

Social Functions in Autistic Children and Interaction with/through Object: A Brief Report

Giulia Savarese^{1*}, Federico Manzi^{2,3}, Antonio Iannaccone³

¹Department of Medicine and Surgery, University of Salerno, Baronissi (Sa), Italy

²Department of Psychology, Research Unit on Theory of Mind, Università Cattolica del Sacro Cuore, Milan, Italy

³Institut de Psychologie et Education, Université de Neuchâtel, Neuchâtel, Switzerland

Email: *gsavarese@unisa.it

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Abstract

The aim is to analyse the social functions of pointing, of imitation and of joint attention in presence of the object for the autistic children. We have built an ad-hoc observation check-list and we have conducted 43 observations with verbal ASD-affected children aged between 2 years and 6 years. The results show that a better use of the object is correlated to the manifestation of social functions analysed.

Keywords

Autistic Children, Objects, Social Functions

1. Introduction

In a *socio-material perspective* (Iannaccone, 2015), the object is composed of material features and social components coexisting together. Considering that the social interaction is impaired in autistic children; consequently, the interaction with the “social world of objects” is impaired as well (Iannaccone, at al., 2016).

Some autistic children show deficits in the use of objects: alterations in manipulation, exploration and describing. Thus, autistic children which do not present impairment in the use of the object show more social functions than impaired children (Trevarthen & Hubley, 1978; Tomasello, 1995; 2016).

The three social functions, pointing, imitation and joint attention analysed in the study and they all have in common the presence of the object in their definition. Thus, our aim is to analyse these functions not only taking into account the development of these by the autistic child, but also what role plays the object

specifically in social and relational terms.

2. Method

We have built an ad-hoc observation check-list inquiring on *9 areas* (each of which has specifying under-questions), which refer to 9 psychological theory constructs developed by the literature on *autism and object*.

The main objective of this check-list is that of describing characteristics and socio-material functions of the object with reference to autistic subjects. In this check-list, there are different psychological constructs, but here we have analysed in detail three constructs: declarative function, imitation and attention. As we can see the check-list was made of different constructs but we will analyse these other constructs in future.

During each observation, an educator following the child for rehabilitation was present and the educator completed the check-list. Each observation lasted 26 minutes on average and has been transcribed on an ad-hoc check-list.

Children have been observed while interacting with an object, a small-sized plastic toy, they had chosen from a set of objects, for instance, toy cars, trains, toy animals and others.

When we refer to “acted and interacted with and through the object” we arranged different constructs of the check-list, such as: Understanding of the use of the object, interaction through the objects etc. Which are the constructs refer to the manipulation, exploration and describing.

We carried out 43 observations with verbal ASD-affected children aged between the end of the sensory-motor stage (24 months) and the start of the pre-operational stage (68 months, namely 6 years). Moreover, the literature shows some results showing a link between a better use of the object and those functions that emerge during the pre-operating period, such as imitation and attention to the other (Bruckner & Yoder, 2007).

We were two samples. The first sample composed of 18 children who acted and interacted with and through the object while the second sample composed of 25 children who acted and interacted with and through the object.

3. Results

Regarding the association between the sample 1 and the declarative function (Figure 1) shows that the **66.7%** of the sample present this association while the sample 2 shows that only the 24% present this association.

Indeed, it is possible also for autistic children to use the imperative function of pointing, as for typical development children, and pointing is often the ground-breaking of a full declarative function (Camaioni et al., 2003).

Regarding the association between the sample 1 and the imitation (Figure 2) shows that the **94.4%** of the sample present this association while the sample 2 shows that only the **60%** present this association.

Concerning imitation, it has been suggested that the specific imitation deficit of autism could be reduced or even eliminated with the use of activities linked to

