

Table 1 Studies found differences between AspD and HFA/AD groups

Variables studied	Author(s) year	Diagnostic system(s)	AspD group		HFA/AD group		Results	
			M/F	Age Range (Mean; SD)	M/F	Age Range (Mean; SD)	Quantitative	Qualitative
<i>Core clinical features</i>								
Early development	Gilchrist et al. (2001)	ICD-10	20/0	11–19 (13.7; ND)	13/0	16–26 (20.9; ND)	The AspD group tended to have less severe early behavioral problems, unlikely to have speech abnormalities, showed relative strength on verbal IQ than HFA group	
Early symptoms	Eisenmajer et al. (1996)	DSM-III-R ICD-10	61/8	2.7–21.3 (10.7; 3.6)	39/9	2.7–21.3 (10.5; 4.5)	AspD group had fewer with delayed language onset, tended to sought social interaction and friendship, had less severe eye contact avoidance, less echolalic speech, had more pedantic speech than the HFA group	
Social impairment	Szatmari et al. (1995)	ICD-10 ADI	17/4	4–6 (5 <sup>8/12</sup> ; ND)	44/3	4–6 (5 <sup>5/12</sup> ; ND)	On ADI, HFA group had significantly higher scores (more impaired) than AspD group on lack of social intentionality & social reciprocity, little affection, no comfort seeking, limited greeting, limited pleasure/excitement, and social development at 36 months of age	
Social deficits	Ghaziuddin (2007)	DSM-IV	48/10	7–51 (13.3; 7.9)	33/6	7–32 (15.3; 7.2)		Active & odd: AspD-79 %, HFA-8 % Aloof & passive: AspD-12 %, HFA-82 %
Social and communication	Saulnier and Klin (2007)	ADI ADOS	35/0	7–18 (12.9; 2.9)	32/0	7–18 (12.6; 3.2)	AspD group had significantly higher Vineland expressive language than HFA group; HFA group had significantly higher ADOS communication & social scores than AspD group	

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Emotion perception	Mazefsky and Oswald (2007)	DSM-IV	Tot = 15	8–15 (11.5; 2.1)	Tot = 14	8–15 (11.0; 2.7)	HFA group was significantly less accurate in emotion perception than AspD group	
Adaptive behavior	Szatmari et al. (1995)	ICD-10 ADI	17/4	4–6 (5 <sup>8/12</sup> ; ND)	44/3	4–6 (5 <sup>5/12</sup> ; ND)	The teacher reports showed the AspD and HFA groups differed in the overall pattern of adaptive functioning scores on the teacher VABS	
Stereotypies—restricted interest	Szatmari et al. (1995)	ICD-10 ADI	17/4	4–6 (5 <sup>8/12</sup> ; ND)	44/3	4–6 (5 <sup>5/12</sup> ; ND)	On ADI, the HFA group had significantly higher scores on compulsions/rituals and resistance to change than AspD group	
Cohesive discourse	Fine et al. (1994)	DSM-III	18/5	8–18 (14.3; ND)	14/4	7–32 (22.8; ND)	HFA group referred less to a previous stretch of the conversation and more to physical environment	AspD group made more unclear references that were difficult to interpret
Pedantic speech	Ghaziuddin and Gerstein (1996)	DSM-III-R ICD-10	14/3	ND (16.4; ND)	12/1 (15.5; ND)	ND	AspD group had more with pedantic speech (76 %) than HFA group (31 %)	
Central coherence theory	Jolliffe and Baron-Cohen (1999b)	DSM-IV ICD-10	15/2	18–49 (27.8; 7.8)	15/2	19–46 (30.71; 7.84)	HFA group had greater difficulty in achieving coherence than AspD group	
Global coherence	Jolliffe and Baron-Cohen (2000)	DSM-IV ICD-10	15/2	18–49 (27.8; 7.8)	15/2	19–46 (30.7; 7.8)	The HFA group tended to perform more poorly than the AspD group on global coherence tests	
Verbal fluency	Spek et al. (2009)	DSM-IV-TR ICD 10 ADI-R-Dutch	29/2	ND (40.8; 10.9)	28/3	ND (38.6; 11.8)	HFA group was impaired significantly in semantic and phonemic fluency	
Assertive speech acts	Ziatas et al. (2003)	DSM-IV	8/4	ND (6 <sup>11/12</sup> ; 2 <sup>1/12</sup> )	10/2	ND (8 <sup>3/12</sup> ; 2 <sup>7/12</sup> )	HFA group used a higher proportion of assertions involving identification than the AspD group	

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Expressive prosody	Peppé et al. (2011)	ICD-10	34/6	5.8–13.7 (9.4; ND)	24/7	6.1–13.7 (9.8; ND)	On lexical mental age, AspD group was significantly higher than HFA group	
Intonation and emotion	Hubbard and Trauner (2007)	DSM-IV	9/0	6–21 (ND)	6/3	6–21 (ND)	Subjective ratings of emotional content of utterances showed AD group to be less successful at encoding target emotion than AspD group	
Pure-tone pitch discrimination	Bonnel et al. (2010)	DSM-IV	12/2	15–31 (22.7; 5.9)	13/2	14–36 (24.2; 7.0)		HFA group displayed enhanced pitch discrimination for simple tones, but not with AspD group
Linguistic characteristics	Seung (2007)	DSM-IV	10/0	11–49 (ND)	10/0	11–49 (ND)		The results suggest there may be pragmatically based differences in the use of verb tense markers between HFA & AspD groups
Lexical processing	Speirs et al. (2011)	DSM-IV-TR	11/0	9 <sup>11/12</sup> –17 <sup>8/12</sup> (14 <sup>10/12</sup> ; 2 <sup>8/12</sup> )	11/0	9 <sup>9/12</sup> –20 <sup>4/12</sup> (14 <sup>11/12</sup> ; 3 <sup>9/12</sup> )		AspD group had intact lexical processing system, orthographic processing of the written word, HFA group had delayed or structurally different lexical processing system
Language comprehension	Kjellmer et al. (2012)	DSM-IV	Tot = 12 (4–6 <sup>8/12</sup> ) (5 <sup>9/12</sup> ; 0 <sup>8/12</sup> )		Tot = 22	(4–6 <sup>8/12</sup> ) (5 <sup>9/12</sup> ; 0 <sup>8/12</sup> )	AspD group had significantly better language comprehension than HFA group	
Pragmatic inferences	Pijnacker et al. (2009)	DSM-IV	Tot = 17	19–40 (27.6; 5.9)	Tot = 11	20–32 (25.6; 3.8)		Verbal intelligence is a constraint for task performance in HFA group but not in Asp group. Deriving scalar implicatures and pragmatic reasoning differentiated AspD group from HFA group

