

**Supplementary Table 1. Socio-Behavioral Endophenotype Matrix – Review of studies of parents of autistic probands.**

Domain	Method / Measure	Factors / Subscales	Country	Study	ASD Parent Group Characteristics	Control Group Characteristics	Key Findings in relation to Proband Diagnosis		
							P value	Effect Size (d)	
<b>BAP Expression (Measures designed specifically to assess BAP)</b>	<b>Autism Spectrum Quotient (AQ) Self-report Questionnaire</b>	Social Skills	UK	Berthoz et al (2013) [40]	ASD-P n = 87 (28%Fa)	UA n = 47 (62%M)	n.s.	ASD-P vs. UA 0.36	
			Australia	Bishop et al (2004a) [20]	ASD-P n = 111 (65Mo/46Fa)	N-P n = 85 (48Mo/37Fa)	ASD-P > N-P**	ASD-Mo vs. N-Mo 0.22 ASD-Fa vs. N-Fa 0.60	
			Turkey	Kadak et al (2014) [21]	ASD-P n=72 (36Mo/36Fa)	TD-P n=38 (19Mo/19Fa)	ASD-P > TD-P**	ASD-P vs. TD-P 0.5	
			Turkey	Kose et al (2013) [18]	ASD-P n = 100 (53Mo/47Fa)	TD-P n = 100 (52Mo/48Fa)	ASD-P > TD-P**	ASD-Fa vs. TD-Fa 0.43 ASD-Mo vs. TD-Mo 0.30	
			Italy	Ruta et al (2012) [17]	ASD-P n= 245 (130Mo/115Fa)	TD-P n = 300 (150Mo/150Fa)	ASD-P > TD-P**	ASD-Fa vs. TD-Fa 0.25 ASD-Mo vs. TD-Mo 0.24	
			Netherlands	Scheeren & Stauder (2008) [24]	ASD-P n= 25 (12Mo/13Fa)	TD-P n= 25 (12Mo/13Fa)	n.s.		
			UK	Wheelwright et al (2010) [22]	ASD-P n= 2000 (1429Mo/571Fa)	TD-P n= 1007 (658Mo/349Fa)	ASD-P > TD-P***	ASD-Fa vs. TD-Fa 0.33 ASD-Mo vs. TD-Mo 0.46	
			UK	Whitehouse et al (2007) [23]	ASD-P n = 30 (20Mo/10Fa)	SLI-P n= 25	n.s.	ASD-P vs. SLI-P 0.67	
			Attention Switching	UK	Berthoz et al (2013) [40]	ASD-P n = 87 (28%Fa)	UA n = 47 (62%M)	n.s.	ASD-P vs. UA 0.14
			Australia	Bishop et al (2004a) [20]	ASD-P n = 111 (65Mo/46Fa)	N-P n = 85 (48Mo/37Fa)	n.s.	ASD-Mo vs. N-Mo 0.13 ASD-Fa vs. N-Fa 0.19	
			Turkey	Kadak et al (2014) [21]	ASD-P n=72 (36Mo/36Fa)	TD-P n=38 (19Mo/19Fa)	n.s.	ASD-P vs. TD-P 0.09	
			Turkey	Kose et al (2013) [18]	ASD-P n = 100 (53Mo/47Fa)	TD-P n = 100 (52Mo/48Fa)	n.s.	ASD-Fa vs. TD-Fa 0.33 ASD-Mo vs. TD-Mo 0.15	
			Italy	Ruta et al (2012) [17]	ASD-P n= 245 (130Mo/115Fa)	TD-P n = 300 (150Mo/150Fa)	n.s.	ASD-Fa vs. TD-Fa 0.13 ASD-Mo vs. TD-Mo 0.03	

	Netherlands	Scheeren & Stauder (2008) [24]	ASD-P n= 25 (12Mo/13Fa)	TD-P n= 25 (12Mo/13Fa)	n.s.	
	UK	Wheelwright et al (2010) [22]	ASD-P n= 2000 (1429Mo/571Fa)	TD-P n= 1007 (658Mo/349Fa)	<b>ASD-P &gt; TD-P***</b>	<b>ASD-Fa vs. TD-Fa 0.12</b> <b>ASD-Mo vs. TD-Mo 0.38</b>
	UK	Whitehouse et al (2007) [23]	ASD-P n = 30 (20Mo/10Fa)	SLI-P n= 25	<b>ASD-P &gt; SLI-P*</b>	<b>ASD-P vs. SLI-P 0.67</b>
Attention to Detail	UK	Berthoz et al (2013) [40]	ASD-P n = 87 (28%Fa)	UA n = 47 (62%M)	n.s.	<b>ASD-P vs. UA 0.37</b>
	Australia	Bishop et al (2004a) [20]	ASD-P n = 111 (65Mo/46Fa)	N-P n = 85 (48Mo/37Fa)	n.s.	<b>ASD-Mo vs. N-Mo 0.29</b> <b>ASD-Fa vs. N-Fa 0.12</b>
	Turkey	Kadak et al (2014) [21]	ASD-P n=72 (36Mo/36Fa)	TD-P n=38 (19Mo/19Fa)	n.s.	<b>ASD-P vs. TD-P 0.22</b>
	Turkey	Kose et al (2013) [18]	ASD-P n = 100 (53Mo/47Fa)	TD-P n = 100 (52Mo/48Fa)	n.s.	<b>ASD-Fa vs. TD-Fa 0.04</b> <b>ASD-Mo vs. TD-Mo 0.14</b>
	Italy	Ruta et al (2012) [17]	ASD-P n= 245 (130Mo/115Fa)	TD-P n = 300 (150Mo/150Fa)	n.s.	<b>ASD-Fa vs. TD-Fa 0.04</b> <b>ASD-Mo vs. TD-Mo 0.03</b>
	Netherlands	Scheeren & Stauder (2008) [24]	ASD-P n= 25 (12Mo/13Fa)	TD-P n= 25 (12Mo/13Fa)	<b>TD-Mo &gt; ASD-Mo*</b>	
	UK	Wheelwright et al (2010) [22]	ASD-P n= 2000 (1429Mo/571Fa)	TD-P n= 1007 (658Mo/349Fa)	n.s.	<b>ASD-Fa vs. TD-Fa 0.13</b> <b>ASD-Mo vs. TD-Mo 0.13</b>
	UK	Whitehouse et al (2007) [23]	ASD-P n = 30 (20Mo/10Fa)	SLI-P n= 25	n.s.	<b>ASD-P vs. SLI-P 0.13</b>
Communication	UK	Berthoz et al (2013) [40]	ASD-P n = 87 (28%Fa)	UA n = 47 (62%M)	n.s.	<b>ASD-P vs. UA 0.13</b>
	Australia	Bishop et al (2004a) [20]	ASD-P n = 111 (65Mo/46Fa)	N-P n = 85 (48Mo/37Fa)	<b>ASD-P &gt; N-p**</b>	<b>ASD-Mo vs. N-Mo 0.19</b> <b>ASD-Fa vs. N-Fa 0.52</b>
	Turkey	Kadak et al (2014) [21]	ASD-P n=72 (36Mo/36Fa)	TD-P n=38 (19Mo/19Fa)	n.s.	<b>ASD-P vs. TD-P 0.32</b>

