



THE CONTRIBUTIONS OF SNOEZELN THERAPY IN AUTISM SPECTRUM DISORDER

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ABSTRACT

We try to understand the contributors of the application of Snoezelen therapy in Autism Spectrum Disorder (ASD). The research is qualitative and exploratory, based on a case study carried out within the framework of an action-research project. The results confirm that the Snoezelen Therapy produces some positive effects in the child with ASD, being verified that the subject presents significant improvements in the communication, interaction and, above all, the behavior after the intervention.

KEYWORDS: Autism Spectrum Disorder and Snoezelen Therapy.

INTRODUCTION

Autism Spectrum Disorder (ASD) is characterized by deficits in the areas of social communication and social interaction, as well as restricted and repetitive behaviors, interests and activities (APA, 2014).

One of the major difficulties of people with ASD is communication with the outside world, whether through verbal language or non-verbal language (Mora and Fortea, 2012). Montgomery, C.B., Allison C, Lai MC, Cassidy S, Langdon PE, and Baron-Cohen S. (2016) point out the difficulties in understanding from the perspective of the other, referring to the major gaps in the construction of "Theory of Mind." Based on media deficits and restricted and repetitive patterns of behavior in individuals with ASD, Mello (2007) states that these manifest themselves through certain characteristics, such as the dependence of routines and resistance to change, compulsive and ritualistic behaviors, literal understanding of language and difficulties in creative processes.

As a starting point for the intervention, Braga (2010) argues that psychoeducational diagnosis and evaluation are crucial in the development process of children with autism and in their prognosis. Paredes (2012) admits that through a good therapy organization, it is possible to find the answer to the needs of the person with ASD.

Snoezelen therapy refers to a multisensory stimulation method that emerged in the Netherlands in the 1970s and was created by two therapists: Ad Verheul and Jan Hulsegge. Since then, Snoezelen has been used as a therapy that promotes stress reduction, relaxation, communication, sensory stimulation, and concentration (Lopes, A., Araújo, J., Ferreira, M., Ribeiro, J. (2015).

The Snoezelen room is able to provide comfort, through the use of controlled stimuli, offering sensory stimuli, which can be used individually or in combination. The environment is safe, promoting self-control, autonomy, discovery and exploration and enhances positive therapeutic and pedagogical effects. The multisensory environment allows the senses to be stimulated and confidence and relaxation are encouraged through non-directive therapies (Martins, 2015).

Snoezelen presented positive results in individuals with mental illness, acquired brain lesions, motor ability lesions and special educational needs (Hulsegge and Verheul, 1987). Some authors report positive results of Snoezelen in children with ASD, namely in reducing stereotypies, self-harm and improved communication (Fagny 2000; Lopes, A., Araújo, J., Ferreira, M. and Ribeiro, J., 2015).

In view of the above, the main objective of the present study is to verify if the application of Snoezelen-Multisensory Stimulation therapy - could benefit a child

with ASD, in relation to the behaviors exhibited. We intend to understand if there are changes in Communication, social dysfunctions and Behavior, interests, restricted and repetitive activities, after the sessions of Snoezelen.

MATERIAL AND MTEHODS

The research is qualitative and exploratory, based on a case study carried out within the framework of an action-research project.

The subject of the study, selected for convenience, is a female child with a diagnosis of ASD, who attends the Preschool Social Response, in a Private Institution of Social Solidarity. The subject is four years and two months old and according to medical reports presents serious deficiencies in global and specific mental functions, delayed language and problems in higher level cognitive functions. At the educational level it is accompanied by an Early Intervention Technique, a Speech Therapist and a Principal Educator.

The research had three distinct phases: phase one, which included study authorizations, collection of clinical diagnoses, and educational measures and assessments of the subject. Phase two, intervention period, which takes place in the Snoezelen room over twelve sessions of 50 minutes, three times a week. Phase three, the results of the intervention, through interviews with the Speech Therapist (ST), the Early Intervention Technique (EIT), the Titular Educator (TE) the Head of Education (HE) and, also, a direct observation.

As instruments of data collection we conducted structured interviews and observation (Quivy and Campenhoudt, 2003). A focused observation grid was created in order to assess the behaviors of the child with ASD in the following categories: communication; social interaction, behavior, restricted and repetitive interests and activities, and Snoezelen therapy. Registration forms for the Snoezelen sessions were also applied.

Table-1.

	Interviewed	Speech Therapist (ST)	Early Intervention Technique (EIT)	Teacher Educator (TE)	In charge of Education
CATEGORIES					
Communication		+	=	=	+
Behavior, interests, and restricted activities		=	=	+	+
Social interaction		=	+	+	=
Snoezelen Therapy		+	+	+	+

After the sessions of Snoezelen Therapy, we verified many improvements observed in the categories under analysis like construction of moments of well-being and leisure, which improved the quality of life of the child with ASD. It is also in this context that the authors Hulsegge and Verheul (1987) point out the importance of Snoezelen Therapy.

