

# The flipped doctor is 'IN'

Study by NIE suggests autistic kids respond well to dolphin therapy

By Ang Yiying



(left) Seven-year-old Rachael Goh, who has autism, smiling as she interacts with a pink dolphin at the Dolphin Lagoon on Sentosa. -- PHOTO: UNDERWATER WORLD SINGAPORE

## Autism and therapies available

AUTISM is a disorder that affects a person's ability to communicate and to socialise with others, which could include traits such as poor eye contact or repetitive body movement. There is no cure for it.

However, symptoms may change or be reduced with intervention and therapies.

Some of the mainstream therapies include speech therapy, occupational therapy, and applied behaviour analysis that can modify unacceptable behaviour through conditioning.

Mrs Anita Russell, senior autism consultant at the Autism Resource Centre (Singapore) said therapy involving animals is often an alternative therapy that aims to develop one's sensory and social skills, manage challenging behaviour and improve quality of life.

In Singapore, people with autism have participated in programmes such as Riding for the Disabled, where they learn to ride and groom horse as part of a structured programme.

But there has not been enough research done on the area of animal therapies for people with autism to conclude if they are effective, said Mrs Russell.

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AUTISTIC children may benefit from regular close encounters with dolphins, a local study has found.

The study tracked five autistic children, then aged six to 12, from August last year to February this year as they went for weekly dolphin encounter sessions at the Dolphin Lagoon at Sentosa.

Tests on the children before and after the sessions showed an improvement in stereotype behaviour.

These include making noises, gazing at an object for a long time or making repetitive body movements.

Even more interesting, the children were able to pick up hand signals - which the trainers taught them to use to communicate with dolphins - and use them.

'There is potential to teach autistic children to use sign language to communicate, especially more so for those who are non-verbal,' suggested the study's principal author, National Institute of Education (NIE) lecturer Noel Chia.

Professor Chia specialises in early childhood and special needs education.

There have been few studies on dolphin-assisted therapy for autistic children and most originate from the West, using bottlenose dolphins.

In the study here, each child had a weekly one-to-one encounter with one of the lagoon's pink dolphins.

The children stroke the dolphins or swim with them for up to five minutes at a time, while being supervised by a marine mammal trainer.

The children, who fall into the mid or average range of autism, took tests before and after the six-month period to determine if there were any differences in their severity of their autism, stereotype behaviour, verbal communication and social interaction.

The tests administered showed that the children had an improvement in stereotype behaviour.

But the tests showed no improvement in other areas.

Autism is a spectrum disorder and its severity differs from person to person.

Autistic individuals typically have lower awareness of their surroundings, difficulty communicating with others and may display stereotype behaviour.

Estimates from the Autism Resource Centre (Singapore) website place the number of autistic people here at 24,000.

Of these, 5,472 are aged below 19, and 216 new cases of children with autism are diagnosed annually.

The findings from the NIE study will be published around October in the Journal of The American Academy of Special Education Professionals.

One limitation of the research is that children undergoing dolphin-assisted therapy are likely to be undergoing mainstream therapy at the same time.

But the results indicate that dolphin-assisted therapy could be beneficial.

MNC executive Sharon Tan, 38, whose 13-year-old son Kenny Goh participated in the study, felt that it has helped him to improve his concentration and be more independent.

She said he now does household chores which he did not do in the past.

'He helps me to lay the table, chopsticks and do simple washing up,' she said.

More research is still needed in the area, said Prof Chia, who is hoping to work again with the Dolphin Lagoon on an in-depth study.

The Underwater World Singapore (UWS), which runs the lagoon, has been conducting its Swim for Children with Autism programme since October 2003.

However, it was only in the past year or so that it was approached by NIE and collaborated on research.

UWS general manager Kwek Meng Tiam said of the programme: 'It's just a platform for special needs students to have an encounter with the dolphins.

'But if we can collaborate with NIE to see if it's effective, why not?'

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