

The Effect of Mental Workload Towards Mental Fatigue on Customer Care Agent Using Electroencephalogram

Authors : Maya Arlini Puspasari, Shafira Karamina Alifah, Hardianto Iridiastadi

Abstract : High mental workload can lead to fatigue and further result in decreased concentration and work performance. This study is conducted to see the effects of mental workload towards mental fatigue. Mental fatigue measurement was conducted at the first and the last 10 minutes of the working time using electroencephalogram, while mental workload measurement was conducted after the work is completed using the NASA-TLX questionnaire. The result shows that there is an increase in alpha band which indicates an increase in mental fatigue. This study also shows absolute alpha is more sensitive compared to the relative alpha. This study proves that there is a relationship between mental workload and mental fatigue although not relatively strong.

Keywords : mental workload, electroencephalogram, customer care agents, NASA-TLX

Conference Title : ICAHFE 2017 : International Conference on Applied Human Factors and Ergonomics

Conference Location : London, United Kingdom

Conference Dates : January 19-20, 2017