RESULTS AND DISCUSSION

In the Communication category, after the intervention, ST and HE verified positive changes. In contrast, EIT and TE do not share the same idea. It is proposed that there be a continuation and an increase of sessions, to affirm the possible development in the area of Communication.

In the category of Behavior, restricted interests and activities, there are several acquired data: the mismatched behaviors stand out with positive changes, in which the subject looks more calm, relaxed, tolerant, receptive, cooperative and greater well-being. There is decrease in tantrums, anxiety and teasing. The interests and behavior of the subject in the lunch period maintain, in contrast, we find that the child fell asleep more easily at night. As for stereotypies, there is no consensus in the opinions, the EIT and ST do not indicate any change.

In the category of Social Interaction, the TE and the EIT do not verify changes, but ST argues that some changes were visible. According to HE, the family relationship is remarkable, with more interaction.

In the category of Snoezelen Therapy, they indicate that it is beneficial and important for Communication, Interaction and Behavior in social and family life and personality change. Thus, it is recommended for all and considered a valid experience and an interdisciplinary approach. They consider that the experience is positive for the subject and family and should be inserted in the National Health Pane and Early Intervention.

Data analysis of the record sheets of Snoezelen's sessions demonstrates that the subject participated actively, when stimulated.

We present, in Table 1, an overall synthesis of the results for each of the categories evaluated after the intervention with = (no improvement) or + (as improvements).

We emphasize that the subject with ASD presents significant improvements. When we checked the existence of some changes in Communication and Interaction in children with ASD finalized the sessions of Snoezelen Therapy. The subject reveals greater ease in fulfilling requests and demonstrates greater understanding, does not challenge colleagues so much,

the focus of concentration is larger and calmer. Communication and interaction are frequent. In research, the subject often presents periods of relaxation and concentration which corroborates the investigations of Lopes, A., Araújo, J., Ferreira, M., Ribeiro, J. (2015). We consider positive sessions with moments of well-being and leisure always present, which improved the quality of life of the child with PEA.

CONCLUSIONS

With the achievement of positive results (relaxation, concentration, calmness, collaboration, receptivity and diminution of tantrums), we consider Snoezelen therapy as a beneficial experience for all those involved in the school, family and professional contexts.

As suggestions for future research, we propose the accomplishment of the same objectives and methodology presented in the present study, extending the size of subjects and increasing the number of sessions. The fact that the research is a case study and restricted to the size of our sample, the results obtained are not generalized, since the results obtained refer only to the respective subject in the study. We also note as limitations that the subject attending other therapies and maintaining a different diet, which makes it difficult to conclude on certain achievements throughout the study. The scarce Portuguese literature on Snoezelen Therapy, including studies with children with ASD and the lack of a record model, uniformity of observation criteria and scale of evaluation are other points considered as limitations in the study.

REFERENCES

1. American Psychiatric Association. *DSM-5. Manual de Diagnóstico e Estatística das Perturbações Mentais*. Lisboa: Climepsi Editores, 2014.
2. Braga, C. *Perturbações do Espectro do Autismo e Inclusão: atitudes e representações dos pais, professores e educadores de infância*. Biblioteca da U.Minho, 2010.
3. Fagny, M. L'impact de la Technique du "Snoezelen" sur les comportements indiquant l'apaisement chez des adultes autistes. *Revue Francophone de la Déficience Intellectuelle*, 2000; 11(2): 105-115.
4. Hulsege, J. & Verheul, A. *Snoezelen: Another World*. Chesterfield: Rompa Editorial, 1987.
5. Lopes, A., Araújo, J., Ferreira, M., Ribeiro, J. The effectiveness of Snoezelen in reducing stereotyping in adults with intellectual disabilities: a case study of Occupational Therapy intervention in multisensory stimulation rooms. *Revista de Terapia Ocupacional*, 2015; 26(2): 234-243.
6. Martins, A. *Snoezelen com idosos- Estimulação sensorial para melhor qualidade de vida*. s/local: s/editora, 2011.
7. Mello, A. *Autismo – Guia Prático*. São Paulo: AMA. Brasília, 2007.
8. MORA, C.E.; FORTEA, I.B. Comunicación, atención conjunta e imitación en el trastorno del espectro autista. *INFAD, Extremadura*, 2012; 3(1): 49-57.
9. Montgomery, C.B., Allison C, Lai MC, Cassidy S, Langdon PE e Baron-Cohen S. Do adults with high functioning autism or Asperger syndrome differ in empathy and emotion recognition? *Journal of Autism Developmental Disorders*, New York, 2016; 46: 1- 10.
10. Paredes, S. *O Papel da Musicoterapia no Desenvolvimento Cognitivo nas Crianças com Perturbação do Espectro do Autismo* (Dissertação para grau de Mestrado, Escola Superior de Educação Almeida GarTET, Lisboa, Portugal), 2012.
11. Quivy, R. & Campenhoudt, L. V. *Manual de Investigação em Ciências Sociais*. Lisboa: Gradiva, 2003.