

THE IMPORTANCE OF GRAPHIC ILLUSTRATIONS IN DEVELOPING COMMUNICATION SKILLS FOR AN AUTISTIC CHILD

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Abstract

Autism is derived from two Greek words (aut), meaning “self”, and “ism”, meaning “status”. This word is used to describe an unusually introvert person, meaning isolation and seclusion. Children with autism refuse to deal with others in addition to their different behaviours, from one child to another, where they suffer in one way or another from difficulties in developing and maintaining relationships with others. Autism spectrum indicates that there is a wide variation in autism behaviour as it is in the form of a spectrum that extends from mild to severe cases and doctors often describe the disease as a widespread development disorder which means that it affects all aspects of a child’s daily life.

Keywords

Autism, Interactive Graphics, Educational Cards, Facial Expressions.

Introduction

Autism has become better known in the last decade. Parents, doctors and teachers have become more aware of autism; they have become able to perceive attention in its diagnosis. Usually, the symptoms of autism are vague and different from one physician to another, as the symptoms of this disease are similar to some of the traditional human characteristics, for example: one of the famous symptoms of autism is the lack of communication with eyes' confluence which is similar to the traditional characteristic of extreme shyness, this can be applied to many other symptoms of autism. Researches have confirmed that there is a connection between the immune system and behavior, there is one child out of fifty children who has an immune disorder that needs medical treatment, we need more understanding of the immune differences on our children that cause weakness in social interaction and communication of what is called autism.

First: Types of Autism

- 1- Classical Autism
- 2- Asperger Syndrome

Second: Symptoms of Autism

Symptoms of autism vary from person to person, symptoms can be mild or severe, and symptoms begin to appear when the child is few months old.

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Autism Spectrum Disorder is divided into:

1-Sensory Discrimination Disorder (SDD), which is the inability to distinguish between similar feelings, and the main sensory systems are divided into three systems (sensory integration system):

a- The vestibular System

b- The Tactile System

When hypersensitivity appears in the tactile system (tactile defense) this leads to several characteristics for the child as follows:

Avoiding groups, refusing to eat certain foods ⁽¹⁾, wearing certain types of clothes, and Avoid soiling hands.

c- The Proprioceptive System

If an allergy occurs in the motivation system, it leads to several characteristics of the child:

- Difficulty in receiving information from the muscles and joints _Inability to interpret reactions correctly about movement

The characteristics of the Sensory Discrimination Disorder (SDD) are summarized in:

- Difficulty in interpreting the quantities of senses received. _Inability to perceive similarities and differences between sensory stimulators.

2- Sensory Processing Disorder- SPD

The Sensory processing disorder affects social growing, as it leads to:

Leads to academic study achievement problems, problems in peer interaction, and problems in attention and motor coordination.

3- Sensory Based Motor Disorder (SBMD): It is the inability to do a series of necessary actions due to the difficulty for the child to interpret the sensory receptors, namely: _ exercise, bike riding, climbing the ladder, imitation of movements. ⁽²⁾

4- Body Awareness and Coordination System

- The Body Awareness and Coordination System receives sensations from the joints, muscles, and tissues that tell us what our bodies do, and we find children with autism suffering from: weakness in this sensory region - they have no clear feeling of their bodies in space.

5- Social Relationships (Social Skills):

There are several characteristics of an autistic child in terms of social skills, as: He does not frequently use direct visual contact, he often seems not to hear the conversation, refuses to hug, weak contact with the eye.

6- Language skills:

There are several characteristics of an autistic child in terms of language skills:

- Severe delay in language acquisition (language disorder) or lack of it, he begins pronunciation of speech at a later age compared to other children.
- He loses the ability to say specific words or sentences which he knew in the past.

7- Behavior:

He loses his tranquility with any simple or small change. He suffers from amazement and fascination with certain parts of the symptoms, such as spinning a wheel in a toy car... Difficulty in being independent from their family members.

Their behavior is incomprehensible and different from child to child:

He may make a strange noise all the time and do so on purpose... Use negative behavior to self-harm and threaten other children ⁽³⁾.

8- Relation to other diseases:

Autistic children share suffering from repeated medical problems caused by similar diseases' causes, such as ⁽⁴⁾:

Viruses, bacteria, parasites, Heavy Metal Poisoning (Aluminum, Arsenic, and especially Mercury), infections, allergies and diseases of the digestive system.

