

Human Dimension Support Services





U.S. ARMY COMBAT CAPABILITIES DEVELOPMENT COMMAND – AVIATION & MISSILE CENTER

Human Dimension Support Services (HDSS) Contract



THE HUMAN DIMENSION SUPPORT SERVICES CONTRACT



The Human Dimension Support Services contract is...

- ✓ A competitively bid IDIQ Task Order (TO) on GSA OASIS focused on the Human Dimensions.
- ✓ Funded incrementally with a MIPR to support customer specific requirements/tasks
- ✓ Supports requirements within a broad scope focusing on Cognitive Enhancement and Tactical Training, Research and Assessment, Accelerated Learning, and Technology and Software Development to support Human Dimension initiatives.
- ✓ A Time & Materials for labor support which allows the government to ramp work up or down.
- ✓ Cost Reimbursable for ODCs and Travel.
- ✓ Allows for Sub-contractors to be added to fill capability gaps.

Scope: Specifically written for Human Dimension (HD) programs, incorporating Performance Psychology, Research and technology development to support applications for tactical training programs.

- ✓ Technology development part of the current scope.
- ✓ TS/SCI cleared personnel.
- ✓ Experienced with government oversight



PILOT TRAINING NEXT V2 HOLISTIC HUMAN PERFORMANCE



Education, Testing, Analysis, Monitoring, Training

Maximizing Performance and Learning

Delivery of individualized **Cognitive Performance and Learning**

Enhancement education, testing & training.

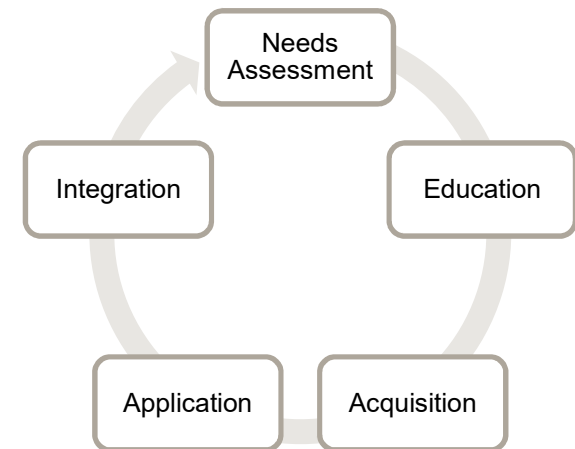
- Optimize student performance through a systematic skills-based training program rooted in performance psychology.
- Expert vs. Novice Sample

Psychometric monitoring and management of student and instructor stress/well-being across the course (e.g., Mood State, Stress Indicators, Personality, Mindset, Emotional Intelligence/Control)

Biometric data analytics of critical stress indicators were utilized to maximize expertise development (e.g., Zephyr, Sleep Monitors- FitBit, Fatigue Science).

Movement Analysis & Training to manage stress and maximize learning states (FMS, Physical testing, Regeneration, CTPT, Stress etc.)

Utilize data in the process of talent development and exploration of key predictive analytic indicators (Comparison Samples & Aviator Performance Profile).



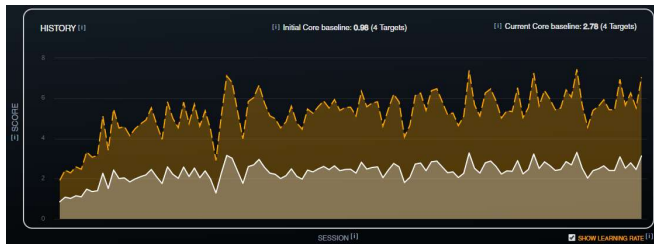
“Humans are more important than Hardware”