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			M/F	Age Range (Mean; SD)	M/F	Age Range (Mean; SD)	Quantitative	Qualitative
<i>Neuropsychological and neurocognitive profiles and functions</i>								
WISC-R	Ehlers et al. (1997)	DSM-III-R ICD 10	40/0	5.3–15.8 (9.8; 2.6)	34/6	5.3–15.8 (9.9; 2.9)		HFA group had a peak on design, AspD group had good verbal ability and troughs on object assembly and coding
WISC-R Subtest	de Bruin et al. (2006)	DSM-IV	10/1	6–12 (8.6; 1.8)	13/0	6–12 (8.6; 1.8)		AspD group: VIQ $\neq$ PIQ HFA group: VIQ = PIQ
WISC-III & WAIS-R	Ghaziuddin and Mountain-Kimchi (2004)	DSM-IV	22/0	ND (12.4; ND)	12/0	ND (12.2; ND)		VIQ $\neq$ PIQ: AspD (82 %) HFA (50 %) AspD group performed significantly better on information, vocabulary, and arithmetic tests than the HFA group
WISC-III & WAIS-III	Saulnier and Klin (2007)	ADI ADOS	35/0	7–18 (12.9; 2.9)	32/0	7–18 (12.6; 3.2)		FIQ and VIQ scores for HFA group were significantly lower than AspD group; AspD group had greater discrepancy between FIQ and PIQ than HFA group (17.5 and 2.2 points respectively)
WAIS-III	Spek et al. (2008)	DSM-IV ICD-10	Tot = 27	18–60 (ND)	Tot = 16	18–60 (ND)		HFA group had processing speed problems, poor performance on digit-symbol coding and symbol search, AspD group was weak on digit span and strong on comprehension and block design
WAIS-IV & social perception	Holdnack et al. (2011)	DSM-IV-TR	21/6	16–40 (22.6; 7.6)	14/2	16–34 (22.2; 6.4)		AspD group had better overall cognitive skills than HFA group which had significant deficits in social perception, verbal comprehension, processing speed, and had inconsistent performance on auditory working memory and perceptual reasoning tasks

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			M/F	Age Range (Mean; SD)	M/F	Age Range (Mean; SD)	Quantitative	Qualitative
Cognitive & symptom profiles	Koyama et al. (2007)	DSM-IV	33/3	5.6–30.5	33/4	5.4–30.3	On WIS, AspD group scored	
		ICD-10		(12.8; 6.4)		(12.6; 5.8)	significantly higher VIQ, vocabulary, comprehension, lower on coding; on CARS-TV, AspD group scored significantly lower verbal and non-verbal communication than HFA group	
Cognitive & academic profiles	Foley-Nicpon et al. (2012)	DSM-IV-TR	19/2	6–16 <sup>6/12</sup> (ND)	13/5	6–16 <sup>2/12</sup> (ND)	AspD group had significantly higher Verbal Comprehension Index scores; HFA group had significantly higher scores on tests of math fluency and written expression	
Cognitive profiles	Planche and Lemonnier (2012)	ICD-10	13/2	6 <sup>1/12</sup> –9 <sup>10/12</sup> (8 <sup>3/12</sup> ; ND)	14/1	6 <sup>2/12</sup> –10 <sup>7/12</sup> (8 <sup>6/12</sup> ; ND)	On WISC-III & NEPSY scale AspD group showed strength on verbal mediated skills and weaknesses on visuo-motor coordination & graphomotor ability, HFA group showed deficits on verbal comprehension & strengths on visuo-spatial skills	
	Kanai et al. (2012)	DSM-IV	32/15	18–60 (30.5; 9.7)	20/4	18–60 (29.0; 7.9)	On WAIS-III, AspD group had significantly higher scores of FIQ, VIQ, vocabulary, informations, digit-symbol coding and symbol search than HFA group	
Neuropsychological profiles	Klin et al. (1995)	ICD-10	19/2	ND (16.1; 8.3)	17/2	ND (15.4; 9.1)	AspD group had higher VIQ lower PIQ, HFA group had PIQ [ VIQ; two groups differed significantly in 11 neuropsychological areas	
Attentional set-shifting	Rinehart et al. (2001b)	DSM-IV	10/2	6.8–20.2 (12.5; 3.8)	11/1	6.8–15.3 (9.9; 3.0)	HFA group's reaction to global targets was retarded; AspD group was normal	

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Inhibition	Rinehart et al. (2002c)	DSM-IV	10/2	7.3–20.5 (13.4; 4.0)	11/1	7.1–16.1 (10.6; 3.0)		HFA group displayed inhibitory deficiency; AspD group had no such deficiency
Pseudo-random number generation	Rinehart et al. (2006b)	DSM-TV	10/2	7.3–20.5 (13.4; 4.0)	11/1	7.1–16.1 (10.6; 3.0)	HFA group generated significantly more repetition response than AspD group	
Cortical inhibition	Enticott et al. (2010)	DSM-IV	11/3	ND (19 <sup>1/12</sup> ; 4 <sup>2/12</sup> )	9/2	ND (16 <sup>8/12</sup> ; 4 <sup>4/12</sup> )	Cortical inhibition was significantly reduced in HFA group than AspD group ( $p \leq 0.001$ )	
Attentional blink	Rinehart et al. (2010)	DSM-IV	10/2	7.3–20.5 (13.4; 4.0)	11/1	7.1–16.1 (10.6; 3.0)		AspD group did not show visual-perceptual processing anomalies as HFA group did
Delayed video self-recognition	Dissanayake et al. (2010)	DSM-IV	12/0	5–9 (ND)	12/0	5–9 (ND)	AspD group had significant higher scores on the ToM false belief (FB) than the HFA group	
Visual integration	Spencer and O'Brien (2006)	DSM-IV	10/0	ND (12.0; 3.6)	13/2	ND (13.5; 3.3)		HFA group had a significant form-coherence deficit And a motion-coherence deficit; AspD group had no such deficit
Pictorial reasoning	Sahyoun et al. (2009)	DSM-IV	21/0	12–30 (19.3; 4.9)	18/3	12–29 (18.9; 5.5)		AspD group was fastest on visuospatial ? semantic, amenable to both linguistic & nonlinguistic mediation, HFA group was equally fast on V & V ? S, and slowest on S
Memory illusion	Kamio and Toichi (2007)	DSM-IV	14/1	12–33 (19.0; 5.6)	13/0	11–26 (16.4; 4.4)		HFA group had reduced memory illusion for the sentences with complete semantic information of the previous studies idea, AspD group's memory illusion occurred when sentences expressed more complete semantic information
Form and motion coherence	Tsermentseli et al. (2008)	DSM-IV	10/1	17–40 (23.3; 7.7)	8/2	17–40 (28.3; 12.7)		HFA group had a general impaired ability to detect coherent form & motion, AspD group had intact motion detection

