EFFECTS OF PHYSICAL ACTIVITY AND SPORTS IN THE REDUCTION OF STEREOTYPY IN BLIND SUBJECTS

Gaetano Raiola¹, Gaetano Altavilla¹ and Gomez Paloma Filippo²

¹ University of Basilicata, Potenza, Italy
² University of Salerno, Italy

Abstract
The study aims to analyze the effects of physical activity in the reduction of stereotypy in individuals who are blind from birth and the benefits obtained through the physical activity and sports. Starting from the observation of subjects with stereotypies, engaging in physical activities, it was found their reduction or even disappearance. The importance of time of onset of visual impairment and the possible correlation that the subject could develop stereotypical behaviors. The use of physical activity is desirable since pre-school age, directing it not only for the reduction of stereotypes, but also as a learning tool and social inclusion for all. It is evaluated also the influence of the adaptation of blind subjects for changing motor control and learning.

Key words: observation, secondary implications, early intervention, methodology, possible outcomes

Introduction
Whether through physical activity and play the child with visual impairment can play its path pedagogical-didactic, his knowledge, by comparison with his peers and with adults who develops his personal skills and competencies (Ambretti et al, 2011, Raiola, 2011ab). Physical activity proposed to the child with visual impairment from birth must always be anticipated and guided verbally during execution (accompanying and encouraging); passing first through the experiences of individual and then with a small group and then within the class, but differentiating the ways, means, instruments and timing of implementation and verification.

These subjects with visual impairment are forced to compensate for their visual impairment to be able to relate to and learn. During its development it is possible to identify some significant changes in the time of acquisition of certain motor milestones, spatial skills, cognitive development and language acquisition (Gargiulo et al., 2009); resulting problems of adjustment, triggering secondary implications that could cause the individual to withdraw into himself, if not properly stimulated. To this end we must believe that physical activity may be an appropriate tool to facilitate adaptation and overcoming difficulties through the enhancement of the senses vicarious without ignoring the context and processes. A system of education to be inclusive should focus on changing contexts and processes of teaching and learning, in order to generate the same development opportunities for those who live in particular situations of difficulty, which are conducted in a state of special educational need. In the absence of specific responses, in fact, such situations need to become limitations in activities and restrictions in social participation. The study aims to analyze the effects of physical activity in the reduction of stereotypy in individuals who are blind from birth and the benefits obtained through the physical activity and sports.

Methods
Theoretical and argumentative approach by reviewing literature and focused on particular data. Deductive way to insert specific issue relating the special needs. Take in relationship effects and stimuli about current paradigm.

Results
Persistence of stereotypies have several expression: Remained stable, Improved, Worsened, Cease. The percentage is difference and it has the maximum peak in the stability of it (Fig. 1).
It is interesting to read the differences between gender. The stereotypes, in general, are more frequent in individuals who are blind from birth with a higher incidence in males 83% compared with 56% of females (Fig. 2).

As for the type of stereotypes most common in people who are blind at birth taken into account, it has been noted that the rattling of the hands is the most frequent complaint in relation to the swaying of the trunk and twisting of the head.

The observation took place during the various experiences and research data of other authors, it could be a sample of 20 students who are blind, which was interesting to note that these stereotypical behavior ceased when the subjects were involved in the execution of a motor act, in which their attention and their energies were engaged and concentrated to that end. Among those surveyed, 95% of them practiced, habitual physical activity at least twice a week; of these, 65% showed stereotyped behaviors among less serious crimes, and that is the tinkling of the hands. By an analysis of data collected during physical activity at school, it was possible to confirm as stereotypes decrease significantly during the practice. This observation also confirms the benefits of physical, psychological, social and engines made by motor practice in blind subjects, but also as an essential tool of learning methods and strategies for orientation and organization of motor acts from simple to more complex (Raiola, Nughes, 2015; Raiola, Tafuri, 2015; Raiola, Altavilla, 2015; Raiola et al 2015a; b).

In fact, physical activity for the blind child is fundamental to the achievement of the conquest of reality, but in most cases is hampered by their own parents for fear of getting hurt, not realizing that there is nothing more wrong not to encourage them to explore their surroundings through movement. Is quite understandable when by the parents of a child who is blind one is to establish, to the same, a mechanism of fear, anxiety and protection that removes the achievement of a physical and mental development and the acquisition of their autonomy; is essential, therefore, do not repress stimulus exploration of the child, for fear that it can run into danger.

