**Table S1. Summary of studies included in the meta-analysis**

|  |  |  |  |
| --- | --- | --- | --- |
| **Study** | **OCD/HC sample** | **Patients %** | **Tasks** |
|  | **n** | **age** | **male%** | **Medicated** | **Comorbid** |  |
| [Head (1989](#_ENREF_38)) | 15/15 | 33/33 | 53/53 | 0 | 0 | BD, LF |
| [Martinot (1990](#_ENREF_55)) | 14/17 | 44/30 | NR | NR | NR | CF, LF, Stroop, TMTB |
| [Boone (1991](#_ENREF_10)) | 20/20 | 37/36 | NR | 0 | 0 | DF, DS, LF, Stroop |
| [Zielinski (1991](#_ENREF_87)) | 21/21 | 35/33 | 48/- | 43 | U | CBT, CPT, DF, LF, VLT dr, VLT sc |
| [Christensen (1992](#_ENREF_24)) | 18/18 | 38/38 | 28/28 | 0 | 0 | LF, LM |
| [Gambini (1993](#_ENREF_33)) | 23/27 | 30/27 | 57/41 | 57 | 0 | WCST |
| [Martin (1993](#_ENREF_54)) | 17/16 | 32/31 | 59/50 | 0 | NR | CF, LF, VLT dr |
| [Aronowitz (1994](#_ENREF_6)) | 31/22 | 39/35 | 65/45 | 0 | NR | TMTA, TMTB |
| [Abbruzzese (1995](#_ENREF_1)) | 25/25 | 30/29 | 56/44 | 100 | 0 | DAT , LF  |
| [Abbruzzese (1995](#_ENREF_2)) | 33/33 | 31/28 | 58/48 | 100 | 0 | WCST |
| [Cohen (1996](#_ENREF_26)) | 65/32 | 36/34 | 63/59 | 0 | NR | DS, TMTA, TMTB |
| [Veale (1996](#_ENREF_86)) | 40/22 | 36/32 | 43/68 | NR | 0 | ToL |
| [Abbruzzese (1997](#_ENREF_3)) | 60/30 | 30/29 | 68/40 | 100 | 0 | DAT, WCST |
| [Lucey (1997](#_ENREF_53)) | 19/19 | 38/38 | 53/53 | 37 | NR | WCST |
| [Hanes (1998](#_ENREF_34)) | 10/24 | 34/43 | 60/50 | 70 | NR | CF, VLT dr |
| [Purcell (1998](#_ENREF_68)) | 30/30 | 41/41 | 33/40 | 77 | 0 | CBT, IED ed, IED id, SWM, ToL |
| [Schmidtke (1998](#_ENREF_77)) | 29/58 | 35/34 | 52/52 | 0 | U | CF, DF, LF |
| [Hartston (1999](#_ENREF_36)) | 76/62 | 33/31 | 46/50 | 59 | NR | Stroop |
| [Deckersbach (2000](#_ENREF_29)) | 71/55 | 36/35 | 46/38 | 4 | NR | RCFT ir, RCFT organ |
| [Savage (2000](#_ENREF_74)) | 33/30 | 39/36 | 45/40 | 67 | 55 | RCFT ir, RCFT organ, VLT dr, VLT sc |
| [Basso (2001](#_ENREF_8)) | 20/31 | 30/30 | 60/35 | 85 | 0 | LF, TMTA, TMTB |
| [Cavedini (2001](#_ENREF_17)) | 64/58 | 32/34 | 52/48 | 0 | 0 | ToH |
| [Coetzer (2001](#_ENREF_25)) | 13/10 | 38/34 | 46/30 | NR | NR | BD |
| [Jurado (2001](#_ENREF_42)) | 27/27 | 29/31 | 56/56 | 0 | 0 | LF, TMTA, TMTB |
| [Zitterl (2001](#_ENREF_88)) | 27/27 | 39/37 | 52/44 | 0 | 0 | CBT |
| [Kim (2002](#_ENREF_45)) | 39/31 | 30/27 | 69/68 | 38 | 18 | TMTA, TMTB |
| [Moritz (2002](#_ENREF_58)) | 25/70 | 32/33 | 44/57 | 56 | 0 | DS |
| [Aycicegi (2003](#_ENREF_7)) | 16/15 | 34/34 | 31/27 | 63 | NR | LF, OAT, TMTA, TMTB |
| [Borkowska (2003](#_ENREF_12)) | 17/15 | 29/30 | 59/40 | NR | 0 | LF, Stroop, TMTA, TMTB |
| [Cavallaro (2003](#_ENREF_16)) | 67/56 | 31/31 | 49/39 | 0 | 0 | ToH, WCST |
| [Ceschi (2003](#_ENREF_19)) | 32/16 | 36/36 | 25/- | 100 | NR | VLT dr |
| [Cohen (2003](#_ENREF_27)) | 14/23 | 32/25 | 29/22 | NR | U | Stroop |
