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# Smartphone Addiction and Reaction Time in Geriatric Population

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**Abstract :** Context: Smartphones are the new generation of mobile phones; they have emerged over the last few years. Technology has developed so much that it has become part of our life and mobile phones are one of them. These smartphones are equipped with the capabilities to display photos, play games, watch videos and navigation, etc. The advances have a huge impact on many walks of life. The adoption of new technology has been challenging for the elderly. But, the elder population is also moving towards digitally connected lives. As age advances, there is a decline in the motor and cognitive functions of the brain, and hence the reaction time is affected. The study was undertaken to assess the usefulness of smartphones in improving cognitive functions. Aims and Objectives: The aim of the study was to observe the effects of smartphone addiction on reaction time in elderly population Material and Methods: This is an experimental study. 100 elderly subjects were enrolled in this study randomly from urban areas. They all were using smartphones for several hours a day. They were divided into two groups according to the scores of the mobile phone addiction scale (MPAS). Simple reaction time was estimated by the Ruler drop method. The reaction time was then calculated for each subject in both groups. The data were analyzed using mean, standard deviation, and Pearson correlation test. Results: The mean reaction time in Group A is 0.27+ 0.040 and in Group B is 0.20 + 0.032. The values show a statistically significant change in reaction time. Conclusion: Group A with a high MPAS score has a low reaction time compared to Group B with a low MPAS score. Hence, it can be concluded that the use of smartphones in the elderly is useful, delaying the neurological decline, and smarten the brain.

**Keywords :** smartphones, MPAS, reaction time, elderly population
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