



DECREASING TANTRUM OF CHILD WITH AUTISM USING BRAIN GYM

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Abstract:

Temper tantrum is uncontrolled emotional expression of child such as angeriness. Temper Tantrum is excessive emotions as result of displeasing condition felt by a child due to unfulfilled desire or due to the child cannot express the desire. Tantrum may be: crying, bite, hitting, kicking, and screaming. Tantrum frequently happens in child with autism. One solution to solve this condition is to use Brain Gym. Brain Gym is a set of simple basic crawls functioning to stimulate brain in easing learning activity. A set of activities are quick, attractive and increasing spirit when doing activities. Crawl of Brain Gym is made to stimulate left and right brains (laterality dimension; stimulate systems associated with feeling/emotion, middle brain (limbic) and big brain (concentration dimension)).

Keywords: tantrum, child with autism, brain gym

1. Introduction

Autism is abnormality of development in a child consisting of aspects of communication, interaction and behavior. Some characteristics of child with autism usually seen are less responding to others, difficult to socialize with others, minimum eye contact, difficult to communicate, difficult in addressing needs, repetitive activities and aloof. Symptoms of autism have appeared before a child reaches age of three years old. Cause of autism has not been found certainly, but tentative assessment indicated that cause of autism is neurobiological abnormality of central nerve structure (brain). Other causes of autism are use of excessive chemicals, heavy metal poisoning, viruses

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(toxoplasma, cytomegalo, rubela and herpes) or fungi (candida) found in mother when being pregnant.

Term autism is actually derived from Greek, namely word *autos* having meaning of self and *ism* meaning flow. Autism was introduced since 1943 by Leo Kanner. Autism behavior is classified into two types, excessive behavior and deficit behavior. Excessive behavior is hyperactive and tantrum such as screaming, kickback, bite, clawing. Deficit behavior is signed by abnormality of speaking, behavior not complying with rule (Handojo, 2004: 13). Child with autism has specific neurotransmitter increasing affecting processes in brain. That is why child with autism cannot control emotion, cannot concentrate and his/her attention is easy to change. Child with autism usually communicates disability by showing Temper Tantrum behavior.

Based on experience of a teacher in teaching child with autism, one of problems associated with process of Learning-Teaching Activities indicated that child was tantrum suddenly. Tantrum is a form of behavior, which is not planned, angry expression, even followed by explosive physical or verbal actions. The child usually will express Temper Tantrum by crying, screaming, kicking, rolling on the floor or running around.

Tantrum happening in process of Learning-Teaching Activities will certainly disrupt the Learning-Teaching Activities alone. Materials programmed for child will not be absorbed well by child so that results of Learning-Teaching Activities are not optimal.

Problem of tantrum in child with autism must immediately be solved and coped with in order to absorb materials of learning well and emotion of child is controlled well. One of solutions to solve tantrum is to use *Brain Gym*. Method of *Brain Gym* is to decrease or minimize tantrum behavior in child with autism. *Brain Gym* is a set of trainings based on simple body crawls. (<http://rahasiaotak.com>) Whereas, journals by Tauchid and Noor (2009:3) define *Brain Gym* as name of a set of simple crawls to ease learning activities.

Paul Dennison (2000), an educator from US, developed approach named Educational Kinesiology (Edu-K) aiming at training brain function relating to stage of kinesiology (Edu-K) aiming at training brain functions relating to certain stage of development or increasing learning ability of child.

2. Discussion

2.1 Tantrum

According to Mirza Maulana (2007), tantrum is a condition where a child has high desire for a thing but facing situation making him/her not obtain the desire in

appropriate time. According to Agung Chandra (2014), Tantrum is result of high energy and insufficient ability to express desire or need "in words". Other opinion, according to Handojo (2004), suggested that Temper Tantrum is explosion of angriness happening suddenly, without planning. In children, it is not only to find attention from adults only. When experiencing tantrum, the children tend to release all forms of angriness. For example, crying hard, screaming, shouting, hitting, bite, pinch, and others. Temper Tantrum is emotional expression or response to an internal or external individual stimulus (Dariyo, 2007: 192).

