Yavapai County Adult Probation Trial

This report depicts individual results achieved in the Prescott, Arizona Yavapai County trial using Brain State Technology™ conditioning sessions with repeat offenders. Arrests were for possession of illegal drugs or drug paraphernalia, petty theft, disturbing the peace, assault, and other miscellaneous crimes.
Brainwave Optimization with RTB™ Results
For Yavapai County Adult Probation Trial
May 16, 2005

The names of the probationers have been changed in order to protect their privacy.

This report depicts individual results achieved in the Prescott, Arizona Yavapai County trial using Brain State Technology™ conditioning sessions with repeat offenders. Probationer's average age was 33 years with an average of seven arrests. Arrests were for possession of illegal drugs or drug paraphernalia, petty theft, disturbing the peace, assault, and other miscellaneous crimes. All probationers were drug addicts. Although all were addicted to multiple drugs, the principal drug of choice for most of the probationers was methamphetamine.

Probationers were trained with Brainwave Optimization with RTB™ sessions at least twice per week by a recently trained, but qualified, Brain State Technology™ technician. In one instance, due to severe anger management issues, the training was accomplished by having the probationer do ten sessions in five days. Generally, probationers completed about 24 Brainwave Optimization with RTB™ training sessions over a three month period.

**Three Month Results**

At the end of the three-month trial period, all probationers were drug-free based both on their testimonies and on random urine analysis. The success rate was 100% -- unheard of with methamphetamine addicts. Additionally, all probationers were arrest-free and all were engaged in gainful employment. Additionally, 40% of the probationers had enhanced their employment status. Employment status enhancements included moving from dishwasher to assistant manager in a kitchen, from stock boy to clerk, from laborer to foreman, and from dishwasher to waitress - positions never before achieved by the individuals in their working careers.

**Nine Month Results**

At the end nine months - six months following the trial - the probationers were queried to determine their status. At this point, an 83% success rate was achieved. Although there had been no arrests of the trial participants, two were known to have used drugs in the six months following the trial period. However, for those who were successful, 40% of the probationers achieved additional advancement in their fields of employment.

**Barbara**

Self-description following eight training sessions
Barbara states that she feels much more emotionally stable. Previously, she was very emotionally up or down and now feels much calmer and more grounded. Additionally, prior to training, she had difficulty waking and now wakes up rested and gets out of bed at a reasonable time in the morning.
Brain state changes from assessment comparisons and observations
Barbara was in her last week of pregnancy during the training. The training helped her sleep more deeply and calmed her. It seemed to calm the baby as well which was new insight for us. Barbara did not have another assessment at the time of this report.

Denise
Self-description following ten training sessions
Denise explained that before training she had difficulty going to sleep and did not sleep well. After ten sessions Denise is sleeping well, going to sleep readily and waking refreshed. Denise explained that since she was 12, the first thing she thought about in the morning was how she was going to get her "fix" for the day. This thought prevailed even when she was clean and sober. After several Brain State training sessions, Denise realized that she no longer had this reoccurring "fix" thought and now cannot understand why she had those thoughts throughout her past. Denise explained that she had not been able to read very well before Brainwave Optimization with RTB™ sessions and is now much better able to read. She also states that she is able to better able to manage her emotions and deal with stressful situations without becoming overwhelmed by them.

Brain state changes from assessment comparisons and observations
Initially, Denise's appearance confirmed that she did not sleep well. Her eyes appeared swollen and dark and her face was puffy. Since the sessions, she looks healthier, happier and speaks more clearly. Her thinking seems to be much more rational.

1. Before training - anxiety levels indicated she was over 350% (3.5 times) more anxious than a normal anxiety level. After ten sessions her anxiety levels are normal.
2. Before training - her coherence (an indicator of well-being and immune system strength) was 45; after training, it is 77. We would train any coherence that was under 65.
3. Before training - her ability to concentrate was measured at 6.18; after training, it is 12.17 - it has nearly doubled.
4. Before training - she had a 350% reversal of Beta in her temporal lobes (an indicator of her ability to sleep soundly and control her emotions); after training, the reversal was gone.
5. Before training - her right parietal alpha is 14.79 and after training, it is 23.84. This indicator is generally representative of one's sense of well-being and happiness. Thus, her sense of well-being and happiness has increased by 61%.

Mitchell
Self-description following seven training sessions
Mitchell said he had difficulty expressing what had changed for him. He felt his problem solving skills were better and, most importantly, he was not as quick to anger as he had been prior to his sessions. And, Mitchell explained, that he when he became angry, it was not as "hot" and not as "long" as it had been previously.

Brain state changes from assessment comparisons and observations
Mitchell is unsure if the benefits he has experienced in the last few weeks have been from Brainwave Optimization with RTB™ or from the activity in his religious community.
1. Before training - there was a reversal of Low Beta between the right temporal and left frontal. This would indicate a personality trait which would most often exhibit a "short trigger" or a high likelihood for rage. After training, the Low Beta ratio was totally reversed indicating a normal likelihood toward rage. This was consistent with Mitchell's experience of not getting upset with his girl friend or friends in social settings following his training sessions.

2. Before training - Mitchell's frontal low frequencies totaled 51% L and 36% R of total frontal frequencies. After training, Mitchell's frontal low frequencies totaled 36% L and 39% R. This is a major shift indicating balance (emotional and rational stability) which was attained during training sessions.

**Donna**

Self-description following nine training sessions
Donna explained that she now sleeps well for the first time in her life. She goes to sleep easily and wakes refreshed. She states that she does not make as many mistakes, that her mood has evened out and even become elevated and that she is more assertive, happier and more articulate. She is quite pleased that she recently handled an emergency situation at work as a leader.

