

SAT Self-Image Script Changing Therapy for Psychogenic Visual Disturbance

Noriko Higuchi, Tsunetsugu Munakata, and Sayuri Hashimoto

Department of Human Care Science

Graduate School of Comprehensive Human Sciences

University of Tsukuba

Correspondence:

n.higuchi@jcom.home.ne.jp, hasimoto@taiiku.tsukuba.ac.jp

munakata@taiiku.tsukuba.ac.jp

ABSTRACT

Psychogenic Visual Disturbance (PVD) can be seen as one of the psychosomatic illnesses that affect children. Through our own psychosomatic support for children with PVD, we confirmed the existence of memory with negative image transferred from the preceding generation as the fundamental problem behind PVD. In this paper, we try to (i) present a new intervention model using the self-image script changing therapy for children with PVD, their parents, grand parents, and the preceding generation; and (ii) examine the causes for controlling recovery based both on the qualitative data on convalescence obtained from the patients' experiences and narratives and also on other data showing the changes in visual performance and psychological characteristics.

A typical single case research was qualitatively reported. To ensure the reliability of the psychological transformation process, and the change of the physical symptom of client and her family by the SAT intervention (ie, changing of the self-image script), the qualitative and quantitative data were triangulated. Results showed that the SAT therapy was effective in changing the self-image script of children with PVD, to enact improved visual functioning.

Keywords: self-image script, psychogenic visual disturbance, relearning, reward system

1. Introduction

Psychogenic visual disturbance (PVD) cause abnormal visual performance. For many years its cause was unknown, as was the explanation for the resulting poor vision. The incidence of PVD in pediatric ophthalmology patients is reported to be approximately 1% (Yokoyama, 1999). Recent development of imaging diagnostic technology has enabled the identification of reduced blood flow to the vision association area as a cause of PVD (Okuyama, Kawakatsu, Wada & Komatani, 2002).

Somatization disorders such as those seen in children with PVD, arise as a result of stress revealing itself as a functional disorder of the body or a transformation of the conscious mind, without the patient being aware of it. Such disorders are often seen in children whose body and mind have not properly differentiated. These children are said to have the tendency to relieve stress by converting it to a physical symptom rather than finding a solution psychologically (Bass, 1993). It is widely known that such psychological characteristics accumulate stress, easily cause worry and anxiety, and trigger psychobiological reactions (ie, interactive reactions involving the autonomous nervous system, endocrine system and the immune system) due to suppression of feelings and desires that are not expressed (Tanaka, 1998). Therefore, it was thought that the physiological characteristic of stress build-up may influence the outset of PVD.

Van den Bergh et al. (2005a,b) reported their fetal programming hypothesis that the degree of anxiety of the mother in the early half of the gestation period was likely to hinder brain development of the baby. They stated that when the mother's degree of anxiety is high during this period, the mothers' cortisol may have effect on the baby though the placenta and may affect development of the HPA system, limbic system, and prefrontal cortex.

Additionally, the intergenerational transfer of attachment disturbance (Watanabe, 1998) is a widely known phenomenon. For instance, when people who lived with trauma in childhood left unsolved and/or twisted attachment, they would unconsciously wound their own children and duplicate the conflict that they had with their parents.

Conventionally, PVD psychotherapies used approaches that tried to reach memories and experiences of psychological trauma in early childhood. Through our own psychosomatic support practice for children with PVD,

we confirmed the existence of negative image memories transferred from one's preceding generation as the fundamental problem behind one's PVD (Higuchi, 2005). In order to solve the fundamental problems of pediatric psychosomatic disorder like PVD, therefore, it seems urgently required to develop a new means to support the parents and their preceding generation for solving their own fundamental problems. Children with PVD have such psychological characteristics as high self-repression, low self-esteem and low recognition of emotional support, and high anxiety tendency (Higuchi, 2004). To cope with these tendencies, we have extended mental support in a form of psychological intervention to the patients themselves and guidance to the patients' parents for their environmental adjustment. Through our psychosomatic support practice for children with PVD, we have come to know that parents' distressful psychological characteristics and their high anxiety tendency would easily worsen the environment for children and cause the recurrence of disorder because it is important for children's healthy mental development if, in their middle childhood to early puberty adolescence life-stages, they may have an image script that they are recognized and loved unconditionally by parents (Munakata, 2006).