Tantrum frequently meant as angry behavior in preschool children. They express their angriness by lying on the floor, kicking, shouting, and sometimes holding their breath. Natural tantrum happens in children who have not been able to use words to express their frustration feeling, because their desire is not fulfilled. Temper Tantrum is an explosion of angriness in children when the children show their independence in negative attitude. Widasari Saraswati (2012) found that Temper Tantrum is explosion of angriness suddenly which is uncontrolled. In general, Temper Tantrum is conducted by children from 2 years old to 3 years old and would start to decrease when the children are four years old. Tantrum is action when a child cannot control or cannot calm down him/herself, no fact that must be accepted when the child does not get what he/she wants. Ignore your child, and when he/she has been calm, repeat your interaction normally as no problem.

Alila Pramiyanti (2008: 75) suggested that Temper Tantrum is explosion of emotion which is excessive and uncontrolled. It appeared in age of 15 months to 6 years old. Temper Tantrum happens in active child with excessive energies. Whereas others suggested that Temper Tantrum is one of abnormalities in habits of child, which usually appear in forms of screaming, shouting and crying hard being expression of emotion unpleasantness, or excessive emotion also due to effects of other people and experience (Oetomo, 1985: 13).

Tantrum is model of development most frequently conducted by child at 3-5 years old. What happens when a child is too enthusiastic to do a thing while her/his physic has not been able to do it well as to make him/her frustrate, or the child wants a thing rejected by his/her parents, or the child is oppressed by his/her parents to show attitude he/she likes (Yuniar, 2011: 10). India Silvia (2011) suggested that tantrum or Temper Tantrum is high emotion appearing on uncontrolled aggressive behavior. Shown behavior may be whining, crying, rolling, damaging or self-deranging activities. Tantrum frequently appears on children from 15 months old to 6 years old. Temper Tantrum happens at active children with excessive energy (Maimun Hasan, 2009: 185). Thus, it can be concluded that Temper Tantrum is uncontrollable individual emotional expression such as explosion of angriness also being positive and negative responses to

internal and external stimulus of individual so that Temper Tantrum is excessive emotion exploding as result of displeasing condition felt by children due to their desire is unfulfilled. Tantrum is explosion of emotion usually associated with children or parents in emotional difficulty commonly signed by stubborn attitude, crying, screaming, shouting, resistive, grumbling angrily, resisting against efforts to make calm and, in some cases, violence.

Period of tantrum may be from 10 to 15 minutes, depending on current energy of child. Although nearly all children with autism are ever tantrum, this behavior remains to have naturalness limit. Too intense tantrum/often and more than 15 minutes, has exceeded limit. If it happens, we need to find solution immediately. Tantrum is one typical characteristic of children with autism, but without good response, escalation of tantrum cannot only increase, but also it is worried that tantrum may develop to be habit affecting character/characteristic of children. Finally, tantrum may be brought to adult. Children also feel difficult to control their emotion or have impact on learning activities in school. In children with autism, behavior of Temper Tantrum may be more aggressive such as kicking hitting, running, pulling their hairs, throwing or dropping things surrounding, also biting their organ. Temper Tantrum in children with autism happens due to damage of brain making children unable to control their emotion and cannot communicate their emotion truly.

Causal factors triggering behavior of Temper Tantrum in children with autism, according to Bambang Sumantri (2012) are:

1. Change in ecology

Small changes are found by normal children as usual but found by children with autism as problematic.

2. Work stress

Children with autism can also show behavior of Temper Tantrum if they have felt frustrated. This situation appears when children face work stress, if jobs given are too heavy making children with autism unable to solve these.

