

# Neurodivergence in Interpreters: Impact on Cognitive Processing and Visual Recall Skills

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## Abstract

**Abstract:** Every Interpreter uses various cognitive processing skills during the interpretation process, but they each have their own unique way of using these skills and processing the interpretation. Many Interpreters are also neurodivergent, which can affect their cognitive processing and visual recall. The purpose of this study is to research and describe the various skills required for the interpreting process, while studying how these processes may be affected or changed due to neurodivergence. Other themes analyzed through previous research will be strategies, strengths, and self-care for neurodivergent interpreters to continue to develop and improve their cognitive processing skills. This theoretical study will be conducted in the United States, through surveys sent out to various online interpreting groups. These overall themes will be analyzed through the research including, 1) cognitive processing skills, 2) understanding strengths and weaknesses, 3) neurodivergence in interpreting, 4) expanding the visio-spatial sketchpad, and 5) mental fatigue. The purpose of interpreting is to provide communication access to the Deaf community. Through interpreters learning about their strengths and weaknesses, they can use their knowledge for the better to provide the best communication access possible. Findings of this study will be used as a resource to encourage neurodivergent interpreters, and to assist them in learning their strengths and weaknesses, along with strategies for improving cognitive processing skills, and self-care to avoid mental fatigue. Suggestions for future research include further studies into the cognitive processes during interpreting, and research into how neurodivergence directly affects these processing skills.

*Keywords:* interpreting, neurodivergent, cognitive processing, strategies, self-care, research, American Sign Language

## Methods

This study will be conducted by sending surveys to ASL/English interpreting groups on social media to gain information about their experiences, with the purpose of using the information gained to help various individuals in the future. The surveys will focus on NT and ND hearing interpreters, certified Deaf interpreters (CDI), and Deaf consumers. The surveys will ask various questions about their experiences with ND interpreters, and if they had any struggles or strengths that impacted the interpreted product, as well as any advice for interpreting strategies and self-care for the future.

## Introduction

During the interpretation process, the interpreter has many cognitive processes happening all at once. Every interpreter’s brain uses these skills differently to create the interpreted product, but this looks especially different for a neurodivergent interpreter. Understanding their strengths and weaknesses will help the neurodivergent interpreter to find strategies and self-care to continue to grow in their cognitive processes, and in the interpreting field. This research will look at the invisible, mental interpreting processes, and skills required between English, and American Sign Language (ASL), and see how they are impacted by neurodivergence.

## Research Question

This research project will study the impact neurodivergence has on the various interpreting processes while asking the question, “How does Neurodivergence affect cognitive processing and visual recall skills during the interpreting process?” Through this question, five themes will be highlighted, including cognitive processing skills, understanding strengths and weaknesses, neurodivergence in interpreting, expanding the visio-spatial sketchpad, and mental fatigue.

## Theoretical Results

Some projected outcomes, and theoretical results of this study will be the confirmation of various skills and struggles ND interpreters face, and how that will impact the interpretation. Other projected outcomes will be constructive advice for ND interpreters from various members of the Deaf and ASL/English interpreting communities. The projected advice will give ND interpreters suggestions for ways to practice harder skills, as well as strengths seen in ND interpreters, and self-care suggestions to avoid mental fatigue, as well as burn-out.

## Future Work

- Studying various forms of neurodivergence in interpreters, and how specifically it impacts cognitive processing, and visual recall skills.
- Ways interpreters can better understand their own strengths and weaknesses and use that knowledge to continue to develop and practice their skills.
- Specific research focused on aphantasia and the use of the visuospatial sketchpad.
- Research for ways to improve spatial imagery, and visual recall skills.

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