

# Exploring the influence of an assistance dog on the verbal communicative interactions of children with selective mutism.

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Assistance Dog (AD)	A dog trained to assist people with a disability to participate in everyday activities and mitigate the impacts of that disability. The AD is trained to a high standard of behaviour and hygiene appropriate to access public spaces that are prohibited to most animals (Howell et al. 2022).
Selective Mutism (SM)	Severe anxiety-based communication disorder where individuals present with inability to speak in some settings, despite the ability to speak in other settings (Shipley & McAfee 2021).
Verbal Communicative Interactions	Verbal communicative interactions include any of the oral verbal language means including (but not limited to): vocalisations/sounds, words, sentences, and conversations that humans use when interacting with others. Defined as the exchange of information between communication partners. (Mclaughlin 2011).

#### Background

Limited evidence for ADs role in non-physical disabilities (Dimolareva & Dunn 2020).

Few studies on the role of ADs on communication (Chitic, Rusu & Szamoskozi, 2012).

Focus on communication in SM



#### Research Aim and Question

#### Aim

• Explore how the presence of an assistance dog may influence communication in children with selective mutism.



Child with Assistance Dog (Guide Dogs Tas, 2022) https://guidedogstas.com.au /ourservices/autismassistance-dogs/

#### **Research Question**

 How do assistance dogs influence verbal communicative interactions in children aged between 5-10 with selective mutism (SM)?

#### Research Design

### TI

#### **Convergent Mixed-Methods**

Explore relationship between ADs and verbal communicative interactions

#### Qualitative Research

- Gather rich in-depth information
- Gain insight and understanding of population

#### Quantitative Research



Support findings



Child with ASD (Otsimo, 2022) https://otsimo.com/en/typical-characteristics-autism-spectrum-disorder/

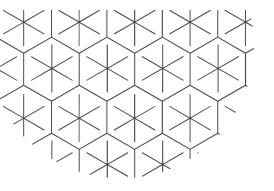
#### **Participants**



Two children with SM characteristics

Parents of the children with SM characteristics

Aged between 5-



#### **Data Collection**



Observation

(Gómez-Calcerrada et al., 2021)



Semi-Structured Interviews

(Hellings et al., 2022)

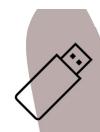


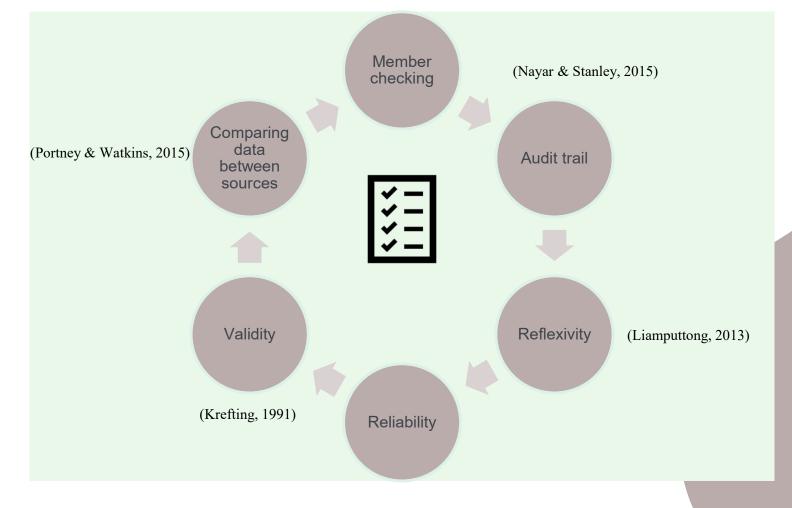
**Photovoice** 

(Glaw et al., 2017)



#### Rigour









#### **Ethics**



- Approved by UniSA Human Research Ethics Committee
- Submitted to UniSA Reportable Activities Register at Animal Research Committee
- Confidentiality and informed consent
- Use of pseudonyms





#### **Data Analysis**



Thematic Analysis

Simple Data Analysis



Compare and Contrast



#### Results

• (1) Communication difference around different people



 (2) Using the dog as a facilitator of communication and increased vocabulary



• (3) Reducing anxiety and increasing confidence



## (I) Communication difference around different people

#### People familiar with:

"They [family] have definitely seen a difference. The family is impressed with his verbal communication when doing commands for the dog... Others still have trouble understanding him but this is better when he has his dog." (Linda)

People the child is not familiar with:

"He'll talk to strangers and people he doesn't know... He'll talk more with random people with the dog"... "Like even going up to people and asking them what they're dog is called." (Jenny)



## (2) Using the dog as a facilitator of communication and increased vocabulary

Ways the dog has increased communication:

"So all the techniques that (Henry) has learnt with (dog's name) he was doing them with (dog's name)...When he meets even other dogs, he would, you know, sit, sit. Like the communication just is clearer." (Linda)

Commands and utterances used with the AD:

"Yeah pretty much but then even if they ask him other questions, he will then answer them. Like aww can you tell me about [dog's name] and I'll ask him a few questions and then they'll go oh, how old are you. And he'll tell them. What's your name? He'll tell them his name." (Jenny)



## (3) Reducing anxiety and increasing confidence

"And he has what we call his confident voice. So he puts on a really good voice. And he's like, that's my dog [dog's name]. And he'll just talk to them about his dog and it's like wow usually he'd just be like boop (gesturing running away)." (Jenny)



#### Results

Talks to people, and names dog

Describe events

Improvements with AD



Respond to greetings



Maintain topic

Asks and answers simple questions

#### **Discussion**

 Impacts on activities and participation

WHO ICF (WHO, 2001)

- Vocabulary
- Communication Functions
- Reduce anxiety

, 2001)

•

Increase in communication

Different interventions (ASHA, n.d.).

 Alternative to clinical interventions 'Animal turn' (Driscoll, 2020)

Understanding of human- animal relationships

#### **Discussion**

#### Limitations

- Small sample size
- Limited observation

#### **Implications**

- Apply to other health conditions
- Using animal-assisted therapy

## Future research

- Large sample size, more populations
- Different settings

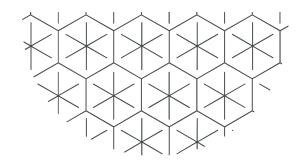
#### Conclusion

- Increase verbal communicative interactions
- Reduce anxiety, improve communication and increase vocabulary









## Thank you for listening

Any Questions?

#### References

Please see thesis for detailed reference list.

References for images used in this presentation:

Guide Dogs WA. (2022). Autism Assistance Dogs. Viewed 05 December 2023. guidedogswa.com.au/getsupport/autism-assistance-dogs/.

McLaughlin, M. (2011). Speech and Language Delay in Children, *American Family Physician*, 83 (10), 1183-1188. https://pubmed.ncbi.nlm.nih.gov/21568252/

Otsimo, (2022). Typical Characteristics of Autism Spectrum Disorder. Viewed 05 December 2023, <a href="https://otsimo.com/en/typical-characteristics-autism-spectrum-disorder/">https://otsimo.com/en/typical-characteristics-autism-spectrum-disorder/</a>.