**Supplemental Table 1(S1): Effect Sizes Characterizing Group Differences Between Family High Risk Participants and Controls***

| ***Study*** | ***Effect Size*** |
|---|---|
| ***General Intelligence*** | |
| **Full-Scale or Estimate of IQ** | |
| Maziade 2009 | -1.583 |
| Dworkin 1993 (adolescence) | -1.314 |
| Dworkin 1993 (childhood) | -1.275 |
| Fis 2008 | -1.024 |
| Groom 2008 | -0.999 |
| Bhojraj 2009 | -0.907 |
| Byrne 2003 | -0.595 |
| Schreiber 1992 | -0.573 |
| Goodman 1987 | -0.544 |
| Worland 1984 | -0.515 |
| Eack 2010 | -0.493 |
| Ozan 2010 | -0.465 |
| Goldstein 2000 | -0.367 |
| Sohlberg & Yaniv 1985 (Raven's Matrices) | -0.225 |
| **Average IQ ES** | **-0.777** |
| ***Attention*** | |
| **Perceptual/motor speed** | |
| *Digit symbol/coding* | |
| Asarnow 1978 | -1.065 |
| Schreiber 1992 | -0.553 |
| Byrne 2003 | -0.536 |
| Fis 2008 | -0.530 |

| | |
|---|---|
| Niendam 2003 | -0.464 |
| Landau 1972 | -0.405 |
| Seidman 2006 | -0.271 |
| **Average digit symbol ES** | **-0.546** |
| *Reaction Time—simple and warned* | |
| Schreiber 1992 | |
| Simple | -0.789† |
| Warned | -0.513† |
| Maier 1994 | |
| Crossover effect (regular-irregular RT) | -0.405 |
| Modality shift effect | -0.317† |
| *Speed and Capacity of Language Processing Test* | |
| *Speed of comprehension* | |
| Schubert and McNeil 2005 | -0.159† |
| *Spokes Test* | |
| Asarnow 1978 (B) | -2.01† |
| Asarnow 1978 (A) | -1.02† |
| *Stroop* | |
| Klemm 2006 | |
| Working speed | -0.643 |
| Selectivity Scale | -0.103 |
| Naming skill | 0.065 |
| Asarnow 1978 | |
| Name colors (interference) | -0.750† |
| Name colors | -0.707† |
| Read color words | -0.075† |
| *Stroop Interference score* | |
| Ozan 2010 | -0.605† |
| Byrne 2003 | -0.406† |

| | |
|---|---|
| Maziade 2009 | -0.205† |
| Asarnow 1978 | 0.005† |
| **Average interference score ES** | **-0.303** |
| *Number of errors during interference* | |
| Klemm 2006 (#errors) | -0.895† |
| *Trail Making* | |
| *Time to execute part A* | |
| Ozan 2010 | -0.976† |
| Klemm 2006 | -0.732† |
| Fis 2008 | -0.540† |
| Schubert and McNeil 2005 | -0.115† |
| Seidman 2006 | 0.038† |
| **Average ES time to execute part A** | **-0.465** |
| *Time to execute part B* | |
| Fis 2008 | -0.836† |
| Klemm 2006 | -0.781† |
| Ozan 2010 | -0.395† |
| Schubert and McNeil 2005 | -0.250† |
| Seidman 2006 | -0.229† |
| **Average ES time to execute part B** | **-0.498** |
| *# of errors* | |
| Klemm 2006 | -0.277† |
| *Visual Search* | |
| Neale 1984 | |
| Quadrant 1 | -0.206 |
| Quadrant 2 | -0.332 |
| Quadrant 3 | -0.394 |
| Quadrant 4 | -0.453 |
| *d2-concentration test* | |

| | |
|---|---|
| *# of marked signs* | |
| Lifshitz 1985 (sum of omissions) | -0.552†** |
| Klemm 2006 | -0.550 |
| Schreiber 1992 | -0.482 |
| **Average d2 concentration test** | **-0.528** |
| *Rate of errors to # of treated signs* | |
| Klemm 2006 | 0.200 |
| *Ratio minus error score* | |
| Schreiber 1992 (age-adj) | -0.470 |
| *Speed of comprehension* | |
| Byrne 2003 | -0.443† |
| **Short-term or working memory** | |
| *Short-term memory lag test* | |
| Ozan 2010 (Consonant Vowel Consonant – CVC trigrams) | -0.622 |
| Rutschmann 1980 | |
| Correct response rate words | -0.523 |
| Memory strength (d') words | -0.500 |
| Correct response rate CVCs | -0.478 |
| Memory strength (d') CVCs | -0.442 |
| *Arithmetic* | |
| Fis 2008 (WISC-R) | -0.473 |
| Sohlberg 1985 | -0.347 |
| Byrne 1999 (age-scaled) | -0.290 |
| Landau 1972 | -0.263 |
| **Average Arithmetic ES** | **-0.343** |
| *Thurstone Number Facility* | |
| Sohlberg 1985 | -0.490 |
| *Thurstone Number Series* | |