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Tactile sensory	Ghanizadeh (2011)	DSM-IV	Tot = 19	ND (7.2; 2.1)	Tot = 36	ND (6.8; 2.6)	AD group had significantly higher scores of tactile hypo-responsivity, poor tactile perception and discrimination in AspD group	
Theory of mind development	Ziatas et al. (1998)	DSM-IV	8/4	ND (6 <sup>1/12</sup> ; 2 <sup>1/12</sup> )	10/2	ND (8 <sup>3/12</sup> ; 2 <sup>7/12</sup> )	HFA group performed significantly poorer on false belief, belief term comprehension, belie term expression than AspD group	
	Paynter and Peterson (2010)	DSM-IV	Tot = 24	4–13 (ND)	Tot = 19	4–13 (ND)	HFA group was delayed substantially in ToM understanding, non-verbal ability and verbal mental age than AspD group	
Theory of mind & social maturity	Peterson et al. (2007)	DSM-IV	11/3	4–12 (8 <sup>7/12</sup> ; 2 <sup>1/12</sup> )	12/1	4–12 (8.0; 1 <sup>1/12</sup> )	AspD group did better on ToM and social maturity than AD group	
Creativity & imagination	Craig and Baron-Cohen (1999)	DSM-IV ICD-10	Tot = 15	ND (12 <sup>9/12</sup> ; 2 <sup>6/12</sup> )	Tot = 15	ND (12 <sup>9/12</sup> ; 3 <sup>1/12</sup> )		Using Torrance Creativity Test, in condition 1, AD group had significantly lower score than AspD group; AD group tended to produce manipulation responses, AspD group tended to produce addition/alteration responses
Emotion Recognition Tests	Dyck et al. (2001)	DSM-IV	24/4	9–16 (ND)	17/3	9–16 (ND)	AspD group had significantly higher empathic ability ToM scores than AD group	
Lateralization	Rinehart et al. (2002a)	DSM-IV	9/3	5.8–16.4 (11.7; 4.3)	11/1	5.5–15.2 (9.1; 3.3)	HFA group was slower & committed more errors when moving rightward than leftward as compared to AspD group	HFA group exhibited a right spatial, left hemispheric deficit on anticipation responses task but not the AspD group
Inhibition of return (IOR)	Rinehart et al. (2008)	DSM-IV	10/2	ND (13.4; 4.0)	11/1	ND (10.6; 3.0)	A borderline-significant trend indicated IOR may be more pronounced in Asp group than in HFA group	

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Pairing stimuli & prior knowledge	Ropar and Mitchell (2001)	DSM-III-R DSM-IV	Tot = 21	9 <sup>5/12</sup> –16 <sup>4/12</sup> (13 <sup>2/12</sup> ; 1 <sup>11/12</sup> )	Tot = 21	9 <sup>3/12</sup> –16 <sup>10/12</sup> (12 <sup>11/12</sup> ; 1 <sup>11/12</sup> )	The Difference Score (neutral minus associated surface pairing) was higher in AspD group than HFA group	
<i>Diagnostic measures</i>								
Rorschach Test	Nihei and Nihei (2008)	ICD-10	5/2	7.6–12.7 (9.7; 1.8)	6/0	9.1–12.7 (10.7; 1.5)		Mean number of total responses (R): HFA \ AspD, mean D %: HFA □ AspD, mean dr %: HFA \ AspD, mean contamination: HFA \ AspD
CARS-TV Scores	Endo et al. (2007)	DSM-IV	12/3	6–20 (13.3; 2.8)	10/2	6–20 (13.1; 4.3)		HFA group had a significantly higher CARS-TV total score than AspD group
<i>Motor and sensory functions</i>								
Clumsiness	Ghaziuddin and Butler (1998)	DSM-IV ICD-10	11/1	8–15 (11.4; 2.3)	11/1	8–15 (10.3; 2.9)	AspD group was less impaired in motor coordination than HFA group	
Movement execution	Rinehart et al. (2001a)	DSM-IV	10/2	5.8–19.0 (12.0; 4.1)	10/1	5.8–15.3 (8.9; 3.4)		Asp group had an atypical deficit and HFA group had “lack of anticipation.”
Movement kinematics	Rinehart et al. (2006a)	DSM-IV	10/2	6.2–19.8 (12.0; 4.1)	10/2	5.5–11.8 (8.1; 1.9)	HFA group is consistently associated with impaired motoric preparation/initiation than AspD group	
Sensory-motor & cognitive function	Iwanaga et al. (2000)	DSM-IV	7/3	4 <sup>10/12</sup> –6 <sup>2/12</sup> (ND)	10/5	5 <sup>1/12</sup> –6 <sup>2/12</sup> (ND)	On the Japanese version of Miller assessment for preschoolers (JMAP), AspD group was significantly lower on Foundation index score and higher on Verbal Index than HFA group	



