IDS-2

Intelligence and Development Scales – 2nd Edition

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International validity tables

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Table 1

Summary of findings from Confirmatory Factor Analysis and intercorrelations on the IDS-2 from the German, Dutch, UK and Italian standardisation projects.

Domain	Participants	Outcome	Language version
Factorial validity (Confirmatory Factor Analysis of Cattell-Horn-Carrol (CHC) Modell)			
Intelligence	Norm sample	*IQ-Profile*: CFI = .97, GH = .98, NCI = .93, RMSEA = .04; Subtest factor loadings between .49 and 89; Intelligence factor loadings on *IQ-Profile* between .65 and .91. *IQ*: CFI = .97, GH = .99, NCI = .98, RMSEA = .05; Subtest factor loadings between .48 and .62.	German
Intelligence	Norm sample	*IQ-Profile*: CFI = .96, TLI = .95, RMSEA = .03; Subtest factor loadings between .26 and .73; Intelligence factor loadings on *IQ-Profile* between .68 and .92. *IQ*: CFI = .96, TLI = .94, RMSEA = .04; Subtest factor loadings between .31 and .59.	Italian
Intercorrelations			
Intelligence	Norm sample	All subtests correlate significantly with each other. Subtests correlate the highest with their corresponding intelligence factor (*r* = .82 – .93). *IQ-Screening* correlates the highest with its two subtests. *IQ* (part 1) correlates the highest with subtests 1–7. *IQ-Profile* correlates with all subtests. The Intelligence factors correlate highly with *IQ-Profile* (*r* = .62 – .73). *IQ-Screening* x *IQ*: *r* = .82. *IQ-Screening* x *IQ-Profile*: *r* = .77. *IQ* x *IQ-Profile*: *r* = .95.	German
Intelligence	Norm sample	All subtests correlate significantly with each other. Subtests correlate the highest with their corresponding intelligence factor (*r* = .29 – .72). *IQ-Screening* correlates the highest with its two subtests. *IQ* (part 1) and *IQ-Profile* correlate the highest with subtests 1–7. *IQ-Profile* correlates with all Subtests (*r* = .41 – 70). The Intelligence factors correlate highly with IQ-*Profile* (*r* = .58 – .70). *IQ-Screening* x *IQ*: *r* = .82. *IQ-Screening* x *IQ-Profile*: *r* = .82. *IQ* x *IQ-Profile*: *r* = .95.	Dutch
Intelligence	Norm sample	All subtests correlate significantly with each other (with the exception of the correlation between subtests 7 and 8). Subtests correlate the highest with their corresponding intelligence factor (*r* = .76 – .91). *IQ-Screening* correlates the highest with its two subtests. *IQ* (part 1) correlates the highest with subtests 1–7. *IQ-Profile* correlates with all subtests. The Intelligence factors correlate highly with *IQ-Profile* (*r* = .58 – .94). *IQ-Screening* x *IQ*: *r* = .81. *IQ-Screening* x *IQ-Profile*: *r* = .76. *IQ* x *IQ-Profile*: *r* = .94.	Italian

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Table 1

Summary of findings from Confirmatory Factor Analysis and intercorrelations on the IDS-2 from the German, Dutch, UK and Italian standardisation projects (Continued)

