

# Study shows that dogs help autistic children adapt

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Dogs may not only be man's best friend, they may also have a special role in the lives of children with special needs. According to a new University of Montreal study, specifically trained service dogs can help reduce the anxiety and enhance the socialization skills of children with Autism Syndrome Disorders (ASDs). The findings published this year in *Psychoneuroendocrinology* may be a relatively simple solution to help affected children and their families cope with these challenging disorders.

"Our findings showed that the dogs had a clear impact on the children's stress hormone levels," says Sonia Lupien, senior researcher and a professor at the Université de Montréal Department of Psychiatry and Director of the Centre for Studies on Human Stress at Louis-H. Lafontaine Hospital, «I have not seen such a dramatic effect before."

### Cortisol the telltale indicator of stress

To detect stress-levels, Lupien and colleagues measured the amount of cortisol present in the saliva of autistic children. Cortisol is a hormone that is produced by the body in response to stress. It peaks half-hour after waking up, known as the cortisol awakening response (CAR) and decreases throughout the day. Moreover, it is detectable in the saliva, which makes sampling its levels easy.

The researchers measured the CAR of 42 children with ASD. "CAR is a



very useful marker of stress," say Lupien. "We used it to determine the effect of service dogs on the children's <u>stress</u> levels by measuring it in three experimental conditions; prior to and during the introduction of a service dog to the family, and after the dog was removed."

# Cortisol and behaviour linked

Throughout the experiment, parents were asked to complete a questionnaire addressing the behaviours of their children before, during and after the introduction of the dog. On average, parents counted 33 problematic behaviours prior to living with the dog, and only 25 while living with the animal.

"Introducing service dogs to children with ASD has received growing attention in recent decades," says Lupien. "Until now, no study has measured the physiological impact. Our results lend support to the potential behavioural benefits of service dogs for autistic children."

More information: www.sciencedirect.com/science/journal/03064530

## Provided by University of Montreal

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