**Will z score training replace the clinician?**

There has been some understandable concern that the automated training provided by live Z Scores may replace the clinician, providing a simple "plug and play" approach.  We do not see this as a concern.

The clinician is first of all completely responsible for the client's treatment, including neurofeedback.  Neurofeedback fits into a comprehensive approach including many other interventions including counseling, diet, psychotherapy, behavioral therapy, and so on.  Using Z Scores to target neurofeedback in no way reduces the importance of these.  Someone still has to determine if the clinical signs are concordant with the EEG condition, whether neurofeedback is indicated, and what changes should be anticipated.

Secondly, to us an analogy, the appearance of autopilot in aircraft did not make the pilot less important.  Nor did laser-guided surgery make the surgeon less important.  It merely reduced one level of detail in their work, by automating it.  It was still important to understand what is being done, how it is being done, and how to react to various situations.  Z Scores makes neurofeedback more in the line of a scientific procedure, like any scientific intervention.  Nonetheless, it is a procedure that needs to be done in a clinical context, with full clinical oversight (and credentials).

Even now, early users of Z Scores are designing variant protocols with special features such as lopsided windows, additional downtraining, selective training, etc.  Z Score training is an approach, not a simple solution.  There will be a continued need for practitioners to choose protocols, monitor their usage, and incorporate them into a total clinical approach.  Indeed, there may be times when Z Score training itself is not optimal, and other approaches will be used.  It is by no means "automatic poker" that Z Score training, much less any particular Z Score protocol, will be the optimal method for everyone.

As time goes on and we learn more, I am sure that Z Score training will enhance practitioner's work, not deteriorate it.  We will continue to need to understand how the brain works, what EEG is, what the components mean, how they manifest in clinical situations, etc.  And I believe we will still need full QEEG analyses and maps, to plan treatment, and to monitor what is happening as it progresses.

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