Domain	Participants	Outcome	Language version
Intercorrelations			
Intelligence	Norm sample	All subtests correlate significantly with each other. Subtests correlate the highest with their corresponding intelligence factor (r = .71 − .92). *IQ-Screening* correlates the highest with its two subtests. *IQ* (part 1) correlates the highest with subtests 1–7. *IQ-Profile* correlates with all subtests. The Intelligence factors correlate highly with *IQ-Profile* (r = .56 − .66). *IQ-Screening* x *IQ*: r = .69. *IQ-Screening* x *IQ-Profile*: r = .77. *IQ* x *IQ-Profile*: r = .94.	English
Executive Functions	Norm sample	All subtests correlate significantly with each other (r = .05 − .60) and with *Executive Functions* (r = .39 − .79).	German
Executive Functions	Norm sample	Subtests correlate significantly with each other (r = .07 − .88) except for *Drawing routes − time* and *Animal colours* (r = .05 ns). All subtests correlate with *Executive Functions* (r = .44 − .70).	Dutch
Executive Functions	Norm sample	All subtests correlate significantly with each other (r = .06 − .62), with the exception of the correlation between subtest 16 and 18.	Italian
Executive Functions	Norm sample	Subtests correlate significantly with each other (r = .08 − .86) except for *Animal colours* (r = .05 ns). All subtests correlate with *Executive Functions* (r = .47 − .80).	English
Psychomotor skills	Norm sample	Low correlations between subtests (r = .19 − .30) but high correlations of subtests with total score of *Psychomotor skills* (r = .41 − .79).	German
Psychomotor skills	Norm sample	Low correlations between the following subtests: *Gross motor skills* x *Fine motor skills*: r = .24. *Gross motor skills* x *Visual motor skills*: r = .17.	Dutch
Psychomotor skills	Norm sample	Low correlations between subtests.	Italian
Psychomotor skills	Norm sample	Low correlations between subtests (r = .05 − .34) but high correlations of subtests with total score of *Psychomotor skills* (r = .41 − .81).	English
Social-emotional skills	Norm sample	Low correlations between subtests (r = .25 −.41) but high correlations of subtests with total score of *Social-emotional skills* (r = .65 − .84).	German
Social-emotional skills	Norm sample	Low correlations between subtests (r = .09 − .30) but high correlations of subtests with total score of *Social-emotional skills* (r = .65 − .77).	Dutch
Social-emotional skills	Norm sample	All subtests correlate significantly with each other (r = .09 − .29).	Italian

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Table 1

Summary of findings from Confirmatory Factor Analysis and intercorrelations on the IDS-2 from the German, Dutch, UK and Italian standardisation projects (Continued)

Domain	Participants	Outcome	Language version
Intercorrelations			
Social-emotional skills	Norm sample	Low correlations between subtests (r = .05 − .36) but high correlations of subtests with total score of *Social-emotional skills* (r = .54 − .82).	English
Scholastic skills	Norm sample	Correlations between subtests from r = .43 to .63. and of subtests with total score of *Scholastic skills* (r = .44 − .85).	German
Scholastic skills	Norm sample	Correlations between subtests from r = .10 to .85 and of subtests with total score of *Scholastic skills* (r = .61 − .93).	Dutch
Scholastic skills	Norm sample	Correlations between subtests from r = .06 to .65.	Italian
Scholastic skills	Norm sample	Correlations between subtests from r = .09 to .85 and of subtests with total score of *Scholastic skills* (r = .43 − .85).	English
Motivation & Attitude	Norm sample	*Conscientiousness* and *Achievement motivation* correlate highly with each other (r = .67).	German
Motivation & Attitude	Norm sample	Conscientiousness and Achievement motivation correlate highly with each other (r = .61).	Dutch
Motivation & Attitude	Norm sample	*Conscientiousness* and *Achievement motivation* correlate highly with each other (r = .65).	Italian
Motivation & Attitude	Norm sample	*Conscientiousness* and *Achievement motivation* show a minor correlation (r < .01).	English

Notes: CFI – Comparative Fit Index; TLI – Tucker Lewis Fit Index; GH – Gamma Hat; NCI – Mc Donald's non-centrality index; ns – non-significant; RMSEA – Root mean square error of approximation.

Table 2

Summary of findings on convergent validity and differential validity for the IDS-2 *Intelligence* and *Executive Functions* Domains from the German, Dutch, UK and Italian standardisation projects.