| | |
|---|---|
| Solberg 1985 | -0.412 |
| *Digit Span* | |
| *Total* | |
| Neale 1984 (w/ distraction) | -0.467 |
| Myles-Worsley 2007 | -0.386 |
| Ozan 2010 (total score) | -0.377 |
| Maziade 2009 | -0.365 |
| Seidman 2006 | -0.221 |
| Neale 1984 (w/out distraction) | -0.210 |
| Niendam 2003 | -0.070 |
| Fis 2008 (scaled score) | -0.032 |
| **Average total digit span ES** | **-0.266** |
| *Forwards* | |
| Ozan 2010 (forward) | -0.388 |
| Lifshitz 1985 (forwards fast) | -0.384** |
| Schubert and McNeil 2005 (forward) | -0.330 |
| Cosway 2000 (forward) | -0.163 |
| Byrne 1999 (forward) (age-scaled) | -0.131 |
| **Average forward digit span ES** | **-0.279** |
| *Backwards* | |
| Ozan 2010 (backward) | -0.298 |
| Byrne 1999 (backward) (age-scaled) | -0.249 |
| Cosway 2000 (backward) | -0.178 |
| Lifshitz 1985 (backwards fast) | -0.178** |
| Schubert and McNeil 2005 (backward) | -0.136 |
| **Average backwards digit span ES** | **-0.208** |
| *Dichotic Listening* | |
| Asarnow 1978 (# of errors) | |
| # of voices=1 | -0.459† |

| | |
|---|---|
| # of voices=3 | -0.729† |
| # of voices=7 | -0.814† |
| # of voices=13 | -0.582† |
| *Working Memory Span* | |
| *Counting Span* | |
| Davalos 2004 | -0.548 |
| *Sentence Span* | |
| Davalos 2004 | -0.478 |
| *Hayling Sentence Completion Test (HSCT)* | |
| Byrne 2003 | |
| Section A Time | -0.472†§ |
| Type B errors | -0.412†§ |
| Total errors | -0.261†§ |
| Section B time | -0.171†§ |
| Time difference (B-A) | -0.098 |
| Type A errors | -0.010†§ |
| Groom 2008 | |
| Response initiation speed (RT) | -0.415† |
| Response inhibition speed (RT) | -0.415† |
| *Total spatial span* | |
| Maziade 2009 | -0.441 |
| Myles-Worsley 2007 | -0.168 |
| *Letter-Number sequencing* | |
| Myles-Worsley 2007 | -0.373 |
| **Vigilance and sustained attention** | |
| *Simple CPTs omissions/commissions* | |
| Asarnow 1978 (Errors of omission) | -0.483† |
| Cohler 1977 (Errors of commission) | -0.422† |
| Cohler 1977 (Errors of omission) | -0.417† |

| | |
|---|---|
| Asarnow 1978 (Errors of commission) | 0.061† |
| *Difficult CPTs* | |
| *Double Digit CPT* | |
| Maziade 2009 | |
| CPT II-hit reaction time block change | -0.387 |
| CPT II-hit standard error block change | -0.195 |
| CPT-II omissions | -0.038† |
| CPT-II commissions | 0.381† |
| CPT-II detectability d' | 0.559 |
| *CPT-IP Numbers* | |
| Myles-Worsley 2007 (fast) | -0.589 |
| Groom 2008 | -0.562 |
| Cosway 2002 (*d'* detectability, no distraction) | -0.202 |
| Cosway 2002 (*d'* detectability, distraction) | -0.058 |
| Seidman 2006 | 0.000 |
| **Average CPT-IP numbers d'** | **-0.282** |
| *CPT-IP Shapes* | |
| Cosway 2002 (*d'* detectability, distraction) | -0.430 |
| Cosway 2002 (*d'* detectability, no distraction) | -0.376 |
| Myles-Worsley 2007 | -0.365 |
| Groom 2008 | -0.139 |
| Seidman 2006 | 0.000 |
| **Average CPT-IP shapes d'** | **-0.262** |
| *Tova CPT* | |
| Ozan 2010 | |
| Omission errors | -0.371† |
| Response time | -0.246† |
| Commission errors | -0.067† |
| **Other attention processes** | |

