The Study of Behaviors and Factors Affecting Children with Autism

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Abstract. The purpose of this study was to investigate behaviors and factors that affect children with autism whom received the services from The Special Education NongKhai Center (Thailand). There are three types of instruments used in this investigation; questionnaire, observation form, and interview form. Interviewing the target parents of autistic children and observing their children’s behaviors after receiving the services were the process of data collection. The statistics for data analysis were percentage, standard deviation, and content analysis.

The investigation on perspectives of 283 parents of autistic children from 5 provinces in North-Eastern Region of Thailand revealed that the first 3 highest external factors affecting their children’s developmental enhancements and learning supports were 1) acceptance of parents and caretakers 2) relationship between the caretakers and their autistic children 3) acceptance and assist of siblings (x = 4.26, 4.02 and 3.75 respectively) while the first 3 highest averages of internal factors were 1) symptoms and levels of autism 2) abnormal electroencephalogram (EEG) 3) frequency of illness of autistic children after birth (x = 3.64, 3.41 and 3.14 respectively). Besides that, the interviews with 12 parents of children with autism in The Special Education NongKhai Center (Thailand) as purposive samples showed that the factors from fathers and mothers; age, education levels, incomes, practice hours, knowledge of autistic disorder, and adaptation, affected their children’s developmental enhancements and learning supports. Most of the mothers were not only easier to adapt and to accept for their children’s disorder, they also more opened their minds for the treatments than the fathers. Moreover, the mothers expected that their children would be able to stand with others in the society or to study in general schools. The interviews also identified the internal factors as premature birth or postmature birth, receiving some substances or some drugs during the mother’s pregnancy, and complicacy during the mother’s pregnancy. According to the observations of 12 purposive samples, 8 boys and 4 girls aged between 5-15 years in The Special Education NongKhai Center (Thailand), the researcher could distinguish the symptoms and behaviors of autistic children into 3 groups; 1. High levels of critical symptom and intrusive behavior (33.33%) 2. Medium levels of critical symptom and intrusive behavior (41.66%) 3. Low levels of critical symptom and intrusive behavior (25%).

Keywords: Autistic Children, Parent of Children with Autism, The Special Education NongKhai Center (Thailand)

1. Introduction

Limitation of understanding and knowledge of autistic disorder in Thai society has impacted to several assisting functions for autistic children such as an acceptance of their parents and families, behavioral modification procedures, consulting services, and medical services. Currently, autistic children in Thailand are more perceived. Research and development in autistic children are focused increasingly [1]. In the United States, it found approximately 500,000-1,500,000 people were diagnosed with autism. The autistic disorders were considered as the one of the most developmental disorders found extensively [2].

The Special Education NongKhai Center (Thailand) has used Montessori Education[3] as an educational approach to develop special children. Montessori Education is characterized by an emphasis on
independence, respect for a child’s requirement of learning, and free activities within a prepared environment. The functions of the environment and the learning materials are to allow the child to develop independence in all areas according to his or her inner psychological directives. The Special Education NongKhai Center (Thailand) also used “Sensory and Movement or Play Way Method” and TEACCH (Treatment and Education of Autistic and related Communication handicapped CHildren) as teaching styles. The TEACCH approach was developed by Dr. Eric Schopler. This approach focuses on the systematic teaching methods, organizing the physical environment, developing schedules and work systems, making expectations clear and explicit, and using more visual materials than audio materials[4].

The study of developmental enhancements and learning supports for the autistic children of the parents from small communities of NongKhai (Thailand) should provide some useful information to contribute the methods of development and support for the autistic children increasingly.

2. Objectives
   - To observe the behaviors affecting the autistic children whom received the services from The Special Education NongKhai Center (Thailand).
   - To identify the factors affecting the autistic children whom received the services from The Special Education NongKhai Center (Thailand).

3. Research
   Questionnaire, interviews with the target parents, and observations of the autistic children’s behaviors who received the services from The Special Education NongKhai Center (Thailand) were used in this study.

4. Data collection
   Participants were 283 parents of autistic children from The Special Education Centers in five provinces in Northeast of Thailand. Questionnaires were used to ask the parents about the factors involved the developmental enhancements and learning supports for their autistic children. 12 parents of children with autism in The Special Education NongKhai Center (Thailand) were interviewed as purposive samples. 12 children with autism in The Special Education NongKhai Center (Thailand) were purposive samples in observations.

5. Results
   This study was divided into 3 parts:

5.1. Factors involved the developmental enhancements and learning supports for the autistic children.
   The study focused on external factors and internal factors.

