

# [Psychology essays - down syndrome child and aac](https://assignbuster.com/psychology-essays-down-syndrome-child-and-aac/)

## Down Syndrome Child and (AAC) Augmentative or Alternative Communication System

Doesthe Down syndrome child, acquiring the ability to communicate usingaugmentative or alternative communication (AAC) System, follow a similardevelopment path as that of typical language development?

The Down syndrome child, bydefinition, is different from others. Therefore, more than likely he or shewill experience some level of mental retardation and physical disability. Physical disability can include health, immunity, and physical problems whichaffect the sight, the hearing and speech. This would imply that most childrenborn with Down syndrome have limited intelligence, limited physical ability, and, similar to the deaf child, because of hearing deficits, will have delaysin language development. Language development and auditory function have beenlinked in numerous studies. Where in the deaf child intellectual function isnot an issue, it should be noted that in most deaf individuals, languageimpairment continues throughout life although the ability to communicate can beaugmented through other means such as hearing aids, sign language, and thelike.

Language delay would beprognosticated in intellectually and/or auditorily impaired children frombirth. In the child with Down syndrome, given the additional physical problemsincluding impaired motor skills affecting articulation, a language delay, to agreater extent, would be both implied and expected. The question as to whether, with the use of augmentative or alternative communication (AAC) the child thenfollows the path of typical language development, albeit retarded or delayed.

In the paper entitled Languageand Communication Characteristics of Children with Down Syndrome, (Miller, J in Pueschel. S. m. et al., p. 224) a collaboration of views that include thedelay which involves the necessity in language for cognitive development, anddeficit which involves the additional characteristics needed for languagedevelopment, is needed. That collaboration with the inclusion of otherenvironmental factors that can affect verbal skills and language comprehension. In fact, this study places more emphasis on the environmental factors thaneither delay or enhance language development in the delayed or deficit child.

Given that all factors areinterchangeable in studies, i. e. level of deficiency or delay and environmentaland social factors, it can also be surmised that a child with variations ofthese combinations, would find his/her world enhanced with the ability tocommunicate. Studies using AAC with Down syndrome children generally speakingshow better communication skills which would lead to better environmentalfactors based on at least less frustration in social situations.

Foreman and Crews (1998, p. 1)define AAC as to commonly refer to mechanical and electronic systems usedwith cerebral palsy and physical disability but include sign language as usedwith the deaf. This article also refers to the language system developed byMargaret Walker – Makaton. The system was developed as a support tocommunication development in adults. This method, now used in over 40countries, combines the use of signing and speaking. Also mentioned in thisarticle is the use of picture communication that requires no reading skills butrather use pictographs to convey information. Both methods have been shown to havepositive results for the child along with concerns of stigma and difficultlyfor either the child or the family to learn the AAC. While these concerns havebeen voiced, on the other hand, better communication skills have cut downsignificantly on behavioral outbursts due to the inability to communicate.

The studies also indicate thatlearning basic signs for no, help and the like empower the child. Thisempowerment would imply enhanced environmental factors as a consequent tobetter social skills. But further, as Foreman and Crews study shows (1998, p. 6):

The ability to name objects is of greatuse to young children with a limited capacity to communicate (Grove &Walker, 1990). Most of the frustration experience by young children withcommunication difficulties is limited by the ability to name a desired toy, food or activity.

While this study taughtchildren naming skills through four methods fv communication, it concludes thatthe multimodal method of instruction is an effective way of encouragingchildren with Down syndrome (1998, p. 7) and signing may carry most weightamongst the various modalities.

Another point to be discussedis to the question as to whether children with Down syndrome have a pattern oflanguage development that is distinct or different from the typical. Studiesconducted by Harris (1983, pp. 153ff) and Coggins (1979, pp166ff) determinedthat children approximately three years old or younger, whether normal or Downsyndrome develop approximately the same. It is with older children where normalchildren acquire more advanced language skills (Coggins, 1979). Harris’ studysuggested that were different language strategies were used both groups, normaland Down, progressed in age.