Pointing function

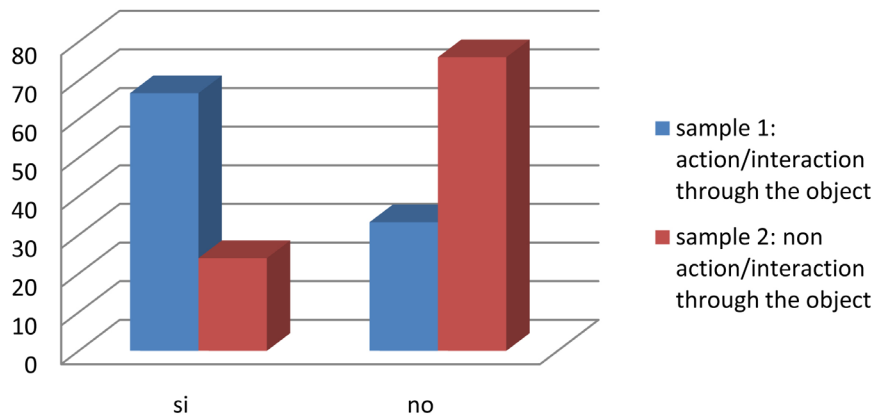


Figure 1. Pointing function.

Imitation function

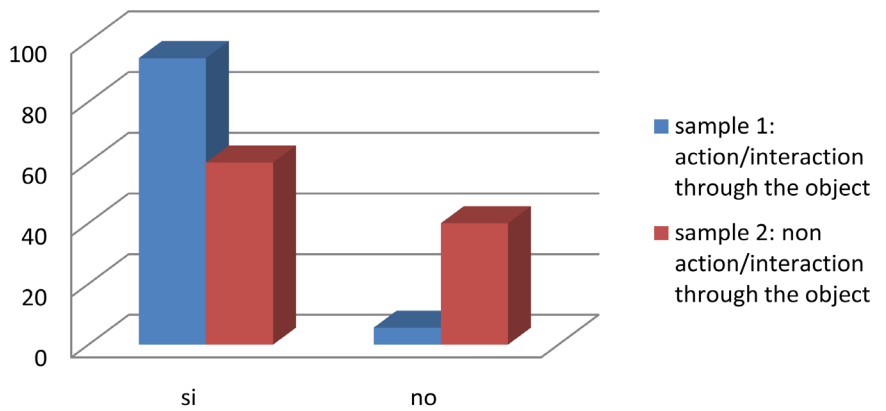


Figure 2. Imitation function.

Joint attention

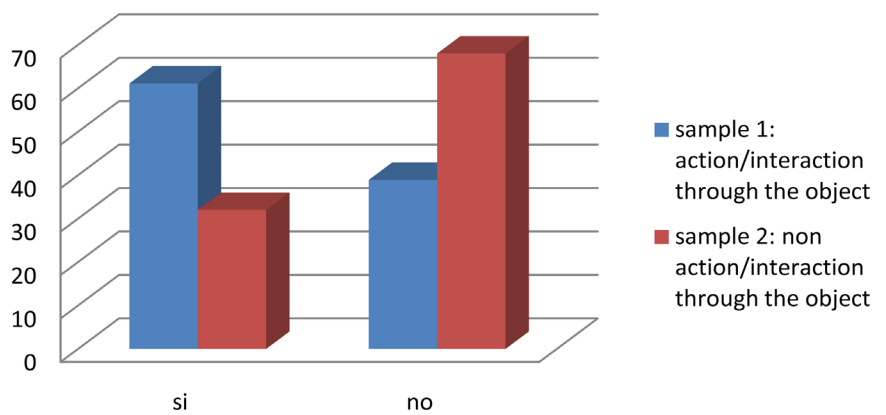


Figure 3. Attention to the adult function.

objects (Vanvuchelen et al., 2013; Custance et al., 2014), especially when no

timelines in the use of objects are given. This would favour a higher joint attention, motor imitation and intentional communication with a social partner (Swettenham et al., 1998).

Regarding the association between the sample 1 and the Joint attention (Figure 3) shows that the 61.1% of the sample present this association while the sample 2 shows that only the 32% present this association.

Lastly, regarding joint attention it has been proved that manipulation of material objects can address the child's attention and favour the joint attention with both adults and peers (Korkiakangas & Rae, 2013).

4. Conclusion

The socio-material features of the object represent factors that mediate the construction of the interaction with the adult. Social functions contribute to this process are: the declarative function (relating to pointing), the imitative function, the function of joint attention.

In line with the literature (Bruckner & Yoder, 2007) on the child with typical development, our study with autistic children shows a link between a better use of the object and these functions that emerge during the pre-operating period, such as imitation and attention for interacting with people.

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