3. Improper diet

Glutein and casein are foods which must be avoided by children with autism, because these will disrupt digestive systems and brain function is disrupted as to affect emotion of children with autism and symptoms of Temper Tantrum behavior may appear anytime.

Thus, it can be concluded that some factors causing tantrum in children are unfulfilled desire of children in getting a thing, when unsuccessful in fulfilling their desire, so that children may do some angry expressions; moreover, Temper Tantrum can be caused by inability to express their own desire.

2.2 Autism

A. Meaning of Autism

Word autism is not only foreign word as in tens of years when this word was widely heard. Now, nearly all people ever hear word autism and they have global information on intention contained in the word autism.

Many people ever hear word children with autism due to many seminars, mass media, books, discussion forum or talk-show to discuss autism. However, people who really understand autism in details are not as same as people who ever hear this word and have little imagination on autism.

According to Cristoper Sunu (2012), autism is condition of child experiencing abnormality of brain function development covering social and affective aspects, verbal and non-verbal communications, imagination, flexibility, interest, cognition and attention. According to Leo Kanner (Handojo, 2004), autism is complex and serious abnormality of development of child, already appearing before age of three years old and making him/her unable to communicate, unable to express his/her feeling/desire, so that his/her behavior and relation to others becomes abnormal.

According to Rudy Sutadi (2003), autism is abnormality of serious neurobiological development and wide abnormality of nerve system development in one experienced since birth or when being under five years old. It also means that autism is complex abnormality of nerve development signed by difficulty to interact.

Based on some definitions on autism, it can confirm that definition of autism is a type of complex development abnormality covering abnormalities of social interaction, communication pattern, interest and crawls, which are unlimited/repetitive.

B. Diagnosis

Early detection of autism symptoms in children is very important to do. The early detection can be continued by very appropriate intervention action to realize optimal future for children. There are some methods usable to detect autism symptoms early. The early detection should be conducted by their parents alone or specialist.

According to Mifzal (2013: 12), early detection for autism in children by parents can be conducted by observing daily behavior of children in details then comparing a number of symptoms or general characteristics of children to autism abnormality; if similarity is found between behavior of children and some general characteristics of children with autism. Parents must be aware of and immediate consult to professional specialist in child development and deepening autism field.

Although early detection can be conducted by parents using observation, most appropriate and ideal detection is to have children examined to some teams of physicians and professional practitioners such as neurologist, psychologist,

pediatrician, language therapist, teacher, and other professionals with autism field. It is due to characteristics of children with autism are various so that it is necessary for specialists to diagnose.

Appropriate diagnosis for autism early helps minimize autism symptoms in order to not develop worse. Detection of autism symptoms is not easy. Parents and physicians need sharp observation to examine whether children suffer from autism or not (Tani Meranti, 2013: 4).

According to Mifzal (2013: 16), role of parents, other members of family, teacher, educator and people nearest to children are very important in process of diagnosis for autism. People nearest to children play very vital role in giving data on daily condition of children in details, required to enforce diagnosis for autism.

There are some methods usable to enforce diagnosis for autism in children, some of them are:

1. M-CHAT method
2. ICD-10 1993 diagnosis manual
3. Diagnosis for autism based on DSM-IV
4. Other support examinations such as CARSM CHAT, *The Autism Screening Questionnaire*

3. Brain Gym Method

Paul Dennison (2005), an educator coming from US, developed a method named Edu-K or Educational Kinesiology to train brain function relating to stage of Edu-K or Educational Kinesiology aiming at training brain function relating to stage of specific development or increasing children's ability to learn.

Education comes from Latin word *educare* meaning pull out. Kinesiology is adapted from Greek that means crawl and it is a human body exercise lesson Edu-K is a system to empower all people who learn, without age limit using crawl activities to pull out all of one's potentials. *Brain Gym* is renovation of crawl pattern to help optimize child's ability to learn increasing energy flow (vitality) to brain. *Brain Gym* activities alone are safe, simple and natural.

