



## List of Interactive Tests

| <b>Test</b>                              | <b>Concept Addressed</b>                              | <b>Key Measure</b>                       | <b>Approx Duration</b> |
|--|---|--|------------------------|
| <b>Basic Performance Screening</b>       |   |  |                        |
| Touch Screen Training                    | Familiarization with equipment                        |  | 2 min                  |
| Flexible Rule Application                | Rule following  | Errors                                   | 4 min                  |
| Digit Symbol Substitution                | Speed of Cognitive Processing                         | Number of Substitutions completed in 90s | 2 min                  |
| Trails A/B                               | Cognitive Flexibility                                 | Completion time difference B-A           | 2 min                  |
| Visual Analog Scales                     | Current Psychological state                           | Scale Distance                           | not fixed              |
| <b>Questionnaires</b>                    |   |  |                        |
| Health Resource Inventory                | Personality – class and social Behavior               | 5 personality factors                    | 5 min                  |
| Swedish University Scales of Personality | Personality – affective state and behaviors           | 13 personality factors                   | 8 min                  |
| Five Factor Personality Inventory        | Personality – general Characteristics                 | 5 personality factors                    | 5 min                  |
| Barrett Impulsiveness Scales             | Personality - impulsiveness                           | 3 impulsiveness factors                  | 5 min                  |
| Adult Self-Report Scale                  | Attention-Deficit Hyperactivity Disorder              | 2 symptom dimensions                     | 2 min                  |
| <b>Impulsive Behavior</b>                |   |  |                        |
| Stop Signal Task                         | Response Inhibition, “motor impulsivity”              | Reaction Time and Stopping Time          | 5 min                  |
| Switch Signal Task                       | Response redirection                                  | Reaction Time and Switching Time         | 5 min                  |
| Uncertain Visual Discrimination          | “Reaction Impulsivity”                                | Reaction Time                            | 5 min                  |
| Variable Consecutive Number              | Ability to link together individual acts into a chain | Mean Response Chain Length               | 8 min                  |
| Delay of Reward                          | Sensitivity to delayed rewards/instant gratification  | Percent choice of delayed large reward   | 20 min                 |

| <b>Test</b>                     | <b>Concept Addressed</b>                     | <b>Key Measure</b>                            | <b>Approx Duration</b> |
|---------------------------------|--|---|------------------------|
| <b>Executive Function</b>       |  |   |                        |
| Balloon Analog Risk Test        | Risk Taking                                  | Mean number of responses before taking reward | 7 min                  |
| Block Stacking Task             | Risk taking                                  | Mean number of responses before taking reward | In development         |
| Discrete Trial N-back           | Working Memory<br>1-back<br>2-back<br>3-back | Percentage correct                            | 12 min                 |
| Top-Down Attentional Processing | Top-down attentional Processing              | Reaction times                                | 4 min                  |
| Reinforcement Learning Task     | Rule learning with uncertain information     | Errors to criterion                           | 4 min                  |
| Sequence Learning Task          | Rule learning                                | Errors to criterion                           | 6 min                  |
| Task Shifting Procedure         | Redirection of executive resources           | Reaction times                                | In development         |
| Block Arrangement Task          | Planning                                     | Completion times                              | In development         |

## Technical Information

- The tests are designed to run on a standard off-the-shelf HP Pavilion tx2500z or TouchSmart tx2z <sup>note 1</sup> touch screen notebook computer with a 12.1" (diagonal) high-definition touch screen, which twists for easy viewing of the tests by the participant.
- Tests are installed on each computer as .exe files.
- Tests can be packaged into a battery specific for the client.
- Data is stored in ASCII files for easy reading into MS Excel or statistical analysis programs. WiltonLogic plans to implement provision for encryption in 2009.

## For more information, please contact

John Evenden, PhD  
WiltonLogic  
101 Wilton Woods Lane  
Media, PA 19063, USA  
Tel: (+1) 610 891 7791  
E-mail: [john.evenden@wiltonlogic.com](mailto:john.evenden@wiltonlogic.com)

Note 1: Computer model current as of Dec 2008, subject to availability and introduction of new models by Hewlett-Packard