“THE DISTRACTED STROOP”

(How extra clutter affects focus, can your brain beat the distractions?)

Research Questions

1.) Does adding extra symbols or letters to stroop cards make people less accurate?

2.) If there are different distractions will I have a harder time recognizing the words?

3.) How does the stroop test compare to our daily lives?

Hypothesis

If I add distractions like symbols and background colors, then people will have a harder time distinguishing the words accurately.

The Stroop effect shows how our brain reacts when it sees confusing information, such as words and colors that do not match. Normally, reading words is easy for the brain, but naming colors takes more focus. When distractions are added, it can be harder to concentrate and respond correctly. This project studies whether distractions slow down accuracy during the Stroop task. Understanding this can help explain how distractions affect focus and attention in everyday activities like studying in school or completing tasks in noisy environments.

Background Research

According to the site, (https://www.simplypsychology.org) “The stroop test impairs focus by creating inferences between the brain's automatic reading process and the effortful task of naming ink colors”. The site (apa.org/researchpractice/conduct-research/stroopeffect) states, “Stroop showed study participants a series of cards with color words printed out in ink colors (such as the word brown printed in purple ink)” According to the site, (motions.com)

“stroops innovation was to show clearly and defiantly that our imbedded knowledge about our environment impacts how we interact with it “ The site (imotions.com) states, “in most cases it takes longer to state the colors of the word rather that to read the text they are printed despite the incogency being essentially the same across but listening both shows words in the wrong colors”

Methodology

1. plan/design the stroop cards
2. print and sort in categories/stacks
3. ask participants to name the ink color
4. record the average time it takes and the amount of mistakes
5. do the same with both stacks (with extra distractions and without)
6. compare data to get results

Results

- Students were faster and made fewer mistakes on the regular Stroop cards.
- The distraction cards increased reaction time by about 3 seconds on average and caused more errors.
- This shows that extra distractions make it harder for the brain to focus on the ink color, slowing down performance.

Keyfindings/What stands out

- Students were faster and made fewer mistakes on the regular Stroop cards.
- The distraction cards increased reaction time by about 3 seconds on average and caused more errors.
- This shows that extra distractions make it harder for the brain to focus on the ink color, slowing down performance.

Conclusión

Our experiment showed that people reacted more quickly and made fewer mistakes when using the regular Stroop cards compared to the distraction cards. The cards with symbols and colored backgrounds slowed down reaction time by about three seconds on average and caused more errors, showing that extra distractions make the brain work harder. Overall, the results support the idea that multitasking or processing extra information makes it tougher to focus on a simple task like identifying the color of a word.

References

Stroop, J. R. (1935). Studies of interference in serial verbal reactions. Journal of Experimental Psychology.

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imotions.com