

Effect of Global Communication system radio-frequency fields on Well-Being and Cognitive Functions of humans subjects with and without subjective complaints

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Conclusion and recommendations

This research is carried out according to rigorous scientific standards and exhibits no major problems with respect to methodology, sample size and analysis. This is the result of two independent specialists who have reviewed the relevant documents.

From our research it is concluded that our hypothesis to find no causal relation between the presence of RF field and the measured parameters is rejected. **We have found the statistically significant relation between UMTS-like fields with a field strength of 1 V/m and the Well-Being.** Both group A and B show similar effects in the well-being results. It is noted that the World Health Organisation (WHO) the definition of health reads as “a state of complete physical, mental and social well being and not merely the absence of disease or infirmity” Within this WHO definition the perceived Well Being is part of health.

Also, a statically significant difference is observed between the generally experienced Well-Being with group A and Group B. The bias introduced by the selection procedure together with the different demographic structure between both groups makes a direct comparison between group A and group B invalid.

From the cognitive tasks, it is observed that a slightly higher number of significant effects is found in group B when compared to group A? The results are unlikely to be attributed to statistical noise. From the 30 cognitive functions test, we found that eight cognitive function tests are statistically significant. Statistical noise could allow up to four false statistically significant results. Note that each exposure frequently is associated with changes in some tasks or parameters, while other frequencies are not.

In literature, similar results on cognition are found. From our results and the available literature, it is not possible to speculate on a scientifically justified hypothesis to explain the potential effects of RF fields on cognition. However, one aspect can be tackled. In literature, it is speculated that the effects on the cognitive parameters can be explained by an unknown mechanism induced by thermal effects. In our study the thermal effects are negligible and therefore, an explanation based on thermal effects seems highly unlikely for effects on the cognitive parameters.

An important scientific issue is the fact that relations that are found must be reproducible? Since this research is the first one to find a statistically significant relation on Well-Being by using a subset of Bulpitt's questionnaire, reproduction of our research by a research independent of TNO is necessary.

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