Miller points out that apreference for gestural expression over verbal expression among children withDown syndrome by educators, parents, and speech-language pathologists (Miller, p. 6) has been noted. This makes sense, as confirmed by many researchers; intelligibility of speech is a major factor in Down syndrome. This inability toproduce intelligible speech is attributable to physical problems mentionedabove, to include the muscular structure of the jaw, and often-reported oversizedtongue. This would go along with where studies indicate the normal child andthe Down syndrome child split from each other in language development. Themuscular development coupled with normally developing cognitive skills allowthe normal child to interact and communicate by the age of 5 or 6 whereas Downsyndrome children remain unintelligible.

Additional to physicaldisability is the deficit in understanding concepts and complex ideas. AsMiller points out, ideas relating to time and space, relationships, causality(Miller, p. 8) are difficult to impossible for the child with Down syndrome tounderstand. It is in this area that the factors involving the physical, cognitive and environment can be linked to where the Down syndrome child’sdevelopment and language skills reach a ceiling.

From research conducted, itcan be safely assumed that children with Down syndrome stop developing aroundthe age normal children are able to understand the above-mentioned ideas andconcepts. This inability, retarding cognition, will then as a consequenceretard ability to communicate at a complex level of thinking as do normallydeveloping children and adults. This would indicate that, despite the currentAAC available, at some point language development would not continue on thesame path as in the typical. An important variable however, is environment, inthe determination of just how far this child can develop.

Since gesture was noted to bepreferred in this group, studies noted in the article by John Clibbens, pointsto arguments such as those of Remington and Clark (1996) that signingfacilitates interactions and thus speech development and those carried out byMiller (1992) and Launonen (1996) both of which point to advantages in signingand greater advancement in vocabulary among subjects during an importantdevelopmental period (Clibbens, p. 2). Launonen’s follow up study in 1998found that there was still significant difference in social and linguisticskills between the two groups. Both of these authors emphasize signing asbeneficial both in the short and long term.

Interesting to point out thatstrategies used by deaf mothers were looked at for research purposes. Clibbens, Powell and Grove (1997) note that signing is preferred as it is a naturallanguage system that does not require special equipment among other reasons.

One of the major argumentsagainst signing is that it does not encourage children to speak. Yet othershave noted that as the child grows (to some extent as does the normal child)that speech overtakes use of gesture to communicate.

It would seem that empowermentis an important factor in all people and this would not exclude the child withDown syndrome. Empowerment implies self-esteem. This comes out of socialinteraction that has positive feedback. When a child is able to find a way tobetter communicate with his environment and have his needs met, he is morelikely to want to learn, on some level, and to do more of the same. The generalfeedback in studies reviewed show that use of AA is generally positive for allparticipants. Empowerment and self-esteem, has been shown in studires of allsorts to enhance the life generally and leads to success in relationships. Success in relationship again, has been shown in numerous studies to be as theresult of good ommunication. Communication, as proven by these studies iseffective both verbally and nonverbally as through signing with thispopulation.

There have been many thingssaid about the Down syndrome child that have not been included in studies. These things could be considered beyond the typical. Down syndrome childrenhave been noted to be openly loving and naively devoted because of theirchildlike nature. More and more opportunities are opening up for these childrento include roles on television. More exposure with less stigmatism, furtherempower the Down syndrome child as well as others with physical, mental andcognitive disiabilties. Events such as the Special Olympics, develop thephysical where before these chidren were coddled and hidden. This furthers theempowerment and self-esteem of the Down syndrome individual and encourages himor her to further develop language skills.

Any method that furthers thechances of a disabled child such as one with Down syndrom to benefit from inclusionin events and circles of others in society brings benefit and furtherdevelopment in all areas of growth. AAC includes a growing number of methodswhereby the ability to communicate can be enhanced. Thus, what was previouislydescribed as impossible or atypical for a child born with Down syndrome nolonger applies.

In conclusion, the child whohas learned one mode or a combination of modes of augmentative or alternativecommunication (AAC) System, follow a similar development path as that oftypical language development to a point. The factors that must be considered inevaluating this question are cognitive in that the intellectual ability toconprehend complex ideas will be retarded or impaired and reach a ceiling. Compared to the norm, where, at a similar developmental point, the typicalprogresses.

