Higher processes of cognition

Psychology

The paper " Higher Processes of Cognition" is a marvelous example of a psychology essay.

The authors of the research paper, Eerland, Guadalupe and Zwaan (2011, p 1511) are addressing two research studies undertaken based on the recent theory that states of the body provide significant cues to higher processes of cognition. Consistent with such a concept, outcomes from numerous studies have illustrated that the posture of the body influences retrieval and estimation of memory. Quite a number of studies have proved that people usually associate their left hand and left the field of vision with characteristically small numbers while their right hand and right field of vision with large numbers. It is therefore hypothesized that people would generally make smaller estimates if in any case they slightly leaned or tilted to the left as opposed to what they would if they slightly leaned towards the right. It is also believed that people would have the same measures of estimates even when they have the conviction that they were, in essence, standing uprightly (1511).

For the first experiment, in order for the researchers to empirically assert their claims, they settled for a sample size of 39 participants. They were given some selected questions of estimations while standing on the balance board. The participants were briefed that they probably could have not known the right answers to the provided questions hence were only mandated to provide estimates but the conditions were that they had to assume an upright posture during the period of the experiment. To make sure that the neutral posture of the body of the respondents was consistent with the center of a fixation cross, the researchers made sure that the

balance board for all the participants was calibrated before the start of the experimental sessions. In order to help respondents maintain their position, the researchers displayed the center of pressure (COP) of the respondents on the computer. The researchers instructed the participants to be keen on their COP so that it can be within the indicated circle just right in the middle of crosshairs shown on the computer screen. The participants were able to monitor their COPs for when it strayed from the indicated circle; a warning signal was displayed hence necessitating the participants to readjust their COP. The coordinates of the participants' COP were continuously throughout each trial (1512).

In the second experiment, 33 undergraduate students taking psychology studies took part in the study as part of their course credit. All the participating students were right-handed and were assigned to one of the six lists in a random manner. The lists differed in terms of the order of the postures and the order of presenting the estimation questions. The researchers found out that in the two experiments, outcomes for the upright position were statistically similar to results obtained for the right-leaning position. The researchers believed that the use of the neutral position of each participant might have been the main contributing factor to the result. Owing to the fact that all the respondents were right-handed, it may be argued that their neutral stance could have already have assumed the position of the center-right. It has also been suggested that when individuals try to balance themselves, there is a degree of directional bias that mostly favors the hip that happens to be on the same side as the dominant hand.

It is important for researchers to eliminate the potential bias that is brought about by the leaning toward the right in interfering with the findings. Since the experiment did not include left-handed people it is my recommendation that future studies should examine left-handed people. In my own view, the researchers have cast in doubt long-held belief that irrespective of the hand and field of vision there is no significant association with either small or large numbers.