	Turkey	Kose et al (2013) [18]	ASD-P n = 100 (53Mo/47Fa)	TD-P n = 100 (52Mo/48Fa)	<b>ASD-P &gt; TD-P**</b>	ASD-Fa vs. TD-Fa 0.20 ASD-Mo vs. TD-Mo 0.62
	Italy	Ruta et al (2012) [17]	ASD-P n= 245 (130Mo/115Fa)	TD-P n = 300 (150Mo/150Fa)	<b>ASD-P &gt; TD-P**</b>	ASD-Fa vs. TD-Fa 0.02 ASD-Mo vs. TD-Mo 0.01
	Netherlands	Scheeren & Stauder (2008) [24]	ASD-P n= 25 (12Mo/13Fa)	TD-P n= 25 (12Mo/13Fa)	n.s.	
	UK	Wheelwright et al (2010) [22]	ASD-P n= 2000 (1429Mo/571Fa)	TD-P n= 1007 (658Mo/349Fa)	<b>ASD-P &gt; TD-P***</b>	ASD-Fa vs. TD-Fa 0.22 ASD-Mo vs. TD-Mo 0.41
	UK	Whitehouse et al (2007) [23]	ASD-P n = 30 (20Mo/10Fa)	SLI-P n= 25	<b>ASD-P &gt; SLI-P*</b>	ASD-P vs. SLI-P 0.63
Imagination	UK	Berthoz et al (2013) [40]	ASD-P n = 87 (28%Fa)	UA n = 47 (62%M)	n.s.	ASD-P vs. UA 0.10
	Australia	Bishop et al (2004a) [20]	ASD-P n = 111 (65Mo/46Fa)	N-P n = 85 (48Mo/37Fa)	n.s.	ASD-Mo vs. N-Mo 0.07 ASD-Fa vs. N-Fa 0.19
	Turkey	Kadak et al (2014) [21]	ASD-P n=72 (36Mo/36Fa)	TD-P n=38 (19Mo/19Fa)	n.s.	ASD-P vs. TD-P 0.02
	Turkey	Kose et al (2013) [18]	ASD-P n = 100 (53Mo/47Fa)	TD-P n = 100 (52Mo/48Fa)	n.s.	ASD-Fa vs. TD-Fa 0.03 ASD-Mo vs. TD-Mo 0.07
	Italy	Ruta et al (2012) [17]	ASD-P n= 245 (130Mo/115Fa)	TD-P n = 300 (150Mo/150Fa)	n.s.	ASD-Fa vs. TD-Fa 0.06 ASD-Mo vs. TD-Mo 0.57
	Netherlands	Scheeren & Stauder (2008) [24]	ASD-P n= 25 (12Mo/13Fa)	TD-P n= 25 (12Mo/13Fa)	n.s.	
	UK	Wheelwright et al (2010) [22]	ASD-P n= 2000 (1429Mo/571Fa)	TD-P n= 1007 (658Mo/349Fa)	<b>ASD-P &gt; TD-P***</b>	ASD-Fa vs. TD-Fa 0.04 ASD-Mo vs. TD-Mo 0.29
	UK	Whitehouse et al (2007) [23]	ASD-P n = 30 (20Mo/10Fa)	SLI-P n= 25	n.s.	ASD-P vs. SLI-P 0.41
AQ Total Score	UK	Berthoz et al (2013) [39]	ASD-P n = 87 (28%Fa)	UA n = 47 (62%M)	n.s.	ASD-P vs. UA 0.06

	Turkey	Kadak et al (2014) [21]	ASD-P n=72 (36Mo/36Fa)	TD-P n=38 (19Mo/19Fa)	n.s.	ASD-P vs. TD-P 0.39
	Turkey	Kose et al (2013) [18]	ASD-P n = 100 (53Mo/47Fa)	TD-P n = 100 (52Mo/48Fa)	ASD-P > TD-P*	ASD-Fa vs. TD-Fa 0.34 ASD-Mo vs. TD-Mo 0.27
	Italy	Ruta et al (2012) [17]	ASD-P n= 245 (130Mo/115Fa)	TD-P n = 300 (150Mo/150Fa)	ASD-P > TD-P**	ASD-Fa vs. TD-Fa 0.30 ASD-Mo vs. TD-Mo 0.29
	Netherlands	Scheeren & Stauder (2008) [24]	ASD-P n= 25 (12Mo/13Fa)	TD-P n= 25 (12Mo/13Fa)	n.s	ASD-Fa vs. TD-Fa 0.30 ASD-Mo vs. TD-Mo 0.73
	UK	Wheelwright et al (2010) [22]	ASD-P n= 2000 (1429Mo/571Fa)	TD-P n= 1007 (658Mo/349Fa)	ASD-P > TD-P***	ASD-Fa vs. TD-Fa 0.17 ASD-Mo vs. TD-Mo 0.38
	UK	Whitehouse et al (2007) [23]	ASD-P n = 30 (20Mo/10Fa)	SLI-P n= 25	ASD-P > SLI-P*	ASD-P vs. SLI-P 0.63
AQ Social/Communication score combined	USA	Ingersoll et al (2011) [25]	ASD-Mo n = 71 (Only Mo)	N-Mo n = 94 (Only Mo)	ASD-Mo > N-Mo*	ASD-Mo vs. N-Mo 0.33
F1 (communication & socialization)	France	Robel et al (2014) [19]	ASD-P n = 66 (35Mo/31Fa)	TD-P n = 127 (67Mo/60Fa)	ASD-P > TD-P*	ASD-P vs. TD-P 1.34
F2 (imagination & rigidity)	France	Robel et al (2014) [19]	ASD-P n = 66 (35Mo/31Fa)	TD-P n = 127 (67Mo/60Fa)	n.s.	ASD-P vs. TD-P 0.24
Global score (F1 & F2 combined)	France	Robel et al (2014) [19]	ASD-P n = 66 (35Mo/31Fa)	TD-P n = 127 (67Mo/60Fa)	ASD-P > TD-P*	ASD-P vs. TD-P 0.76
Broader Autism Phenotype Questionnaire (BAPQ)	Aloof	USA	Hurley et al (2007) [26]	ASD-P = 86 (40Mo/46Fa) BAP(+) n = 27 BAP(-) n = 59	N-P = 64 (32Mo/32Fa)	BAP(+) > BAP(-), N-P*** BAP(+) vs. N-P 1.49 BAP(+) vs. N-P 1.30
<i>Self &amp; Informant Report Questionnaire</i>		USA	Sasson et al (2013) [27]	ASD-P n=711 (50.5% Fa)	N-P n = 981 (49.9% Fa)	ASD-Fa > N-Fa** ASD-Mo > N-Mo*** ASD-Fa vs. N-Fa 0.26 ASD-Mo vs. N-Mo 0.34

