

Memory

Science



**ASSIGN
BUSTER**

Topic: External stimuli performance Approximate word count: 600. Memory can be defined as the capability of an organism to remember and recall objects, items, events, individuals, etc. Although, memory, generally, is associated with brain and nervous system of an organism; immunological memory defined as the capability of an organism's immune system to recognize a pathogen on subsequent encounters, may not have anything to do with brain or the nervous system.

Human beings represent the highest point of evolution with regard to all types of memory; memory has also been demonstrated in almost all animals irrespective of whether they are vertebrate or invertebrate (1). In humans, the capacity to remember and recall things from memory varies from individual to individual. Furthermore, in all types of memory, including those associated with immune responses, an individual's capacity decreases with age (2, 3).

While certain amount of scientific literature is available in the public databases with regard to the influence of external stimuli on memory, little or no information is available on decrease of memory performance in response to an external stimulus. In this context, we hypothesized that the memory of an individual is affected by external stimuli to such an extent that there's a significant decrease in individual memory performance. For the present, memory performance is defined as the ability of an individual to recall the objects which that particular individual was allowed to view for one minute.

With an aim to test the hypothesis, two groups, of five people each, were included in the present study. The first group was the experimental group while the later served as controls. Both the groups were asked to memorize, <https://assignbuster.com/memory/>

and recall from their memory, twelve easily recognizable objects placed in a tray after viewing them for one minute. However, when individuals from the experimental group were viewing the objects, loud rock music was played next to them. This, loud rock music, in our opinion, served as an external stimulus for the present study.

A marked difference was observed in the number of objects remembered and recalled by both the groups. Whereas the control group, on an average, remembered 8.6 items; the experimental group recalled a relatively less number of objects. The average number of objects recalled from memory by the experimental group was 5.8. This difference of 2.8 objects, in part, can be attributed to a decrease in memory performance, probably influenced by the external stimulus - the loud rock music played when the experimental group viewed the objects. Thus proving the hypothesis, albeit crudely.

A number of factors have been demonstrated to influence the memory of an individual (4). In the present experiment, a clear difference in the number of objects remembered by each group was observed. Implications of this study are clearly apparent. For example, observations like these might provide an answer to why children who are exposed to various distractions during their study hours perform poorly in academics in comparison to those who are not. Major limitations, among others, of the current study include: small sample size, ill-defined grouping, and ill-conceived testing of the hypothesis. Despite this, the findings reported here are noteworthy.

References:

1. Collett TS. Invertebrate memory: honey bees with a sense of direction. *Curr Biol* 2005 Jun 7; 15(11): R419-21.
2. Haynes L. The effect of aging on cognitive function and development of
<https://assignbuster.com/memory/>

immune memory. *Curr Opin Immunol*, 2005 Oct; 17(5): 476 - 9.

3. Hess TM. Memory and aging in context. *Psycho Bull*. 2005 May; 131(3): 383 - 406.

4. Apfelbaum BE, Sherriff AC. Factors influencing affective ratings of recalled experiences. *J Pers* 1954 Jun; 22(4): 537 - 64.

Internet Sources:

1. <http://www.ncbi.nlm.nih.gov/gquery.fcgiitool=toolbar>.

2. EBSCO host Research Database.