Most of the approaches toward the treatment of PVD reported so far have been limited to mental education and advice (Abe 1987; Okamoto, 1984). There have seen few reports that examined active psychological intervention for PVD patients and their parents. In this paper we try to (i) present a new intervention model using the self-image script changing therapy for children with PVD, their parents and grand parents, the preceding generation, and (ii) examine the causes for controlling recovery based both on the qualitative data on convalescence obtained from the patients' experiences, and on other data showing changes in their visual performance and psychological characteristics.

2. SAT Image Script Changing Therapy

Self-Image Script is different from the concept of schemata (Markus, 1997) which seems to carry the implication of an intellectual framework. Rather it is the concept of script developed by Munakata (2006) in which the nature of elapsed time, nature as a causal story, and sensations are involved. In other words, it is the script of the original form of the self. Theoretically speaking, everyman interprets himself, holds a pattern to understand himself in conformity with the expected value obtained from his past experiences. SAT therapy is an image therapy which derives from this theory and utilizes Self-Image Script Changing Therapy as its major technique. This theory hypothesizes that the troubles the client experienced in the past cause the flashback in the current

problems the client is now consciously faced with. By identifying the past negative experience, it aims to make the client find out a positive meaning in the negative image attached to the negative experience. To do so it requires the client to make up a positive image script through various means such as re-learning, re-narrating, re-imagining, re-acting and body contact. Its final goal is to make the client obtain a new self-image based on the said newly formed image script (Munakata, 2005).

Embryologically, human beings have both new and old brains. Conventional cognitive behavior therapy that is aimed at the transformation of the skewness of the recognition is directed mainly to neocortex (Munakata, 2006). SAT Self Image Script Changing Therapy tries to deploy effectual mental support on a ground of the triune concept of the human brain advocated by P. D. MacLean (MacLean, 1982). We attached importance to ensuring the client's sense of security mainly with the adjustment of environment. We next promoted the client to learn erasing such negative emotion as anxiety, fear, sense of helplessness by means of affection signals and body contacts. We further encouraged the client to promote pleasure emotion such as comfort, safety and sense of relief. In other words, conducted was the intervention to approach both protoreptilian and paleomammalian brains. Finally then, we tried to make client realize how to lead a life so that s/he may feel own essence, satisfaction and significance. We extended our supports so that the client may think practically and go forward to that direction. In other words again, conducted was the intervention to approach neomammalian brain.

3. Method

Design

In this study, a typical single case was qualitatively reported. Our conversations in the counseling session were taped as an audio record and these were matched with the patient's medical record. Ethic consideration was carried out as follows: We explained the purpose about the study to a child and the parent and obtained their consent to participate. In addition, we considered privacy protection.

Subject

The patients were diagnosed with PVD at A university hospital in the metropolitan area. One case intervention

for three generations with SAT self-image script changing therapy entered into the study.

Data collection and Analysis

To ensure reliability with the psychological transformation process and the change of the physical symptom of client and her family by the SAT intervention (ie, changing of the self-image script), the qualitative and the quantitative data were triangulated.

Assessment of Visual function

Visual Acuity was tested with Landolt's C chart.. The testing distance is 5 m. The children have to answer the direction corresponding to the C optotype which the examiner pointed. For all cases, the acuity was tested in approximately logarithmic steps from 0.1 to 1.0 and 1.2. The visual acuity was defined as the line at which 3/5 of the optotypes were correctly identified.

Assessment of psychological characteristics of children

(1) *State-trait anxiety inventory for children (STAIC; Soga, 1983)*: State anxiety indicated a "temporary emotional state that may change depending on the conditions being experienced by the subject", Spielberger (1966) created STAI and then a "State-transition anxiety inventory for children" (STAIC). It consists of 20 items such as state and trait anxiety. Each item is scored between one and three with three being the highest level of anxiety.

(2) *Self-esteem for children (Yoshida & Munakata, 1997)*: This scale is used to measure the degree of self-satisfaction or how highly the subject regards him- or herself. It consists of ten items with values of 0 to 10 assigned to each item. A higher score indicated higher self-esteem.

(3) *Self-repression for children (Yoshida & Munakata, 1997)*: The self-repression scale is used to measure the behavioral trait indicating the patient's tendency to suppress his or her feelings or thoughts to avoid being disliked by others, or to avoid making things worse. This scale consists of 10 items, and a higher score indicated

higher self-repression.