	Rigid	USA	Hurley et al (2007) [26]	ASD-P = 86 (40Mo/46Fa) BAP(+) n = 27 BAP(-) n = 59	N-P = 64 (32Mo/32Fa)	<b>BAP(+) &gt; BAP(-), N-P***</b>	<b>BAP(+) vs. BAP(-) 0.77</b> <b>BAP(+) vs. N-P 0.73</b>	
		USA	Sasson et al (2013) [27]	ASD-P n=711 (50.5% Fa)	N-P n = 981 (49.9% Fa)	<b>ASD-Fa &gt; N-Fa***</b> <b>ASD-Mo &gt; N-Mo***</b>	<b>ASD-Fa vs. N-Fa 0.35</b> <b>ASD-Mo vs. N-Mo 0.29</b>	
	Pragmatic Language	USA	Hurley et al (2007) [26]	ASD-P = 86 (40Mo/46Fa) BAP(+) n = 27 BAP(-) n = 59	N-P = 64 (32Mo/32Fa)	<b>BAP(+) &gt; BAP(-)** , N-P*</b>	<b>BAP(+) vs. BAP(-) 0.94</b> <b>BAP(+) vs. N-P 1.13</b>	
		USA	Sasson et al (2013) [27]	ASD-P n=711 (50.5% Fa)	N-P n = 981 (49.9% Fa)	<b>ASD-Fa &gt; N-Fa**</b> <b>ASD-Mo &gt; N-Mo***</b>	<b>ASD-Fa vs. N-Fa 0.28</b> <b>ASD-Mo vs. N-Mo 0.44</b>	
	Total score	USA	Hurley et al (2007) [26]	ASD-P = 86 (40Mo/46Fa) BAP(+) n = 27 BAP(-) n = 59	N-P = 64 (32Mo/32Fa)	<b>BAP(+) &gt; BAP(-), N-P***</b>	<b>BAP(+) vs. BAP(-) 1.49</b> <b>BAP(+) vs. N-P 1.43</b>	
		USA	Sasson et al (2013) [27]	ASD-P n=711 (50.5% Fa)	N-P n = 981 (49.9% Fa)	<b>ASD-Fa &gt; N-Fa***</b> <b>ASD-Mo &gt; N-Mo***</b>	<b>ASD-Fa vs. N-Fa 0.37</b> <b>ASD-Mo vs. N-Mo 0.45</b>	
<b>Broader Phenotype Autism Symptom Scale (BPASS)</b>	Social	USA	Bernier et al (2012) [28]	MPX-P n=39 SPX-P n=22	DD-P n = 20 TD-P n = 20	<b>MPX-P &gt; SPX-P* &gt; DD-P** &gt; TD-P*</b>	<b>MPX-P vs. DD-P 0.84</b> <b>MPX-P vs. TD-P 0.77</b> <b>MPX-P vs. SPX-P 0.75</b>	
	Expressiveness	USA	Bernier et al (2012) [28]	MPX-P n=39 SPX-P n=22	DD-P n = 20 TD-P n = 20	<b>MPX-P &gt; TD-P***</b>	<b>MPX-P vs. TD-P 1.28</b>	
	Conversation	USA	Bernier et al (2012) [28]	MPX-P n=39 SPX-P n=22	DD-P n = 20 TD-P n = 20	<b>n.s.</b>		
	Interview & Direct Behavioral Observation	Restricted Interests	USA	Bernier et al (2012) [28]	MPX-P n=39 SPX-P n=22	DD-P n = 20 TD-P n = 20	<b>MPX-P &gt; TD-P*</b>	<b>MPX-P vs. TD-P 0.93</b>
<b>Communication Checklist - Adult Version (CC-A)</b> <i>Informant Report</i>	Language Structure	UK / Ireland / USA / Canada / Australia	Whitehouse et al (2010) [29]	ASD-P n= 238 (115Mo/123Fa)	UA n= 187 (90M/97F)	<b>n.s.</b>	<b>ASD-P vs. UA 0.04</b>	
	Pragmatic Skills	UK / Ireland / USA / Canada / Australia	Whitehouse et al (2010) [29]	ASD-P n= 238 (115Mo/123Fa)	UA n= 187 (90M/97F)	<b>n.s.</b>	<b>ASD-P vs. UA 0.18</b>	

<b>Questionnaire</b>	Social Engagement	UK / Ireland / USA / Canada / Australia	Whitehouse et al (2010) [29]	ASD-P n= 238 (115Mo/123Fa)	UA n= 187 (90M/97F)	<b>ASD-P &lt; UA*</b>	<b>ASD-P vs. UA 0.43</b>
	Total Score (1 SD below mean)	UK / Ireland / USA / Canada / Australia	Whitehouse et al (2010) [29]	ASD-P n= 238 (115Mo/123Fa)	UA n= 187 (90M/97F)	<b>ASD-P &lt; UA*</b>	
<b>Family History Interview / Schedule (FHI/FHS)</b>	Social	USA	(FHS) Piven et al (1997a) [6]	MPX-P n= 48 (25Mo/23Fa)	DS-P n = 60 (30Mo/30Fa)	<b>MPX-P &gt; DS-P**</b> <b>MPX-Fa &gt; DS-Fa***</b> <b>MPX-Mo &gt; DS-Mo*</b>	
<i>Interview</i>		UK	Pickles et al (2013) [31] <i>Modified version</i>	ASD-P n = 193 (97Mo/96Fa)	SLI-P n = 103 (54Mo/49Fa) SLI+ASD-P n = 43 (23Mo/20Fa) DS-P n = 70 (35Mo/35Fa)	<b>ASD-P &gt; SLI-P*</b>	
	Communication	USA	(FHS) Piven et al (1997a) [6]	MPX-P n= 48 (25Mo/23Fa)	DS-P n = 60 (30Mo/30Fa)	<b>n.s.</b>	
		UK	Pickles et al (2013) [31] <i>Modified version</i>	ASD-P n = 193 (97Mo/96Fa)	SLI-P n = 103 (54Mo/49Fa) SLI+ASD-P n = 43 (23Mo/20Fa) DS-P n = 70 (35Mo/35Fa)	<b>n.s.</b>	
	<i>Definite &amp; Probable ELRCD</i>	USA	Folstein et al (1999) [30]	ASD-P n = 166	DS-P n = 75	<b>ASD-P &gt; DS-P**</b>	
	<i>Definite only ELRCD</i>	USA	Folstein et al (1999) [30]	ASD-P n = 166	DS-P n = 75	<b>ASD-P &gt; DS-P*</b>	
	Stereotyped behavioours	USA	(FHS) Piven et al (1997a) [6]	MPX-P n= 48 (25Mo/23Fa)	DS-P n = 60 (30Mo/30Fa)	<b>MPX-P &gt; DS-P*</b>	
<b>The Modified Personality Assessment Schedule –</b>	Aloof	USA	Losh et al (2008) [34]	MPX n=48 (25Mo/23Fa) SPX n=78	DS-P n=60	<b>MPX-P &gt; DS-P**</b> <b>SPX-P &gt; DS-P**</b> <b>MPX-P &gt; SPX-P*</b>	