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Sensory issues	Myles et al. (2004)	DSM-IV	80/6	6 <sup>9/12</sup> –16 <sup>8/12</sup> (7 <sup>6/12</sup> ; ND)	80/6	6 <sup>9/12</sup> –16 <sup>8/12</sup> (7 <sup>6/12</sup> ; ND)	On the sensory profiles, 3 areas (emotional/social responses, emotional reactivity, inattention/distractibility) showed significant differences between AspD & HFA groups	
Rapid aiming movement	Papadopoulos et al. (2012)	DSM-IV	14/6	7–12 (9 <sup>8/12</sup> ; 1 <sup>7/12</sup> )	15/4	7–12 (9 <sup>9/12</sup> ; 2 <sup>2/12</sup> )	AspD and HFA are associated with different neuromotor profiles	
Gait function	Rinehart et al. (2006d)	DSM-IV	8/2	7 <sup>11/12</sup> –14 <sup>1/12</sup> (10 <sup>9/12</sup> ; 2 <sup>3/12</sup> )	8/2	6 <sup>11/12</sup> –14 <sup>5/12</sup> (10 <sup>6/12</sup> ; 2)	AspD group did not have quantitative gait deficit, HFA group had significantly increased stride-length variability in gait	
	Nayate et al. (2012)	ADI	Tot = 11	7–18 (11 <sup>11/12</sup> ; 3 <sup>8/12</sup> )	Tot = 11	7–18 (12 <sup>10/12</sup> ; 3 <sup>1/12</sup> )	Overall findings support that some aspects of neuro-motor functioning are qualitatively distinct in HFA and AspD groups	
Voluntary saccades	Stanley-Cary et al. (2011)	DSM-IV-TR	Tot = 9	11–19 (14 <sup>4/12</sup> ; 2 <sup>1/12</sup> )	Tot = 8	11–19 (14 <sup>9/12</sup> ; 1 <sup>10/12</sup> )	The results suggested the integrity of cerebellar modulation of movement may be different in HFA and AspD groups	
Postural reactivity	Gepner and Mestre (2002)	DSM-IV	3/0	5 <sup>6/12</sup> –9 <sup>8/12</sup> (7 <sup>5/12</sup> ; 2 <sup>1/12</sup> )	1/2	7 <sup>8/12</sup> –11 <sup>5/12</sup> (9 <sup>5/12</sup> ; 1 <sup>10/12</sup> )	Overall postural instability was significantly reduced in AD group than that in AspD group	Visuopostural detuning existed in AD group, but not in AspD group
<i>Brain structures and functions</i>								
Amygdala and hippocampus	Schumann et al. (2004)	DSM-IV ADI-R ADOS-G	24/0	7.5–18.5 (13.0; 2.9)	21/0	7.5–18.5 (12.7; 3.5)	HFA group had larger amygdala & hippocampus than AspD group	
Cerebellum volumes	Scott et al. (2009)	ADI-R ADOS-G	15/0	7.5–18.5 (12.3; 3.2)	15/0	7.5–18.5 (11.7; 3.2)	HFA group had a significant reduction in vermal volume than that of AspD group	

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Voxel-based morphometry	Kwon et al. (2004)	DSM-IV	11/0	10–18 (13 <sup>6/12</sup> ; 2.4)	9/0	10–18 (14; 3.3)	AspD group had less gray matter density in the body of cingulate gyrus than HFA group	
	McAlonan et al. (2008)	DSM-IV	13/3	7–16 (11.7; 2.8)	14/3	7–16 (11.4; 2.5)	HFA group had significantly smaller grey matter volumes in subcortical, posterior cingulate and precuneus regions than AspD group	HFA group had smaller grey matter volumes predominantly in fronto-pallidal regions, AspD group had less grey matter mainly in bilateral caudate and left thalamus
	McAlonan et al. (2009)	DSM-IV	15/3	6–16 (11 <sup>2/12</sup> ; 2 <sup>6/12</sup> )	15/3	6–16 (11 <sup>4/12</sup> ; 2 <sup>11/12</sup> )	The impact of HFA on basal ganglia white matter was greater than AspD	HFA group was affected mainly left hemisphere white-matter systems, AspD group was affected mainly right hemisphere white-matter systems
	Toal et al. (2009)	ICD-10	35/4	16–59 (32; 12)	21/5	18–49 (30; 8)	Gray matter in frontal and temporal lobe regions was increased in HFA group, not in AspD group	
Volumetric analysis	Lotspeich et al. (2004)	DSM-IV	21/0	7.8–17.9 (12.7; 2.6)	18/0	7.8–17.9 (12.1; 3.4)	A negative correlation between cerebral gray matter volume and PIQ in HFA group, not in AspD group, a positive correlation between cerebral white matter volume and PIQ in AspD group, not in HFA group	
Volumetric & metabolic analysis	Haznedar et al. (2006)	DSM-IV	Tot = 7	17–35 (27.7; 11.3)	Tot = 10	17–35 (27.7; 11.3)	HFA group had lower metabolic activity in the ventral thalamus than AspD group	
Regional cerebral blood flow	Yang et al. (2011)	DSM-IV	9/0	ND (ND)	11/3	ND (ND)	Asymmetry of hemispheric hypoperfusion was more obvious in AspD group than in AD group	

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Cortical folding abnormalities	Nordahl et al. (2007)	DSM-IV	15/0	7.5–18.5 (12.3; 3.2)	14/0	7.5–18.5 (11.4; 3.1)		AspD group had bilateral abnormalities in intraparietal sulcus, HFA group's abnormalities were in and near the parietal operculum and ventral postcentral gyrus
Cortical gyrification	Jou et al. (2010)	ADI-R ADOS	Tot = 9	10.1–17 (13.4; 2.7)	Tot = 6	(9.5–16.1) (12.3; 2.4)		HFA group had higher left inferior gyrification index than AspD group
Olfactory identification (OI)	May et al. (2011)	DSM-IV-TR	9/3	ND (10.8; 2.0)	9/3	ND (10.6; 2.1)		HFA group had impaired Unirhinal-OI, but normal In AspD group
Chemical metabolites	Endo et al. (2007)	DSM-IV	12/3	6–20 (13.3; 2.8)	10/2	6–20 (13.1; 4.3)	HFA group had a lower NAA/Cr ratio in the right MTL than AspD group	
<i>Genetic association</i>								
Family history	Ghaziuddin (2005)	DSM-IV	48/10	ND (13.34; 7.9)	33/6	ND (15.33; 7.2)	Family histories: Autism: AspD (3 %) \ HFA (10 %) Depression: AspD (60 %) [ HFA (51 %) Schizophrenia: AspD (16 %) [ HFA (10 %)	
DISC1 gene	Kilpinen et al. (2008)	DSM-IV ICD-10	Tot = 8	ND ND	Tot = 118	ND ND		AD group is associated with DISC1 intragenic microsatellite (DIS2709), AspD group is associated with an intragenic single nucleotide polymorphism of DISC1(rs1322784) and a 3-SNP haplotype over-lapping HEP3 haplotype
SLC25A12 gene	Turunen et al. (2008)	DSM-IV ICD-10	Tot = 114	ND (ND)	Tot = 118	ND (ND)		AD group has association at SNP rs2292813 within SLC25A12 gene, AspD group does not have such association