| [Harris (2003](#_ENREF_35)) | 25/11 | 39/35 | 48/45 | 48 | U | LF, Stroop |
| [Lacerda (2003](#_ENREF_50)) | 14/14 | 33/34 | 71/71 | 0 | NR | CF, RCFT ir, WCST |
| [Mataix-Cols (2003](#_ENREF_56)) | 30/30 | 34/32 | 57/57 | 90 | NR | RCFT ir, RCFT organ |
| [Nielen (2003](#_ENREF_66)) | 19/24 | 37/31 | 42/29 | 16 | NR | IED ed, IED id, Stroop, SWM, ToL |
| [Choi (2004](#_ENREF_23)) | 34/34 | 27/26 | 82/82 | 0 | 12 | WCST |
| [Deckersbach (2004](#_ENREF_30)) | 30/30 | 34/35 | 47/40 | 63 | 37 | VLT dr, VLT sc |
| [Murphy (2004](#_ENREF_61)) | 16/16 | 25/25 | 0/0 | 0 | NR | LF, TMTA, TMTB |
| [Roth (2004](#_ENREF_72)) | 27/29 | 37/35 | 59/41 | 0 | NR | VLT dr |
| [Airaksinen (2005](#_ENREF_5)) | 16/175 | 36/44 | 25/51 | U | U | LF, TMTA, TMTB |
| [Bohne (2005](#_ENREF_9)) | 21/26 | 32/35 | 43/38 | 62 | 48 | BD, OAT, RCFT ir, RCFT organ, VLT dr, VLT sc, WCST |
| [Fenger (2005](#_ENREF_32)) | 15/17 | 39/33 | 47/47 | 0 | 0 | DF, IED ed, IED id, LF |
| [Moritz (2005](#_ENREF_60)) | 71/30 | 33/32 | 31/30 | 55 | NR | BD, CBT, RCFT ir, RCFT organ, TMTA |
| [Nakao (2005](#_ENREF_64)) | 24/14 | 34/30 | 38/36 | 0 | 0 | WCST |
| [Penades (2005](#_ENREF_67)) | 35/33 | 34/32 | NR | 34 | 0 | RCFT ir, RCFT organ, TMTA |
| [Roth (2005](#_ENREF_73)) | 38/27 | 39/36 | 45/59 | 16 | 58 | DS, TMTA, TMTB, VLT dr, WCST |
| [Sawamura (2005](#_ENREF_75)) | 16/16 | 49/49 | 75/50 | NR | 0 | DS |
| [Buhlmann (2006](#_ENREF_14)) | 15/18 | NR | NR | 100 | U | RCFT ir, RCFT organ |
| [Chamberlain (2006](#_ENREF_21)) | 20/20 | 35/34 | 20/20 | 80 | 0 | IED ed, IED id |
| [Kuelz (2006](#_ENREF_49)) | 30/39 | 30/28 | 30/44 | 0 | 3 | LF, OAT, RCFT ir, RCFT organ, TMTA, TMTB |
| [Lawrence (2006](#_ENREF_51)) | 39/40 | 36/33 | 51/50 | 77 | 74 | WCST |
| [Mataix-Cols (2006](#_ENREF_57)) | 56/40 | 28/28 | 59/50 | NR | NR | VLT dr |
| [Simpson (2006](#_ENREF_81)) | 30/35 | 41/38 | 50/43 | 37 | 0 | IED ed, IED id, RCFT ir, RCFT org, SWM, WCST |
| [Aigner (2007](#_ENREF_4)) | 40/40 | 35/35 | 60/60 | U | 0 | CPT, WCST |
| [Bucci (2007](#_ENREF_13)) | 30/30 | 26/26 | 47/47 | 0 | NR | WCST |
| [Chamberlain (2007](#_ENREF_22)) | 20/20 | 35/32 | NR | 80 | 0 | SWM |
| [de Geus (2007](#_ENREF_28)) | 39/26 | 36/34 | 26/38 | 100 | NR | LF, TMTA, TMTB, VLT dr, VLT sc, WCST |
| [Kitis (2007](#_ENREF_47)) | 23/22 | 33/32 | 26/41 | 57 | NR | DS, LF, TMTA, TMTB, VLT dr, WCST |
| [Burdick (2008](#_ENREF_15)) | 26/38 | 37/35 | 65/63 | 73 | NR | BD, DF, DS, LM, TMTA, TMTB, VLT dr |
| [Cha (2008](#_ENREF_20)) | 47/20 | 32/30 | 70/100 | 100 | U | RCFT ir, WCST |
| [Rao (2008](#_ENREF_71)) | 30/30 | 28/28 | 73/73 | 93 | 0 | CPT, DS, LF, RCFT ir, Stroop, TMTA, TMTB, VLT dr |
| [Shin (2008](#_ENREF_80)) | 55/67 | 26/26 | 65/64 | 0 | NR | CF, LF |
| [Trivedi (2008](#_ENREF_84)) | 30/30 | 35/34 | 60/67 | U | 0 | CPT, WCST |