<b>Revised (MPAS-R)</b>	USA	Losh et al (2012) [35]	ASD-Mo n = 89 (All Mo)	FXS-Mo n = 49 (All Mo) TD-Mo n = 23 (All Mo)	<b>n.s.</b>
<i>Interview</i>					
	USA	(MPAS) Piven et al (1994) [32]	ASD-P n = 87 (45Mo/42Fa)	DS-P n = 38 (19Mo/19Fa)	<b>ASD-P &gt; DS-P**</b>
	USA	Piven et al (1997b) [33]	MPX-P n= 39	DS-P n = 58	<b>MPX-P &gt; DS-P**</b>
Anxious	USA	Losh et al (2008) [34]	MPX-P n=48 (25Mo/23Fa) SPX-P n=78	DS-P n=60	<b>MPX-P &gt; DS-P**</b> <b>SPX-P &gt; DS-P*</b> <b>MPX-P &gt; SPX-P**</b>
	USA	Piven et al (1997b) [33]	MPX-P n= 39	DS-P n = 58	<b>MPX-P &gt; DS-P**</b> <b>MPX-Fa &gt; DS-Fa**</b>
Hypersensitive	USA	Losh et al (2008) [34]	MPX-P n=48 (25Mo/23Fa) SPX-P n=78	DS-P n=60	<b>MPX-P &gt; DS-P***</b> <b>SPX-P &gt; DS-P*</b> <b>MPX-P &gt; SPX-P*</b>
	USA	Piven et al (1997b) [33]	MPX-P n= 39	DS-P n = 58	<b>MPX-P &gt; DS-P**</b>
Overly conscientious	USA	Losh et al (2008) [34]	MPX n=48 (25Mo/23Fa) SPX n=78	DS-P n=60	<b>MPX-P &gt; DS-P*</b> <b>SPX-P &gt; DS-P*</b>
	USA	Losh et al (2012) [35]	ASD-Mo n = 89 (All Mo)	FXS-Mo n = 49 (All Mo) TD-Mo n = 23 (All Mo)	<b>n.s.</b>
	USA	Piven et al (1997b) [33]	MPX-P n= 39	DS-P n = 58	<b>n.s.</b>
Rigid	USA	Losh et al (2008) [34]	MPX-P n=48 (25Mo/23Fa) SPX-P n=78	DS-P n=60	<b>MPX-P &gt; DS-P***</b> <b>SPX-P &gt; DS-P*</b> <b>MPX-P &gt; SPX-P**</b>
	USA	Losh et al (2012) [35]	ASD-Mo n = 89 (All Mo)	FXS-Mo n = 49 (All Mo) TD-Mo n = 23 (All Mo)	<b>ASD-P, FXS-P &gt; TD-P*</b>

		USA	Piven et al (1997b) [6]	MPX-P n= 39	DS-P n = 58	<b>MPX-P &gt; DS-P**</b>	
<b>Pragmatic Rating Scale (PRS)</b>  <i>Interview &amp; Direct Behavioral Observation</i>	Untactful	USA	Losh et al (2008) [34]	MPX-Pn=48 (25Mo/23Fa) SPX-P n=78	DS-P n=60	<b>MPX-P &gt; DS-P*</b> <b>MPX-P &gt; SPX-P*</b>	
		USA	(MPAS) Piven et al (1994) [32]	ASD-P n = 87 (45Mo/42Fa)	DS-P n = 38 (19Mo/19Fa)	<b>ASD-P &gt; DS-P*</b>	
		USA	Piven et al (1997b) [33]	MPX-P n= 39	DS-P n = 58	<b>n.s.</b>	
	Undemonstrative	USA	(MPAS) Piven et al (1994) [32]	ASD-P n = 87 (45Mo/42Fa)	DS-P n = 38 (19Mo/19Fa)	<b>ASD-P &gt; DS-P*</b>	
		USA	Piven et al (1997b) [33]	MPX-P n= 39	DS-P n = 58	<b>n.s.</b>	
	Unresponsive	USA	Piven et al (1997b) [33]	MPX-P n= 39	DS-P n = 58	<b>n.s.</b>	
	Pragmatic language violations	USA	Losh et al (2008) [34]	MPX-P n=48 (25Mo/23Fa) SPX-P n=78	DS-P n=60	<b>SPX-P &gt; DS-P**</b>	
		USA	Losh et al (2012) [35]	ASD-Mo n = 89 (All Mo)	FXS-Mo n = 49 (All Mo) TD-Mo n = 23 (All Mo)	<b>ASD-Mo/FXS-Mo &gt;TD-Mo*</b>	
		USA	Piven et al (1997b) [33]	MPX-P n= 38	DS-P n = 58	<b>MPX-P &gt; DS-P**</b>	<b>MPX-P vs. DS-P 0.80</b>
	Speech errors	USA	Losh et al (2008) [34]	MPX-P n=48 (25Mo/23Fa) SPX-P n=78	DS-P n=60	<b>SPX-P &gt; DS-P**</b>	
	Total score (blind ratings)	USA	Piven et al (1997b) [33]	MPX-P n= 38	DS-P n = 58	<b>MPX-P &gt; DS-P**</b>	<b>MPX-P vs. DS-P 0.93</b>
	Total score (blind &	USA	Landa et al (1992) [36]	ASD-P n = 21	TD/DS n = 19	<b>ASD-P &gt; TD/DS-P*</b>	<b>ASD-P vs. TD/DS-P 0.71</b>
		USA	Landa et al	ASD-P n = 43	TD/DS n = 21	<b>ASD-P &gt; TD/DS-P***</b>	<b>ASD-P vs. TD/DS-P 0.87</b>