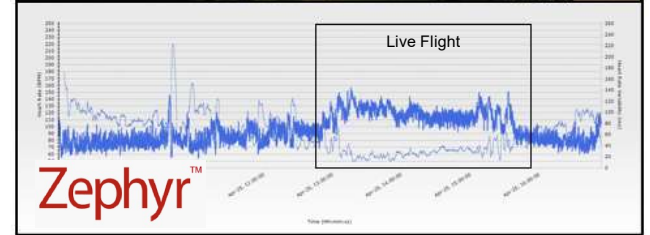
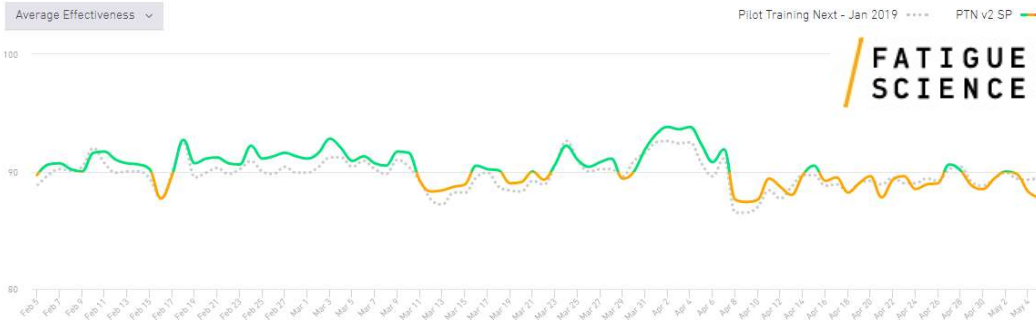
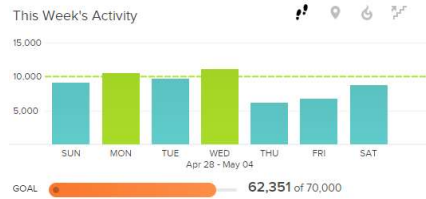
PILOT TRAINING NEXT V2 HOLISTIC HUMAN PERFORMANCE



HDSS TECHNOLOGICAL RESOURCES



NeuroTracker

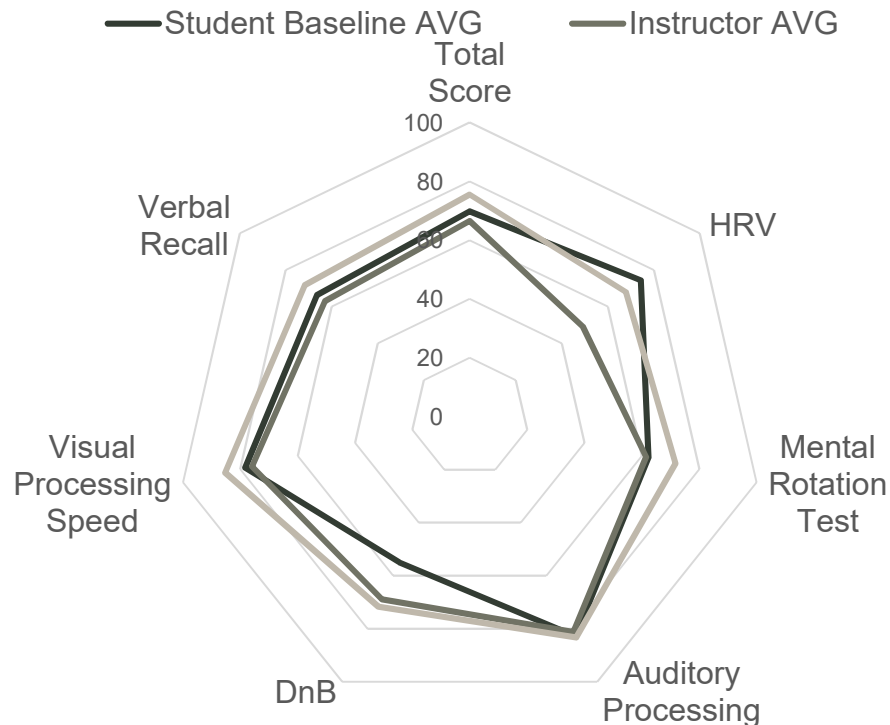




PILOT TRAINING NEXT V2 RESULTS



CEPP Cognitive Testing Protocol Results



Bottom Line

Integrating innovative training techniques graduated pilots in $\frac{1}{2}$ the time of conventional training to the same standard, saving the Air Force training time and dollars, as well as developing more pilots in the same amount of time.

- Students post test **outperformed** both student & instructor baseline scores.
- Heart Rate Variability (HRV): **3% decrease** from baseline score. This is likely the result of extensive stress experienced throughout the course.
- Mental Rotation Test: **20% improvement** from baseline score.
- Auditory Processing (Digit Span): **4% improvement** from baseline score. Minimal increase due to high baseline proficiency.
- DnB (Working Memory): **36% improvement** from baseline score.
- Visual Processing Speed: **12% improvement** from baseline score.
- Long-term Verbal Recall: **9% improvement** from baseline score.