| [Exner (2009](#_ENREF_31)) | 23/22 | 33/33 | 52/55 | 48 | 0 | LM, RCFT ir, RCFT organ, VLT dr, VLT sc |
| [Kim (2009](#_ENREF_46)) | 14/14 | 25/25 | 50/50 | 86 | U | VLT dr, VLT sc |
| [Lee (2009](#_ENREF_52)) | 20/20 | 31/32 | 55/55 | 0 | 0 | CPT |
| [Nakao (2009](#_ENREF_62)) | 40/25 | 33/31 | 40/40 | 0 | 0 | RCFT ir |
| [Nakao (2009](#_ENREF_63)) | 32/16 | 30/31 | 38/56 | 75 | 0 | DS, LM |
| [Nedeljkovic (2009](#_ENREF_65)) | 59/59 | 38/38 | 39/39 | 69 | 0 | IED ed, SWM |
| [Cavedini (2010](#_ENREF_18)) | 35/31 | 36/35 | 43/71 | NR | 0 | ToH |
| [Jang (2010](#_ENREF_41)) | 144/144 | 26/25 | 65/65 | 47 | 16 | RCFT ir, RCFT organ |
| [Rampacher (2010](#_ENREF_70)) | 40/40 | 33/35 | 33/30 | 75 | 53 | LF, RCFT organ, TMTA, TMAB |
| [Sayin (2010](#_ENREF_76)) | 30/30 | 34/33 | 33/33 | 100 | 0 | DS, LM, Stroop |
| [Segalas (2010](#_ENREF_78)) | 25/25 | 44/44 | 48/48 | 96 | 24 | RCFT ir, RCFT organ, VLT dr, VLT sc |
| [Starcke (2010](#_ENREF_82)) | 23/22 | 35/37 | 57/55 | 61 | U | LF, Stroop, TMTA, TMTB |
| [Borges (2011](#_ENREF_11)) | 67/17 | 33/30 | 42/29 | NR | U | LF, WCST |
| [Hashimoto (2011](#_ENREF_37)) | 63/50 | 34/33 | 40/44 | 78 | 0 | CF, LF, LM |
| [Jaafari (2013](#_ENREF_40)) | 32/32 | 38/38 | 41/41 | 72 | U | CBT |
| [Kikul (2011](#_ENREF_44)) | 36/36 | 33/33 | 42/42 | 61 | U | RCFT ir, RCFT organ |
| [Krishna (2011](#_ENREF_48)) | 31/31 | 26/26 | 77/77 | 0 | 0 | CPT, DF, DS, LF, RCFT ir, Stroop, TMTA, TMTB, VLT dr |
| [Rajender (2011](#_ENREF_69)) | 30/30 | 26/27 | 40/40 | 0 | 0 | RCFT ir, VLT dr, WCST |
| [Segalas (2011](#_ENREF_79)) | 29/29 | 36/37 | 52/48 | 93 | 17 | RCFT ir, RCFT organ |
| [Tolin (2011](#_ENREF_83)) | 12/26 | 31/45 | 58/31 | 17 | NR | RCFT organ, Stroop |
| [Hur (2012](#_ENREF_39)) | 31/52 | 27/25 | 74/69 | 0 | 0 | CF, LF, TMTA, TMTB, VLT dr, WCST |
| [Kashyap (2012](#_ENREF_43)) | 150/177 | 27/28 | 66/63 | 75 | NR | RCFT ir |
| [Moritz (2012](#_ENREF_59)) | 60/30 | 32/32 | 32/27 | 48 | 50 | BD, CBT, RCFT ir, TMTA, TMTB |
| [Tukel (2012](#_ENREF_85)) | 72/54 | 27/27 | 38/44 | 0 | 0 | CF, LF, TMTA, TMTB, VLT dr, VLT sc |

Abbreviation: NR, not reported; U, unclear data; BD, Block Design; CBT, Corsi block-tapping test; CF, category fluency test; CPT, Continuous Performance Test; DAT, Delayed Alternation Test; DF, Design Fluency; IED, Intra/Extra Dimension; ed, extra-dimensional score; id, intra-dimensional score; LF, letter fluency test; LM, logical memory; OAT, Object Alternation Test; RCFT, Rey-Osterrieth Complex Figure Test; ir, immediate recall; organ, organizational strategies; SWM, Spatial Working Memory; TMTA, Trail Making Test part A; TMTB, Trail Making Test part B; ToL, Tower of London; ToH, Tower of Hanoi; VLT, Verbal Learning Test; dr, delayed recall; sc, semantic clustering; WCST, Wisconsin Card Sorting Test.

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