	unblind ratings combined)		(1992) [36]		TD n = 11 DS n = 10		
<i>Interview &amp; Direct Behavioral Observation</i>	Pragmatic Rating Scale - Modified (PRS-M)	Emotional expressiveness and awareness of the other	USA	Ruser et al (2007) [37]	ASD-P n= 47 (49% Fa)	SLI-P n= 47 (45% Fa) DS-P n = 21 (48% Fa)	<b>ASD-P &gt; DS-P*</b>  <b>ASD-P vs. SLI-P 0.25</b> <b>ASD-P vs. DS-P 0.58</b>
		Communicative performance	USA	Ruser et al (2007) [37]	ASD-P n= 47 (49% Fa)	SLI-P n= 47 (45% Fa) DS-P n = 21 (48% Fa)	 <b>n.s.</b>  <b>ASD-P vs. SLI-P 0.06</b> <b>ASD-P vs. DS-P 0.40</b>
		Over-talkativeness	USA	Ruser et al (2007) [37]	ASD-P n= 47 (49% Fa)	SLI-P n= 47 (45% Fa) DS-P n = 21 (48% Fa)	 <b>ASD-P &gt; DS-P*</b>  <b>ASD-P vs. SLI-P 0</b> <b>ASD-P vs. DS-P 0.53</b>
		Language	USA	Ruser et al (2007) [37]	ASD-P n= 47 (49% Fa)	SLI-P n= 47 (45% Fa) DS-P n = 21 (48% Fa)	 <b>ASD-P &gt; DS-P**</b>  <b>ASD-P vs. SLI-P 0.14</b> <b>ASD-P vs. DS-P 0.92</b>
		Total score	USA	Ruser et al (2007) [37]	ASD-P n= 47 (49% Fa)	SLI-P n= 47 (45% Fa) DS-P n = 21 (48% Fa)	 <b>ASD-P &gt; DS-P**</b>  <b>ASD-P vs. SLI-P 0.09</b> <b>ASD-P vs. DS-P 1.14</b>
<i>Social Responsiveness Scale (SRS)</i>	<i>Self &amp; Informant Report Questionnaire</i>	Belgium / Netherlands	De la Marche et al (2012) [38]	ASD-P n = 275 (143Mo/132Fa) MPX-P n = 93 (48Mo/45Fa) SPX-P n = 129 (68Mo/61Fa)	UA n = 595 (295F/300M)	<b>ASD-Fa &gt; UA-M**</b>  <b>MPX-Fa &gt; UA-M*</b>	 <b>ASD-Fa vs. UA-M 0.30</b> <b>ASD-Mo vs. UA-F 0.28</b> <b>MPX-Fa vs. UA-M 0.44</b> <b>SPX-Fa vs. UA-M 0.19</b> <b>MPX-Fa vs. SPX-Fa 0.23</b>
		USA	Schwichtenberg et al (2010) [39]	MPX-P n = 21 (10Mo/11Fa) SPX-P n = 239 (115Mo/124Fa)	TD-P n = 163 (81Mo/82Fa)	<b>MPX-Fa &gt; TD-Fa*</b>  <b>SPX-Fa &gt; TD-Fa*</b>	 <b>MPX-Fa vs. TD-Fa 0.90</b> <b>SPX-Fa vs. TD-Fa 0.35</b> <b>MPX-Fa vs. SPX-Fa 0.38</b> <b>MPX-Mo vs. TD-Mo 0.27</b> <b>SPX-Mo vs. TD-Mo 0.02</b> <b>MPX-Mo vs. SPX-Mo 0.18</b>

Friendship Interview								
Other measures of Personality and Friendships	The Friendship Interview	Quality of friendships (higher scores indicate fewer friendships)	USA	Losh et al (2008) [34]	MPX-P n=48 (25Mo/23Fa) SPX-P n=78	DS-P n=60	<b>SPX-P &gt; DS-P**</b> <b>MPX-P &gt; SPX-P*</b>	<b>MPX-P vs. DS-P 1.14</b>
				Piven et al (1997b) [33]	MPX-P n= 38	DS-P n = 58	<b>MPX-P &gt; DS-P***</b>	
Reciprocal Social Interaction	The NEO Personality Inventory (NEO-PI)	Neuroticism	USA	Losh et al (2008) [34]	MPX-P n=48 (25Mo/23Fa) SPX-P n=78	DS-P n=60	<b>SPX-P &gt; DS-P***</b> <b>MPX-P &gt; SPX-P*</b>	<b>MPX-P vs. DS-P 0.79</b>
				Piven et al (1997b) [33]	MPX-P n= 38	DS-P n = 58	<b>MPX-P &gt; DS-P***</b>	
Alexithymia	Toronto Alexithymia Scale (TAS-20)	Difficulty Identifying Feelings (DIF)	Canada	Szatmari et al (2008) [9]	ASD-P n = 439 (237Mo/202Fa)	PW-P n = 45 (28Mo/17Fa)	n.s.	<b>ASD-P vs. UA 0.25</b>
				Berthoz et al (2013) [40]	ASD-P n = 87 (28%Fa)	UA n = 47 (62%M)	n.s.	
		Difficulty Describing Feelings (DDF)	Canada	Szatmari et al (2008) [9]	ASD-P n = 439 (237Mo/202Fa)	PW-P n = 45 (28Mo/17Fa)	n.s.	
				Berthoz et al (2013) [40]	ASD-P n = 87 (28%Fa)	UA n = 47 (62%M)	n.s.	
		Externally-Oriented Thinking (EOT)	Canada	Szatmari et al (2008) [9]	ASD-P n = 439 (237Mo/202Fa)	PW-P n = 45 (28Mo/17Fa)	n.s.	<b>ASD-P vs. UA 0.14</b>
				Berthoz et al (2013) [40]	ASD-P n = 87 (28%Fa)	UA n = 47 (62%M)	n.s.	
		Total score	Canada	Szatmari et al (2008) [9]	ASD-P n = 439 (237Mo/202Fa)	PW-P n = 45 (28Mo/17Fa)	<b>ASD-P &gt; PW-P*</b>	<b>ASD-P vs. UA 0.16</b>
			UK	Berthoz et al	ASD-P n = 87	UA n = 47	n.s.	<b>ASD-P vs. UA 0.23</b>

				(2013) [40]	(28%Fa)	(62%M)		
<b>Bermond-Vorst Alexithymia Questionnaire-B (BVAQ-B)</b>	Total score	UK	Berthoz et al (2013) [40]	ASD-P n = 87 (28%Fa)	UA n = 47 (62%M)	n.s.	ASD-P vs. UA 0.15	
	Cognitive score	UK	Berthoz et al (2013) [40]	ASD-P n = 87 (28%Fa)	UA n = 47 (62%M)	n.s.	ASD-P vs. UA 0.19	
	Affective score	UK	Berthoz et al (2013) [40]	ASD-P n = 87 (28%Fa)	UA n = 47 (62%M)	n.s.	ASD-P vs. UA 0.02	
<b>Anhedonia</b>	Revised Social Anhedonia Scale (SAS)	Total score	UK	Berthoz et al (2013) [40]	ASD-P n = 87 (28%Fa)	UA n = 47 (62%M)	ASD-P vs. UA 0.25	
	Physical Anhedonia Scale (PAS)	Total score	UK	Berthoz et al (2013) [40]	ASD-P n = 87 (28%Fa)	UA n = 47 (62%M)	ASD-P > UA**	ASD-P vs. UA 0.33
<b>Social and Narrative Language</b>	Grice's Conversational Maxims Task	No. of errors	Italy	Di Michele et al (2007) [8]	ASD n = 46	DS n=14 TD n=12	ASD-P > TD-P*** ASD-P > DS-P*	
	Spontaneous Narrative Discourse	Story length (mean o. of clauses)	USA	Landa et al (1991) [41]	ASD-P n = 41	TD/DS-P n = 23 total TD-P n = 10 DS-P n = 13	n.s.	ASD-P vs. TD/DS-P 0.35
		Stories w/ complete episodes	USA	Landa et al (1991) [41]	ASD-P n = 41	TD/DS-P n = 23 total TD-P n = 10 DS-P n = 13	ASD-P < TD/DS-P**	ASD-P vs. TD/DS-P 0.71
		Stories w/ multiple episodes	USA	Landa et al (1991) [41]	ASD-P n = 41	TD/DS-P n = 23 total TD-P n = 10 DS-P n = 13	ASD-P < TD/DS-P**	
		Stories w/ incomplete episodes	USA	Landa et al (1991) [41]	ASD-P n = 41	TD/DS-P n = 23 total TD-P n = 10	ASD-P > TD/DS-P*	ASD-P vs. TD/DS-P 0.50

