

Abstract:

The focus of this research was to assess students at a residential facility for complex developmental trauma throughout their process of Brainspotting (BSP) using Quantitative Electroencephalography (qEEG) data. QEEG is an electric brain picture that can evaluate brainwaves. QEEG is also able to assess the connectivity of the brain and can evaluate the speed of information and the level of differentiation. These metrics help to illuminate the efficiency of connectivity. The qEEG data can be analyzed through a normative database which assess deviations in brainwave activity compared to same age and gender peer groups. Deviations in normative data are indications of probability of symptoms, neurological adaptations, defenses, or instabilities.

QEEG was used to assess the effects of BSP on brainwaves and connectivity. Each subject was connected to a qEEG machine and a scan was recorded before, during, and after a BSP session. Each scan was then compared to a normative database to evaluate what state the student was in before BSP and what state the brain was in after BSP. The objective was to determine if the brain was more statistically normal after the session. These recordings were taken over several months after many cumulative BSP sessions.

In many cases the results showed shifts and changes towards improved regulation. Over several months the data continued to show trends towards normalization along with improvements in subjective responses. The preliminary qEEG data indicated that BSP sessions improved brainwave regulation and connectivity over time in subjects with complex developmental trauma.