Third: Discovery of the disease (diagnosis of the disease)

1- There are three important elements for diagnosing autism, one or all of these elements may appear on the child:

- a- Difficulties in using the language to communicate with parents or other children (significant delay in forming speech or repetition of words).
- b- Difficulty in making relationships with others (lack of awareness of others – difficulty of meeting eyes).
- c- Difficulties in pretending to play and imagination (He Desires to be alone - Repetition of activities) ⁽¹⁾.

2- Diagnosis is made by:

Evaluation of intellectual skills... Evaluation of mental growing... Determining child's skills and talent... Studying the child's behavior and the surrounding environment... Social conditions... Determining the psychological evaluation of the general cognitive performance level.

3- There is a test to discover autism that parents can use by tracking the daily signs of the disease so that it can be known from the following symptoms:

- a- Language of speech and communication.
- b- His relationship with others.
- c- Playing and imagination.

Fourth: Causes of Autism

1. Genetic Causes.

2. Biological causes

Causes related to the central nervous system: as the nerve cells are linked to the platelets through the capillaries⁽²⁾

3. Environmental factors.

4. Amygdala injury

Fifth: Treatment of the Disease

Parents use effective training methods which help to change the behavior of their autistic children through:

- The academic education of autistic children must coincide with socialization at the same time and early enough. It is necessary to understand the strengths and weaknesses of children in the areas of development in order to develop educational programs for them.⁽³⁾
- There must be appropriate cooperation by all for the development of language and occupational therapy to be implemented jointly to establish the routine and arrange the contents of the treatment according to each child separately. In this sense, the treatment must come through play and recreational activities and if the children suffer from the causes of similar diseases such as toxic minerals and viruses, when treating these causes, the child recovers faster.⁽⁴⁾

If the autistic child suffers from allergic reactions to touch, it is necessary to find other alternative methods in order to tolerate touch, such as:

Approaching to the child slowly in front and at the same level.

Among the methods of treatment used:

1-Medicinal therapy - non-drug programs(behavioral educational programs):

- a- Analysis of applied behavior.
- b- Organizing, treating and educating children with autism and similar communication problems.
- c- Social stories method.
- d- System of Communicating by sharing pictures:

Sixth: Practical Experience

From this point, the research problem came, where:

- 1- Autistic child's sense
- 2- Autistic child's special capabilities
- 3- Examples of super autistic patients

The first phase: producing educational drawings through Canvas Painting

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Facial expressions in half:

| | |
|--|--|
| <p>The first drawing (Figure 4) expresses laughter.</p> | <p>Fourth Drawing (Figure 7) expresses non believing or non-convincing</p> |
|  |  |
| <p>(Figure 4) expresses laughter , second drawing</p> | <p>(Figure 7) expression of non-believing or non-convincing</p> |
| | <p>Third Drawing (Figure 6) expresses displeasing</p> |
|  |  |
| <p>(Figure 5) expresses reprobatory sadness</p> | <p>(Figure 6) expression of displeasing</p> |
| <p>Facial and body expressions in half: Fifth Drawing (Figure 8) expresses crying.</p> | <p>Sixth Drawing (Figure 9) expresses fear and shaking</p> |

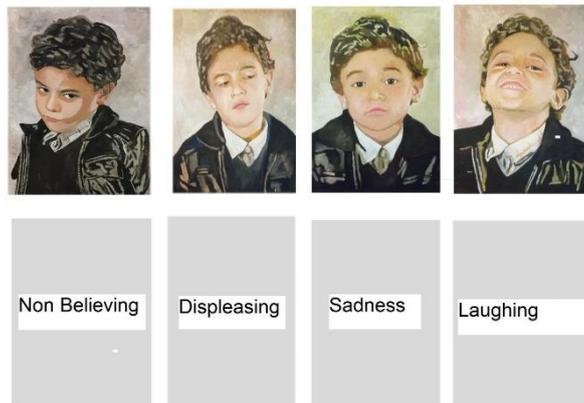
| | |
|---|---|
|  |  |
| <p>(Figure 8) expression of crying</p> | <p>(Figure 9) expression of fear and shaking</p> |
| <p>Seventh Drawing (Figure 10) expresses acceptance and approbation</p> | <p>Eighth Drawing (Figure 11) expresses refusal</p> |
|  |  |
| <p>(Figure 10) expression of acceptance and approbation</p> | <p>(Figure 11) expression of refusal</p> |
| <p>Ninth Drawing (Figure 12) expresses thinking and contemplation moment.</p> | <p>c. Facial and Body Expressions in Full: Tenth Drawing (Figure 13) expresses saying "I don't know".</p> |
|  |  |