		Mean overall quality	USA	Landa et al (1991) [41]	ASD-P n = 41	DS-P n = 13		
<b>Repetitive, restrictive behaviors and interests  <i>(Everyday Preferences and abilities)</i></b>	<b>Real-life Skills and Preferences</b>	Social items	UK	Briskman et al (2001) [42]	ASD-P n = 42 (21Mo/21Fa)	DLX-P n = 27 (14Mo/13Fa) TD-P n = 28 (14Mo/14Fa)	<b>ASD-P &gt; DLX-P &gt; TD-P*</b> <b>ASD-Fa &gt; DLX-Fa**</b> <b>ASD-Fa &gt; TD-Fa**</b> <b>ASD-Mo &gt; DLX-Mo**</b> <b>ASD-Mo &gt; TD-Mo**</b>	<b>ASD-P vs. DLX-P 0.92</b> <b>ASD-P vs. TD-P 0.91</b> <b>ASD-Fa vs. DLX-Fa 1.03</b> <b>ASD-Fa vs. TD-Fa 1.11</b> <b>ASD-Mo vs. DLX-Mo 0.89</b> <b>ASD-Mo vs. TD-Mo 0.77</b>
		Non-social items	UK	Briskman et al (2001) [42]	ASD-P n = 42 (21Mo/21Fa)	DLX-P n = 27 (14Mo/13Fa) TD-P n = 28 (14Mo/14Fa)	<b>ASD-P &gt; TD-P**</b> <b>ASD-Fa &gt; TD-Fa*</b>	<b>ASD-P vs. DLX-P 0.44</b> <b>ASD-P vs. TD-P 0.76</b> <b>ASD-Fa vs. DLX-Fa 0.37</b> <b>ASD-Fa vs. TD-Fa 0.9</b> <b>ASD-Mo vs. DLX-Mo 0.54</b> <b>ASD-Mo vs. TD-Mo 0.64</b>

Note: ASD, Autism Spectrum Disorder; BAP, Broad Autism Phenotype; BAP(+), BAP present; BAP (-), BAP absent; P, Parent; Mo, Mother; Fa, Father; M, Male; F, Female; MPX, Multiple incidence autism families; SPX, Single incidence autism families; DD, Developmental delay without autism; DLX, Dyslexia; DS, Down Syndrome; FXS, Fragile X Syndrome; N, Normative sample; PWD, Prader Willi; SLI, Specific Language Impairment; TD, typically developing; UA, Unaffected adult

\*p<0.05; \*\*p<0.01; \*\*\*p<0.001

**Supplementary Table 2. Cognitive Endophenotype Matrix – Review of studies of parents of autistic probands.**

Domain	Method / Measure	Factors / Subscales	Country	Study	ASD Parent Group Characteristics	Control Group Characteristics	Key Findings in relation to Proband Diagnosis	
							P value	Effect Size ( <i>d</i> )
<b>General Intellectual Functioning</b>	<i>Weschler Scales</i>	Total Score or Estimate	Australia	Bishop et al (2004a) [20]	ASD-P n = 121 (69Mo/52Fa)	N-P n = 89 (52Mo/37Fa)	n.s.	ASD-Mo vs. N-Mo 0.20 ASD-Fa vs. N-Fa 0.21
		Verbal IQ (VIQ)	Australia	Bishop et al (2004b) [53]	ASD-P = 142 (77Mo/65Fa)	N-P n = 96 (57Mo/39Fa)	n.s.	ASD-Mo vs. N-Mo 0.19 ASD-Fa vs. N-Fa 0.07
			Netherlands	de Jonge et al (2006) [65]	MPX-P n = 51 (26Mo/25Fa)	DS-P n = 54 (28Fa/26Mo)	n.s.	MPX-P vs. DS-P 0.11
			Netherlands	de Jonge et al (2007) [67]	MPX-P n = 51 (26Mo/25Fa)	DS-P n = 52 (25Fa/27Mo)	n.s.	MPX-P vs. DS-P 0.17
			Netherlands	de Jonge et al (2009) [66]	MPX-P n = 51 (26Mo/25Fa)	DS-P n = 57 (28Mo/29Fa)	n.s.	MPX-P vs. DS-P 0.09
			USA	Folstein et al (1999) [30]	ASD-P n = 166	DS-P n = 75	n.s.	ASD-P vs. DS-P 0.19
			UK	Fombonne et al (1997) [44]	ASD-P n = 160 (86Mo/74Fa)	DS-P n = 42 (23Mo/19Fa)	ASD-P > DS-P**	ASD-P vs. DS-P 0.51
			UK	Happé et al (2001) [64]	ASD-P n = 43 (21Mo/22Fa)	DLX-P n = 30 (15Mo/15Fa) TD-P n = 20 (10Mo/10Fa)	n.s.	ASD-Mo vs. DLX-Mo 0.05 ASD-Mo vs. TD-Mo 0.17 ASD-Fa vs. DLX-Fa 0.26 ASD-Fa vs. TD-Fa 0.19
			USA	Lindgren et al (2009) [47]	ALN-P n = 39 (20Mo/19Fa) ALI-P n = 62 (31Mo/31Fa)	SLI-P n = 70 (35Mo/35Fa)	n.s.	ALN-Fa vs. ALI-Fa 0.95 ALN-Fa vs. SLI-Fa 2.10 ALI-Fa vs. SLI-Fa 0.95 ALN-Mo vs. ALI-Mo 0.80 ALN-Mo vs. SLI-Mo 2.10 ALI-Mo vs. SLI-Mo 1.28
			USA	Piven & Palmer (1997) [46]	MPX-P n= 48 (25Mo/23Fa)	DS-P n = 60 (30Mo/30Fa)	n.s.	MPX-P vs. DS-P 0.16
			USA	Ruser et al (2007) [37]	ASD-P n= 47 (49% Fa)	SLI-P n= 47 (45% Fa) DS-P n = 21	n.s.	ASD-P vs. SLI-P 0.09 ASD-P vs. DS-P 0.26