Study goal	Domain	Participants	External Assessment	Outcome	Language version
Convergent validity	Intelligence	N = 114; 40% male; 6;0 – 16;10 years; mean age 11;10 (SD 2;10) years.	WISC-IV	*FSIQ* correlates highly with *IQ-Screening* (*r* = .52), *IQ* (*r* = .67) and *IQ-Profile* (*r* = .69). Expected significant correlations between IDS-2 factors and WISC-IV factors (*r* = .29 – .79). *FISQ* additionally correlates highly with *Executive Functions* and *Scholastic skills* (*r* = .47 and .64) and low with *Psychomotor skills*, *Social-emotional skills* and *Motivation and Attitude* (*r* = .24 – .37).	German
Convergent validity	Intelligence	N = 25; 29% male; 16–21 years; mean age 19;2 (SD 1.14) years.	WAIS-IV-NL	*TIQ* correlates highly with *IQ-Screening* (*r* = .59), *IQ* (*r* = .90) and *IQ-Profile* (*r* = .95). Expected significant correlations between IDS-2 factors and WAIS-IV factors (*r* = .17 – .78). Except: WAIS-IV *Processing Speed* does not correlate with IDS-2 *Abstract reasoning*, *Verbal reasoning* and *Visual spatial short-term memory*. *TIQ* additionally correlates with *Executive functions* (*r* = .41) and *Scholastic Skills* (*r* = 52).	Dutch
Convergent validity	Intelligence	N = 60; 50% male; 6–7 years; mean age 6;7 (SD 0;4) years.	WPPSI-III	*All IQ measures correlated with Total IQ WPPSI-III (r = .73 – .81).*	Italian
Convergent validity	Intelligence	N = 26; 50% male; 11–16 years; mean age 14;8 (SD 1;2) years.	WISC-IV	*All IQ measures correlated with Total IQ WISC-IV (r = .60 – .64).*	Italian
Convergent validity	Intelligence	N = 24; 50% male; 16–21 years; mean age 19;1 (SD 1;4) years.	WAIS-IV	*All IQ measures correlated with Total IQ WAIS-IV (r = .44 – .64).*	Italian
Convergent validity	Intelligence	N = 94; 50% male; 6–16 years; mean age 10;10 years (SD 3;2).	WISC-V[UK]	*Full IQ* correlates highly with *IQ-Screening* (*r* = .61), *IQ* (*r* = .74) and *IQ-Profile* (*r* = .51). Expected significant correlations between IDS-2 factors and WISC-V factors (*r* = .38 – .61).	English
Convergent validity	Intelligence	N = 68; 49% male; 6–16 years; mean age 10;9 years (SD 3;1).	WISC-V[UK]	*Full IQ* correlates highly with *Scholastic skills* (*r* = .61) and low with *Motivation and Attitude* (*r* = .38); no significant correlations with *Executive Functions*, *Psychomotor skills*, and *Social-emotional skills* (*p* > .05).	English
Convergent validity	Intelligence	N = 180; 48% male; 5;1 – 20;3 years; mean age 12;3 (SD 3;10) years.	RIAS	*GIX* correlates as expected with *IQ-Screening* (*r* = .47), *IQ* (*r* = .51) and *IQ-Profile* (*r* = .55). *RIST* correlates as expected with *IQ-Screening* (*r* = .49). *RIAS* factors correlate as expected with IDS-2 intelligence factors but low correlations with *Psychomotor skills*, *Social-emotional skills* and *Motivation and Attitude*.	German
Convergent validity	Intelligence	N = 139; 50% male; 6;0 – 20;3 years; mean age 12;5 (SD 3;8) years.	SON-R 6-40	High correlations between *SON Total IQ-Score* and *IQ-Screening* (*r* = .56), *IQ* (*r* = .62) and *IQ-Profile* (*r* = .67). All IDS-2 Intelligence Factors correlate with the *SON Total IQ-Score* (*r* = .35 – .57).	German

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Table 2

Summary of findings on convergent validity and differential validity for the IDS-2 *Intelligence* and *Executive Functions* Domains from the German, Dutch, UK and Italian standardisation projects (Continued)