Table 1 continued

Variables studied	Author(s) year	Diagnostic system(s)	AspD group		HFA/AD group		Results	
			M/F	Age Range (Mean; SD)	M/F	Age Range (Mean; SD)	Quantitative	Qualitative
SNP-based classification	Jiao et al. (2011)	DSM-IV	5/0	6–15 (9.6; 1.1)	11/2	6–15 (9.4; 2.5)		One SNP-rs878960 in GABRB3 can distinguish AspD from HFA
<i>Family and/or parental effects</i>								
Parental stress	Mori et al. (2009)	DSM-IV	23/7	ND (8.4; 2.3)	140/23	ND (7.2; 2.81)	AspD group had a significantly higher level of parental stress than HFA group	
<i>Comorbidities</i>								
Obstetric factors	Ghaziuddin et al. (1995b)	DSM-III-R ICD-10	10/0	ND (13.7; 3.7)	10/0	ND (14.3; 6.2)	AspD group showed a trend toward lower Apgar scores at 1 min, was more likely born to older mother, less likely to have been irritable and floppy as infants	
Risk factors	Haglund and Källén (2011)	DSM-IV ICD-10	Tot = 93	ND (ND)	Tot = 157	ND (ND)		Obstetric sub-optimality (prematurity, low Apgar scores, growth restriction, macrosomia) positively associated with AD group but not with AspD group
Birth defect	Dawson et al. (2009)	DSM-IV	Tot = 67	ND (ND)	Tot = 314	ND (ND)	AD group had more birth defects (12.1 %) than the AspD group (3.0 %)	
Thought disorder	Ghaziuddin et al. (1995a)	ICD-10	10/2	ND (12.2; 3.3)	7/1	ND (12.2; 3.8)	AspD group had higher scores on conventionality, self-image, number of primary contents;	AspD group was often classified as Intro-verseive; HFA group as more as extratensive
Behavioral and emotional disturbance	Tonge et al. (1999)	DSM-IV	46/6	4–18 (9.9; 3.8)	66/9	4–18 (7.4; 3.5)	AspD group had higher level of psychopathology, was more disruptive, anti-social, anxious, problems with social relationship than HFA group	
Psychiatric symptoms	Gadow et al. (2004)	DSM-IV	Tot = 24	3–5 (ND)	Tot = 67	3–5 (ND)		The AspD group was more oppositional and had less severe language than AD group which was more socially impaired than AspD group

Table 1 continued

Variables studied	Author(s) year	Diagnostic system(s)	AspD group		HFA/AD group		Results	
			M/F	Age Range (Mean; SD)	M/F	Age Range (Mean; SD)	Quantitative	Qualitative
Anxiety & psychotic symptoms	Weisbrot et al. (2005)	DSM-IV	Tot = 80	6–12 (ND)	Tot = 103	6–12 (ND)	AspD group had more anxiety and psychotic Symptoms than AD group	
<i>Laboratory findings</i>								
Movement-related potentials (MRP)	Rinehart et al. (2006c)	DSM-IV	11/2	8 <sup>11/12</sup> –20 <sup>4/12</sup> (13 <sup>5/12</sup> ; 3 <sup>8/12</sup> )	16/1	6 <sup>0/12</sup> –20 <sup>9/12</sup> (12 <sup>5/12</sup> ; 4 <sup>4/12</sup> )	Bereitshaftspotential were more severely impaired in HFA group than in AspD group	
	Enticott et al. (2009)	DSM-IV	10/2	8 <sup>11/12</sup> –20 <sup>4/12</sup> (13 <sup>7/12</sup> ; 3 <sup>9/12</sup> )	14/1	7 <sup>8/12</sup> –20 <sup>9/12</sup> (13 <sup>1/12</sup> ; 4 <sup>2/12</sup> )	Abnormal MRPs (e.g., increased post-movement cortical activity, abnormal peak time) were found in HFA group, not in AspD group	
Iron deficiency	Latif et al. (2002)	DSM-IV ICD-10	41/2	3–13 ND	42/10	(12 <sup>7/12</sup> –8 <sup>5/12</sup> ) ND	2/44 of Asp group, 6/52 of AD group had iron deficiency anemia; 3/22 of AspD group and 12/23 of AD group had iron deficiency	
EEG	Muñoz-Yunta et al. (2008)	DSM-IV ICD-10	7/2	5–14 (ND)	19/3	2–12 (ND)	In AspD group, epileptic form spikes were found in the right hemisphere, no lateralized epileptic form activity in AD group	
<i>Follow-up findings</i>								
A 30-year follow-up study	Larsen and Mouridsen (1997)	ICD-10	7/2	ND (39.1; ND)	3/6	ND (36.5; ND)	AD group had a poorer outcome than AspD group regarding education, employment, autonomy, marriage, reproduction and the need for continuing medical & institutional care	
Two-year outcome	Szatmari et al. (2000)	ADI	16/4	6–8 (7 <sup>9/12</sup> ; 0 <sup>9/12</sup> )	43/3	6–8 (7 <sup>6/12</sup> ; 0 <sup>11/12</sup> )	AspD group had better social skills and fewer autistic symptoms at 2 2 years follow-up than HFA group	

Table 1 continued

Variables studied	Author(s) year	Diagnostic system(s)	AspD group		HFA/AD group		Results	
			M/F	Age Range (Mean; SD)	M/F	Age Range (Mean; SD)	Quantitative	Qualitative
Stability and change	Starr et al. (2003)	ADI-R	13/4	6–8 (10 <sup>11/12</sup> ; 2.0)	38/3	6–8 (9 <sup>2/12</sup> ; 1 <sup>6/12</sup> )	2-year outcome showed HFA group improved on 7 items and increased symptom severity on 3 items on ADI; AspD group improved on only 2 items and showed increased symptom severity on 6 items	
Structural language impairment	Szatmari et al. (2009)	ADI-R	Tot = 21	17–19 (17 <sup>6/12</sup> ; 1 <sup>2/12</sup> )	Tot = 36	17–19 (17 <sup>8/12</sup> ; 1 <sup>6/12</sup> )	AspD group was functioning better and had fewer autistic symptoms than HFA group on all measure across time	
<i>Treatment outcomes</i>								
Language interventions	Tamanaha and Perissinoto (2011)	DSM-IV-TR	Tot = 5	4 <sup>2/12</sup> –10 (ND)	Tot = 5	4 <sup>2/12</sup> –10 (ND)	AspD group performed more positively than AD group	
Outcomes	Cederlund et al. (2008)	DISCO*	70/0	16–34 (21.5; 4.4)	70/0	16–36 (24.5; 5.4)	Good outcome: AspD: 27 %; AD: 0 % Very poor outcome: AspD: 0 %; AD: 56 % Independent living: AspD: 64 %; AD: 8 % FSIQ over time: AspD: stable; AD: decline	
	Szatmari et al. (2003)	DSM-IV ICD-10	Tot = 21	ND (13 <sup>3/12</sup> ; ND)	Tot = 47	ND (13 <sup>3/12</sup> ; ND)	The association between language skills and outcome was stronger in HFA group than in AspD group	

