

# [Autism from theories to learning](https://assignbuster.com/autism-from-theories-to-learning/)

Since it first identified as a distinct disorder by Leo Kanner (1943), autism studies continued in order to explain its causes. Many theories and clinical studies evolved. However, none of them seems to be conclusive. Although it was interchangeably considered as part of schizophrenia, recently it is defined as a distinct disorder that has its own characteristics. The field of management is still challenging. In this paper, I am going to discuss different theories that explain autism. Then, I am going to summarize different learning approaches that are used for autistic children based on the different theories and ideas.

Introduction:

What is autism?

Autism is part of the autistic spectrum disorders. The name itself is originated from the Greek word “ autos” which means “ self”. 1 “ Autism is a complex developmental disability that typically appears during the first three years of life and is the result of a neurological disorder that affects the normal functioning of the brain, impacting development in the areas of social interaction and communication skills” (ASA). 2 There are five autistic spectrum disorders labeled as pervasive developmental disorder (DSM IV). 3

Causes of autism:

There is no known single cause for autism. Many theories evolved to explain the possible causes. There are many different cognitive and psychological thoughts describe the autism symptoms. On the other hand, new beliefs developed which explain the autism symptoms as results of genetic or environmental influences. 4 Controversial ideas like the effect of diet and vaccines on the development of autism symptoms recognized as hot topics for the last few years. 5

Autism symptoms:

Autism, as per the definition, consists mainly of three main categorical symptoms which include behavioral, communication and social aspects. 6 The severity of the symptoms fluctuates from one child to other. 7

Treatment methods:

Treatment approaches and methods vary widely according to the teaching center and to the autistic child assessment of needs and symptoms. 8 There are many behavioral and cognitive modalities in dealing with autistic children. 9 Recently, many therapies introduced for the management of autism symptoms such as diet therapy and drugs therapy. 10 None of these therapies appears superior to others. It is the child condition and needs that judge.

## Cognitive models:

Since the introduction of autism as a definite disorder by Leo Kanner (1943), 11 many theories developed to explain the dilemma behind this disorder. Three main theories expressed the cognitive dysfunction on autism. These are The Theory of Mind Deficit, Executive Dysfunction theory and the Weak Central Coherence theory.

Theory of mind deficit:

Theory of mind refers to the ability to make full mental states (beliefs, desires, intentions, imagination, emotions, etc.) that trigger action. 12 Child with autism has difficulty to understand others thoughts which consider, according to the theory of mind, as the core cognitive deficit in autism. 13

Executive function theory:

Executive function theory deals with planning, working memory, impulse control, inhibition and mental flexibility. 14 Also, it includes the initiation and monitoring of action. 14This theory explains some of the autism symptoms. For example, repetitive and restricted behavior observed in autistic children might be explained due to executive dysfunction. 15 In addition, the poor social interaction could be due to defect in cognitive shifting which is a vital part of executive function. 16

Central coherence theory:

Weak Central coherence theory describes inability to understand the context or to see the “ big picture”. 17 This could explain common autistic behaviors such as repetitiveness, focusing to parts of objects and persistence in behaviors related to details. 18

Other cognitive theory:

Autism could be described by Piaget’s two-factor theory of figurative and operative functions. Several autistic children exhibit an arrest in operative functions at the sensorimotor level while remaining to grow in figurative functions. This arrest limits consequent development of higher-level theoretical, figurative, and social skills. 19

Limitations of cognitive theories:

Cognitive theories have successfully explained the typical abnormal behavior seen in autistic children. However, cognitive theories have their weakness in explaining the total picture of autism. Also, the deviation in the autistic symptoms between different affected children could not be clarified by the cognitive theories. The other notable limitation in the cognitive theories is explaining autism as a static cognitive impairment rather than studying the developmental approach of the condition. 20

## Psychoanalytic theories:

Psychoanalytic theories have their potency in explaining the developmental attitude of autism. Psychoanalysts perceive autism as a disorder in which the development of self-perception and perception of others is altered significantly. Psychoanalysis has advocated understanding the development, maintenance, and treatment of autism. 17

Autism has two main psychoanalytic explanations. One is that it is a failure to an earlier stage of development. Second idea rationalizes autistic behavior as a defense mechanism in response to extremely stressful conditions. 17

Reflection of Freud theory on autism:

The methods of social engagement, which proceeds to identification as defined by Freud are essential in autistic development. Freud’s original ideas of drives have influenced the psychodynamics explanations of the causes of autism. 21 In 1975; Donald Meltzer established a model of autism based on three main philosophies: the dismantling of the ego, adhesive identification, and the bio-dimensionality of object relations. The dismantling of the ego represents the idea that autistic children dispersed their ego throughout the various senses, so that they can never appropriately perceive the world around them. Adhesive identification is often seen in autism. It follows the transmission of energy from the death drive and the libido when these drives are being defused. The bio-dimensionality of object relations discusses how the autistic child connects to libidinal objects, with an incapability to see beyond the surface of objects. 17