Study goal	Domain	Participants	External Assessment	Outcome	Language version
Convergent validity	Intelligence	N = 56; 45% male; 7–20 years; mean age 11;3 (SD 3;5) years.	SON-R 6-40	*SON-R 6-40 total IQ* correlates with *IQ-Screening* (r = .63), *IQ* (r = .70) and *IQ Profile* (r = .78). Expected significant correlations between the IDS-2 intelligence factors and *SON-R 6-40 total IQ* (r = .30 − .66). *SON total IQ* additionally correlates highly with *Executive Functions* (r = .54), *Psychomotor skills* (r = .47) and *Scholastic skills* (r = .58), low with *Social-emotional skills* (r = .36) and shows no correlation with *Motivation and Attitude* (r = .02).	Dutch
Convergent validity	Intelligence	N = 369; 48% male; 13–20 years; mean age 16;7 (SD 2;2) years.	SPM	*All IQ measures correlated with SPM IQ (r =.50 − .58).*	Italian
Differential validity	Intelligence	High intelligence participants: N = 62; 60% male, 6;4–20;11 years, mean age 13;6 (SD 4;4) years; Suspected above average intelligence (by parents); matched control group N = 60.		*IQ Screening*: d = 0.92. *IQ*: d = 0.89. *IQ-Profile*: d = 1.12. Significant differences in the *Intelligence factors* (d = 0.39 − 0.99) except for *Long-term memory* (d = 0.31).	German
Differential validity	Intelligence	High intelligence participants: N = 38; 47% male 5;3–17;11 years, mean age 9;2 (SD 2;5) years; Diagnosed above average intelligence (by earlier IQ-test); matched control group.		*IQ Screening*: d = 1.09. *IQ*: d = 1.32. *IQ-Profile*: d = 1.29. Significant differences in the *Intelligence factors* (d = 0.62 − 1.07) except for *Long-term memory* (d = 0.21) and *Short-term memory* (d = 0.24).	Dutch
Differential validity	Intelligence	Low intelligence participants: N = 70; 56% male, 6;3–20;1 years, mean age 13;0 (SD 3;5) years; Diagnosed with below average intelligence (IQ < 70; reported by parents); matched control group N = 70.		*IQ Screening*: d = 2.35. *IQ*: d = 2.88. *IQ-Profile*: d = 2.83. Significant differences in all *intelligence factors* (d = 1.52 − 2.30).	German

Table 2
Summary of findings on convergent validity and differential validity for the IDS-2 *Intelligence* and *Executive Functions* Domains from the German, Dutch, UK and Italian standardisation projects (Continued)

Study goal	Domain	Participants	External Assessment	Outcome	Language version
Differential validity	Intelligence	Low intelligence participants: N = 50; 78% male, 5–19 years, mean age 12;7 (*SD* 3;1) years; Diagnosed with below average intelligence (IQ < = 80; diagnosed with earlier IQ-test); matched control group.		*IQ Screening*: *d* = 1.52. *IQ*: *d* = 1.65. *IQ-Profile*: *d* = 1.67. Significant differences in all Intelligence factors (*d* = 0.79 – 1.80).	Dutch
Differential validity	Intelligence	Learning disability: N = 116; 60% male, 5–20 years, mean age 12;1 (*SD* 4;3) years; matched control group.		*IQ Screening*: *d* = .37. *IQ*: *d* = .63. *IQ-Profile*: *d* = .68. Significant differences in all Intelligence factors, with the exception of Visual processing (*d* = 0.32 – 0.76).	Italian
Convergent validity	Executive Functions	N = 138; 52% male; 5;3–14;3 years; mean age 9;3 (*SD* 2;1) years.	Test of Everyday Attention for Children (TEA-Ch) Trail making test (TMT) verbal: Regensburger Wortflüssigkeits-Test (RWT) Stroop	TEA-Ch: correlations of *Executive Functions* with *Focused attention*, *Attention control*, *Vigilance* and *Divided attention* (*r* = −.19 to −.37). TMT: Correlations of *Executive Functions* with *Visual attention*, *Speed of processing* and *Flexibility* (*r* = -.31 to − .36). RWT: *r* = .26 − .61. Stroop: *r* = −.25.	German
Convergent validity	Executive Functions	N = 52; 62% male; 5–12 years; mean age 8;5 (*SD* 2;6) years.	BRIEF	IDS-2 *Executive functions* correlates with *BRIEF Working memory* (*r* = .31). BRIEF *Working memory* and *Metacognition* also correlates with *Divided attention* (*r* = .36 and *r* = .28; *Crossing out parrots*: *r* = .41 and *r* = .32). The quality score of *Drawing routes* correlates with BRIEF Working memory (*r* = .33) and Metacognition (*r* = .35).	Dutch
Convergent validity	Executive Functions	N = 66; 38% male; 8–18 years; mean age 11;9 (*SD* 2;4) years.	BRIEF-2	IDS-2 *Executive Functions subtests* correlates with *BRIEF-2 Working memory* (*r* = .15 − .33).	Italian
Convergent validity	Executive Functions	N = 120; 68% male; 5;5–19;3 years; mean age 9;7 (*SD* 2;4) years.	BRIEF-2	IDS-2 *Executive Functions* correlates with *BRIEF-2 CRI* (*r* = .25) and *GEC* (*r* = .22). *Listing words* correlates with *BRIEF-2: CRI* (*r* = .21) and *GEC* (*r* = .21), *Divided attention* correlates with *BRIEF-2: CRI* (*r* = .28) and *GEC* (*r* = .28), *Divided attention, Listing animals* correlates with *BRIEF-2: ERI* (*r* = .20), *CRI* (*r* = .24), and *GEC* (*r* = .21), *Divided attention, Crossing out parrots* correlates with *BRIEF-2: CRI* (*r* = .22) and *GEC* (*r* = .24), *Animal colours* correlates with *BRIEF-2: BRI* (*r* = .28), *ERI* (*r* = .20), *CRI* (*r* = .42), *GEC* (*r* = .39).	English