(4) *Interpersonal dependency for children (Yoshida & Munakata, 1997)*: This scale is used to measure how much the child expects others to take care of him or her and level of emotional dependency. This scale measures the trait whereby those behaviors that allow the subject to cope with the expectations of others are adopted according to other's evaluations, as well as that trait whereby unrealistic expectations continue to be held, even for an unreliable person. The scale consists of 10 items, and a higher score indicated higher interpersonal dependency.

(5) *Emotional support network for children (Yoshida & Munakata, 1997)*: This scale focuses on the emotional support provided by the various social support networks. It measures how much a child is aware that there are "people around you who support you emotionally and mentally." The scale consists of ten items with a total score of ten points.

Assessment of psychological characteristics of parents

(1) *State-trait anxiety inventory (STAI; Spielberger, 1966)*: A state anxiety indicated a "temporary emotional state that may change depending on the conditions being experienced by the subject". It consists of 20 items such as state and trait anxiety.

(2) *Self-rating Depression Scale (SDS, Zung, 1965)*: The SDS scale, comprising 20 items, was used to measure social depression tendencies. Scores over 40 indicated depression tendencies.

(3) *Self-esteem Scale (Developed by Rosenberg, 1965; Japanese version developed by Munakata, 1987)*: This scale was used to measure degree of self-satisfaction or self-regard.

(4) *Self-repression (Munakata, 1996)*: This scale was used to measure repression tendency one's feelings or thoughts so as to maintain pleasant relationships

(5) *Interpersonal dependency Inventory (IDI, McDonald-Scott, 1988)*: This scale was used to measure degree of emotional dependency.

(6) *Problem-solving behavior Scale (Munakata, 1996)*: This scale was used to measure the tendency toward effective and positive problem-solving.

A PVD case treated by Self-Image Script Changing Therapy

Case: 8 year old. Girl (A)

Family: Mother (MA, 40 years old, older brother (junior high school student, 12 years old. Her parents were divorced several years ago.

Medical history: Asthma (1.5 years old)

Present illness history: April 200X, she was referred to our university hospital for detail medical examination by her home doctor; she was found to have abnormal visual acuity at the school health screening.

At initial ophthalmological examination: A demonstrated abnormal visual acuity

V.D.=0.02(0.06) V.S.=0.02(0.07)

Neurophthalmological examination: Visual evoked Pattern: normal, CT: normal

Familial medical history: MA was diagnosed of depression since 4 years ago.

Circumstances before the counseling

MA, having suffered from depressive disorder for several years, had difficulty even just to come to the clinic as a chaperon for A. Actually she repeatedly cancelled and changed the appointment for A. On one occasion when she wanted to change our appointment for A, one of the authors of the study had an opportunity to talk with MA over the phone, when her serious mental pain was noted. This phone conversation prompted MA to visit our clinic.

The first interview with A

A conveyed to us an impression that she was pretty mature for her actual age. She looked grim, had no sign of smile and hardly talked. So we tried to keep up with her pace. We asked A if she might come to the clinic

from time to time and draw pictures or something, and she nodded saying "Well, I'll try."

The first interview with *MA*

The first interview with *MA* was conducted half a year after the introduction had been made to us from her doctor. She talked on her agonizing situation quite straight. Her mother (*GMA*) was divorced from *MA*'s biological father in her childhood *GMA* got remarried, and then she became abused constantly by stepfather Her real father who she had loved so much for his affectionateness passed away for drinking too much soon after the divorce Her stepfather did not extend the financial support to her brother who suffered from an intractable disease Distressed by his illness, he committed suicide *MA* got married in the teeth of her parental opposition, but later got divorced She had a difficulty to deal with *A* She felt herself maneuvered by *GMA* "I should better not exist in this world. I should better die anyway, shouldn't I?" said *A* to her. It was exactly what *MA* had in mind in her childhood. *MA* said that she was uneasy wondering if she herself repeated what *GMA* had done to her. "I have been so much depressed" *MA* added, "that I was hardly able to take care of my children. Even when I was rearing *A* when she was a baby, I felt she was so hard to deal with."

We did not conduct the actual counseling to *MA* on the first day because she showed no intention to change herself based on the self-trust demand, the driving force to receive counseling. For successful mental support to the case of depression it is vital to understand the supporters to the patient. So, we put the priority on the intervention to *GMA*.