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| | |
|---|--|
| (Figure 12) expression of thinking and contemplation moment | (Figure 13) expression of saying "I don't know" |
| Eleventh Drawing (Figure 14) expresses sadness and giving up | Twelfth Drawing (Figure 15) expresses anger and grimace |
|  |  |
| (Figure 14) expresses sadness and giving up | (Figure 15) expression of anger and grimace |
| Thirteenth Drawing (Figure 16) expresses suspense and tracking | Fourteen drawing (Figure 17) expresses non acceptance and non-probation |
|  |  |
| Figure 16) expression of suspense and tracking | (Figure 17) expresses non propation and acceptance |
| Fifteenth Drawing (Figure 18) expresses broodiness (sadness and severe crying) | |

| | |
|---|--|
|  | |
| <p>(Figure 18) expresses broodiness (sadness and severe crying)</p> | |

Second Phase (Educative Cards): 1. Facial Expressions in half:



(Figure 19) Facial expressions in half (laughing, sadness, displeasing and non-believing)



Facial and body expressions in half:

(Figure 20) Facial and Body Expression in Half



c. Facial and Body Expression in Full:

(Figure 21) Facial and Body Expression in Full

3- Third Phase: RGB Cards

Facial expressions in half



(Figure 22) expression of laughing with RGB filters



(Figure 23) expression of reprobatory sadness with RGB filters



(Figure 24) expression of displeasing with RGB filters



(Figure 25) expression of non believing with RGB filters



(Figure 26) expression of crying

b. Facial and body expressions in half:



(Figure 27) expression of fear and shaking



(Figure 28) expression of acceptance and approbation



(Figure 29) expression of refusal



(Figure 30) expression of thinking and contemplation moment

c- Facial and body expressions an full:



(Figure 31) expression of saying "I don't know"



(Figure 32) expression of sadness and giving up



(Figure 33) expression of anger and grimace



(Figure 34) expression of suspense and tracking



(Figure 35) expression of non-approbation and acceptance



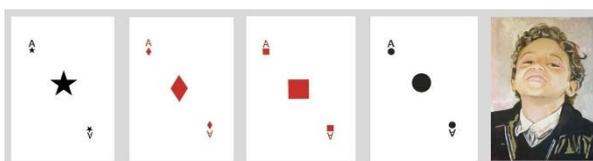
(Figure 36) expression of broodiness (sadness and severe crying)

4- Fourth Phase: "Playing Cards"

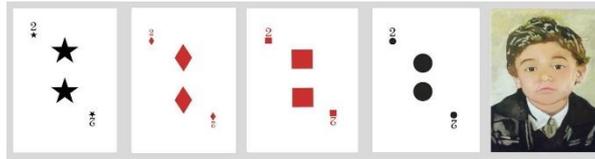


(Figure 37) represents front and back of "Playing Cards"

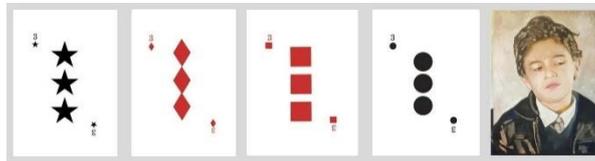
"Playing Cards" have been designed in front and back as follows: 1. Drawings that represent face in half:



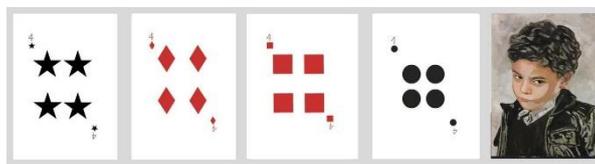
(Figure 38) front and back of "Playing Cards" of laughing expression with number (1)



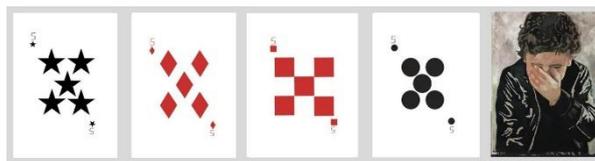
(Figure 39) front and back of "Playing Cards" of sadness expression with number (2)



(Figure 40) front and back of "Playing Cards" of displeasing expression with number (3)

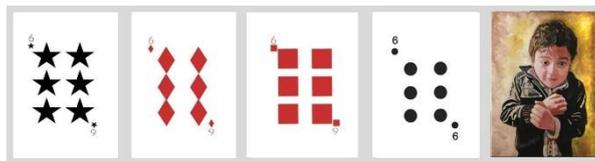


(Figure 41) front and back of "Playing Cards" of non-believing expression with number (4)

