Volunteers Needed for Intelligence Research in the UK

by Gwyneth Rolph, MSPE

Regular readers may recall an article I wrote in the fourth-quarter 2018 edition of *Telicom*, entitled, "Using EEG to Predict IQ." That earlier article was based on a research study I conducted as part of my cognitive neuroscience degree, in which I explored relationships between participants' scores on the two UK Mensa tests—the Cattell B Verbal and Cattell Culture Fair—and certain variables of interest extracted from the electroencephalogram (EEG) signal. This earlier research was intended as the pilot study for a more extensive exploration into intelligence and EEG, which is now going full steam ahead as my PhD research project. (The project was delayed, unfortunately, because of restrictions on face-to-face data collection over the past two years or so.)

Now I am inviting members based in the UK to volunteer for the next stages of my research. Initially, this project will involve administering a full-battery test—the Stanford-Binet Fifth Edition (SB5)—in person, with a follow-up online pilot test battery which will be normed against the SB5. Eventually, the pilot test will be available as a standalone online test after the norming procedure is completed. Participants who complete the testing stages of the research will also be invited back for a full EEG brain map over the next year or so. Participant debriefing will be provided, including your SB5 scores and a report with your EEG data. This information is confidential to you.

The reason this research is important is that there is hardly any published literature on the psychological and neuroscientific characteristics of gifted adults; and research samples which include highly and exceptionally gifted adults are diminishingly rare, especially those including adults who have been identified via testing administered in adulthood and not based on a previously administered childhood test. Certain correlations between various IQ subtests, as well as their correlations with life outcomes, are known to break down in this range, and it is, in fact, this phenomenon I am investigating. I am particularly interested in the pattern and scatter of subtest scores.

There are also almost no studies conducted on this population using EEG, which technology was largely abandoned with the availability of such imaging modalities as functional magnetic resonance imaging (fMRI). However, modern EEG technology is now sufficiently sophisticated to undertake much of the work that was previously possible only with fMRI, and EEG has the added advantages of portability and relatively low cost.

Since this is a correlational study, I need volunteers who cover the whole ability range. Therefore, if you know any non-ISPE members (ages 18–60) who may wish to participate, they are more than welcome.

Exclusion criteria: Volunteers must have no history of traumatic head injury, stroke, or epilepsy (as these conditions affect the EEG).

Location: London area but can travel within reason.

Interested volunteers should contact me at g.rolph@westminster.ac.uk. **Ω**