Interview with *GMA*

We requested *GMA* to cooperate with us at all costs in our efforts for healing *MA* because warm support from those people around *A* is essential. Fortunately *GMA* understood our intention, and accepted to receive our counseling. According to her own life story, *GMA*, since her childhood, had been behaving independently without relying on her parents and showing any attitude like a spoilt child as she had observed the sufferings that her mother had experienced under the stepmother. *GMA* talked, "under some uneasiness, though, I always try doing my best not to give anything up telling myself that nobody but I can help myself." We started with

letting her identify that she would grow very much anxious to be abandoned if she changed her independent way of living. Once such a feeling was identified, she was asked to recollect the image of her being in the womb, and then to clarify the feeling she had when she had been in the womb and its meaning. After that, we tried to let her convert her negative life story to a positive self-image script. *GMA* invented an image script as if her mother had been raised and spoiled by her real mother. Based on the above work, she was asked to form up an image of her rebirth and her spoiled childhood. Tears formed in her eyes and she talked, "If I had been raised by the parents with such an image like this, I would have been able to make complaints and depend on others with an open mind." Finally she realized that she might have depended too much upon *MA*, her daughter, as a quid pro for having refused clinging to her parents. She made up her mind just to keep watching and going along with *MA*.

Stages of SAT therapy to *MA* (from the second to the fourth interview)

MA became aware of changes in her mother after our conducting SAT therapy to *GMA*. *MA* showed improvement in her commitment to *A* sitting close to her daughter. Also, she began having positive mind to change herself so that she might lead a happy life together with her children. In communication with *GMA*, her mother, she still had a difficulty to divulge what she really thought, and she made it her task to speak out what she felt overcoming the difficulty. Thus, we confirmed her motive for changing herself based on the self-trust demands. On the other hand, she was seized with the fear to be abandoned by *GMA* and thrown into a panic when she dared to tell what she really felt. To start our therapy with this feeling of hers we requested her to recollect the image of her fetal days, how she found out the womb and how she felt there. She said, "It is quite dark and cold. Navel string, winding itself around me so tightly, chokes me." We identified her appeal with such feelings as despair, misery and fear to be abandoned. Using the role-playing technique mixed with body contact we helped her try and picture *GMA* clinging to her mother and *GMA*'s father surviving until *GMA* had grown up to watch over the family. And then, we prompted *MA* to picture the image of her own rebirth, of her clinging to parents in childhood and of her growing-up peacefully in the family. "If I had been brought up like this, . . ." said *MA* and tears formed in her eyes. People tend to unconsciously take in the image of the dead and confuse it with their own personalities. Therefore, applying the technique of imaging the reunion with the dead in the empty chair work, we made her engage in a dialogue with her brother who had committed suicide taking his illness seriously to heart. We asked her, "How does your brother look like?" and she replied, "He

looks like worrying about me.” Then we said to her, “if there is anything you want to talk to him, you can talk it now.” She conveyed to him with tears in her eyes, “I’m so sorry. I should have been more affectionate to you and listened to you more closely, but . . .” We asked her to continue the dialogue with her brother with the empty chair technique for a while. We successfully established in her such self-image to be able to listen to her brother and to be affectionate to him. And then *MA* told us that her brother now looked like forgiving her and watching her over. Incidentally, *A* came to perceive that her task was to become a person that could properly communicate and behave when needed. Once she established the self-image as if she had grown up to achieve the task, communicate quite frankly with her brother and understood each other, she made the decision to convey to her mother how she felt. *MA* became more active in expressing her heart than before.

The stage of the mother’s self-change: The fifth interview

MA told us that *A*, who had not been intimate with her, came to stay at her side saying, “I love you so much, Mom.” After that, we confirmed improvement of *A*’s eyesight. Then we heard from *MA* that she was told by one of her friends that *A* was not an ordinary child. *MA* felt that she and *A* together were existentially negated. From early stages of the counseling, *MA* had shown an attitude not to just make complaints dependently to our attention but rather a positive attitude to overcome the difficulties by herself. She had held a strong motivation for changing herself. In other words, she wanted to be such a mother who might be sensitive to any changes in her child, and also she wanted to be always lively and relaxed. So here on this stage we conducted the counseling with the Retroactive Evolution Imagery Therapy (REIT).