Brain Gym activities aim at integrating each part of brain to open previously closed or inhibited part of brain. We can imagine what happens if each part of brain develops individually," harmony certainly will not happen. Disharmony of brain work will also make children experience various inhibitions such as tantrum or angriness, especially in learning process in school.

Brain Gym method is assumed to minimize tantrum behavior when existing in classroom if this Brain Gym is conducted continuously, consistently and intensively.

Simple and pleasant *Brain Gym* crawl is felt more suitable and near to world of children identical to simplicity, plainness, and pleasantness. One this *Brain Gym*'s goals is to increase one's attention interval as to ease process of one's learning.

Freeman (www.iamthechild.com) stated that *Brain Gym* is only useful for children with special need or difficulty to learn. *Brain Gym* crawl can be tried in each child requiring brainwork optimization. Especially early age learning to know environment through senses and what he/she learns will stimulate increasing of nerve quantity. *Brain Gym* crawl can be applied to child at any ages, even since baby. However, crawl remains to adapt to motor development of child in specific age. Some researches, according to Henry, found that routine exercise will stimulate brain development.

Brain Gym method being a method through 26 basic crawls to stimulate and balance all parts of brain, left-right brains, lower-upper and front-back brains. Crawls have been classified according to brain area. "This method has been developed for more than 25 years emphasizing on learning. Many children with learning abnormality and dyslexia can be solved. Henry suggested that *Brain Gym* method is not useful for children with special need or difficulty to learn. *Brain Gym* crawl can be applied to each child requiring brainwork optimization. Especially children with early age who are learning to know environment through their senses and what they learn will stimulate increasing of nerve quantity." *Brain Gym* crawl can be applied to children at any ages, even since baby. However, crawl remains to adapt to motor development of children at specific age.

Generally, *Brain Gym* is useful to increase concentration and sharpen memory. *Brain Gym* is very useful for children such as to help them with learning abnormality and mediate interpretation of all therapies conducted by children with special need. *Brain Gym* is a set of pleasant simple crawls used to increase ability to learn by using all *Brain Gym* crawls. *Brain Gym* crawls make all kinds of learning become easier, especially very useful for academic competency.

Early steps in *Brain Gym* consist of PACE (*Positive, Active, Clear and Energetic*). Process of PACE consists of four simple activities, these are water (for age under two years old, water is replaced by mother's milk), brain button, homolateral/cross crawl and relax hook. Special for relax hook crawl is to integrate ends of finger for one minute and keep silence for a moment, child under five years old needs help. Positive is to do hook ups, hands are crossed with thumb under lower part, then rotated while legs are crossed. Active, conducted by cross crawl. The way is to move right hand with left leg, vice versa. Clear, clearance needs massage on brain button. Area massaged is point of two fingers under *clavikula* with one hand and other hand rubs navel area. Energetic, energetic attitude needs supports such as fresh water. It is useful to distribute oxygen to brain.

Brain Gym will give the following results: emotional stress decreases and thought is clearer. Relationship between human and situation of learning/working is more relax and pleasant. Ability to speak and memorize increases. One becomes higher enthusiasm, creative and efficient. One feels healthier due to stress decreases. Learning achievement and work increase.

Some *Brain Gym* crawls, according to Siti Irene Astuti (2010), consist of some crawls, where development, understanding of brain and body widen involving three brain dimensions as follows: laterality, focus, and concentration.

3.1 Laterality

It is associated with left and right brain dimensions relating to ability to communicate. Middle line crossing crawl can integrate left part brain (rational thought) and right part brain (feeling) so that one can be more positive, able to hear using both ears, see using both eyes, write and move flexibly. If this part is unbalanced, one will have trouble to distinguish left and right, stiff crawl, bad writing, difficult to read and write.

3.2 Focus

It is associated with front-back dimensions involving brain trunk relating to ability to concentrate, understand and know. Crawl by stretching muscles in nape and along feet can facilitate energy from back part brain to flow into front part where there is ability to self-express. If this part is unbalanced, nape muscle and shoulder are tense, less enthusiasm to learn, quickly to confuse, difficult to understand and less able to self-express.