ND no data presented, Tot total, \* DISCO Diagnostic Interview for Social and Communicative Disorders

Table 2 Studies found both similarities and differences between AspD and HFA/AD groups

Variables studied	Author(s) Year	Diagnostic system(s)	AspD group		HFA/AD group		Result/conclusion
			M/F	Age range (mean; SD)	M/F	Age range (mean; SD)	
<i>Core clinical features</i>							
Early history	Ozonoff et al. (2000)	DSM-IV	10/2	6 <sup>6/1</sup> –20 <sup>9/12</sup> (13.9; 4.5)	21/2	6 <sup>6/12</sup> –20 <sup>9/12</sup> (13.3; 3.9)	HFA group [ AspD group significantly: ADI-R (age 4–5): social, communication, repetitive behavior; ADI-R age at first single word; number of DSM-IV symptoms; years in special education; grade fully mainstreamed
Current symptoms	Ozonoff et al. (2000)	DSM-IV	10/2	6 <sup>6/1</sup> –20 <sup>9/12</sup> (13.9; 4.5)	21/2	6 <sup>6/12</sup> –20 <sup>9/12</sup> (13.3; 3.9)	No group differences were found except: HFA group [ AspD group: ADOS-G imagination deficits insistence on sameness AspD group [ HFA group: circumscribed interests
Psychosocial adaptation	Noterdaeme et al. (2010)	ICD-10	52/2	6 <sup>8/12</sup> –19 <sup>9/12</sup> (11 <sup>2/12</sup> ; 3 <sup>1/12</sup> )	49/6	6 <sup>1/12</sup> –19 <sup>5/12</sup> (10 <sup>6/12</sup> ; 3 <sup>3/12</sup> )	No group differences
Clinical evaluation of language fundamental 3rd edition	Ozonoff et al. (2000)	DSM-IV	10/2	6 <sup>6/1</sup> –20 <sup>9/12</sup> (13.9; 4.5)	21/2	6 <sup>6/12</sup> –20 <sup>9/12</sup> (13.3; 3.9)	AspD group performed significantly better than HFA group on expressive language; no group differences on receptive language
Language function	Noterdaeme et al. (2010)	ICD-10	52/2	6 <sup>8/12</sup> –19 <sup>9/12</sup> (11 <sup>2/12</sup> ; 3 <sup>1/12</sup> )	49/6	6 <sup>1/12</sup> –19 <sup>5/12</sup> (10 <sup>6/12</sup> ; 3 <sup>3/12</sup> )	AD group had significantly more deficit in expressive & receptive function than AspD group
	Ramberg et al. (1996)	ICD-10	22/0	5 <sup>7/12</sup> –14 <sup>9/12</sup> (ND)	11/0	5 <sup>5/12</sup> –14 <sup>1/12</sup> (ND)	Language comprehension and pragmatic skills did not separate HFA & AspD groups
<i>Neuropsychological and neurocognitive profiles and functions</i>							
Cognitive function	Ozonoff et al. (2000)	DSM-IV	10/2	6 <sup>6/1</sup> –20 <sup>9/12</sup> (13.9; 4.5)	21/2	6 <sup>6/12</sup> –20 <sup>9/12</sup> (13.3; 3.9)	Few group differences
IQ profile	Noterdaeme et al. (2010)	ICD-10	52/2	6 <sup>8/12</sup> –19 <sup>9/12</sup> (11 <sup>2/12</sup> ; 3 <sup>1/12</sup> )	49/6	6 <sup>1/12</sup> –19 <sup>5/12</sup> (10 <sup>6/12</sup> ; 3 <sup>3/12</sup> )	AspD group had higher FSIQ & VIQ than AD group
	Ramberg et al. (1996)	ICD-10	22/0	5 <sup>7/12</sup> –14 <sup>9/12</sup> (ND)	11/0	5 <sup>5/12</sup> –14 <sup>1/12</sup> (ND)	AspD group had higher FIQ & VIQ than HFA group
WISC-III Index Score Profile	Zander and Dahlgren (2010)	DSM-IV	Tot = 341	ND (11.1; 2.4)	Tot = 85	ND (10.2; 2.2)	There was a significant difference in level of performance: AspD group in the average range, AD group in below average range; few other group differences were found
Executive function	Ozonoff et al. (2000)	DSM-IV	10/2	6 <sup>6/1</sup> –20 <sup>9/12</sup> (13.9; 4.5)	21/2	6 <sup>6/12</sup> –20 <sup>9/12</sup> (13.3; 3.9)	No group differences

<i>Motor functions</i>	Noterdaeme et al. (2010)	ICD-10	52/2	$6^{8/12}$ – $19^{9/12}$ ( $11^{2/12}$ ; $3^{1/12}$ )	49/6	$6^{1/12}$ – $19^{5/12}$ ( $10^{6/12}$ ; $3^{3/12}$ )	No group differences
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*ND* no data presented, *Tot* total