We asked *MA* to describe to us the image of obstruction to her self-changing mind if any, its color and shape, and her physical response to it. She said, “It’s brown and distorted. It makes me feel oppressed and uncertain.” Having confirmed her physical response, we let her enter the image of the womb, and asked her how it looked like. Then sprang into her mind the image of cold and dark interior and also of far and solid uterine wall. For her the natural desirable image of the womb interior should have been bright, wide and warm. We asked her, “In order for you to get the desirable image of the womb interior, we like to suggest you to go back to the past. Somewhere in the old age, you may have a different image of the way of your living. Now, which age do you want to go back to and what kind of image do you want to have there?” Then she said, “I want to go back to the primitive ages where others and I around can be bathed in light from the sun and I want to

be a bacterium so that I may have an image of myself living comfortably and cheerfully.” Next, we encouraged her to evoke a bad image of womb interior and asked, “Which age are you in now and how do you feel?” Then she answered, “I’m in the early days of human history and I can see people fighting each other for survival because some of them are trying to lead the others. Those people of low social standing and the weak are very poor but all they can do is just to live in pain. These are the images I can see now.” “Is there anything common to the both ages, early days of human history in your image and the present days which you live in now?” “Well, it is the problem that no way can be found to escape the misery despite my doing best.” So, we once took her to the ancient age of bacterium and then took her back again to the early days of human beings. “Suppose you have been evolved as a descendent of that happy bacterium. Now what do you see in the early days of human history?” “Oh, this time all of us help each other and are better off with enough foodstuffs.” “Keeping it in your mind, please imagine further that your descendants have been evolved. Now can you find any changes in your ancestors, parents and yourself?” “Everybody looks relaxed. They are mild and affectionate.” With the image of such a new course of evolution she now had a new image of her own that she was able to easily find out with calmness the solution to difficulties. She started making a cool judgment. She even made a concrete action plan in the first place to change herself so that she might accept her children without being influenced by others. She said, “I’ll try to listen in my mind to my daughter to the end without jumping the gun. No matter how trifle it may be, I’ll listen and talk. I’ll try to understand from her view point what they will talk.” *MA* thus made up her mind to change herself though gradually to try to understand *A*, her daughter, with her own judgment howsoever strange *A* might look to others. Her resolution made her look so affectionate and spontaneous.

The stage of the recovery of child’s self-esteem

After a while, *A* talked to us, “Mom’s been changing.” But the relations with her brother was reported as an everyday frustration. So we conducted the counseling for her to solve the issue. *A* complained of her displeasure caused by her brother’s teasing her. So, we let her clarify what she really hoped. Using both methods of physical contact and affection signaling, we let her rehearse how to communicate to her brother exactly what she wanted to communicate.

Table 1 shows the changes in psychological characteristics of *A* and *MA*. These data show improvement of

visual acuity with improvement of psychological characteristics of *A* and *MA*.

Table 1. Change of psychological characteristics after intervention

Change of psychological characteristics (*A*)

	before intervention	After intervention I	After intervention II	Follow-up
Self repression	4	1	1	1
Interpersonal dependency	1	—	1	1
Self esteem	0	5	8	8
Perceived emotional support(from Mother)	0	6	9	9
SATIC	35	23	23	25

intervention I: initial counseling

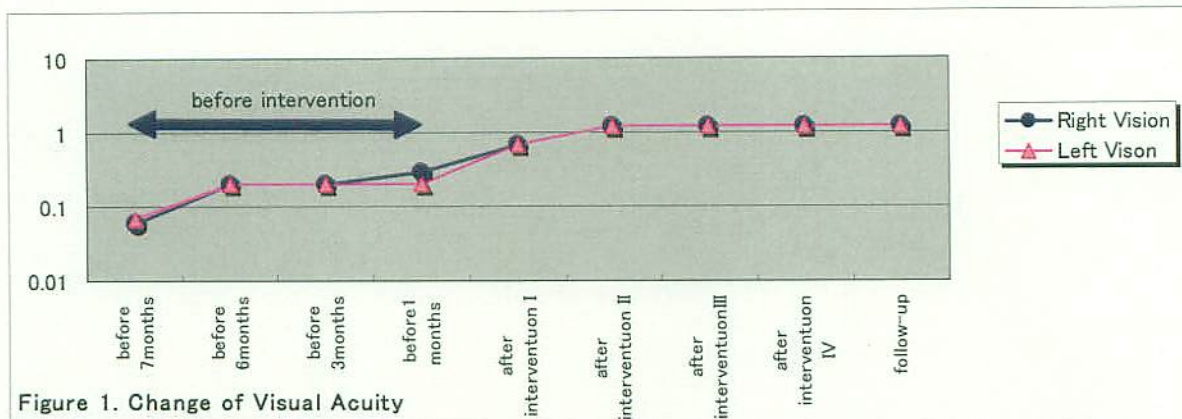
intervention II: 1st self-image script changing therapy for *A* and *MA*