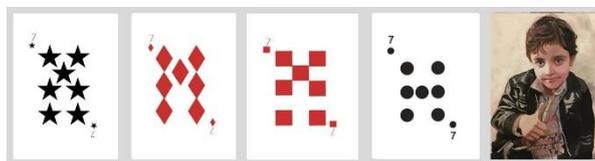


(Figure 42) front and back of "Playing Cards" of crying expression with number (5)

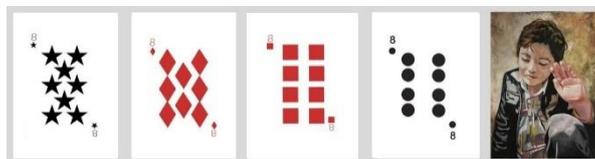
b. Facial and body expressions in half:



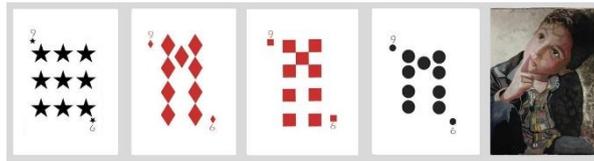
(Figure 43) front and back of "Playing Cards" of fear and shaking expression with number (6)



(Figure 44) front and back of "Playing Cards" of acceptance and approbation expression with number (7)

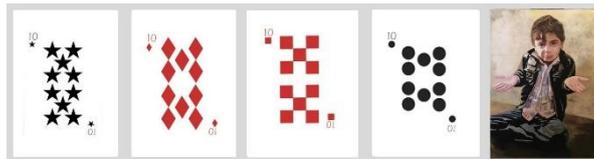


(Figure 45) front and back of "Playing Cards" of refusing expression with number (8)



(Figure 46) front and back of "Playing Cards" of thinking and contemplation moment expression with number (9)

c. Facial and body expressions in full:



(Figure 47) front and back of "Playing Cards" of saying "I don't know" expression with number (10)

d- Expression of sadness and giving up is to be repeated 4 times with hoary man photo.



(Figure 48) front and back of "Playing Cards" of sadness and giving up expression with "hoary man" photo

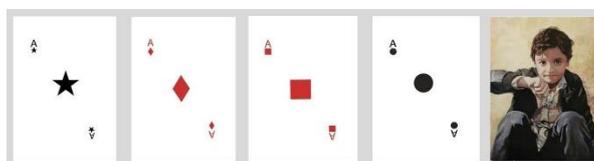


(Figure 49) front and back of "Playing Cards" of anger and grimace expression with "Boy" photo

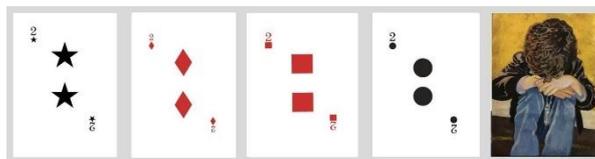


(Figure 50) front and back of "Playing Cards" of suspense and tracking expression with "Girl" photo

e- Remaining of drawings after repetition:



(Figure 51) front and back of "Playing Cards" of non-approbation acceptance expression with number (1)



(Figure 52) front and back of "Playing Cards" of boarding expression with number (2)
So, we can play with "Playing Cards" in front and back to develop child's expressing skills

Reference:

- 1- Alessia c.Ciordaho ,viola A. 10 mbarid -"Causes and Risks for Autism"- Ibid,p8
- 2- Barbara sher- "Early Lnter Vention Games"- Josses Bass, VSA,2009,p.15
- 3- Barry M . prlzant, with tom fields - Meyer-"A Different Way al Seeing Autism"- souvenir press, 2006,p.14,24
- 4- Catherinelord & James p- "Educating Children with Autism" - Ibid , p.4
- 5- Colin Tiril- Tiri Yesenger- Translator: "Mark Aboud"- "Autism,Hypermovement, Reading andPerformance Disorder" Previous referencepage 49.
- 6- Miller.lucy jane.Anzalon, Marie E.lane, Shelly J.Cermak, Sharon A and osten, Elizabeth"-Concept Evaluation in Sensory integration: Aproposed Nosology for Diagnosis"-Ibid p.13
- 7- Rohn J., Wokochic, Lutgen Drecolle " Colar Atlos of Amotomy: Aphotographic Study of the the Homan Body" Six Th ed Philadelphia pa: Lippincott Williams &Wilkins: 2006, p. 78
- 8- Simeon D,knulelska M - "Anopentrial of Naltrexone in The Rneatment of Dopersonalizatue Disorder " - Journal alclinical Psychophar maco 10gy,25(3) 267 June 2005.

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