A body denied exclude the individual from all educational activities, social and even existential (Magnanini, 2008). Therefore, you should always encourage what is necessary to explore the environment in which he lives through movement, identifying the most appropriate approach to foster the best relationship between the individual and his environment by giving it the right amount of stimulation, without exceeding, not to cause the opposite effect. In fact, if the child is provided too many stimuli, he will not have time to analyze them and assimilate them, so will appear meaningless, it will go to expand his knowledge and as a result he does not re-use them in other situations. Today the prevailing socio-constructivist paradigm, according to which the child actively constructs the meaning of reality in which he lives through its interaction with the environment (Altavilla, Raiola, 2014; 2015, Altavilla et al., 2014a; b).

Sports activity could help for inclusion in several activities such as the sitting volleyball and volley for disabled people (Parisi, Raiola 2015ab). The promotion of physical activityin early childhoodis therefore essential, in addition to being a valuable tool for developing sensory perception, because the blind person has to pay more attention to stimuli from the remaining sensory channels. The movement through the tactile and auditory stimulation can facilitate the process of information processing and cognitive strategies for building space similar to that of sighted people, promoting a better understanding and conquest of the reality that surrounds him.
Discussion

The motor stereotypies are defined as involuntary movements, coordinated, structured, repetitive, rhythmic, purposeless movements but apparently significant. The most common stereotypes are the rocking of the body, the tinkle of the hands, twisting of the head movement of the fingers before his eyes, sweeping movements of the arms. Is also important to emphasize the importance of knowing the temporal onset of visual impairment, as there may be a high correlation with the possibility that the subject could develop stereotypical behaviors and that they occur in situations of anxiety, stress, fatigue, boredom, neglect and excitement. Harvey et al. (2009) argue that motor stereotypes usually begin during the first three years of life. Each child has their own way of expressing these movements, how to beat or swaying may happen several times during the day and last from a few seconds to a few minutes; usually this kind of sudden movements cease when the child is called to the attention or distracted. Most motor stereotypes persist, 3% cease, 28% improved, 61% remained stable and 11% worsened.

Conclusions

Based on the data collected from my office I can reiterate and confirm that physical activity for people who are blind from birth can be an excellent tool for reducing stereotypical behaviors. In fact, one of the stereotyped behaviors observed as the rocking of the trunk, twisting of the head and the ringing of hands, was found to be more common particularly the latter. The tinkle of the hands, compared to the swaying of the trunk, it is certainly an involuntary movement of minor and do not underestimate the fact that the rocking motion of the trunk, where the majority of the subjects are adults and practicing physical activity and sports is not was present. In fact, the only cases in which it was found the rocking motion of the trunk were in children and adolescents, in which the process of growth and development is still going on.

This analysis leads me to share with what is stated in the literature, namely that such conduct is attributable to delays in development of the areas affected by the visually impaired such as the production of space, the development of motor, cognitive, emotional, linguistic and subsequently with the growth and maturation of the motor pattern and body is filled more quickly if the subject, from early childhood, are given the opportunity to know and learn. Finally, if you think that stereotypes can be subject to prejudice, marginalization or exclusion, physical activity can certainly be a valuable tool to break down prejudices and cultural barriers, in favor of a policy of inclusion, based on building positive social relationships and full self-realization.

References

UČINCI TJELESNE AKTIVNOSTI I SPORTA U SMANJENJU STEREOTIPA KOD SLIJEPIH SUBJekATA

Sažetak

Studija ima za cilj analizirati učinke tjelesne aktivnosti u smanjenju stereotipa u pojedinaca koji su slijepi od rođenja i prednosti dobivene kroz fizičku aktivnost i sport. Polazeći od promatranja ispitanika u stereotipovima, kao i sudjelovanja u tjelesnim aktivnostima, utvrđeno je njihovo smanjenje ili čak nestanak. Uvažavajući važnost vremena nastanka oštećenja vida i moguću korelaciju moglo se razviti stereotipne ponašanje. Uporaba tjelesne aktivnosti je poželjna jer već u predškolskoj dobi, usmjerava ne samo ka smanjenju stereotipa, već je to i alat za učenje socijalnog uključivanja za sve. Može se vrednovati i utjecaj prilagodbe slijepih ispitanika za promjenu motoričke kontrole i učenja.

Ključne riječi: promatranje, sekundarne implikacije, rana intervencija, metodologija, mogući izlaz

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Correspondence to:
Assoc.Prof.Gaetano Raiola, Ph.D.
University of Basilicata
85100 Potenza, via N. Sauro 85, Italy
Phone: +39 0971 201 011
E-mail: raiolagaetano@libero.it