Change of psychological characteristics (*MA*)

	before intervention	After intervention III	After intervention IV	Follow-up
Self repression	13	8	4	4
Interpersonal dependency	14	—	3	4
Self esteem	1	4	10	10
Perceived emotional support(from Family)	1	6	10	10
Perceived emotional support(from others)	9	—	10	—
Problem-solving behavior	9	15	15	—
SATI	70	60	40	—
SDS	60	—	42	40

intervention III: 2nd self-image script changing therapy for *MA*

intervention IV: after Retroactive Evolution Imagery Therapy (REIT) for *MA*



4. Discussion

In this case, the visual acuity of A improved with increased scores for self-esteem, perceived emotional support, and decreased STAIC. Generally observed are cases of symptom shift such as appearance of visual impairment after recovery and improvement of visual acuity. It is more necessary to have a viewpoint to expedite the solution of fundamental problem rather than to make efforts to remove symptoms.

Werring, Bullmore, Plant, and Ron (2004) found reduced activation in the visual cortices on the one hand, and increased activation in left inferior frontal lobe, left insula-claustrum, bilateral striatum, thalami, left limbic structures and left posterior cingulate gyrus, on the other, among PVD patients. Judging from the anatomical structure, the limbic system is believed to execute some kinds of high-order processing of the sensory information input from association areas (Barker and Barasi, 2000). Some of the major outputs from the limbic system are directed to the prefrontal area and hypothalamus, and the others to the cortical area which takes part in the planning of action including motional responses. It is said that the limbic system takes part particularly in

the responses to behavior representing emotional matters and signifying stimulus (Kawamura, 2000). Increased activation in the limbic system seems to support the result of its emotional reaction to the recognized stress. In our study (Higuchi, Munakata, & Hashimoto, 2004), children suffered from PVD showed a marked tendency toward having uneasiness. It leads us to suppose that the increased activation in the limbic system exercises an influence upon the high-order visual information processing system in the temporal visual pathway. When we conduct mental intervention to the client, we put emphasis on the formation of a positive self-image script of having been born warmly welcomed by the parents and family members. And all changes in and improvements of psychological characteristic, mental condition and physical symptom seen so far with the intervention of SAT therapy to PVD are assumed to be closely connected with normalization of cerebrophysiological functions. With psychological intervention, children suffered from PVD experienced increased sense of security, of self-value, and of emotional support. Also, they tended to experience less intensive negative cognitive process. They showed an improved mental condition, a recovery of physical functions, activation in the visual association area, and improved visual function.

The parents' interference experienced in childhood exerts a long-lasting influence upon how to receive and handle psychological stimulus even after subject child grows up and get older. Kawamura (2000) explains it using the concept of learning as basically 'the association of recollection and feeling', and also it is the sum total and integration of many associations. Assuming that the learning depends on interconnection of nerve fibers from hippocampus, amygdale, reward system and punishment system, he says that these neural interconnections in the wide domain are considered as the very complex. He emphasizes that the therapy is the change and transformation from the past learning to a new one. The therapy for PVD using SAT is also considered to accelerate 'relearning' which is similar to the concept of new learning advocated by Kawamura. In the therapeutic process for physical symptom appearing in child, says Murayama (1998), the 'growth model,' in which the patient grows up to an upper stage by recovering the illness, should be followed rather than the 'Bio-medical model.' The present authors like to propose PVD as 'the relearning model' through the experience of illness. The purpose of our therapy is to let the client not aim to grow one step up but rather learn from physical symptom, realize his/her own original demands and live his/her original self. In our therapy, the changes in the client's cognition and behavior are promoted from those with emotions of aversion system to those with emotions of reward system.