Table 2
Summary of findings on convergent validity and differential validity for the IDS-2 *Intelligence* and *Executive Functions* Domains from the German, Dutch, UK and Italian standardisation projects (Continued)

Study goal	Domain	Participants	External Assessment	Outcome	Language version
Differential validity	Executive Functions	Participants with ADHD diagnosis: N = 65; 75% male; 8;4–20;11 years; mean age 13;6 (*SD* 3;0) years; ADHD diagnosis (medication: n = 17).		No differences in *Executive Functions* between control group and children with ADHD and medication. ADHD without medication: *Executive Functions*: d = 0.47. *Listing words*: d = 0.43. *Animal colours*: d = 0.42.	German
Differential validity	Executive Functions	Participants with ADHD diagnosis: N = 39; 73% male; 6–20 years; mean age 11;7 (*SD* 3;3) years; without medication.		Differences in *Executive Functions* between control group and children with ADHD (without medication). *Executive Functions*: d = 0.68. *Listing words*: d = 0.56. *Animal colours*: d = 0.60.	Dutch
Differential validity	Executive Functions	Learning disability: N = 116; 60% male, 5–20 years, mean age 12;1 (*SD* 4;3) years; matched control group.		Significant differences in all subtests, with the exception of Drawing routes (d = 0.41 − 0.69).	Italian
Differential validity	Executive Functions	Children with DCD diagnosis: N = 25; 92% male; 6;2–10;11 years; mean age 8;8 (*SD* 1;3) years with 25 matched typically developing controls.		Differences in *Executive Functions* between control group and children with DCD *Executive Functions*: d = 0.97. *Listing words*: d = 0.71. *Divided attention*: d = 0.77. *Animal colours*: d = 0.94.	English

Notes: ADHD – Attention Deficit/Hyperactivity Disorder; *BRIEF*: Behavior Rating Inventory of Executive Function; (BRI – Behaviour Regulation Index, ERI – Emotion Regulation Index, CRI – Cognitive Regulation Index, GEC – Global Executive Composite); DCD – Developmental Coordination Disorder; *RIAS*: Reynolds Intellectual Assessment Scales; *RIST*: Reynolds Intellectual Screening Test (short form of two subtests); *RWT*: Regensburg Wortflüssigkeits-Test [word fluency tests]; *SON*: Snijders Oomen Nonverbaler Intelligenztest 6-40; *TEA-Ch*: Test of Everyday Attention for Children; *TIQ*: Total Intelligence Quotient; GIX – General Intelligence; *TMT*: Trail making Test; *WISC-IV*: Wechsler Intelligence Scale for Children, 4th Edition; *WISC-V*: Wechsler Intelligence Scale for Children, 5th Edition

Table 3
Summary of findings on differential validity for the IDS-2 *General Development* Domains from the German, Dutch, UK and Italian standardisation projects.

