

Qualitative Study of Sensory Processing in Autism Spectrum Disorder



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Background

- About 90% of individuals with autism spectrum disorder (ASD) experience problems with sensory processing.
- Some experience hyper-sensitive and hypo-sensitive issues with different sensory stimuli, which can result in discomfort.
- Previous research has sought to identify the contextual factors that affect sensory processing in ASD; however, findings have been inconsistent.
- This inconsistency is due to:
 1. a lack of ecological validity in lab-based studies
 2. a potential recall bias in qualitative studies
- Thus, a gap in the literature exists regarding the contextual factors affecting sensory processing in individuals with ASD.

Purpose of Project

- To bridge the gap in the current literature using behavioural and interview techniques to determine the contextual factors that impact sensory processing in individuals with ASD.

Proposed Methods

- Both neurotypical and autistic individuals will be recruited to participate in the study.
- Participants will complete questionnaires regarding personal characteristics and skills.
- They will then be sent specific prompts via a smartphone or tablet application to record in-the-moment information regarding their sensory experiences.
- Participants will respond to multiple prompts each day over the course of one week.
- Prompts will include questions regarding:

Current Activities

Surroundings

Mood

Sensory Experiences

Planned Analyses

- Once data is collected from participants, we will conduct a qualitative analysis on the participants' responses.
- The responses will be thematically analyzed using NVivo to determine common themes across participant groups.

Completed Tasks

- The following tasks were completed as part of the Undergraduate Student Research Internship:

Completed Annotated Bibliography

- Conducted literature search on qualitative studies regarding sensory processing in ASD
- Compiled findings together in an annotated bibliography

Piloted Applications

- Attended meetings regarding different application software that could be used in the study
- Piloted different applications for the most user-friendly option to be included in the study

Devised List of Prompts

- Met with community partners to gage input on prompts and sensory processing from their personal experiences
- Put together a list of prompts and questions for the participants to answer based on the literature and community partners' input

Ethics Protocol

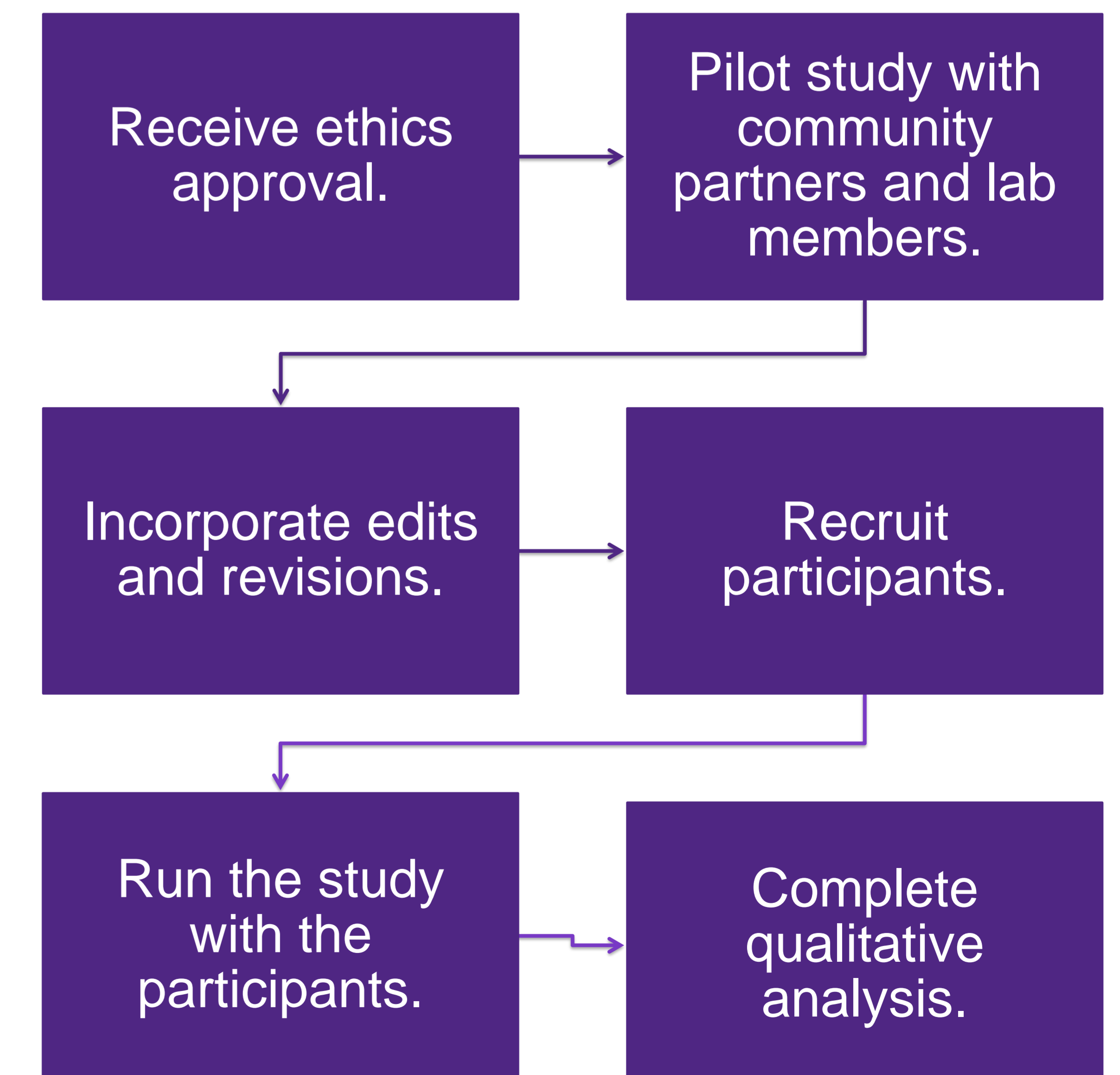
- Helped in writing and editing the ethics protocol for the study

Hypotheses

- It is predicted that individuals with ASD will experience sensory processing issues in their daily lives and discomfort from negative sensory experiences in their environments.
- It is predicted that the following contextual factors will affect sensory processing in individuals with ASD:
 - Level of control over the environment
 - General mood and outlook
 - Severity of autistic traits
- It is predicted that neurotypical individuals will experience fewer sensory processing issues in their daily lives compared to individuals with ASD.

Next Steps

- The following tasks will be completed as part of an Honours Thesis Project this school year:



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