Image of strong fear that the client has is considered to be memorized hereditarily. The Retroactive Evolution Imagery Therapy (REIT) by Munakata (2006) treats such image as a life-threatening trauma which humans brought about in the process of life evolution. REIT helps the client go back to the past and form a peaceful safe image. It is known that man's ontogeny recapitulates the evolutionary process of life in the womb, that man inherits in himself the whole process of life evolution and further that all substances that existed in the universe before life evolution are contained in human body (Yamada, 1992). There is no definite ground to prove if those memories of evolutionary process are preserved in genetic level. In the afore-reported case accompanying mood disorder, however, we may suppose that REIT was effective for the transformation of the client's self-image because the client had a latent but strong sense of fear. We interpret the change in the client's self-image as follows; the client went back through her own evolutionary process to the birth of the earth or even of the universe, where she obtained the sense of her being a part of the cosmos and recognized the people around her as intimate fellows with whom she was able to exchange mutual help and support, and thus finally her self-image was improved.

Munakata (2003) indicates that in the past unfinished stories which cause stress hidden under illness and disorder lurk three unsolved problems of soul over love related to previous generations, society, parents, one's self, nature, the absolute and others. These three problems are expressed in the following words; "I was not loved when I should have been loved," "I was not able to love myself when I should have trusted and protected myself," and "I was not able to love my valued one when I should have done so." He emphasizes that for the complete recovery of the illness and the disorder it is crucial to create the image that may solve the aforementioned problems. In the case of medical treatment for PVD as reported above also, it is not enough to pay our attention only to the patient child because there are latent problems including the basic demands in the minds of the parents and their previous generations which have been left dissatisfied. Therefore, we have been conducting the therapy for PVD paying our attention to the fact that there are such latent problems behind the symptom appearing in the patient child (Higuchi, 2006). In the above reported case which we intervened, the experiences to picture the image that the three basic demands have been fulfilled neither too much nor too little and the new images and memories obtained from those experiences through relearning are considered to have psychologically healed all the individuals concerned and promoted their physical stabilization. Particularly notable were the changes seen not only in the client child herself but also in her parents by formation of the self-image of the wished-for birth. In order to let child maintain positive self-image, the mental intervention to

the parents is indispensable because child is easily affected by the people around. So, by letting the parents change their self-image scripts we had them fix their wishful self-images as if they had been raised with the unconditional love by their preceding generations. When the parents themselves get changed to have the solid sense of being loved and the self-image script of being raised with unconditional love, they come to realize their 'natural selves' and accordingly they can restructure their own characteristic way of living for they are now well aware of their demands and goals. Then, it was thought that the parents through having solved their own problems showed the innate affection to their child and that the child's recovery was influenced by the recognition that her existence was confirmed as it really stood. It also was thought that small changes in cognition and behavior of both parents and child, together with changes in their family system, produced a favorable cycle the effects of which remained in the long run.

Thus in the treatment of PVD also, we believe it crucial to watch if the parents can honestly show their love to their children and fondly watch over them. It is effective to counsel the patient's parents on their own fundamental problems although it is not quite as direct (Higuchi, 2006). When we treat for a child's illness, it seems necessary for both the child and his/her parents to note the following steps: (1) Since the physically appeared symptoms are the externalized emotional turmoil which the patient avoid touching, we have to call upon them to become aware of some hidden problems yet to be solved. The first step for the solution must be not to get rid of something bad but to reveal the internal meaning of the symptoms and those problems yet to be solved. The process is believed necessary in which the patient clarifies what kind of demands he/she has and how he/she deals them. (2) The patient must grasp the externalized problems first, then internalize them as their own problems. The externalized symptoms suggest the existence of emotional turmoil, but it is not recognized. Physical symptoms are considered as defense reaction to bring mental balance with the recognition of something different from the self. To realize the meaning and problem of the symptoms, the process to temporally internalize them becomes necessary so that the symptoms may be recognized as the patient's own problem. Thus, we thought it necessary to clarify the problem after grasping the emotion behind the externalized symptoms and internalizing it by utilizing physical senses and non-linguistic approaches. (3) The third step is to fix both verbal and non- verbal image scripts necessary for the solution of fundamental problems. With the aid of non- verbal approaches such as affection signaling and touching, and also with the client's inspiration, a new image is to be formed to solve the past unsolved negative image. Besides, the client's own positive attitude is required.