| | |
|---|---|
| *Selective Attention* | |
| Schubert and McNeil 2005 | |
| Compound hits | -0.470 |
| Correct hits | -0.416 |
| Errors | -0.003† |
| *Stop Task* | |
| Davalos 2004 | -0.816† |
| *Span of Apprehension* | |
| Asarnow 1978 (Number of correct detections) | |
| 1 array element | -0.100 |
| 3 array elements | -0.396 |
| 5 array elements | -1.012 |
| 10 array elements | -1.450 |
| ***Executive functioning*** | |
| **Concept Formation and Abstraction** | |
| *Concept Attainment* | |
| Asarnow 1978 (Errors to criterion) | |
| 3 stimulus dimensions | -1.731† |
| 4 stimulus dimensions | -1.677† |
| 5 stimulus dimensions | -0.781† |
| 6 stimulus dimensions | -0.981† |
| *Object Sorting Test* | |
| Neale 1982 | |
| Complexive responses | -0.397† |
| Superordinate response | -0.338 |
| Thematic responses | -0.224† |
| Vague responses | -0.108 |
| *Picture Arrangement* | |
| Ott 1998 | -0.642 |

| | |
|---|---|
| Niendam 2003 | -0.604 |
| Fis 2008 | -0.325 |
| **Average picture arrangement ES** | **-0.524** |
| *Wisconsin Card Sort (WCST)* | |
| *Perseverative errors/responses* | |
| Wolf 2002 (errors) | -0.645† |
| Wolf 2002 (responses) | -0.634† |
| Klemm 2006 | -0.603† |
| Schubert and McNeil 2005 | -0.119† |
| **Average WSCT perseverative errors/responses ES** | **-0.500** |
| *Total errors* | |
| Wolf 2002 | -0.652† |
| Ozan 2010 | -0.524† |
| Maziade 2009 | -0.132† |
| Schubert and McNeil 2005 (%) | -0.047† |
| **Average WCST total errors ES** | **-0.339** |
| *Trials to first category* | |
| Ozan 2010 | -0.767† |
| Maziade 2009 | -0.176† |
| *Failure to maintain set* | |
| Maziade 2009 | -0.595† |
| Wolf 2002 | -0.353† |
| *Learning to learn* | |
| Maziade 2009 | 0.248 |
| *% correct trials* | |
| Klemm 2006 | -0.759 |
| Ozan 2010 (Total Correct Score) | -0.524 |
| *Number of complete categories* | |

| | |
|---|---|
| Ozan 2010 | -0.789 |
| Klemm 2006 | -0.600 |
| Wolf 2002 | -0.412 |
| Maziade 2009 | 0.672 |
| **Average WCST complete categories ES** | **-0.282** |
| *Reitan-Indiana Neuropsychological Test Battery* | |
| Fis 2008 | |
| Color Form Test | -0.768† |
| Progressive Figures Test | -0.708† |
| *Tower of London* | |
| Maziade 2009 | |
| Total rule violations | -0.780† |
| Total # of problem solved in min moves | -0.495 |
| Total time violations | 0.074 |
| Mittenecker Perseveration Test | |
| Schreiber 1992 | -0.669 |
| ***Verbal/linguistic ability*** | |
| *Verbal IQ* | |
| Ott 1998 | -1.104 |
| Fis 2008 | -0.709 |
| Schreiber 1992 | -0.592 |
| Neale 1984 | -0.473 |
| Sohlberg 1985 | -0.123 |
| **Average verbal score ES** | **-0.720** |
| *Comprehension* | |
| Fis 2008 (WISC-R) | -0.709 |
| Schreiber 1992 | -0.696 |
| Ott 1998 | -0.646 |
| Niendam 2003 | -0.045 |