Further, beyond the cognitiveand intellectual factors, there are the physical factors that impedeintelligibility. This is based on physical deformity and which contribute todelays which further impede ability to communicate. This separates languageability related to muscle development and jaw structure from the typical at thephysical level.

AAC techniques cannot yetbring language development to the level of the typical or the norm, yet theycan increase vocabulary, extend communication skills, beyond what is now thenorm for the Down syndrome child. This enhancement helps the child developother social skills that bring the environment closer to him or her and others,

While researchers in AAC techniquesrealize the factors that inhibit or enhance their studies involve the type ofmodality or combination thereof along with social factors level of deficiency, and the environmental factors that contribute greatly to the better functioningof children with Down syndrome. Because the stigma of retardation anddisability has lessened over the years, more opportunities are available toenhance learning and social skills. Sports events such as the above-mentionedSpecial Olympics allow a Down syndrome child to experience physical strengthand the sense of competition which build on self-esteem and emotional balance. More and more acceptance of such children has come about in the communityleading to support groups, respite, and more understanding of what is availableand what works.

The capacity and capability ofthese children, studies and personal experience show, has been underrated. Acouple of generations ago, these children were not expected to survivechildhood. While they have shown mental deficiencies, their emotional abilitiesto give and receive are not deficient by the reports of many. More and more, these children are participating in regular schools, grow up to do work thathas meaning to them and are able to maintain independent living skills. Manyare developing talents such as singing, acting, music which also can beconsidered skill enhancing providing further means of communication andlanguage development.

The answer is to the question: Does the Down Syndrome child, acquiring the ability to communicate usingaugmentative or alternative communication (AAC) System, follow a similardevelopment path as that of typical language development, is yes and no. Nobecause the child born with Down syndrome will develop at all levels atypicallyand this would include language development. However, as stated below:

Providing the best strategies for communication for a child with anintellectual disability is an enormously complex task. Augmentative proceduresare not the complete solution to the communication problems of these children. However, by a slow process of trial and assessment of these procedures, smallgains can be achieved in the eventual construction of a system that allowschildren to communicate more effectively. The practical benefits of theseprocedures for children with Down syndrome (and all children with intellectualdisabilities) are of great importance to the improvement of their lifeopportunities. (Foreman, p. 8)

Improvement of live andopportunity has been the result of, at least in part, augmentative procedures.

## References

Coggins. T. E. (1979). Relational meaning encoded in thetwo-word utterances of stage 1 Down’s syndrome children. Journal of Speechand Hearing Research , 22, 166-178.

Clibbens, J. (2001). Signing and lexical development inchildren with Down syndrome. Down Syndrome Research and Practice 7(3), 101-105.

Clibbens, J. Powell, G. G. & Grove, N. (1997). Manualsigning and AAC Issues for research and practice. Communication Matters, 11 (2), 17-18.

Foreman, P., Crews, G. (1998). Using augmentativecommunication with infants and young children with Down syndrome. Down SyndromeResearch and Practice Vol. 5, No. 1, pp. 16-25. NSW, Australia, University ofNewcastle.

Harris, J. (1983). What does mean length of utterance mean? Evidence from a comparative study of normal and Down’s syndrome Children. BritishJournal of Disorders of communication , 18, 153-169.

Launonen, K. (1996). Enhancing communication skills ofchildren with Down syndrome: Early use of manual signs. In S. von Tetzchner& M. H. Jensen (Eds.), Augmentative and Alternative Communication: European Perspectives. London: Wherr.

Launonen, K. (1998). Early manual sign intervention: Eight-year follow up of children with Down syndrome. In Proceedings of theISAAC ’98 Conference. Dublin ISAAC/Ashfield Publications.

Miller, J. F. (1992). Development of speech and language inchildren with Down syndrome. In I. T. Lott & E. E. McCoy (Eds.) DownSyndrome: Advances in medical care. Chichester: Wiley.

Pueschel, Siegfried M., Tingey, Carol, Rynders, J. E., Crocker, A. C. & Crutcher, D. M. (Eds.) (1987). New perspectives on Downsyndrome. Baltimore, MD: Paul H. Brookes Publishing Co. ISBN 0933716699Congresses Chapter 9, 233-62.