Bibliography

- Abe, K. (1987). Treatment of psychogenic vision impairment in children. *Rinsho Seishin Igaku*, 16(10): 1443-1448.
- Barker, R.A., and Barasi, S. (2000). Neuroscience at a glance. *Medical Science International*, 96-97.
- Bass, C., and Benjamin, S. (1993). The management of chronic somatization. *British Journal of Psychiatry* 162: 472-480.
- Higuchi, N., Munakata, T., Hashimoto, S., and Higuchi, H. (2004). Psychological characteristics of psychogenic visual disturbance. *Journal of the Eye*, 21, 999-1004.
- Higuchi, N., Munakata, T., and Hashimoto, S. (2005). The process of healing in psychogenic visual disturbance applying structured association technique imagery therapy for children and their parents: the viewpoint of the changing self-image script within children and their parents. *Journal of Health counseling*, 11, 51-62.
- Higuchi, N. (2006). Guideline for ophthalmologist: Psychogenic Visual Disturbance. *Nippon no Ganka*, 77, 665-666.
- Kawamura, N. (2000). Self healing and psychosomatic medicine. In Tomonobu Kouno, Masayuki Yamaoka, Toshio Ishikawa, and Tomoyasu Ichijyou (Eds), *Psychosomatic medicine up-to-date*, 94-100. Miwa Syoten, Tokyo.
- MacLean, P.D. (1982). *Primate Brain Evolution*. In E. Armstrong & D. Falk (eds), *Method and Concepts*, 291-317. Plenum Press, NY.
- Markus, H. (1977). Self-schemata and processing information about the self. *Journal of Personality and social Psychology*, 35, 63-7.
- Munakata, T. (1996). Health and illness viewed from latest behavioral science, *Medical friend*.
- Munakata, T. (2006). Image script. *Journal of Japanese Health Behavior Science* 21, 245-254.

- Munakata, T. (2006). *Structured Association Technique Therapy*. Kaneko Shobou, Tokyo.
- Munakata, T. (2005). The therapy of love to save family from cancer and depression. *Syufu to seikatsusya*.
- Munakata, T. (2006). *SOM seminar*. Academy of Health Counseling.
- Munakata, T. (2003). Promoting People's Well-Being with Structured Association Technique. *Journal of Health Counseling*, 9, 19-28.
- Murayama, T. (1998). Pediatric Psychosomatics. *Encyclopedia of clinical psychiatry 11 mental disorder in adolescence*, 165-172. Nakayama-syoten, Tokyo.
- Okamoto, M., Watanabe, M., Watanabe, H. et al (1984). Psychogenic eye disorders in adolescence. *Ganka* 26 : 147-152.
- Okuyama, N., Kawakatsu, S., Wada, T., Komatani, A., et al (2002). Occipital hypoperfusion in a patient with psychogenic visual disturbance. *Psychiatry Research Neuroimaging* 114: 163-168
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton New Jersey: Princeton University Press.
- Watanabe, H. (1998). Mother-infant bonding disorders. *Encyclopedia of clinical psychiatry 11 mental disorder in adolescence*. Nakayama syoten: Tokyo.
- Spielberger, C.D. (1966). Theory and research on anxiety. In C.D. Spielberger (Ed.) *Anxiety and behavior*. New York: Academic Press.
- Tanaka, T. (1998) . Perspectives of Stress-From a biological standpoint. *Shinryonaika* 2: 93-99
- Van den Bergh BR, Mennes M, Oosterlaan J, Stevens V, Stiers P, Marcoen A and Lagae L. (2005a). High antenatal maternal anxiety is related to impulsivity during performance of cognitive tasks in 14- and 15-year-olds. *Neurosci. Biobehav. Rev.* 29(2): 259-69

- Van den Bergh BR, Mulder EJ, Mennes M, and Glover V (2005b). Antenatal maternal anxiety and stress and the neurobehavioural development of the fetus and child: links and possible mechanisms. *A review. Neurosci.Biobehav. Rev.* 29(2): 237-58.
- Werring, D.J., Weston, L., Bullmore, E.T., Plant, G.T., and Ron, M.A. (2004). Functional magnetic resonance imaging of the cerebral response to visual stimulation in medically unexplained visual loss. *Psychological Medicine*, 34, 583-589.
- Yamada, M. (1992). Pain of Human. *Fujinsya*, 17-18.
- Yokoyama, H. (1999). Psychogenic visual disturbance. *Ophthalmology in Japan*, 70(10), 1227-1231.
- Yoshihara, K., and Munakata, T. (1997). Development of psychological health-related scales for children. *The Japan Association of Mental Health Sociology Annual Report*, 7, 29-35.
- Zung, W.W.K. (1965). A self-rating depression scale. *Archives of General Psychiatry*, 12, 63-70.