

The Effects of Sleep Deprivation on Cognitive Functioning

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Abstract. This article explores the impact of sleep deprivation on cognitive performance. Using a controlled experimental design, we assessed the cognitive functions of participants subjected to varying degrees of sleep deprivation. Results indicate a significant decline in attention, memory, and decision-making abilities, underscoring the critical role of adequate sleep in maintaining cognitive health.

Keywords: sleep deprivation, cognitive performance, attention, memory, public health

Introduction

Sleep is crucial for optimal cognitive functioning, yet many individuals experience chronic sleep deprivation. This study investigates the effects of sleep deprivation on various cognitive domains, including attention, memory, and decision-making. Through a controlled experiment, we measured the cognitive performance of participants after different sleep deprivation intervals. The findings reveal a marked decline in cognitive abilities, emphasizing the necessity of sufficient sleep for maintaining mental acuity. These results carry important implications for public health strategies aimed at improving sleep hygiene.

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