Brain state changes from assessment comparisons and observations
Donna seems much happier than when she began Brainwave Optimization with RTB™ sessions. Her brain reflects this in the following manner:

1. Before training - anxiety levels indicated she was over 500% (5 times) more anxious than a normal anxiety level. After nine sessions, her anxiety levels are normal.
2. Before training - her coherence (an indicator of well-being and immune system strength) was 46; after training, it is 79. We would train any coherence that was under 65.
3. Before training - her ability to concentrate was measured at 7.63; after training, it is 15.04. It has effectively doubled.
4. Before training - she had a 36% reversal of back-to-front (an indicator for her ability to execute interactively and control her emotions); after training, the reversal is 1%.
5. Before training - her SMR (sensory motor response) indicator was 4.66; after training, it is 8.26. This means that she has doubled her brain-body connection helping her to regain sustained energy, physical health and ability.

**Robert**

Self-description following eleven training sessions
Robert describes himself as doing GREAT! Robert contends that he has more coordination and has lots of energy. Robert, a cigarette smoker for 20+ years, explained that during Brain State training sessions he chose to see himself as smoke-free. Subsequently, he was able to stop smoking without the issues of withdrawal and difficulty normally associated with stopping smoking. Robert described himself as having no cravings for cigarette or drugs and was feeling good and strong. Robert also explained that those around him remarked how good and how healthy he was looking.
Brain state changes from assessment comparisons and observations
Robert began Brainwave Optimization with RTB™ sessions after having been told that he was not participating effectively in some of his group activities. He was also quite awkward and not in very good physical shape. Robert was generally on-time after the second session and told us he was enjoying the sessions. His self-description is confirmed by his change in brain state in the following manner:

1. Before training - his internal anxiety level was over 50% higher than normal. Following training, his internal anxiety is in the normal range.
2. Before training - his temporal beta was high and unbalanced - 9.1 on left, 19.2 on the right. This would indicate a lack of restful sleep and result in the probability of being clumsy or awkward. Following eleven sessions, his left was 3.4 and his right 3.1 - indicating total balance and an ability to achieve better coordination and better sleep.
3. Before training - his coherence (an indicator of well-being and immune system strength) was 33; after training, it is 47. We would train any coherence that was under 65.
4. Before training - Robert had right side parietal alpha which was less than the left at 17.25. After training, his right side parietal alpha is greater than the left and is 19.80, an increase of approximately 15%. Right side alpha greater than left and increased generally means a significant change in the experience of well-being. This is consistent with what we see Robert doing currently.

Marvin
Self-description following twelve training sessions
Marvin felt that Brainwave Optimization with RTB™ sessions have improved his mood and attitude immensely. He showed us a bandaged hand and explained that he had a serious accident at work. When the accident happened, the man working with Marvin ran away, knowing that Marvin would immediately go into a rage and tear things up and possibly hurt someone around him. But when this happened, he instead simply went to get medical assistance without the immediate uncontrollable rage. Marvin also explains that although he only gets four hours of sleep at night, he has lots of energy, following the Brainwave Optimization with RTB™ sessions.

Brain state changes from assessment comparisons and observations
It is apparent that Marvin enjoys himself more and appreciates the training sessions. He seems to have become comfortable with himself and feels badly when he is unable to train as frequently as he might due to conflicts between his work schedule and the office schedule. Marvin impresses the staff by his understanding of the training and willingness to talk about it with the trainers. His verbal skills seem to have improved dramatically. Marvin's self-description is confirmed by the following data:

1. Before training - frontal low frequency totaled 39% and 37%. Following training, his frontal low frequency totaled 31% and 27%. This is a major shift which indicates balance (emotional and rational stability) which he attained in training.
2. Before training - his temporal beta was high and unbalanced - 12 on left, 10 on the right. This would indicate a lack of restful sleep and the probability of being clumsy or
awkward. Following 12 sessions, his left was 8 and his right 8 - totally balanced to indicate his ability to be more coordinated, sleep better and have much less need to self-medicate due to anxiety.

3. Before training - his coherence (an indicator of well-being and immune system strength) was 81; after training, it is 88. We would train any coherence that was under 65.
4. Before training - Marvin had an alpha reversal in the parietal area - 30.3 L and 29.2 in the right. After training, it was L 26.8 R 27.7. This is consistent with Mike saying he discovered a never-before-experienced sense of well-being and confidence.
5. Before training - his SMR (sensory motor response) indicator was 6.4% and after training, it is 7.4%. Effectively, this means that he increased brain-body connection by 16% which helps with sustained energy, physical health and natural ability.

**William & Susan**

William, who had eight sessions, and Susan, who had three sessions, both elected to leave the program. William stated in drug court that he felt better following Brainwave Optimization with RTB™ sessions, but his work schedule did not allow him to continue. Susan just had her first baby and wanted to stay home and concentrate on being a mother.

**Jim**

The other non-program probationer was Jim. Jim was trained twice daily for five days as an experiment. He was a repeat offender. He was not going to be allowed into the Drug Court program. Brain State Technologies trained Jim in order to determine if his imbalance could be helped in only five days.

Jim volunteered for Brainwave Optimization with RTB™ knowing that his choice was either that or go directly to jail. Not surprising he chose to volunteer. This made the test even more relevant as he brought a certain disbelief and contempt for what we were doing. Jim's brain state changes were remarkable:

1. Internal anxiety went from 350% (3.5 times) normal, to normal.
2. SMR increased from 11.4% to 11.9%.
3. Ability to concentrate went from 10.7 to 17.7.
4. Coherence went from 67% to 69%.

Generally, Jim became much more capable of relating to other people. However, Jim still had indicators of imbalance, likely manifesting as a lack of trust and uneasiness with others.