				(48% Fa)		
	USA	Schmidt et al (2008) [10]	ASD-P n = 22 (14Mo/8Fa)	UA n = 22 (14F/8M)	n.s.	<b>ASD-P vs. UA 0.07</b>
	Australia	Wong et al (2006) [62]	ASD-P n = 145 (80Mo/65Fa)	TD-P n = 96 (57Mo/39Fa)	n.s.	
Digit Span	UK	Fombonne et al (1997) [44]	ASD-P n = 160 (86Mo/74Fa)	DS-P n = 42 (23Mo/19Fa)	<b>ASD-P &gt; DS-P**</b>	<b>ASD-P vs. DS-P 0.48</b>
	UK	Whitehouse et al (2007) [23] (modified version to assess short-term memory)	ASD-P n = 30 (20Mo/10Fa)	SLI-P n= 30 (22Mo/8Fa) TD-P n = 30 (23Mo/7Fa)	<b>ASD-P &gt; SLI-P**</b>	<b>ASD-P vs. SLI-P 0.67</b> <b>ASD-P vs. TD-P 0.14</b>
	Canada	Szatmari et al (1993) [76]	ASD-P n = 97 (51Mo/46Fa)	DS/LBW-P n = 54 (30Mo/24Fa)	n.s.	<b>ASD-Fa vs. DS/LBW-P 0.40</b> <b>ASD-MO vs. DS/LBW-P 0.04</b>
Arithmetic	UK	Fombonne et al (1997) [44]	ASD-P n = 160 (86Mo/74Fa)	DS-P n = 42 (23Mo/19Fa)	n.s.	<b>ASD-P vs. DS-P 0.25</b>
Vocabulary	UK	Fombonne et al (1997) [44]	ASD-P n = 160 (86Mo/74Fa)	DS-P n = 42 (23Mo/19Fa)	<b>ASD-P &gt; DS-P***</b>	<b>ASD-P vs. DS-P 0.58</b>
	USA	Schmidt et al (2008) [10]	ASD-P n = 22 (14Mo/8Fa)	UA n = 22 (14F/8M)	n.s.	<b>ASD-P vs. UA 0.24</b>
	USA	Smalley & Asarnow (1990) [45]	ASD-P n = 15	TD-P n = 12	<b>ASD-P &lt; TD-P*</b>	<b>ASD-P vs. TD-P 0.96</b>
	Canada	Szatmari et al (1993) [76]	ASD-P n = 97 (51Mo/46Fa)	DS/LBW-P n = 54 (30Mo/24Fa)	n.s.	<b>ASD-Fa vs. DS/LBW-P 0.40</b> <b>ASD-MO vs. DS/LBW-P 0.04</b>
Comprehension	UK	Fombonne et al (1997) [44]	ASD-P n = 160 (86Mo/74Fa)	DS-P n = 42 (23Mo/19Fa)	<b>ASD-P &gt; DS-P*</b>	<b>ASD-P vs. DS-P 0.35</b>
	USA	Smalley & Asarnow (1990) [45]	ASD-P n = 15	TD-P n = 12	n.s.	<b>ASD-P vs. TD-P 0.74</b>

	Canada	Szatmari et al (1993) [76]	ASD-P n = 97 (51Mo/46Fa)	DS/LBW-P n = 54 (30Mo/24Fa)	n.s.	<b>ASD-Fa vs. DS/LBW-P 0.36</b> <b>ASD-Mo vs. DS/LBW-P 0.31</b>	
	Iran	Tajmirriyahi et al (2013) [58]	ASD-P n = 48 (38Mo/10Fa)	DS-P n = 31 (25Mo/6Fa) TD-P n = 30 (23Mo/7Fa)	n.s.	<b>ASD-P vs. DS-P 0.42</b> <b>ASD-P vs. TD-P 0.39</b>	
Similarities	UK	Fombonne et al (1997) [44]	ASD-P n = 160 (86Mo/74Fa)	DS-P n = 42 (23Mo/19Fa)	<b>ASD-P &gt; DS-P*</b>	<b>ASD-P vs. DS-P 0.35</b>	
	USA	Schmidt et al (2008) [10]	ASD-P n = 22 (14Mo/8Fa)	UA n = 22 (14F/8M)	n.s.	<b>ASD-P vs. UA 0.13</b>	
Performance IQ (PIQ)	Total Score or Estimate	Australia	Bishop et al (2004a) [20]	ASD-P n = 121 (69Mo/52Fa)	N-P n = 89 (52Mo/37Fa)	n.s.	<b>ASD-Mo vs. N-Mo 0.10</b> <b>ASD-Fa vs. N-Fa 0.17</b>
		Australia	Bishop et al (2004b) [53]	ASD-P = 142 (77Mo/65Fa)	N-P n = 96 (57Mo/39Fa)	n.s.	<b>ASD-Mo vs. N-Mo 0.03</b> <b>ASD-Fa vs. N-Fa 0.38</b>
		Netherlands	de Jonge et al (2006) [65]	MPX-P n=51 (26Mo/25Fa)	DS-P n = 54 (28Fa/26Mo)	n.s.	<b>MPX-P vs. DS-P 0.03</b>
		Netherlands	de Jonge et al (2007) [67]	MPX-P n = 51 (26Mo/25Fa)	DS-P n = 52 (25Fa/27Mo)	n.s.	<b>MPX-P vs. DS-P 0.11</b>
		Netherlands	de Jonge et al (2009) [66]	MPX-P n = 51 (26Mo/25Fa)	DS-P n = 57 (28Mo/29Fa)	n.s.	<b>MPX-P vs. DS-P 0.05</b>
		USA	Folstein et al (1999) [30]	ASD-P n = 166	DS-P n = 75	<b>ASD-P &lt; DS-P**</b> <b>ASD-Fa &lt; DS-Fa*</b>	<b>ASD-P vs. DS-P 0.35</b>
		UK	Fombonne et al (1997) [44]	ASD-P n = 160 (86Mo/74Fa)	DS-P n = 42 (23Mo/19Fa)	n.s.	<b>ASD-P vs. DS-P 0.13</b>
		UK	Happé et al (2001) [64]	ASD-P n = 43 (21Mo/22Fa)	DLX-P n = 30 (15Mo/15Fa) TD-P n = 20 (10Mo/10Fa)	n.s.	<b>ASD-Mo vs. DLX-Mo 0.09</b> <b>ASD-Mo vs. TD-Mo 0.26</b> <b>ASD-Fa vs. DLX-Fa 0.14</b> <b>ASD-Fa vs. TD-Fa 0</b>