| | |
|---|---|
| Sohlberg 1985 | 0.038 |
| **Average comprehension ES** | **-0.412** |
| *Grammatical Reasoning* | |
| Schubert and McNeil 2005 | |
| Correct rejections | -0.616 |
| Correct hits | -0.343 |
| Level of logical difficulty | -0.262 |
| Errors | -0.242† |
| *Information* | |
| Fis 2008 | -0.564 |
| Schreiber 1993 | -0.502 |
| Landau 1972 | -0.409 |
| Niendam 2003 | -0.155 |
| Sohlberg 1985 | -0.091 |
| **Average information ES** | **-0.344** |
| *Similarities (WISC-R)* | |
| Schreiber 1992 | -0.742 |
| Fis 2008 | -0.614 |
| Sohlberg 1985 | 0.242 |
| **Average similarities ES** | **-0.371** |
| *NART Reading* | |
| Byrne 2003 | -0.773 |
| Marjoram 2006 | -0.651 |
| *WRAT-3 Reading* | |
| Seidman 2006 (standard score) | -0.669 |
| **Average NART & WRAT Reading ES** | **-0.698** |
| *Token Test* | |
| Byrne 2003 | -0.251 |

| | |
|---|---|
| *Verbal Fluency* | |
| *Total verbal fluency* | |
| Bhojraj 2009 (controlling for IQ) | -0.450 |
| Seidman 2006 (raw score) | -0.295 |
| Schubert and McNeil 2005 | 0.241 |
| **Average total fluency ES** | **-0.168** |
| *Letter Fluency* | |
| Ozan 2010 | -0.575 |
| Bhojraj 2009 (controlling for IQ) | -0.445 |
| Maziade 2009 | -0.431 |
| Byrne 2003 | -0.262 |
| Groom 2008 | -0.170 |
| **Average letter fluency ES** | **-0.377** |
| *Category fluency* | |
| Byrne 2003 | -0.487 |
| Maziade 2009 | -0.366 |
| *Vocabulary* | |
| Ott 1998 | -1.153 |
| Davalos 2004 (WISC) | -0.762 |
| Seidman 2006 (scaled score) | -0.682 |
| Niendam 2003 (WISC) | -0.615 |
| Byrne 2003 (WAIS-R) | -0.533§ |
| **Average vocabulary ES** | **-0.749** |
| *Thurstone Verbal Meaning* | |
| Sohlberg 1985 | |
| Letter Series | -0.538 |
| Word grouping | -0.124 |
| Verbal meaning | -0.043 |
| Spot the word test | |

| | |
|---|---|
| Byrne 2003 | -0.623 |
| ***Visual spatial ability*** | |
| *Performance IQ* | |
| Fis 2008 | -1.172 |
| Ott 1998 | -0.866 |
| Byrne 2003 | -0.544 |
| Neale 1984 (WISC) | -0.449 |
| Schreiber 1992 | -0.230 |
| **Average performance IQ ES** | **-0.652** |
| *Block Design* | |
| Fis 2008 (WISC-R) | -1.262 |
| Cosway 2000 | -0.705 |
| Seidman 2006 (scaled score) | -0.234 |
| Davalos 2004 | -0.242 |
| Schubert and McNeil 2005 | -0.195 |
| Niendam 2003 | -0.193 |
| **Average Block Design ES** | **-0.472** |
| *Picture completion* | |
| Fis 2008 | -0.936 |
| *Object Assembly* | |
| Fis 2008 (WISC-R) | -1.113 |
| *Paper Folding* | |
| Davalos 2004 | -0.115 |
| *Bender Gestalt* | |
| Sohlberg 1985 | -0.282† |
| *Embedded Figures Test (# of failures)* | |
| Cohler 1977 | -0.245† |
| *Visual-Spatial Orientation and Memory* | |

| | |
|---|---|
| Lifshitz 1985 | |
| Total errors | -0.421†** |
| Total time to execute | -0.384†** |
| Total time learning | -0.217†** |
| Total # of trials | -0.168†** |
| ***Social cognition*** | |
| **Emotion Perception** | |
| *Penn Emotion Recognition Test-40* | |
| Eack 2010 | |
| Speed (total) | -0.725† |
| Speed (neutral) | -0.613† |
| Speed (emotional) | -0.545† |
| Accuracy (neutral) | -0.420 |
| Total accuracy | -0.310 |
| Accuracy (emotional) | -0.144 |
| *Emotion perception* | |
| Davalos 2004 | |
| Adult | -0.073 |
| Children | -0.030 |
| **Theory of mind** | |
| *Hinting Task* | |
| Marjoram 2006 | -0.462** |
| *Self Monitoring task* | |
| Marjoram 2006 | -0.177** |
| *Brune Cartoon Task* | |
| Marjoram 2006 | -0.129** |
| ***Declarative memory*** | |
| **Verbal Story and List Recall** | |