   The external factors involved the developmental enhancements and learning supports for the autistic children were based on acceptance of parents and caretakers, basic knowledge of autism disorders of parents and caretakers, practice hours, acceptance of intimates, relationship between the caretakers and their autistic children, home facilities, acceptance and assist of siblings, and acceptance of neighbors. Statistical results from this study were showed in Table 1.

   Table 1: The external factors involved the developmental enhancements and learning supports for the autistic children.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>The acceptance of parents and caretakers</td>
<td>4.26</td>
<td>0.86</td>
<td>1</td>
</tr>
<tr>
<td>The basic knowledge of autism disorders of parents and caretakers</td>
<td>3.51</td>
<td>0.94</td>
<td>7</td>
</tr>
<tr>
<td>Practice hours</td>
<td>3.66</td>
<td>1.11</td>
<td>4</td>
</tr>
<tr>
<td>Acceptance of intimates</td>
<td>3.62</td>
<td>1.01</td>
<td>5</td>
</tr>
<tr>
<td>The relationship between the caretakers and their autistic children</td>
<td>4.02</td>
<td>0.95</td>
<td>2</td>
</tr>
<tr>
<td>The acceptance and assist of siblings</td>
<td>3.75</td>
<td>0.97</td>
<td>3</td>
</tr>
</tbody>
</table>
According to Table 1, the results of the external factors involved the developmental enhancements and learning supports for the autistic children reported that the first 3 highest averages were 1) the acceptance of parents and caretakers 2) the relationship between the caretakers and their autistic children 3) the acceptance and assist of siblings (\(\bar{x} = 4.26, 4.02\) and 3.75 respectively). The lowest average was the basic knowledge of autism disorders of parents and caretakers (\(\bar{x} = 3.51\)). The averages of all factors were at the high level (\(\bar{x} = 4.26 – 3.51\)).

The internal factors involved the developmental enhancements and learning supports for the autistic children were based on postmature birth, premature birth, birth asphyxia, receiving some medicines during the mother’s pregnancy, German measles, receiving some addictive substances such as caffeine, alcohol, and nicotine during the mother’s pregnancy, frequency of illness of autistic children after birth, symptoms and levels of autism, abnormal electroencephalogram (EEG), and genetic disorders.

Table 2: The internal factors involved the developmental enhancements and learning supports for the autistic children.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>The autistic children were based on postmature birth</td>
<td>2.80</td>
<td>1.34</td>
<td>7</td>
</tr>
<tr>
<td>Premature birth</td>
<td>2.74</td>
<td>1.29</td>
<td>8</td>
</tr>
<tr>
<td>Birth asphyxia</td>
<td>2.84</td>
<td>1.56</td>
<td>6</td>
</tr>
<tr>
<td>Receiving some medicines during the mother’s pregnancy</td>
<td>3.02</td>
<td>1.49</td>
<td>4</td>
</tr>
<tr>
<td>German measles</td>
<td>2.87</td>
<td>1.63</td>
<td>5</td>
</tr>
<tr>
<td>Receiving some addictive substances such as caffeine, alcohol, and nicotine during the mother’s pregnancy,</td>
<td>2.84</td>
<td>1.62</td>
<td>6</td>
</tr>
<tr>
<td>Frequency of illness of autistic children after birth</td>
<td>3.14</td>
<td>1.19</td>
<td>3</td>
</tr>
<tr>
<td>Symptoms and levels of autism</td>
<td>3.64</td>
<td>1.08</td>
<td>1</td>
</tr>
<tr>
<td>Abnormal electroencephalogram (EEG)</td>
<td>3.41</td>
<td>1.28</td>
<td>2</td>
</tr>
<tr>
<td>Genetic disorders</td>
<td>2.80</td>
<td>1.39</td>
<td>7</td>
</tr>
<tr>
<td>Sum</td>
<td>3.01</td>
<td>1.38</td>
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</tbody>
</table>

According to Table 2, the results of the internal factors involved the developmental enhancements and learning supports for the autistic children reported that the first 3 highest averages were 1) the symptoms and levels of autism 2) the abnormal electroencephalogram (EEG) 3) the frequency of illness of autistic children after birth (\(\bar{x} = 3.64, 3.41\) and 3.14 respectively). The lowest average was the premature birth (\(\bar{x} = 2.74\)).

5.2. The results of interviews with the parents about the factors involved the developmental enhancements and learning supports for their autistic children.