Study goal	Domain	Participants	Outcome	Language version
Differential validity	Psychomotor skills	Children with poor motor skills: *N* = 120; 65% male; mean age 10;0 (*SD* 3;0) years; Children with poor motor skills (based on DCDQ).	Difference in performance compared to control group in *Psychomotor skills* (*d* = 1.01) and subscales (*d* = 0.52 – 0.83).	German
Differential validity	Psychomotor skills	Children with DCD diagnosis: *N* = 25; 92% male; 6;2–10;11 years; mean age 8;8 (*SD* 1;3) years.	Differences in *Psychomotor skills* between control group and DCD children on all subtests (*p* < .01) except for time dependent scales in *Fine motor Skills* and *Visual motor skills* (both n.s.). Cohen's *d* values for *Psychomotor skills, Gross motor skills, Fine motor skills* (*Time and Quality*), *Visual motor skills* (*Time and Quality*) are: −2.18, −2.45, −0.92, −0.26 (n.s.), −1.48, −0.86, 0.18 (n.s.), −1.54.	English
Differential validity	Social-emotional skills	Participants with Autism Spectrum Disorder (ASD): *N* = 18; 94% male; 8;9–17;6 years; mean age 13;3 (*SD* 3;8) years; ASD (Atypical Autism, Asperger's Syndrome, High Functioning Autism).	Difference in performance compared to control group in *Social-emotional skills* (*d* = 0.62) and subtest *Socially competent behaviour* (*d* = 0.66) as well as *Regulating Emotions* (*d* = 0.25).	German
Differential validity	Social-emotional skills	Participants with ASD: *N* = 72; 78% male; 6–20 years; mean age 13;6 (*SD* 3;9) years; Autism spectrum disorder.	Difference in performance compared to control group in *Identifying emotions* (*d* = 0.69) and *Regulating emotions* (*d* = 0.46). No difference in *Socially competent behaviour* and no difference in the total score of *Social-emotional skills*.	Dutch
Differential validity	Scholastic skills	Participants with Reading/Writing Disability: *N* = 22; 59% male; 9;8–20;5 years; mean age 14;8 (*SD* 2;10) years; diagnosed with Reading and Writing disorder.	Differences in performance compared to control group in *Scholastic skills* (*d* = 1.31) and *Reading* (*d* = 1.25) and *Spelling* (*d* = 1.24). Smaller differences in other *Scholastic skills* subtests.	German
Differential validity	Scholastic skills	Participants with Dyslexia: *N* = 83; 51% male; 7 to 20 years old; mean age 14;9 (*SD* 3;4) years.	Differences in performance compared to control group in *Scholastic skills* (*d* = 0.49) and *Reading* (*d* = 1.32), *Word reading* (*d* = 1.18), *Nonword reading* (*d* = 1.29) and *Spelling* (*d* = 0.86). No differences in other *Scholastic skills* subtests.	Dutch
Differential validity	Scholastic skills	Gifted in Maths: *N* = 30; 72% male; 11;7–17;9 years; mean age 14;5 (*SD* 1;5) years; math talents.	Better performance compared to the control group in *Logical mathematical reasoning* (*d* = 1.58), *IQ* (*d* = .118) and *Executive Functions* (*d* = .77). Similar performance to control group in *Social-emotional skills*.	German
Differential validity	Scholastic skills	Children with general developmental delay: *N* = 47; 81% male; 12–16 years; mean age 14;3 (*SD* 1;3) years.	Differences in performance compared to control group in all subtests for *Scholastic skills* (*d* = 0.69 – 0.98), also significant differences in *Intelligence* (*d* = 0.95) and *Executive Functions* (*d* = 1.04).	Dutch
Differential validity	Scholastic skills	Learning disability: *N* = 116; 60% male, 5–20 years, mean age 12;1 (*SD* 4;3) years.	Differences in performance compared to control group in all subtests for *Scholastic skills* (*d* = 0.55 – 0.83).	Italian

Notes: d – Cohen's d, showing the effect size of the comparison between the two group means, ADHD – Attention Deficit/Hyperactivity Disorder; *DCDQ*: Developmental Coordination Disorder Questionnaire.