Refrigerator mother theory:

Refrigerator mother theory is another psychological theory explaining the cause of autism. Bettelheim was the first who introduce this concept. The theory claims that autism is a defense mechanism against cold, impassive, and detached mothers. Autistic children are been raised to dampening and hardhearted families during the initial stages of development where language and social skills typically acquire. There is limited interaction between mothers and their children, and this is the core cause of autism according to Bettelheim. 17

Attachment deficit theory:

Autism has been argued as a result of social isolation from parents; hence the attachment deficit theory arises. Rutgers et al. (2004) relates the social isolation noted in autism to the absence of early and secured attachement. 17

## Ecological theory on autism:

Bronfenbrenner described human development in the form of interconnected, nested ecological levels, which can be applied to the environmental circumstance of autistic children. According to the ecological theory, the child with autism behaves in various microsystem structures and processes in the home, school, and community. A collection of interactive microsystems composes a mesosystem. Exosystems have an indirect or secondary impact on the child through their direct influence on the persons who interrelate with the child. The exosystem’s formal and informal social contexts modify characters in the child’s micro- and mesosystems, hence ultimately affect the autistic children themselves. 22

## Management of autism:

Identifying a child with autistic spectrum disorder is a dilemma for parents and caregivers. Different tools could be used to assess the severity and disability.

Dealing with autistic children is challenging. Many modalities have been used with different achievements. Using drugs or diet is controversial. Many schools attempt to reflect the psycho-cognitive theories for autistic spectrum disorders in their approach to manage these cases.

## Learning approaches for autism:

Many approaches evolved to teach autistic children. Most of These approaches are based on the different psycho-cognitive theories on autism.

I am going to discuss the approaches that are recognized by the American society of autism.

## Applied Behavior Analysis (ABA):

This method attempts to teach the autistic child different skills and behavior in stepwise approaches. The child get rewards after completing the task, so reinforcing the task or behavior. This method appears successfully beneficial in improving the personal skills and social behavior. However, it required intensive training time at school, and it does not prepare the autistic child to respond to new situations in life. 23

## Treatment & Education of Autistic and Related Communication of Handicapped Children (TEACH):

## Based on the sense that the environment should be acclimatized to the child with autism, the TEACH approach uses a structured teaching method to introduce skills and behavior for children with autism. There is no specific technique for this method. The child’s learning abilities evaluated, and then teaching strategies are planned according to the child’s needs. Although this approach has been criticized for being too structured, it helps the autistic children to understand the environment around them and people’s behaviors. 23

## Picture Exchange Communication Systems (PECS):

This method intends mainly to teach autistic children, especially those that do not speak. It helps to improve the communication skills. It is a clear and intentional method. The child hands on the picture of interest to communicate with the teacher. 23

## Pivotal Response Treatment:

Pivotal response treatment is aiming to teach the autistic child behavior, communication and social skills. Also, it enhances the skills of self-management and social initiation. This approach uses a multi-task method to teach the child critical behaviors. The child plays a leading role in defining the activity or object to be used in teaching. 23

## Floor Time:

This approach is using a developmental, stepwise method in teaching the child with autism. It is much like play therapy. It does not plan to teach a single task. However, it advanced the child skills to encourage emotional development. The problems with this method are the difficulty in processing the information by the child, the child may under or over react and children with autism may not have control over their body to do different tasks or play. 23

## Social Stories:

## Social story method helps the child with autism to understand the expected or appropriate response. Through stories, the child learns how to interact socially and behave appropriately. This method has been adopted in view of the theory of mind deficit. 23

## Sensory Integration:

## Occupational and physical therapist implement this method to help autistic children to overcome their hypo or hypersensitivities. Children get desensitized to help them identify the sensory information. 23

## Facilitated Communication:

## This method is based on the idea that the autistic children are not able to communicate because of a movement disorder, not the insufficiency in communication skills. In this approach, the facilitator or the teacher supports the child arm helping him or her to communicate through the computer or typewriter. 23

## Complementary Approaches:

Different intended approaches have been tried for autistic children. Using music, playing, models or animals are some of the methods that are not categorized under any of the known approaches. 23

## Conclusion:

Autism is still considered as a mystery for teachers and physicians. Many causes seem to interact together to result in autistic symptoms. Learning the theories behind autism could help teachers and physicians to understand how appropriately approach autistic children. Human development theories help to understand the steps of building up the knowledge for autistic children.

## Conflicts of interest: none.