

Mental development of children with down syndrome



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Down Syndrome Research Paper

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Learning and Cognition

All psychology students, at some point during their studies, learn about the topic of mental development in children. However, students sometimes fail to learn how those with disabilities differ when it comes to mental development. The typical child's development differ dramatically when compared to children with a development disability. One of a large number of developments disabilities is Down syndrome, where an individual learns and functions on a different level than others. Children with this developmental disability primarily differ in their cognitive development, socialization, education and attachment.

Pamela May, author of *Child Development in Practice: Responsive Teaching and Learning from Birth to Five* defines cognitive development as “ The mental process of knowing, including aspects such as awareness, perception, reasoning and judgment” (2011, 16). Jean Piaget, a recognized psychologist, expresses that development split among four phases; sensorimotor, preoperational, concrete operational and formal operational. As stated by Cicchetti and Beeghly (1990), adolescents with and those without disabilities experience the same stages. Nevertheless, adolescents with developmental disabilities are believed to proceed through these various phases gradually compared to other adolescents with no developmental disabilities (Hill & McCune-Nicolich 1981).

Within a study concluded by Hill and McCune-Nicolich's, children with Down syndrome developed at a much slower rate within the preoperational phase when compared to children without Down syndrome. The group comprised of adolescents with Down syndrome generating outcomes consisting of a 50% failure in development throughout the preoperational stage measure against the group of children without the disability. This study parallels Cicchetti and Beeghly theory, observing slight to no differentiation throughout the sensorimotor stage however observed a delayed developmental pace regarding children with Down syndrome throughout the preoperational stage.

What precisely triggers this obstruction in adolescents with Down syndrome? These adolescents are affected by a variation in their genotype. These persons possess an additional chromosome called trisomy-21, which influences their development. Down syndrome influences adolescents in every phase of development. Sanz, Menéndez & Rosique state, " This chromosomal disorder affects the development of physical structures, motor functioning, cognitive abilities and communicative skills in varying degrees" (2011, 488).

Language functioning seemed to be difficult during the preoperational phase for adolescent's affected by Down syndrome. Cicchetti and Beeghly describe that despite the fact that this struggle is associated with the disorder, Down syndrome adolescents tend to be placed in inadequate linguistic surroundings. Parents of affected adolescents stereotypically lower their expectancies of language abilities upon discovering their adolescent's disorder. Cicchetti and Beeghly refer to a 1985 study by Mervis and Cardoso-
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Martins where mothers confessed that they were fearful their children influenced by Down syndrome would never learn to talk. Nevertheless, Leifer and Lewis conducted a study in 1984 exploring Down syndrome adolescents' verbal skills in depth.

The researchers recognized various characteristics of language which had not been exclusively considered in earlier studies. Researchers chose to study whether or not adolescents with Down syndrome will continue to struggle with conversational language versus grammatical/relational language. The researchers discovered that adolescents affected by Down syndrome were essentially superior at holding a conversation compared to adolescents without a disability. In regards to the information provide, there is confirmation proposing Down Syndrome adolescents possess superior social language skills compared to adolescents without the disability.

Sanz, Menéndez & Rosique conducted a study in which, adolescents affected by Down syndrome were subjected to a verbal strengthening group or a physical strengthening group. Each type of constructive reinforcement impacted the adolescents. The adolescents produced more encouraging responses to verbal reinforcement versus the physical reinforcement. Why the adolescents favored verbal reinforcement is not entirely evident, nevertheless a trend was obvious. The adolescents flourished when presented with social praise for their accomplishments. However this is also true for unaffected adolescents as well, it is crucial for adolescent affected by Down syndrome. Their disorder triggers reservation in their actions as to whether what they are doing right or wrong on a steady basis. As a result,

these adolescents function at a higher level when they are socialized through affirmative support.

Conversely, in a study by Drash, Raver, Murrin & Tudor (1989), adolescents affected by Down syndrome did not successfully socialize when presented constructive support alone. They combined visual examination into the constructive support. When measure against affirmative strengthening alone, the addition of visual examination generated more social interaction from the children. It becomes evident that adolescents affected by Down syndrome need much more stimulus than adolescents not affected in regards to socialization. Their cognitive delay limits them from entirely comprehending reinforcement alone. Visual encouragement permits their minds to adapt to a new idea and absorb it.

This cultivates the question of whether or not special education classrooms are necessary for children with Down syndrome. Some suppose that normal education surroundings afford sufficient stimulus to adolescents affected with the disorder. On the other hand, in most cases the typical education surroundings are not adequate. There are specialists educating adolescents with cognitive delays such as those with Down syndrome. Special Education is a stand-alone discipline of study and cannot be anticipated from all that enter this particular teaching field. Special Education demands diverse methods and compassions compared to that of normal teachers. If an adolescent affected by Down syndrome were to be placed into the average classroom, the presence of an aid would be necessary. This poses funding issues as well as the adolescent's parental trust. It is much more feasible to place these adolescents in special educational environments which possess

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several aids in addition to a set pace of learning for each individual (Fidler & Nadel, 2007).