| | |
|---|---|
| *Story Recall* | |
| Lifshitz 1985 | |
| Sum of distracted omissions | -0.572†** |
| Sum of nondistracted omissions | -0.473†** |
| Total nondistracted errors | -0.307†** |
| Total sum of errors | -0.071†** |
| Total distracted errors | -0.016†** |
| *Logical Memory (WMS) Story recall* | |
| Myles-Worsley 2007 | |
| Immediate recall | -0.672 |
| Bonner-Jackson 2007 (scaled) | -0.471 |
| Delayed recall | -0.238 |
| Seidman 2006 (percentage) | -0.231 |
| **Average Story Recall ES** | **-0.403** |
| *California Verbal Learning Test (CVLT)* | |
| *Short-delay recall* | |
| Bonner-Jackson 2007 | -0.350 |
| Maziade 2009 | |
| Total recall | -0.407 |
| Delayed recall | -0.697 |
| Recognition | -0.156 |
| *Rey Auditory Verbal Learning Test (RAVLT)* | |
| *Immediate recall* | |
| Maziade 2009 | -0.792 |
| *Recognition* | |
| Ozan 2010 (percent score) | -0.748 |
| Maziade 2009 | 0.140 |
| *Trial 1* | |

| | |
|---|---|
| Byrne 2003 | -0.653 |
| *Delayed Recall* | |
| Maziade 2009 | -0.732 |
| Ozan 2010 | -0.668 |
| Byrne 2003 | -0.509 |
| **Average RAVLT Delayed Recall ES** | **-0.636** |
| *Recall B* | |
| Byrne 2003 | -0.274 |
| *Recognition List A* | |
| Byrne 2003 | -0.123 |
| *Recognition List B* | |
| Byrne 2003 | -0.121 |
| *Total T1-5* | |
| Ozan 2010 | -0.618 |
| Groom 2008 | -0.589 |
| Byrne 2003 | -0.546 |
| **Average T1-T5 ES** | **-0.584** |
| *Retention (%)* | |
| Groom 2008 | -0.390 |
| *Retrieval* | |
| Groom 2008 | -0.230† |
| *True positive* | |
| Ozan 2010 | -0.471 |
| *Rivermead Behavioral Memory Test (standardized score)* | |
| Byrne 2003 | |
| Delayed | -0.656 |
| Immediate | -0.564 |
| Standardized score | -0.503§ |
| *Word Pairs Test* | |

| | |
|---|---|
| Schubert and McNeil 2005 | |
| Delayed | -0.786 |
| Immediate | -0.601 |
| ***Visual Recall*** | |
| *Family pictures (WMS)* | |
| Bonner-Jackson 2007 (immediate, scaled) | -0.850 |
| *Memory for Designs* | |
| Orvaschel 1979 | -0.088** |
| *Visual Reproductions* | |
| Byrne 2003 | |
| Delayed | -0.653§ |
| Immediate | -0.583§ |
| *Visuospatial memory* | |
| Myles-Worsley 2007 | |
| Visual recognition | -0.206** |
| Faces recognition | 0.189** |
| ***Motor functioning*** | |
| *Finger Tapping* | |
| Schubert and McNeil 2005 | -0.051 |
| *Purdue-both Hands* | |
| Maziade 2009 | -0.147 |
| *Grooved pegboard* | |
| Seidman 2006 | |
| Right (seconds) | -0.071 |
| Left (seconds) | 0.022 |
| ***Cerebral asymmetry*** | |
| *Story Comprehension Test* | |
| Hallett 1986 | |
| Both | -0.435 |

| | |
|---|---|
| Right | -0.238 |
| Left | 0.205 |
| *Auditory Recall Test* | |
| Hallett 1986 | |
| Both | -0.560 |
| Left | -0.196 |
| Right | -0.155 |
| *Verbal Dichotic Listening* | |
| Hallett 1986 (matched on verbal IQ) | |
| Absolute ear advantage | -0.553 |
| Right ear score | -0.045 |
| Mean score | 0.214 |
| Left ear score | 0.465 |
| *Handedness* | |
| Byrne 1999 | 0.006 |

*Average Effect Sizes (ESs) in Cohen's *d* are calculated when 3 or more studies with the same tests and variables have been used to compare Family High Risk (FHR) and Control subjects

** Subgroups within the high-risk (HR) group have been pooled to create an overall HR group average score

† Effect sizes are inverted such that a negative value denotes poor performance in the HR group.

§ Cohen's d computed from hedges g

Across studies, within test (e.g., IQ), ESs are ordered from larger to smaller