The Special Education NongKhai Center (Thailand) has used TEACCH (Treatment and Education of Autistic and related Communication handicapped Children) as teaching methods. The TEACCH approach was developed by Dr. Eric Schopler[3]. It focuses on the systematic teaching methods, organizing the physical environment, developing schedules and work systems [4] Furthermore, Montessori Education developed by Dr. Maria Montessori, was used in learning development for the autistic children in this center. Montessori Education is characterized by an emphasis on independence, respect for a child’s requirement of learning, and free activities within a prepared environment. The functions of the environment and the learning materials are to allow the child to develop independence in all areas according to his or her inner psychological directives. The Special Education NongKhai Center (Thailand) also used “Sensory and Movement or Play Way Method” as a teaching approach. This approach is starting with an observation of a child and then studying on his or her development, requirements and interests. According to the interviews with 12 parents of children with autism in The Special Education NongKhai Center as purposive samples, the results reported that the factors from father and mother of autistic children; age, education levels, incomes, practice hours, knowledge of autistic disorder, and adaptation, involved the autistic children’s developmental enhancements and learning supports. Most of autistic children’s mothers were not only easier to adapt and to accept for their children’s disorder, they also opened their mind for the treatments more than the fathers. Moreover, the mothers expected that their autistic children would be able to stand with others in the society or to study in general schools. For internal factors, they consisted of premature birth or
postmature birth, receiving some substances or some drugs during the mother’s pregnancy, and complicacy during the mother’s pregnancy

5.3. The results of observations of autistic children’s behaviors and symptoms.

The symptoms and behaviors of autistic children were distinguished into 3 groups:

- Group of autistic children with high levels of critical symptom and intrusive behavior.

There were 4 autistic children found in this group (33.33%). The children in this group were unable to classify the colors. For social behaviors such as storing stuffs, helping and sharing activities, they could not do those activities without their trainers. For example, whenever a child with high levels of critical symptom and intrusive behavior was in the classroom and given learning materials from his or her trainer, the child would try to protect his or her stuffs from others. The child might run away with the stuffs and sometime the child might act wildly and attack the person who coming close to him or her. For compliance behaviors such as joining the group and waiting for using the stuffs in the activity room, the children in this group could not follow these procedures. For example, whenever a child in this group was in the activity room and wanted to play a toy, the child would direct to his or her target toy. The child would try to scream and to fight with other children to get the toy he or she wanted.

- Group of autistic children with medium levels of critical symptom and intrusive behavior.

There were 5 autistic children found in this group (41.66%). The children in this group were able to classify some colors like green and blue. For social behaviors such as storing stuffs, helping and sharing activities, they could do some of those activities and were ready for getting the knowledge with repeatedly teaching from their trainers. For example, whenever a child with medium levels of critical symptom and intrusive behavior was in the classroom, the trainer would let the child look at the pictures or the animal dolls. The child in this group would not get angry or run away with the stuffs when the other children came joining. The child could also select the pictures as the trainer requested and forwarded those pictures to others. For compliance behaviors such as joining the group and waiting for using the stuffs in the activity room, the children in this group could play together under supervision of the trainer. For example, whenever a child in this group was in the activity room and wanted to play a toy, the child would try to wait for his or her target toy if it was not available. However, the child sometimes might get angry and walk away from the activity room if he or she could not get the toy he or she wanted.

- Group of autistic children with low levels of critical symptom and intrusive behavior.

There were 3 autistic children found in this group (25%). The children in this group were great to recognize the colors like pink, red, yellow, blue and green, as they were practiced. Some children in this group were good in English ability. They knew English vocabularies and could response in English sentences. For social behaviors such as storing stuffs, helping and sharing activities, they could do those activities along with the only once instruction from the trainer. They were also able to help their trainer in taking the stuffs out and keeping them in the right place after used. For compliance behaviors such as joining the group and waiting for using the stuffs in the activity room, some children in this group liked to play with others although they sometimes might get angry and walk away from the activity room.

6. Acknowledgment

Thank you, Ms. Thanaporn Rittphaeng Director of The Special Education NongKhai Center (Thailand), Ms. Darunee Vorajak Teacher of The Special Education NongKhai Center (Thailand) and The Special Education Centers in five provinces in Northeast of Thailand.

7. Discussion

As the autistic children need specific and solid care, the caretaker must be patient and have both knowledge and experience in helping their children survival in society [5]. The results of this study revealed that the family acceptance and the relationship between the caretakers and their autistic children could support them in taking care of their children effectively [6]. The acknowledgements of these factors will lead all concerns to the well preparation and the right problem solving [7]. Furthermore, the mothers expected that their autistic children’s symptoms would be improved [8]. The symptoms and levels of autism affect
directly to their development and perception [9]. The parents should participate in the training for their children because they can use the training procedures to continually practice their children by themselves at home. This approach will support the autistic children’s development of learning, recognitions, knowledge retention, and important skills to survive in the society[10].

8. References