ in that DT utilizes *dohsa* exercises to bring about changes in psychological attitudes. DT deals with the mind of SAs who cannot move as intended. Therefore, the DT session focuses on the way the SAs strive to achieve the assigned *dohsa* exercise, not on the outcome of the exercise. Based on experiential treatment theory, let us examine how DT can help SAs change their maladaptive ways of experience.

The following are some examples of SAs' maladaptive expressions of experience that often appeared in DT sessions at university counseling services.

1. SAs often tend to focus more on the outside world and people than their body. Because their main concerns are often result and reputation, they care less about their body, which in effect lowers self-awareness towards bodily

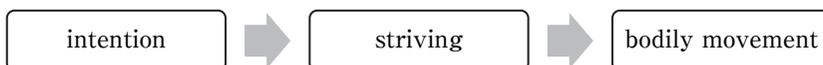


Figure 1. Diagram of *dohsa* mental processes and movements (Naruse, 1995, p.37)

sensations. Owing to this maladaptive way of experience, they reduce contact with body signals and fail to notice excessive muscle tone (Hoshino, 2003).

2. They tend to believe that results are everything. This strong belief makes them try too hard to win the competition and makes the body tighten up due to excessive muscle tension. They believe that they must use all the power that they have all the time, which is another maladaptive way of experience (Kaneko et al., 2019).
3. When they say that their body is stiff, they believe that they cannot change the stiffness of the body as it is inherent. This fixed mindset indicates another maladaptive way of experience in which they unconsciously set the limit of their own body and athletic ability.

In the DT session, SA clients are given simple *dohsa* exercises such as *ude age* (arm raising) exercise (Figure 2) and *kata age* (shoulder raising) exercise (Figure 3) based on an assessment by therapists. These *dohsa* exercises appear to be easily accomplished by anyone, including SAs. However, almost all SAs notice that it is quite difficult to move shoulders or arms when told to raise them slowly and smoothly using minimum muscular power without

unnecessarily moving other body parts. The *dohsa* exercises enhance the SAs' ability to focus on the inner sensations of the body because the exercises cannot be achieved without paying attention to the details of the bodily sensations and movements (Hoshino, 2003). This experience also leads them to focus on themselves and ignore others. In addition, enhanced self-awareness makes them notice the excessive strain they unconsciously tend to exert on their bodies when they have strong desire to win.

Another awareness SAs gain in the DT session is that such excessive tension, ironically, hinders their striving to achieve the intended movement in the *dohsa* exercise. Take the arm raising exercise for example, when they reach a point where they can no longer raise their arm, some SAs unconsciously tend to raise the shoulder with excessive tension instead. So, the therapist helps the SAs notice this unconscious movement with the excessive tension around the shoulder and helps them relieve the tension. When SAs manage to relieve the excessive tension, they find it easier to raise the arm. With this experience, they realize the importance of moving the body by controlling the optimal tension, rather than moving the body using full tension (Kaneko et al., 2019).

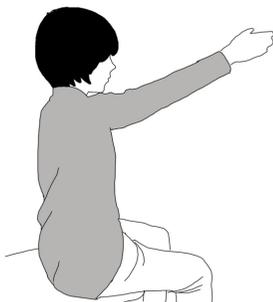


Figure 2. *ude age* (arm raising) exercise



Figure 3. *kata age* (shoulder raising) exercise

When they think they have reached the limit of movement, some SAs may easily give up raising the arm any further, saying “I cannot raise the arm anymore” or “I do not feel like the arm can rise any higher.” However, through DT sessions they find out that they can raise the arm higher than expected if they control the muscle tone. This experience gives them a better understanding of their bodies. They come to realize that depending on how they strive, they can even change their body’s capabilities. Namely, this open mindset can increase self-efficacy which is essential to continue their striving in a more adaptive, competitive, and beneficial way.

Implication for further study of Dohsa-hou

In Japan, Dohsa-hou has been successfully applied to a wide variety of patients and clients including student-athletes. It is very unfortunate that Dohsa-hou practitioners’ experience and knowledge have not been disseminated in Western countries due to the language barrier. Due to length limitations, detailed descriptions of how to conduct DT sessions for SAs cannot be presented here. This present article only introduces Dohsa-hou’s brief history, theory and its application for student-athletes. It is hoped that more existing theoretical works as well as case studies describing various clinical applications of DT from different areas will be translated into English and other languages in the near future.

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