Fidler & Nadel furthermore describe a “ culture” in special needs classrooms where adolescents affected by Down syndrome can succeed. Countless adolescents requiring special needs flourish when surrounded by others who also differ from adolescents without disabilities. Nevertheless, adolescent’s parents frequently worry about the equal treatment and lack of socialization among unaffected children. This all differs among particular adolescents as well as the school they attend. Countless schools fashion an atmosphere in which adolescents requiring special needs possess the ability to interact with the other students at lunch, recess, homeroom, etc.

Contrary to what Fidler & Nadel explain, a study by Sobelman-Rosenthal, Biton, & Klein (2009) examined children with Down syndrome in regular educational settings and compared to special education settings. Parents were questioned as to the setting they preferred for their child. Parents were divided into three groups: those who favored life-skills, those who favored academic success and those who favored social success. Generally, parents seemed to prefer regular educational setting. The parents perceived substantial developmental advances when their child was placed in a regular school environment.

It is evident researchers have achieved contradictory outcomes. This is presumably due to the fact that every case differ from one another. Certain adolescents require additional help compared to others in addition certain special education programs are better than others. The answer is uncertain

in regards to which educational settings more beneficial for an adolescent affected by Down syndrome since each setting possess there advantages and drawbacks. The safest thing for a parent to do is research individual surroundings in their school district and formulate an educated assessment from there (Fidler & Nadel).

The connection an adolescent affected by Down syndrome possesses regarding his or her mother also effects their mental development. “Communication between mother and infant occurs by many means: it employs facial expressions, gazing, whole body movements, gestures, speech, writing, and even crying “(Fiamenghi, Vedovato, Meirelles, Shimoda, 2010, 192). Adolescents require the ability to understand this interaction and in adolescents affected by Down syndrome it becomes difficult to understand if they comprehend the communication and its’ effects.

Adolescents affected by Down syndrome occasionally require the development of a connection in diverse ways compared to unaffected children. The manner in which they do this is vital since it may possibly signify particular needs the child must have addressed that may not be exposed through clinical assessment. Nevertheless, since parents do not normally comprehend the syndrome entirely in earlier stages in their child’s life, they tend to be opposed in nearly all they do with their child. Parents regularly tend be afraid they are not caring for their child appropriately as a result become reluctant to do everything they would for an adolescent not affected by Down syndrome (Fiamenghi et al.)

A study conducted in 2010 regarding collaborative behaviors in adolescents affected by Down syndrome with their mothers, three groups of behavior were recognized: Interaction, Invitation and Imitation. The outcomes specified that a sizeable amount of these behaviors benefited however quality is what made the significant differences in the adolescent's emotional attachment. Down syndrome adolescents depend on on these behaviors for the reason that it aids them mentally develop. It is considerably simpler for them to mimic somebody they trust for example their mother or father, in contrast to merely learning these behaviors as they grow. The greater quality the imitation is in addition to interaction obtained throughout their earlier ages, the greater articulated constructive behavior as they grow up. The reasoning behind this is due to their cognitive delay becomes more prevalent with age. They have a scarcity of a particular characteristic of cognition that other adolescents possess, consequently these interactions become significant in demonstrating to them how to behave (Fiamenghi et al.)

A study conducted in 1999 investigated bonding behaviors in 53 children aged 14-30 months. The children were exposed to a " Strange Situation" where an unfamiliar person would come into the room and the parent would leave. Their response to the parent leaving was then observed. They established that although attachment is exceptionally significant with Down syndrome children, it is not necessary to grant considerably more consideration than in children not affected by Down syndrome. The researchers discovered that parents should be mindful of however no additional action can counteract the child from theoretically suffering from

attachment issues. Parents should approach attachment the exact same way as if their child was not effected by Down syndrome (Atkinson, Chisholm, Scott, Goldberg, Vaughn, Blackwell, Tam).

Atkinson et al. findings vary marginally from Fiamenghi et al. nonetheless they equally possess similarities as well. Both research groups distinguish the significance of attachment in adolescents affected by Down syndrome. It appears Atkinson et al. would approve of Fiamenghi et al. findings that quality is the predicting factor, not quantity. Since each study exhibited the interactional significance between the parent and adolescents affected by Down syndrome, additional research on the topic possess the probability of making momentous advances in both psychology and special education.

Although there are numerous means where adolescents affected by Down syndrome and adolescents without any developmental ailments can relate, there are still several variances in their mental development in which we must account for. The main variances are comprised of cognition, socialization, education and attachment. Cognition deals with their development through the stages of learning and comprehension. Socialization is a strength many children with Down syndrome possess. Their ability to dive in to any conversation is remarkable. Education is and most likely will continue to be an issue for all families with children affected by developmental disabilities. Each program differs so greatly that there simply cannot be one assumption made. Finally, the way in which they develop an attachment with their mothers can be critical but not any more so than children not inflicted by a disability. Down syndrome can present many

obstacles for the child as well as the family, but there is no reason they cannot live a life as fulfilling and exciting as the rest of us.

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