**Supplementary Table 2: Quality assessment of included studies.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **First Author****Year** | **Model No.** **(Results No)** | **Sample Size** | **Age** | **Reserve Factor** | **Cognitive Tests** | **Statistical Analysis** | **Overall Quality Rating trends to:** |
| Alexander et al. 1997 | 58 | LL | MM | LL | LL | HH | L(8)L(8) |
| Borroni et al. 2009 | 1234 | MMMM | MMMM | MMMM | LLLL | MMMM | M (9)M (9)M (9)M (9) |
| Christensen et al. 2007 | 1 * Res1
* Res2

2* Res1
* Res2
 | HHHH | LLLL | MMMM | MMMM | HMHH | M(11)M(10)M(11)M(11) |
| Dumurgier et al. 2010 | 1234567* Res1
* Res2
* Res3

89 | MMMMMMLLLLL | MMMMMMMMMMM | MMMMMMMMMMM | LLLLLLLLLLL | HHHHHHHHHMM | M(10)M(10)M(10)M(10)M(10)M(10)M(9)M(9)M(9)L(8)L(8) |
| Murray et al. 2011 | 1 * Res1
* Res2

2* Res1
* Res2
 | HHHH | HHHH | MMMM | HHHH | HHHH | H(14)H(14)H(14)H(14) |
| Garibotto et al. 2012 | 12 | MM | MM | MM | LL | LL | L(8)L(8) |
| Garibotto et al. 2008 | 123456789 | HHHHHHHHH | LLLLLLLLL | MMMMMMMMM | LLLHHHHHH | HHHHHHMMM | M(10)M(10)M(10)H(12)H(12)H(12)M(11)M(11)M(11) |
| Staff et al. 2004 | 12345678 | MMMMMMMM | HHHHHHHH | MMMMMMMM | HHHHHHHH | HHHHHHHH | H(13)H(13)H(13)H(13)H(13)H(13)H(13)H(13) |
| Ewers et al. 2013 | 1234 | MMMM | MMMM | LLLL | LLLL | HHHM | M(9)M(9)M(9)L(8) |
| Scarmeas et al. 2003 | 134 | LLL | MMM | LHH | LLL | MMM | L(7)M(9)M(9) |
| Kemppainen et al. 2008 | 1234 | LLLL | MMMM | LLLL | LLLL | MMHH | L(7)L(7)L(8)L(8) |
| Perneczky et al. 2007 | 1 | L | M | M | L | H | M(9) |
| Perneczky et al. 2007  | 1 | L | M | M | L | H | M(9) |
| Perneczky et al. 2006  | 1 | M | M | M | L | H | M (10) |
| Reed et al. 2011 | 1* Res1
* Res2
* Res3
* Res4
 | HHHH | MMMM | HLMM | LLLL | HHHH | H (12)M (10)M (11)M (11) |
| Roe et al. 2008 | 123456789 | HHHHHHHHH | MMMMMMMMM | LLLLLLLLL | LLLLLLLLL | MMMHHMHHH | M (9)M (9)M (9)M (10)M (10)M (9)M (10)M (10)M (10) |
| Schweizer et al. 2012 | 12345 | LLLLL | MMMMM | MMMMM | LLLLL | HHHHH | M (9)M (9)M (9)M (9)M (9) |
| Spreng et al. 2011 | 123 | LLL | LLL | MMM | LLL | MMM | L (7)L (7)L (7) |
| Teipela et al. 2009 | 123 | LLL | MMM | MMM | LLL | MMM | L (8)L (8)L (8) |
| Stern et al. 1995 | 1* Sig.
* N.Sig

2* N.Sig

3* Sig
* N.Sig

4* Sig
* N.Sig

5* Sig.
* N.Sig

67 | MMMMMMMMMMM | MMMMMMMMMMM | HHHHHHHHHHH | LLLLLLLLLLL | HLLHLHLHMMM | M (11)M (9)M (9)M (11)M (9)M (11)M (9)M (11)M (10)M (10)M (10) |
| Christensen et al. 2009 | 123456 | HHHHHH | LLLLLL | MMMMMM | HHHHHH | HHHHHH | H (12)H (12)H (12)H (12)H (12)H (12) |
| Lane et al. 2011 | 1 | L | H | L | L | H | M (9) |
| Negash et al. 2013 | 12 | MM | MM | LL | LL | HM | M (9)L (8) |
| Terracciano et al. 2013 | 12 | MM | MM | MM | LL | HH | M (10)M (10) |
| Roe et al. 2007 | 123 | HHH | HHH  | LLL | LLL | HHH  | M (11)M (11)M (11) |
| Dufouil et al. 2003 | 123456789101112 | HHHHHHHHHHHH | MMMMMMMMMMMM | LLLLLLLLLLLL | LLLLLLLLLLLL | HMHHHHHHHHHH | M (10)M (9)M (10)M (10)M (10)M (10)M (10)M (10)M (10)M (10)M (10)M (10) |
| Bennett et al. 2003 | 1234567891011121314 | HHHHHHHHHHHHHH | M MMMMMMMMMMMMM | LLLLLLLLLLLLLL | LLLLLLLLLLLLLL | HHHHHHHHHMMLLM | M (10)M (10)M (10)M (10)M (10)M (10)M (10)M (10)M (10)M (9)M (9)L (8)L (8)M (9) |
| Bennett et al. 2005 | 12 | HH | MM | LL | LL | HH | M (10)M (10) |
| Koepsell et al. 2008 | 12 | HH | MM | MM | LL | HH | M (11)M (11) |
| Brayne et al. 2010 | 1234567891011121314151617 | HHHHHHHHHHHHHHHHH | HHHHHHHHHHHHHHHHH | LLLLLLLLLLLLLLLLL | LLLLLLLLLLLLLLLLL | HHHHHHHHHHHHHHHHH | M (11)M (11)M (11)M (11)M (11)M (11)M (11)M (11)M (11)M (11)M (11)M (11)M (11)M (11)M (11)M (11)M (11) |
| Roe et al. 2008 | 12345678 | HHHHHHHH | HHHHHHHH | MMMMMMMM | LLLLLLLL | HHMHHHHH | H (12)H (12)M (11)H (12)H (12)H (12)H (12)H (12) |
| Roe et al. 2011 | 12345 | HHHHH | MMMMM | LLLLL | HHHHH | HHMHH | H (12)H (12)M (11)H (12)H (12) |
| Yaffe et al. 2011 | 1234 | HHHH | HHHH | MMMM | HHHH | HMMH | H (14)H (13)H (13)H (14) |
| Stern et al. 1992 | 12 | MM | MM | MM | LL | HH | M (10)M (10) |

 H = “High”: 12-15 points overall across the five domains; M = “Moderate”: 9-11 points overall across the five domains; L = “Low": 5-8 points overall across the five domains. In brackets overall points for a model.