Food Deprivation and Work Concentration

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Abstract

People's ability to concentrate on a job gets distracted by numerous things, for instance, noisy environments, headaches and psychological problems. The external factors can be in control, but it is hard to keep internal elements like staying on an empty stomach under control. Can a person's focus be fostered by eating more?

Glucostatic theory propelled research on the effect of food intake on a person's focus. It explained that humans become hungry when their glucose level is reduced, and after eating, they become satisfied (Pinel, Sunaina, and Darrin, 1105). The theory held some water with the fact that glucose is the brain's ultimate processor. When the energy matter was looked into with an experiment of food deprivation for more than 36 hours, the specimen showed signs of melancholia, irascibility, sluggishness, lower heartbeat rate and high incapacity of staying focused. On the other hand, an investigation found that fasting for some days leads to irritability, apathy, and weakness of the muscles. Thenceforth, researchers looked into how cognition relates to nutrition, and in the past few years, the impacts of deprivation of food on insight and comprehension have relatively met lesser attention. Perception is not affected much by missing a single meal in a day.

Studies on middle-aged women and men, 9 to 11-year-olds, and obese people were conducted to determine the cognitive responses among the different age groups. The reactions were the same among the groups: they all became less cognitive and focused when they got starved for a while. The researchers studied simple reaction time, reaction time, recognition memory, free recall, problem-solving accuracy, two-finger tapping, and intelligence quotient, and many of the results revealed that most cognitive functions are not affected by a short-term period of starvation but by long hours of fasting(Green, and John, 246). However, the deduced findings seem half-baked because of the lack of proper investigation on cognitive functions like staying power and concentration.

To date, no apparent research has tested focus in spite of its importance in cognition. Perseverance is the best indication that the test, when assessing progress in one's thinking and learning capabilities, and determination aids in cracking very multiplex tasks. It is evident that cognition is better placed when concentration is the critical factor of observation when interpreting the relationship between cognitive performance and deprivation from food. The current studies help us understand the way a short period of food starvation can affect concentration and determination when undertaking hard work. More specifically, our participants who were denied eating for about 24 hours were presumed to perform dismally in focus and perseverance tasks than the ones who were dismissed for 12 hours.

Method

Participants included a total of 51 undergraduate volunteers, 19 females and 32 males; these are some of the students who received little credit in their college courses. 3.19 was the low college werent average grade in this case. The students who were on particular medication, dieting or menstruating were excluded from the process. Those who had struggled or were struggling with eating difficulties were also excluded. The last group that was exempted was the caffeine and nicotine addicts.

Materials

A digital numbers-matching test (www.psychtests.com/tests/iq/concentration.html) was used to measure the concentration speed and the student's accuracy, and it consisted of 26 lines of 25 numbers each. After 6 minutes, the students who were participating looked for their pairs of digits in each rule that summed up to ten. A calculation was done out of 120 to determine the scoreline. A puzzle that contained five octagons having a stencil of a specific object with either a flower or an animal was used to measure perseverance. The five formations ought to be pilled on each other in a particular manner to form a rabbit-like silhouette. All three shapes were altered to make the task almost impossible to achieve. The number of minutes taken by the participants on the puzzle before giving up was the score for their perseverance.

Procedure

Initially, when they met, the participating students showed informed consent, and every accord paper had a designated identification number and was ordered for the student's grade point average. Participants were told that they would receive notification about their assignments by telephone or e-mail. Instructions sheets were provided to the students, and these written instructions were also read aloud for they explained the condition for the experiments, clarified all guidelines for the food starvation duration and also showed the location and time of testing. Randomly, the participants were assigned to any of the conditions by the application of a matched–triplet model gauged on the grade point average tabulated during the first gathering. The model or instead design kept in check the individual personal difference in cognitive capability. After two days, the students were reminded of their tasks and how it is done. They were also told not to eat anything after 10 a.m. because they belonged to a food-deprived group.

Participating students belonging to the first control section were examined at dawn in a specified computer lab when the deprivation process began, while the ones in the 12-hour ones were reviewed in the mid-morning on the very day.

The others in the 24-hour section were examined at mid-day on a subsequent day. The participants

arrived at the lab for testing at the assigned time, and a written instruction was read aloud and given to each of them. An unlimited duration is given to the participants as they solve the puzzle so that no influence can be observed. A student could be going on with the mystery even 30 minutes after another had given up.

Results

Attentiveness and focus statistics from a control-class participant were let go off that he never entirely completed that experiment, while perseverance evaluation from another control-class contender got banished since she left the test time earlier than expected. Manipulation check question showed that every contributor precisely understood her or his state of deprivation and ought to follow set guidelines to the latter. The average concentration score was 78 percent over an average of 24 minutes. The prediction was that a participant in the 24-hour deprival category performed more dismally than the one in the 12-hour bunch. When gender got considered as a determinant, the results ended up to be null and void because generally or with specific sex has little or no impact on deprivation instances (Kiss et al., 228), So food deprivation affects perseverance profoundly as the as the number of hours increase.

Conclusion

The study purposefully determines how various levels of deprivation from food related to perseverance and concentration while performing strenuous tasks (Hickman, Cory, and Louis, 215). Successfully, it decided that the longer the participants stayed without food, the less concentration they had and significantly the lower their perseverance in doing tasks. The findings assert that focus is not to a profoundly affected by short-term deprivation of food. When a strenuous job that needs utmost tenacity is involved, the normality of the tests changes because the focus is hindered by denial for a short time due to loss of energy in a hard manual job; the capability of staying focused reduces tremendously in a short period.

Work Cited

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