3.3 Concentration

It is associated with upper-lower dimensions involving middle brain relating to ability to regulate and organize anything. Certain crawl can increase energy to communicate lower part brain (emotional information) with big brain (thinking abstractly). If this part is unbalanced, one will have trouble to concentrate poor self-confidence, coward ignoring feeling and difficult to do jump crawl.

According to Tri Gunadi (2012), some usable kinds of *Brain Gym* crawls are as follows:

1. Brain button crawl: massage two points/hollow under clavicle, other hand is put on navel area.
2. Cross crawl: lifting right knee and touch using left hand, do it interchanging.
3. Earth button: Put two fingers under lip while putting other hand under navel in position of fingers facing below.

4. Owl crawl: Massage left should muscle using right hand. Move head slowly crossing midline, to left, to right, in static chin position height.
5. Prepare: Open feet, direct the right foot to right and left foot to remain straight to front. Breath straightening head in front, bend the right knee followed by breathing while diverting head into right direction. Repeat it for left foot.
6. Space button: Two fingers of hand under nose and other hand in end of tail. Breath and aspirate breathe well.
7. Earth button: Put two fingers of hand in middle chin and other hand in navel area pointing to below. Follow eye crawl from lower to upper in one line.
8. Energetic evaporation: Opening mouth like one evaporates and message in jaw joints.
9. Hearing: This crawl is made by massaging ear leaves from upper end to below until along ear concave up to ear lobe.
10. Feet waves: Put right ankle on left foot and do massaging on muscle with tense pain.

Brain Gym crawl can be applied to children with autism or other children with special need, taught crawl can be started from simple crawl, children with autism who cannot imitate *Brain Gym* crawl may be helped by teacher holding part of their bodies to do *Brain Gym*. Crawl should be followed by full confidence to gain optimal result. *Brain Gym* crawl must also be done continuously in order that children can memorize the *Brain Gym* crawl correctly.

Brain Gym is found as one best teaching technique, so that many benefits can be gained in the own *Brain Gym*. Benefits of given *Brain Gym* are: to enable learning and working without stress, it can be conducted in short time (less than 5 minutes), not requiring materials or special place, usable in all situation of learning/working in daily life, increasing self-confidence, showing effective result soon in solving one's inhibition and stress to learn, making one autonomous in learning and activating all potentials and skills belonging to someone.

Brain Gym should be conducted in cheerful condition so that it will create relax situation, also it is good to be conducted in early process of learning, especially if followed by cheerful and glad song or music. *Brain Gym* can also be conducted to make pupils' physic sand thought fresh after facing process of learning requiring high concentration resulting in tiredness in brain. *Brain Gym* has goal to make pupils play and exercise that can help increase their capacity of brain. Crawl in *Brain Gym* can be conducted easily by everyone, children and parents, with directly seen effect. In Educational Kinesiology, pupils are highly recommended to crawl suitable for their desire because crawl can explore capacity of children' brain.

Brain Gym has been used by teachers and therapists in a program where its goal is to help children facing difficulty in development of learning. In order that *Brain Gym* can be applied to children with special need, *Brain Gym* is also useful for developing children with autism physically and psychically, especially can be used to minimize tantrum rate in children with autism.

4. Conclusions

Brain Gym is a set of simple crawls which are pleasant and can be used to increase their ability to learn using all crawls. *Brain Gym* makes all types of learning easier, especially it is very useful for academic competency. *Brain Gym* crawls are a set of healthy natural body crawls to deal with stress and challenge in oneself and others.

Brain Gym can be given to children with autism experiencing tantrum, with some *Brain Gym* crawls conducted to stimulate children' physic and psychic well. *Brain Gym* should be conducted in pleasant condition for children with autism, done without coercion and done in relax situation.

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