

Supplementary Table 1 – Summary of studies comparing correlated, 2nd order and bifactor ADHD dimensions

Study	Sample	Instrument	Models tested
Dumeci <i>et al.</i> 2004 [1]	• Community (n=2635) and clinical (n=2702) • 6-18 • USA	Teacher Report Form (T)	1-factor Correlated 2-factor (In, H-I) Bifactor-2 (1'g', 2's': In, H-I)
Toplak <i>et al.</i> 2009 [8]	• Referred for ADHD assessment (K-SADS P n=201, C n=189; SWAN P n=166, T n=167) • 13-18 • Canada	Schedule for Affective Disorders and Schizophrenia for School-Age Children — Present and Lifetime Version (K-SADS-PL) (P, C) The Strengths and Weaknesses of ADHD-symptoms and Normal Behavior Scale (SWAN) (P, T)	Correlated 2-factor (In, H-I) Correlated 3-factor (In, H, I) Bifactor-2 (1'g', 2's': In, H-I) Bifactor-3 (1'g', 3's': In, H, I)
Martel <i>et al.</i> 2010	• Community recruited	K-SADS-E	1-factor (1''g'')

[4]	•n=548 (302 ADHD, 199 Controls) •6-18 •USA	(P) or DISC-IV (P) ADHD-RS-IV (P, T)	Correlated 2-factor (In, H-I) Correlated 3-factor (In, H, I) Second-order 2-factor (1”g”, 2 second-order “s”: In, H-I) Second-order 3-factor (1”g”, 3 second-order “s”: In, H, I) Bifactor-2 (1”g”, 2”s”: In, H-I) Bifactor-2 (“s” allowed to correlate with “g”) Bifactor-3 (1”g”, 3”s”: In, H, I)
Toplak <i>et al.</i> 2012 [9]	•Clinical ADHD •5-17 •n=1,373 clinical and 1,772 unselected siblings •Ireland, United Kingdom, Belgium, The Netherlands, Germany,	Parental Account of Childhood Symptoms and report (P) The Conners Rating Scales (CPRS-R:L; CTRS-R:L; Conners, 1997)	1-factor (1”g”) Correlated 2-factor (In, H-I) Correlated 3-factor (In, H, I) Bifactor-2 (1”g”, 2”s”: In, H-I) Bifactor-3 (1”g”, 3”s”: In, H, I)

	Switzerland, Israel	(P, T)	
Gibbins <i>et al.</i> 2011 [2]	• Clinical ADHD • 18-78 • n=751 • USA and Canada	ADHD Rating Scale–Fourth Edition (ADHD-RS-IV; DuPaul, Power, Anastopoulos, & Reid, 1998). (SR)	Correlated 2-factor (In, H-I) Correlated 3-factor (In, H, I) Bifactor-2 (1”g”, 2”s”): In, H-I) Bifactor-3 (1”g”, 3”s”): In, H, I) Additional: Correlated 3-factor (In, Verbal H-I, Motor H-I) Bifactor-3 (1”g”, 3”s”): In, Verbal H-I, Motor H-I)
Ullebo <i>et al.</i> 2012 [10]	• General population sample • Age 7-9 • n=6.237 • Norway	Swanson, Nolan and Pelham Questionnaire–IV (SNAP-IV) (P, T)	1-factor (1”g”) Correlated 2-factor (In, H-I) Correlated 3-factor (In, H, I) Second-order 3-factor (1”g”, 3 second-order “s”): In, H, I) Bifactor-3 (1”g”, 2”s”): In, H, I)

			Incomplete models (removing H and allowing symptoms to correlate directly to G) Incomplete Second-order Incomplete Bifactor
Normand <i>et al.</i> 2011 [6]	• Community recruited • n= 524 • Age=6-9 • Canada • Longitudinal	Strengths and Weaknesses of ADHD-symptoms and Normal-Behavior (SWAN) (P, T)	1-factor (1''g'') Correlated 2-factor (In, H-I) Correlated 3-factor (In, H, I) Bifactor-2 (1''g'', 2''s'': In, H-I) Bifactor-3 (1''g'', 3''s'': In, H, I) Exploratory Bifactor-2
Smith et al. (2013) [7]	• Clinical ADHD • n=242 • age=3-17 • USA	SNAP (P, CR) Schedule for Affective Disorders and Schizophrenia for School-Age Children — Present and	Correlated 2-factor (In, H-I) Correlated 3-factor (In, H, I) Bifactor-2 (1'g', 2 's': In, H-I) Bifactor-3 (1'g', 3 's': In, H, I)

		Lifetime Version (K-SADS-PL) (P, C)	
Gomez, Vance & Gomez (2013) [3]	• General community (214 adolescents, aged 12-17, and 366 adults, aged 18-40) • Clinical sample (n=245), aged 7-17 • Australia	Disruptive Behavior Rating Scale (DBRS, Barkley & Murphy, 1998) (P) Current Symptom Scale (CSS, Barkley & Murphy, 1998) (SR) Strengths and Weaknesses of ADHD-symptoms and Normal-Behavior (SWAN) (P)	Correlated 2-factor (In, H-I) Bifactor-2 (1”g”, 2”s”: In, H-I)
Matte et al. (2014) [5]	• Pelotas Birth Cohort Study (4000 adults, aged 18-19) • Brazil	structured interview that included 18 questions about	1-factor (1”g”) Correlated 2-factor (In, H-I) Correlated 3-factor (In, H,

		DSM-5 ADHD symptoms	I) Second-order 2-factor (1'g', 2 second-order "s": In, H-I) Second-order 3-factor (1'g', 3 second-order "s": In, H, I) Bifactor-2 (1'g', 2 's': In, H-I) Bifactor-3 (1'g', 3 's': In, H, I) Incomplete Bifactor
Note: P, Parent report; C, Child report; T, Teacher Report; SR, Self-rated, CR, Clinician-rated 'g', general factor; 's', specific factor; I, Inattention; H, Hyperactivity; I, Impulsivity; * Bold , best fitting model			

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