Table 4
Summary of findings on convergent and criterion validity for the IDS-2 *General Development* Domains from the German, Dutch, UK and Italian standardisation projects.

Study goal	Domain	Participants	External Assessment	Outcome	Language version
Convergent validity	Psychomotor skills	*N* = 54; 44% male; 5;2–16;0 years; mean age 10;5 (*SD* 3;3) years.	M-ABC-2	M-ABC-2 *total score* x IDS-2 *Psychomotor skills*: *r* = .49.	German
Convergent validity	Psychomotor skills	*N* = 34; 38% male; 6–16 years; mean age 9;3 (*SD* 2;3) years.	M-ABC-2	M-ABC-2 *total score* x IDS-2 *Psychomotor skills*: *r* = .59.	Dutch
Convergent validity	Psychomotor skills	*N* = 50; 92% male; 6;2–10;11 years; mean age 8;8 (*SD* 1;3) years.	M-ABC-2	M-ABC-2 *total score* x IDS-2 *Psychomotor skills*: *r* = .78, *Gross motor skills* (*r* = .73), *Fine motor skills* (*r* = .56), *Visual motor skills* (*r* = .44); and smaller correlations with Intelligence (*r* = .41), Executive functions (*r* = .32), Socio-emotional (*r* = .39), and Scholastic skills (*r* = .26).	English
Convergent validity	Social-emotional skills	*N* = 442; 5;0–17;0 years.	Parent Rating Scale of Social Competence (PRSSC) Rosenberg Self-Esteem Scale (RSES) Revised Class Play Method (RCPM) Friendship Quality Scale (FSQ) Inventory of Social Competence – short form (ISK-K)	IDS-2 *Social-emotional skills* correlate with: PRSSC *Problem behaviour* (*r* = −.15), PRSSC *Social behaviour* (*r* = .11). RSES *Peer rejection* (*r* = −.11), FSQ *Quality of Friendship* (*r* = .15). ISK-K *Social orientation* (*r* = .16), ISK-K *Reflexibility* (*r* = .16). Total *ISK-K* (*r* = .17).	German
Convergent validity	Social-emotional skills	*N* = 158; 12–18 years.	Strength and Difficulties Questionnaire (SDQ)	Parent rating: IDS-2 *Social-emotional skills*, *Regulating emotions* and *Socially competent behaviour* only correlate significantly with the SDQ *Scale Peer problems* (*r* = −.18 to −.24). Self rating: IDS-2 *Social-emotional skills* and *Regulating emotions* correlate with SDQ *Behaviour problems* (*r* = -.28 and *r* = −.24), *Peer problems* (*r* = −.19 and −.18) & *Prosocial behaviour* (*r* = .35 and .26). *Socially competent behaviour* correlates with *Behaviour problems* (*r* = −.19) & *Prosocial behaviour* (*r* = .35).	Dutch

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Table 4

Summary of findings on convergent and criterion validity for the IDS-2 *General Development* Domains from the German, Dutch, UK and Italian standardisation projects. (Continued)

