

# Example of research paper on charge syndrome

[War](#), [Intelligence](#)



Current reports indicate that, in every 9-10000 births worldwide, at least one or two births are CHARGE defects. Babies born with this syndrome are often faced with life threatening defects, which include complex heart issues, and difficulties in breathing, which makes them, spend many months in hospitals undergoing surgeries and treatments. CHARGE is an acronym for Coloboma, which refers to the eye, Atresia or Choanal, Retardation of growth and development, Genital anomaly and Ear anomaly. Vast majorities of CHARGE syndrome cases do not have any historical trace or any similar condition in the family (Deuce et al, 2012). This implies that the condition is not inheritable, and the pattern of malfunction differs among individuals.

The key characteristics of this syndrome that adversely affect a child's growth even in learning include; a hole in one eye, which forms in early development. This is referred to as Coloboma, and it interferes with vision of a learner depending on its location and size. Some people may have small eyes (microphthalmia), narrowed nasal passages (choanal stenosis), or totally blocked nasal passages (Choanal atresia). This leads to breathing and swallowing difficulties (Bergman et al, 2011).

In addition, individuals with this disorder experience cranial nerve irregularities where the cranial nerves emerge straight from the brain then extend to various areas such as the neck and head. This controls transmission of sensory information and muscle movements (Smith and Blake, 2010). Such abnormalities lead to a diminished sense of smell (hyposmia), swallowing difficulties, facial paralysis, mild hearing loss, and absentia (anosmia). The syndrome also leads to inner and middle ear abnormalities, and unusual shaped ears, which interferes with the hearing

sense.

Other characteristics, which may impartially affect learning include; heart defects, slow growth, cleft lips (opening in the lip), opening in the mouth roof (cleft palate), and developmental delays among others. Individuals with this syndrome are also affected with hypogonadotropic hypogonadism, which retards production of sexual hormones. Males are born with a small penis (micropenis) and undescended testes (cryptorchidism). Females experience external genitalia, and incomplete or delayed puberty (Bergman et al, 2011).

For those who survive the challenges of early life such as surgeries, the difficult lies on education, communication and development. The ultimate level of understanding and functioning significantly varies among the affected. This can be enhanced by early intervention from speech pathologists and audiologists (Smith and Blake, 2010). These facilities are expensive from some parents, and this leads to lack of education among children with the syndrome. Learning in individuals with CHARGE syndrome is often a massive challenge where the educators have to cope with all these abnormalities, and move with the needs of the learners.

All students with this syndrome exhibit unique strengths and abilities: Unlike in normal learning (i. e. individuals who do not have such a syndrome), learners with this syndrome vary in cognitive development. This is in contrary with normal learning where teachers develop a common or uniform cognitive development amongst learners. This makes brings all learners in a common level of understanding, and the teacher can simply tell where the learners are being faced with difficulties (Deuce et al, 2012). With this

syndrome, learners have a different understanding capacity, and cognitive and behavioral aspects. They develop differently, and this makes it a challenge in learning.

The syndrome also associates with higher frequency in repetitive behavior as compared other students of a similar age. They also have sensory and functional impairments. The repetitive behaviors do not appear to serve some purpose or function, and this proves a difficulty in redirecting them from the repetitive behavior (Smith and Blake, 2010).. Educators and care givers have difficulties in assigning meanings to some of these repetitive acts, and this interferes with learning. The repetitive behaviors affect their ability to adapt in an environment, and this affects their participation in class.

Learners with CHARGE syndrome have variable Intelligence Quotients (IQ), which range from profound to normal retardation. This can be explained from the hearing problems, vision complications, and lack of coordination in sensory transmissions. The IQ varies in different learners since the abnormalities vary from different learners. In many instances, learners with hearing abnormalities experience communication problems. Apart from any other issues possessed by these learners, communication difficulties arising from hearing loss or visionary loses, are solved by use of sign languages and use of Braille respectively (Bergman et al, 2011). Approximately 60% of learners with this syndrome acquire the use of symbolic language and can communicate with visual symbols, signs and spoken language. However, this varies according to clefts, breathing problems and craniofacial anomalies. Learners who do not have skills to use symbolic language may acquire pre-

linguistic communication, such as vocalization and gestures, to regulate the behavior of their fellow students.

Communication problem affects learning massively amongst learners with this syndrome. This is due to differences in intelligence and understanding amongst the students. The level of intelligence and understanding varies according to a classroom environment or the mood of the students. In some instances, a learner may be incredibly cooperative and participatory while after some time the mood suddenly changes, and the learner becomes dull and stubborn (Deuce et al, 2012). However, the use of pictures to vary the moods of students faced with this abnormality has proved to bear positivity. Introducing images and pictures to those students, who do not have visionary problems, increases the urge to continue learning, develops a positive learning environment at, and increases the ability to think in a more abstract level as compared to written words.

Learners with CHARGE syndrome require consistent access to material and information. This assists them to reduce their anxiety about routine changes and transitions. It also helps them to move ahead and become unstuck in relation to perseveration of a topic. However, this varies amongst the learners depending on the prevailing characteristic of the syndrome. In normal learning, consistency in information is used in refreshing the minds and memory of learners and in preparing them to the next topic. This is in contrast to learners with this syndrome where consistency is used as a factor for perseverance. It acts as a negotiating element or a charge to influence memory, and induce a lifelong skill.

Unlike in normal learning, children faced with this abnormality tend to forget

fast or have fast memory losses (Deuce et al, 2012). This poses a significant challenge to the educators as they have to keep repeating a single concept for a long period of learning time. Memory lapse is also different among the learners, and this implies that some learners have the capability to grasp concepts faster than others. This may relate to learning in individuals without this difficulty where memory varies among them, but refreshing their memory is not as hard as with learners with this difficulty.

Learners faced with CHARGE syndrome are forced to be in and out of class as they attend medical services. This affects learning since as they seek medical services other learners continue with their studies. Having such breaks affect their memory where most of them tend to forget whatever they had learnt before going to seek medical attention. However, as much as medical attention takes much of their learning time, it is crucial for prevention of further damage to sensory parts.

## **Reference.**

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