Table 3 Studies found no differences between AspD and HFA/AD groups

Variables studied	Author(s) year	Diagnostic system(s)	AspD group		HFA/AD group		Results/conclusions
			M/F	Age range (mean; SD)	M/F	Age range (mean; SD)	
<i>Core clinical features</i>							
Dimensions of social interaction	Macintosh and Dissanayake (2006a)	DSM-IV	19/0	4 <sup>4/12</sup> –10 <sup>10/12</sup> (8.0; 1.7)	20/0	4 <sup>4/12</sup> –10 <sup>10/12</sup> (8.1; 1.6)	Few differences between the groups on spontaneous social and play behaviors on a behaviour observation schedule
Social skills & problem behaviors	Macintosh and Dissanayake (2006b)	DSM-IV	19/0	4 <sup>4/12</sup> –10 <sup>10/12</sup> (8.0; 1.7)	20/0	4 <sup>4/12</sup> –10 <sup>10/12</sup> (8.1; 1.6)	The children with AspD & HFA were not differentiated on any social skill or problem behavior based on either parent or teacher report
Repetitive behavior profiles	South et al. (2005)	DSM-IV-TR	Tot = 19	8–19 (14.3; 3.0)	Tot = 21	8–20 (14.1; 3.5)	No reliable differences in repetitive behavior between AspD & HFA groups
Repetitive behavior	Cuccaro et al. (2007)	DSM-IV	27/6	5 <sup>6/12</sup> –22 <sup>8/12</sup> (11 <sup>7/12</sup> ; 5 <sup>3/12</sup> )	27/6	4 <sup>10/12</sup> –21 <sup>11/12</sup> (10 <sup>8/12</sup> ; 6 <sup>5/12</sup> )	No group differences in RBS-R intensity score or frequency score
Initial speech age	Kurita (1997)	ICD-10	22/4	3 <sup>1/12</sup> –12 (5 <sup>2/3</sup> ; 2 <sup>1/2</sup> )	13/3	3–11 <sup>1/12</sup> (6 <sup>1/12</sup> ; 2 <sup>1/6</sup> )	AspD group: mean age = 2.9 HFA group: mean age = 3.0
Test of language competence-expanded edition	Lewis et al. (2007)	DSM-IV	Tot = 10	ND (12 <sup>5/12</sup> ; 2 <sup>4/12</sup> )	Tot = 8	ND (11 <sup>4/12</sup> ; 1 <sup>11/12</sup> )	No group differences on any of the language measures
Speech & prosody-voice profiles	Shriberg et al. (2001)	DSM-IV	Tot = 15	10–49 (20.7; 10.9)	Tot = 15	10–49 (21.6; 10.8)	There were few significant differences in the speech and prosody-voice profiles in AspD and HFA groups
<i>Neuropsychological and neurocognitive profiles and functions</i>							
IQ profile	Kurita (1997)	ICD-10	22/4	3 <sup>1/12</sup> –12	13/3 (5 <sup>2/3</sup> ; 2 <sup>1/2</sup> )	3–11 <sup>1/12</sup> (6 <sup>1/12</sup> ; 2 <sup>1/6</sup> )	AspD group: mean IQ = 104 HFA group: mean IQ = 97
Neuropsychological profile	Manjiviona and Prior (1999)	DSM-IV ICD-10	30/5	6–17 (10.4; 2.7)	17/4	7–15 (11.6; 2.4)	Clinically diagnosed children with AspD and HFA were not differentiated based on their neuropsychological profiles
Executive function	Kenworthy et al. (2005)	DSM-IV	25/3	5–17 (10.2; 3.3)	40/5	5–17 (10.4; 3.06)	AspD and HFA groups were not differentiated by distinct patterns of executive abilities
	Verte' et al. (2006a)	Modified DSM	33/4	6–13 (8.5; 2.1)	46/4	6–13 (8.7; 1.9)	Little difference was found between AspD and HFA groups with respect to EF

Table 3 continued

Variables studied	Author(s) year	Diagnostic system(s)	AspD group		HFA/AD group		Results/conclusions
			M/F	Age range (mean; SD)	M/F	Age range (mean; SD)	
	Thede and Coolidge (2007)	DSM-IV-TR 13/3		5–17 (Boys 11.8; 3.0) (Girls 10.3; 3.1)	8/7	5–17 (Boys 10.4; 4.0) (Girls 9.6; 2.8)	There were no significant differences between AspD & HFA groups on the overall EF deficit scale or on its three subscales
	Miller and Ozonoff (2000)	DSM-IV ICD-10	14/0	6 <sup>1/12</sup> –12 <sup>11/12</sup> (10.1; 1.9)	22/4	6 <sup>1/12</sup> –12 <sup>11/12</sup> (10.1; 1.9)	No significant group differences in executive function domain
Visuospatial functions	Miller and Ozonoff (2000)	DSM-IV ICD-10	14/0	6 <sup>1/12</sup> –12 <sup>11/12</sup> (10.1; 1.9)	22/4	6 <sup>1/12</sup> –12 <sup>11/12</sup> (10.1; 1.9)	No significant group differences in visuospatial function domain
Self-presentational display rules	Barbaro and Dissanayake (2007)	DSM-IV-TR	18/0	4–11 (ND)	21/0	4–11 (ND)	No group differences in using or understanding of SPDRs
Embedded Figures Test	Jolliffe and Baron-Cohen (1997)	DSM-IV	15/2	18–49 (27.8; 7.8)	15/2	19–46 (30.7; 7.8)	No group differences in terms of accuracy and mean number of lines used to complete the figure on EMT
Theory of mind	Dahlgren and Trillingsgaard (1996)	ICD-10	Tot = 20	7.3–12.7 (10.2; 1.9)	Tot = 20	6.3–15.5 (10.6; 2.8)	No significant differences between groups were found in the ToM tasks
	Klin (2000)	DSM-IV	Tot = 20	ND (18.9; 11.8)	Tot = 20	ND (20.5; 10.8)	There were only minor differences in all measures of social attribution task between AspD and HFA groups
	Spek et al. (2010)	DSM-IV-TR	25/4	18–60 (43.7; 10.5)	27/5	18–60 (42.1; 10.8)	The AspD and HFA groups did not differ in ToM tests
Theory of mind—Strange Stories Test	Jolliffe and Baron-Cohen (1999a)	DSM-IV	15/2	18–49 (27.8; 7.8)	15/2	19–46 (30.7; 7.8)	Performance on the Strange Stories test seems to support that AspD and HFA groups being part of the autistic continuum
Personality & neurobehavior	Thede and Coolidge (2007)	DSM-IV-TR	13/3	5–17 (Boys 11.8; 3.0) (Girls 10.3; 3.1)	8/7	5–17 (Boys 10.4; 4.0) (Girls 9.6; 2.8)	There were more similarity than differences between AspD & HFA groups on the personality scales, though the Asp group scored significantly on the two scales with anxiety components

