

## Introduction

Most of the world is made up of people being able to speak, read, write, or comprehend more than one language and are widely known as bilinguals. There are, of course, some countries that are exceptions to having a great number of bilinguals, but they are present and their impact is still felt in many parts of these societies.

This project focuses on a more cognitive aspect of being bilingual, as compared to an economic or political aspect, and on the different articles that have been published on related material.

## Research Questions

- \*Are the cognitive control tasks advantages and verbal fluency disadvantages in bilinguals significant?
- \*Why are there many contradictions in the data concerning bilingualism?



## Background

The studies that have been conducted in the field of bilingualism and cognition vary from study to study. Many focus on inhibitory control because the continuous dual-language activation in the brain suggests that bilinguals exercise cognitive control (Rivera Mindt et al., 2008). Some are conducted on the elderly to see if older age and bilingualism have developmental effects on inhibitory control; the study ultimately determined that elderly bilinguals do not exhibit those advantages (Paap et al., 2018). Other studies were done on bilingual children and inhibitory control, in which only a reported 3 out of thirty comparisons showed a bilingual advantage and concluded that bilingual children do not show advantages in the most part (Paap et al., 2018). The Festman et al. (2010) study even compared two groups of bilinguals: the bilinguals with strong language control abilities and the ones with weaker abilities in language control. The study measured reaction times, assigned tasks, and performed verbal tests and concluded that bilinguals with strong language control had cognitive advantages in inhibition, self-monitoring, problem solving, and fluency (Festman et al., 2010).

## Methods

This project will take on an analytical research approach. Various online journals and articles will be used to further compare and contrast the disagreement between the studies on bilinguals and cognitive abilities. Articles related to the subject will also be examined to clarify on terms and ideas that go further in depth. The main topics of disagreement will be in cognitive control tasks and in verbal fluency in bilinguals. The experiment types, tasks, and tests that lead to a certain conclusion for a study will also be examined and compared to others to determine the better conditions in which the study can run effectively.

## Significance

Researchers have yet to come to a consistent conclusion if there are any advantages or disadvantages in bilinguals and their cognitive skills and if it is in any way significant to their performance in things that aren't societal, political, or economical. We have known for a while that being bilingual is a great help in being able to communicate with others in society but finding out if there are other advantages in cognition can motivate others into teaching a second language to their child or learning one themselves. At this point in time, we might not even figure out if there are any advantages or disadvantages in bilinguals' cognitive skills due to the fact that it might not even be determinable.

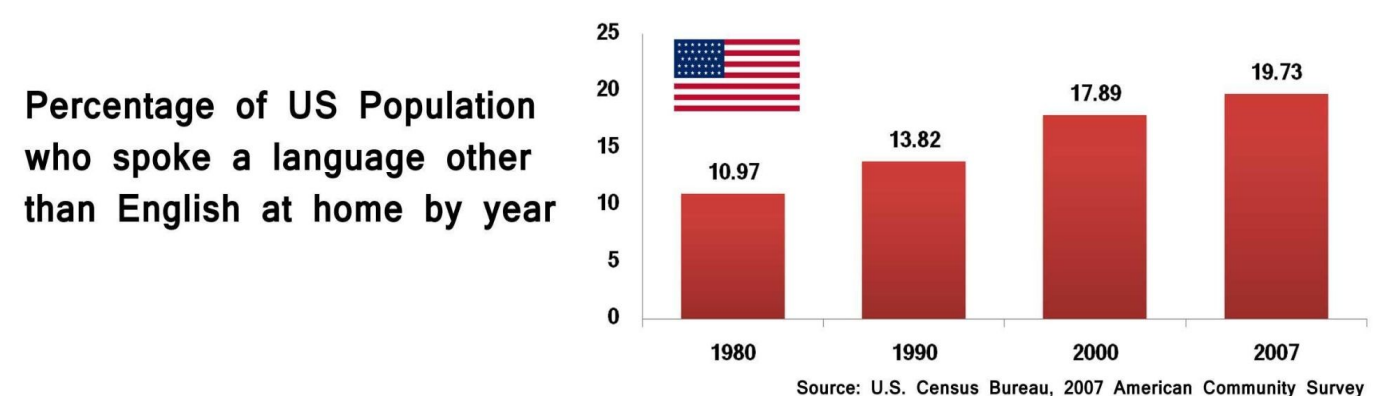
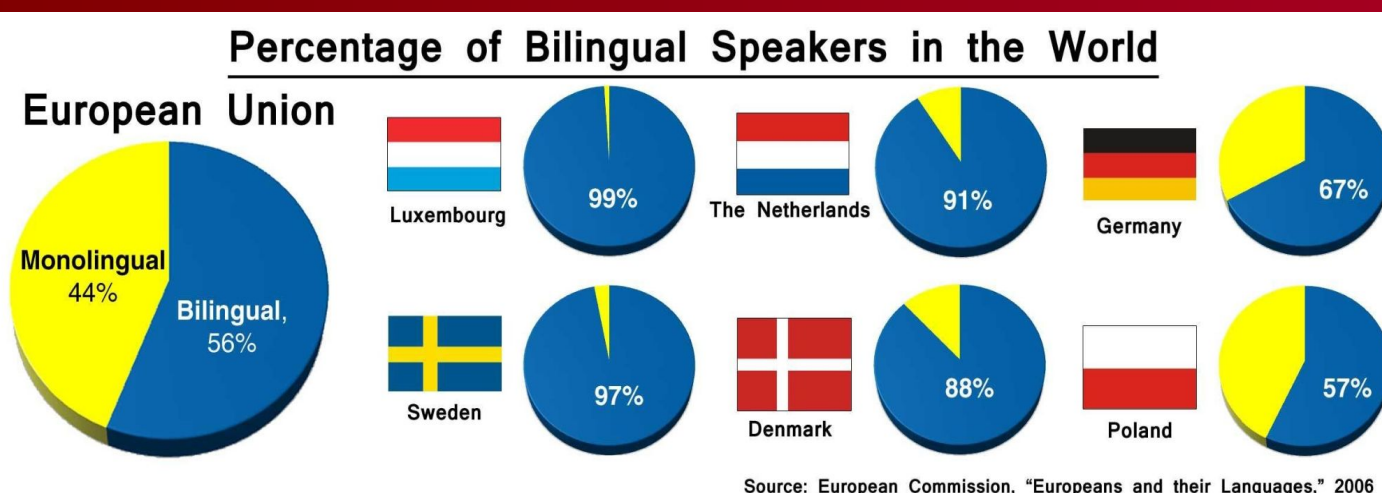


## Expected Results

- \*It is expected that cognitive control tasks advantages and verbal fluency disadvantages in bilinguals are not that significant in relation to monolinguals and bilinguals with weaker language skills.
- \*There are many contradictions in the data concerning bilingualism due to the fact that different methods of investigating are being implemented and can perhaps vary from study to study depending on how it is being utilized and interpreted. It can also be that earlier studies measured something else with the methods that were implemented for research and not the desired topic. The answer can also be much more complex or simple depending on the research that was conducted.

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