



# The Relationship between Cognitive Reserve and Cognitive Decline in Older Adults in a Community Book Club

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## Abstract

Mild cognitive impairment (MCI) is a condition that is very common among the elderly and is characterized by difficulty remembering, making decisions, concentrating, and focusing. Cognitive reserve is defined as the individual differences in one's lifestyle that allow more resilience to brain damage. Previously, we studied the perceptions of older adults' experiences as they participated in a community book club, but cognitive reserve was not explored. The current study seeks to find a relationship between cognitive reserve and perception of cognitive abilities. For this purpose, a survey was developed and administered to participants of an elderly book club. Responses were tabulated and analyzed. The results showed that 2/3 of participants who have a higher education level saw improvement in their memory and/or concentration. The other 1/3 of the respondents reported having no difficulty remembering or concentrating, some of which reported experiencing no difficulties before participation. Of the participants who shared their previous occupation, 100% report having no concern about their cognitive function. Together, these results suggest a possible relationship between the factors that contribute to cognitive reserve and the perception of cognitive abilities before and after participating in a book club.

## Introduction

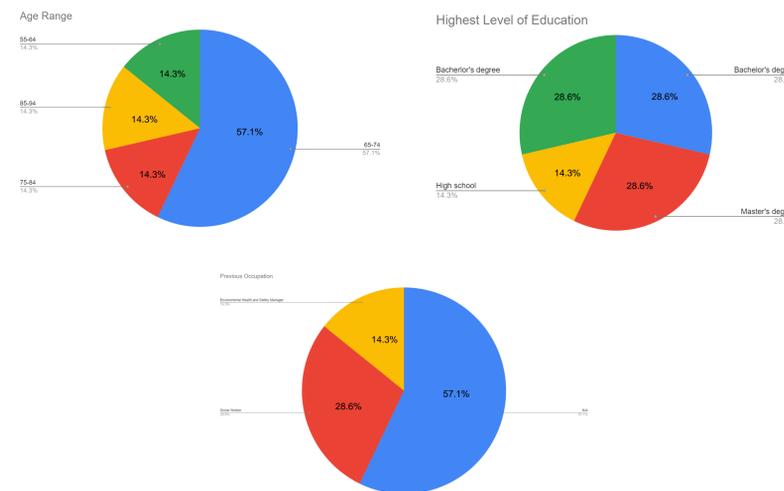
Cognitive reserve can be defined as the mind's resistance to damage of the brain. Some aspects of one's life style that affect cognitive reserve are education, occupation, marital status, and social and physical lifestyle. This study sought to explore the relationship between the factors that contribute to cognitive reserve and the perception of cognitive abilities of participants who participated in a community book club. My research question was:

- How can cognitive reserve affect how older adults perceive their cognitive abilities?

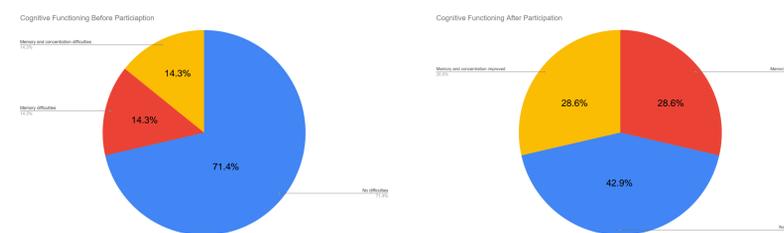
## Methods

A survey was developed using the Survey Monkey platform. This survey was given to a community book club consisting of about 13 members. Responses were anonymously collected. The survey given to the participants consisted of 22 questions. These questions asked about their experience in the book club and their perception of their ability to remember and/or concentrate. There were also questions related to demographics such as age, previous occupation, gender, race, etc. This study was approved by the Institutional Review Board.

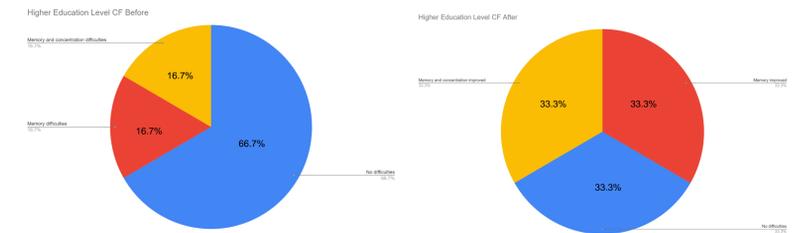
## Results



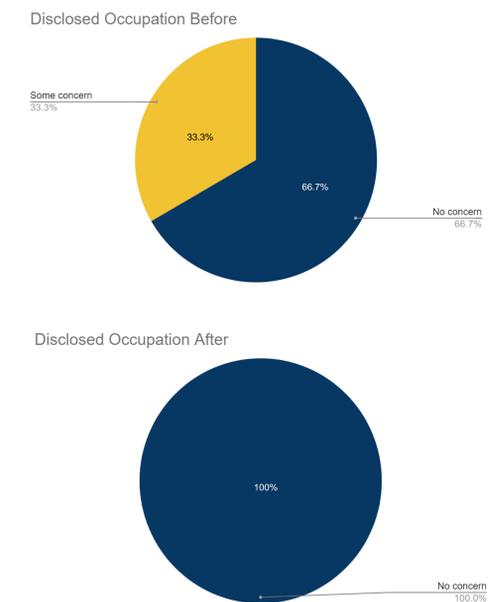
**Figure 1. Demographics of the Book Club.** Survey respondents were 100% African-American women between the ages 55-94. There were a range of education levels, from high school to a master's degree, and three of the five participants disclosed their previous occupation.



**Figure 2. Cognitive functioning before and after participation.** These charts represent how respondents perceived their cognitive abilities before and after their book club participation.



**Figure 3. Participants with a higher education level and their perceptions of cognitive functioning before and after participation.** This is what respondents who obtained a higher education level reported when asked if they perceived any difficulties with remembering, concentrating, or both.



**Figure 4. Participants who disclosed their occupation and their level of concern about their cognitive abilities before and after participation.** This is what respondents who reported their previous occupation reported when asked how concerned they were with their ability to concentrate or remember before and after participating in the book club.

## Acknowledgements

*I would like to thank Dr. Myrita Wilhite and Mrs. Brigitte Wilson for their time, effort, and support through this project. I would like to thank Ms. Sandra Vasenda and the Choose Ohio First Program for this opportunity and support.*

## Conclusions

- This study suggests that there may be a connection between the factors that contribute to cognitive reserve and the perception of cognitive abilities before and after participating in a book club.
- A larger and more diverse sample size is needed along with more in-depth questions about the factors that contribute to cognitive reserve to expand knowledge in this area.