Table 3 continued

Variables studied	Author(s) year	Diagnostic system(s)	AspD group		HFA/AD group		Results/conclusions
			M/F	Age range (mean; SD)	M/F	Age range (mean; SD)	
Temporal context memory	Gras-Vincendon et al. (2007)	DSM-IV	5/2	ND (21.5; 7.4)	10/1	ND (16.9; 4.9)	The performance on a recency task of Asp group did not differ from that of the AD group
Global processing	Rinehart et al. (2000)	DSM-IV	10/2	6.8–20.2 (12.5; 3.8)	11/1	6.4–15.3 (9.9; 3.0)	AspD and HFA groups shared a common local interference anomaly
Local information processing	Spek et al. (2011)	DSM-IV ICD-10	37/4	ND (41.3; 11.5)	35/7	ND (37.2; 10.8)	AspD group did not differ from HFA group on local information processing
<i>Diagnostic measures</i>							
CARS-TV	Kurita (1997)	ICD-10	22/4	3 <sup>1/12</sup> –12 (5 <sup>2/3</sup> ; 2 <sup>1/2</sup> )	13/3	3–11 <sup>1/12</sup> (6 <sup>1/12</sup> ; 2 <sup>1/6</sup> )	AspD group did not differ significantly from HFA on all but total & 4 items (imitations, visual responsiveness, auditory responsiveness, non-verbal communication)
Ritvo autism—Asperger's Diagnostic Scale	Ritvo et al. (2007)	DSM-IV-TR	11/9	ND (37; ND)	11/6	ND (33; ND)	The Ritvo autism & Asperger's Diagnostic Scale (RAADS) does not distinguish between AspD and HFA groups
Ritvo autism—Asperger's Diagnostic Scale	Ariella Ritvo et al. (2008)	DSM-IV-TR ICD-10	17/8	ND (38.2; ND)	12/7	ND (34.9; ND)	The RAADS data support the hypothesis that AspD is a mild form of AD
Children's communication checklist & ADI-R	Verte' et al. (2006b)	DSM-modified	Tot = 47	6–13 (8.9; 2.2)	Tot = 57	6–13 (8.8; 1.8)	Little difference between AspD and HFA groups on CCC profile; cluster analysis based on ADI-R support the autism spectrum/continuum concept
Cluster analysis	Kamp-Becker et al. (2010)	DSM-IV ICD-10	Tot = 52	6–24 (11.9; 4.4)	Tot = 44	6–24 (12.8; 5.1)	AspD and AD groups are not qualitatively distinct disorders, but rather different quantitative manifestations of the same disorder
<i>Motor functions</i>							
Clumsiness	Ghaziuddin et al. (1994)	ICD-10 DSM-III-R	10/1	9.1–19.6 (13.6; 3.7)	8/1	7.4–17.9 (12.9; 3.8)	Both AspD and HFA groups had motor clumsiness which may not reliably distinguish the two groups

Table 3 continued

Variables studied	Author(s) year	Diagnostic system(s)	AspD group		HFA/AD group		Results/conclusions
			M/F	Age range (mean; SD)	M/F	Age range (mean; SD)	
	Thede and Coolidge (2007)	DSM-IV-TR	13/3	5–17 (Boys 11.8; 3.0) (Girls 10.3; 3.1)	8/7	5–17 (Boys 10.4; 4.0) (Girls 9.6; 2.8)	There were no significant differences between AspD (94 %) & HFA (80 %) groups on motor clumsiness
Motor impairment	Manjiviona and Prior (1995)	ICD-10 DSM-III-R	Tot = 12 7–17 (ND)		Tot = 9	10–15 (ND)	The two groups did not differ on either total or subscale impairment scores on the test of motor impairment-Henderson revision
Motor functions	Miller and Ozonoff (2000)	DSM-IV ICD-10	14/0	6 <sup>1/12</sup> –12 <sup>11/12</sup> (10.1; 1.9)	22/4	6 <sup>1/12</sup> –12 <sup>11/12</sup> (10.1; 1.9)	No significant group differences in motor functions except a marginal significant trend toward poorer fine motor performance in AspD group
<i>Brain structures and body growth</i>							
Brain volume	Hallahan et al. (2009)	ICD-10	Tot = 80	ND (33; 11)	Tot = 28	ND (29; 7)	No significant between-group difference in head and/or lobar brain matter
Head circumference and body growth	Dissanayake et al. (2006)	DSM-IV	Tot = 12	4–11 (7.9; 1.6)	Tot = 16	4–11 (8.1; 1.7)	No group differences were found in the growth rate for head circumference, stature, or weight
<i>Comorbidities</i>							
Seizure disorder	Kurita (1997)	ICD-10	22/4	3 <sup>1/12</sup> –12 (5 <sup>2/3</sup> ; 2 <sup>1/2</sup> )	13/3	3–11 <sup>1/12</sup> (6 <sup>1/12</sup> ; 2 <sup>1/6</sup> )	AspD group: 2/26 (7.7 %) group: 1/16 (6.3 %)
Sleep disorders	Allik et al. (2006)	ICD-10	17/2	8.5–12.8 (11.0; 1.2)	11/2	8.5–12.8 (10.5; 1.3)	No differences in sleep patterns between AspD and HFA groups
Psychiatric disorders	Mukaddes et al. (2010)	DSM-IV	Tot = 30	7.0–15.5 (11.0; ND)	Tot = 30	6.2–14.4 (10.3; ND)	Both AspD and HFA groups had high rate of similar comorbid psychiatric disorders except that AspD group had significantly higher rates of major depressive disorder and ADHD-combined type

Table 3 continued

Variables studied	Author(s) year	Diagnostic system(s)	AspD group		HFA/AD group		Results/conclusions
			M/F	Age range (mean; SD)	M/F	Age range (mean; SD)	
Anxiety & mood problems	Kim et al. (2000)	DSM-IV ICD-10	Tot = 19 9–14 (12; 1.2)		Tot = 40	9–14 (12; 1.2)	There were no differences in the number of anxiety and mood problems between AspD and HFA groups
<i>Laboratory findings</i>							
Abnormal EEG	Kurita (1997)	ICD-10	22/4	3 <sup>1/12</sup> –12 (5 <sup>2/3</sup> ; 2 <sup>1/2</sup> )	13/3	3–11 <sup>1/12</sup> (6 <sup>1/12</sup> ; 2 <sup>1/6</sup> )	AspD group: 2/23 (8.7 %) HFA group: 2/15 (13.3 %)
Psychophysiology	Schoen et al. (2008)	ADOS	8/3	5–15 (9.5; ND)	25/2	5–15 (8.8; ND)	No significant differences were detected between AspD & HFA groups on psychophysiological testing using electrodermal activity to characterize the arousal and sensory reactivity
<i>Follow-up findings</i>							
	Howlin 2003	ADI-R	35/7	ND (26.1; 5.9)	25/9	ND (27.6; 10)	No significant group differences were found in total ADI-R algorithm scores, Algorithm scores on individual domains, and social outcome ratings

ND no data presented, Tot total

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