Study goal	Domain	Participants	External Assessment	Outcome	Language version
Convergent validity	Scholastic skills	N = 60; 42% male; 13;11–17;5 years; mean age 15;8 (SD 0;8) years.	DEUTSCH 9-10 R-FIT 9-10	IDS-2 *Basic Skills* and DEUTSCH *total* show a high correlation: r = .64. IDS-2 *Reading* x DEUTSCH *reading speed*: r = .44. IDS-2 *Spelling* x R-FIT *Error identification*: r = .75 and r = .76. IDS-2 *Spelling* x DEUTSCH *dictation*: r = .73. Lower correlations with other scholastic skills tests (r = .07 – .36).	German
Convergent validity	Scholastic skills	N = 201; 5–17 years.	CITO-Score of: Math, Reading skills, Reading comprehension and Spelling	All the IDS-2 *Scholastic skills* subtests correlate with the *CITO-Scales* (r = .24 – 56). The *CITO-Scales* also correlate with the *Intelligence* scores (r = .31 – .57), *Executive Functions* (r = .33 – .41) and *Psychomotor skills* (r = .17 – .25).	Dutch
Convergent validity	Scholastic skills	N = 99; 46% male; 7–18 years; mean age 10;7 (SD 2;4) years.	School grades	- *Logical mathematical reasoning* x Math performance (*Grades*: r = .27). - *Reading and Spelling* x Italian (*Grades*: r = .32 and r = .43). - *Scholastic Skills* x Social Science (*Grades*: r = .36). - *Scholastic Skills* x Biology/Chemistry/Physics (*Grades*: r = .29). - *Scholastic Skills* x Geography/History (*Grades*: r = .38).	Italian
Convergent validity	Scholastic skills	N = 38; 53% male; 7–14 years; mean age 9;9 (SD 1;7) years.	ABAS-II	No significant correlations were found due to the small number of subjects.	Italian
Convergent validity	Scholastic skills	N = 1079; 49% male; 5–18 years; mean age 11;2 (SD 3;8) years.	Parent ratings of school performance	All IDS-2 *Scholastic skills* subtests correlate with parent ratings of school performance (r = .18 – .58), confirming specific hypotheses: medium to high correlations between *Logical mathematical reasoning* and numeracy (r = .49) and science (r = .40), *Language skills* and reading (r = .35), *Reading skills* and reading (r = .53) as well as spelling (r = .46), and *Spelling* and reading (r = .52) as well as spelling (r = .58).	English
Convergent validity	Motivation & Attitude	N = 184–785; 5;0–17;0 years.	Five Factor Questionnaire for children (FFFK; N = 785) Achievement motivation questionnaire for students (FLM 4-6/FLM 7–13; N = 217/358) NEO-PI-R (N = 185) Achievement motivation inventory – short version (LMI-K; N = 184)	IDS-2 *Conscientiousness* correlates the highest with FFFK *Conscientiousness* (r = .35), NEO-PI-R *Conscientiousness* (r = .67). All the other subtests show smaller or no correlation with FFFK and NEO-PI-R. IDS-2 *Achievement Motivation* correlates significantly with: FLM *Performance aspiration* (r = .52/56), FLM *Effort* (r = .46/45). LMI-K *Achievement motivation* (r = .63). All other subtests show smaller or no correlation with FLM and LMI-K.	German

(Continued)

Table 4
Summary of findings on convergent and criterion validity for the IDS-2 *General Development* Domains from the German, Dutch, UK and Italian standardisation projects. (Continued)

Study goal	Domain	Participants	External Assessment	Outcome	Language version
Criterion validity	Scholastic skills	*N* = 752; 5;0–17;0 years.	Parent rating of school performance on a 5-step Likert scale in German, Math, Social Science Biology/Chemistry/Physics, Geography/History School grades	Correlations of *Scholastic Skills* with Parent rating and school grades: - *Logical mathematical reasoning* x Math performance (*Rating*: *r* = .44/*Grades*: *r* = .37). - *Reading and Spelling* x German (*Rating*: *r* = .43 and *r* = .44/*Grades*: *r* = .39 and *r* = .40). - *Language Skills* x German (*Rating*: *r* = .29 /*Grades*: *r* = .39). - *Scholastic Skills* x Social Science (*Rating*: *r* = .29/*Grades*: *r* = .32). - *Scholastic Skills* x Biology/Chemistry/Physics (*Rating*: *r* = .27/*Grades*: *r* = .16). - *Scholastic Skills* x Geography/History (*Rating*: *r* = .30/*Grades*: *r* = .18).	German

Notes: MABC-2: Movement Assessment Battery for Children – 2nd Edition; *PRSSC, RSES-* Rosenberg Self-Esteem Scale; *RCPM*: Revised Class Play Method; *FSQ*: Friendship Quality Scale; *ISK-K*: Inventory of Social Competence - short form; *SDQ*: Strength and Difficulties Questionnaire; *DEUTSCH 9-10*; *R-FIT 9-10*; *CITO-Score; FFFK*: Five Factor Questionnaire for children; *FLM 4-6/FLM 7-13*: Achievement motivation questionnaire for students from the 4th to 6th class and 7th to 13th class; *NEO-PI-R*: NEO Personality Inventory - Revised; *LMI-K:* Achievement motivation inventory - short version