## MECA\_TSA: Mechanisms underlying the benefits of assistance dogs for children with ASD

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Although we nowadays have many proofs of the benefit of animals, particularly the assistance dog, on psycho-social development in children with ASD, few studies have looked into the underlying mechanisms of these benefits. From a theoretical point of view, two leads can be suggested: 1) a direct lead, suggesting that the interaction and attachment created between the child and the dog is at the origine of the benefits; 2) an indirect lead, suggesting the introduction of the dog in the family is a source of benefits for the parents, which would modulate the quality of the parent-child interaction and the parental strategies used, and would contribute to a more suitable environment to the development of children with ASD.

In this project, currently underway, a longitudinal follow-up is realized on twenty families of children with ASD. These families are met at three key moments: before the introduction of the assistance dog, then 3 and 6 months after the introduction. At every step are collected: the answers of the parents to an online questionnaire (a series of standardized scales on parental profile, parental stress/anxiety, child-dog attachment and autistic traits), the answers of the parents during a semi-directive interview and the collect of videos (recording of the interaction between the child with ASD and the parents in semi-standardized situations).

Following the two leads mentioned above, the goals of this project are numerous:

(1) Confirm the benefits of the introduction of an assistance dog on the child (autistic traits) with ASD and their parents (stress and parental anxiety); (2) investigate the contribution of the

attachment between the child and the dog in the benefits on the child and their parents; (3) explore if parental profiles (i.e. parental interaction strategies) can be established and how these evolve after introduction of the assistance dog; (4) investigate if associations are present between evolvement of the parental strategies and benefits coming from the introduction of the dog on child and their parents, as well as with the attachment between the child with ASD and the dog.

In carrying out this project, the team adopted a Participatory Action Research approach. With this in mind, right from the start of the project, a steering committee was set up, bringing together researchers, representatives and professionals from assistance dog supply organizations, and parents of children with ASD. Regular meetings of this committee were organized throughout the project and until today. The implication of every interested party during the whole research process is source of many benefits in this research: bettering of the process and methodology, continuous improvement of the recruitment and data collection process, refinement of statistical analyses and associated interpretations, maintenance of research objectives aimed at achieving answers/deliverables relevant to the various parties involved.