	USA	Lindgren et al (2009) [47]	ALN-P n = 39 (20Mo/19Fa)  ALI-P n = 62 (31Mo/31Fa)	SLI-P n = 70 (35Mo/35Fa)	<b>ALN-Fa &gt; ALI-Fa &gt; SLI-Fa**</b>	<b>ALN-Fa vs. ALI-Fa 0.44</b> <b>ALN-Fa vs. SLI-Fa 1.16</b> <b>ALI-Fa vs. SLI-Fa 0.72</b> <b>ALN-Mo vs. ALI-Mo 0.37</b> <b>ALN-Mo vs. SLI-Mo 0.77</b> <b>ALI-Mo vs. SLI-Mo 0.40</b>
	USA	Piven & Palmer (1997) [46]	MPX-P n= 48 (25Mo/23Fa)	DS-P n = 60 (30Mo/30Fa)	<b>MPX-P &lt; DS-P*</b>	<b>MPX-P vs. DS-P 0.74</b>
	USA	Ruser et al (2007) [37]	ASD-P n= 47 (49% Fa)	SLI-P n= 47 (45% Fa)  DS-P n = 21 (48% Fa)	<b>n.s.</b>	<b>ASD-P vs. SLI-P 0.14</b> <b>ASD-P vs. DS-P 0.48</b>
	USA	Schmidt et al (2008) [10]	ASD-P n = 22 (14Mo/8Fa)	UA n = 22 (14F/8M)	<b>ASD-P&lt; UA*</b>	<b>ASD-P vs. UA 0.62</b>
	Australia	Wong et al (2006) [62]	ASD n = 145 (80Mo/65Fa)	TD-P n = 96 (57Mo/39Fa)	<b>n.s.</b>	
Picture Completion	USA	Folstein et al (1999) [30]	ASD-P n = 166	DS-P n = 75	<b>ASD-P &lt; DS-P**</b>	<b>ASD-P vs. DS-P 0.42</b>
	UK	Fombonne et al (1997) [44]	ASD-P n = 160 (86Mo/74Fa)	DS-P n = 42 (23Mo/19Fa)	<b>n.s.</b>	<b>ASD-P vs. DS-P 0.07</b>
	USA	Piven & Palmer (1997) [46]	MPX-P n= 48 (25Mo/23Fa)	DS-P n = 60 (30Mo/30Fa)	<b>MPX-P &lt; DS-P*</b>	<b>MPX-P vs. DS-P 0.65</b>
	Iran	Tajmirriyahi et al (2013) [58]	ASD-P n = 48 (38Mo/10Fa)	DS-P n = 31 (25Mo/6Fa)  TD-P n = 30 (23Mo/7Fa)	<b>n.s.</b>	<b>ASD-P vs. DS-P 0.12</b> <b>ASD-P vs. TD-P 0.46</b>
Picture Arrangement	USA	Folstein et al (1999) [30]	ASD-P n = 166	DS-P n = 75	<b>ASD-P &lt; DS-P*</b>	<b>ASD-P vs. DS-P 0.26</b>
	UK	Fombonne et al (1997) [44]	ASD-P n = 160 (86Mo/74Fa)	DS-P n = 42 (23Mo/19Fa)	<b>n.s.</b>	<b>ASD-P vs. DS-P 0.03</b>

	Block Design	UK	Fombonne et al (1997) [44]	ASD-P n = 160 (86Mo/74Fa)	DS-P n = 42 (23Mo/19Fa)	n.s.	<b>ASD-P vs. DS-P 0.21</b>
		USA	Piven & Palmer (1997) [46]	MPX-P n= 48 (25Mo/23Fa)	DS-P n = 60 (30Mo/30Fa)	n.s.	<b>MPX-P vs. DS-P 0.34</b>
		USA	Schmidt et al (2008) [10]	ASD-P n = 22 (14Mo/8Fa)	UA n = 22 (14F/8M)	n.s.	<b>ASD-P vs. UA 0.43</b>
		USA	Smalley & Asarnow (1990) [45]	ASD-P n = 15	TD-P n = 12	n.s.	<b>ASD-P vs. TD-P 0.36</b>
		Canada	Szatmari et al (1993) [76]	ASD-P n = 97 (51Mo/46Fa)	DS/LBW-P n = 54 (30Mo/24Fa)	n.s.	<b>ASD-Fa vs. DS/LBW-P 0.38</b> <b>ASD-M0 vs. DS/LBW-P 0.04</b>
	Object Assembly	UK	Fombonne et al (1997) [44]	ASD-P n = 160 (86Mo/74Fa)	DS-P n = 42 (23Mo/19Fa)	n.s.	<b>ASD-P vs. DS-P 0.12</b>
		USA	Piven & Palmer (1997) [46]	MPX-P n= 48 (25Mo/23Fa)	DS-P n = 60 (30Mo/30Fa)	<b>MPX-P &lt; DS-P*</b>	<b>MPX-P vs. DS-P 0.62</b>
	Matrix Reasoning	USA	Schmidt et al (2008) [10]	ASD-P n = 22 (14Mo/8Fa)	UA n = 22 (14F/8M)	<b>ASD-P &lt; UA*</b>	<b>ASD-P vs. UA 0.67</b>
	Digit Symbol	Canada	Szatmari et al (1993) [76]	ASD-P n = 97 (51Mo/46Fa)	DS/LBW-P n = 54 (30Mo/24Fa)	n.s.	<b>ASD-Fa vs. DS/LBW-P 0.19</b> <b>ASD-M0 vs. DS/LBW-P 0.17</b>
Full Scale IQ (FSIQ)	Total Score or Estimate	USA	Adolphs et al (2008) [59]	AD-P n = 42 total BAP(+) Aloof n = 15 (3Mo/12Fa) BAP(-) n = 27 (20Mo/7Fa)	TD-P n = 20 (8Mo/12Fa)	n.s.	<b>BAP (+) Aloof vs. TD-P 0.47</b> <b>BAP(-) vs. TD-P 0.37</b>
		Netherlands	de Jonge et al (2006) [65]	MPX-P n=51 (26Mo/25Fa)	DS-P n = 54 (28Fa/26Mo)	n.s.	<b>MPX-P vs. DS-P 0.09</b>
		Netherlands	de Jonge et al (2007) [67]	MPX-P n = 51 (26Mo/25Fa)	DS-P n = 52 (25Fa/27Mo)	n.s.	<b>MPX-P vs. DS-P 0.10</b>
		Netherlands	de Jonge et al (2009) [66]	MPX-P n = 51 (26Mo/25Fa)	DS-P n = 57 (28Mo/29Fa)	n.s.	<b>MPX-P vs. DS-P 0.06</b>

USA	Folstein et al (1999) [30]	ASD-P n = 166	DS-P n = 75	<b>ASD-P &lt; DS-P**</b> <b>ASD-Fa &lt; DS-Fa*</b>	<b>ASD-P vs. DS-P 0.30</b>
UK	Fombonne et al (1997) [44]	ASD-P n = 160 (86Mo/74Fa)	DS-P n = 42 (23Mo/19Fa)	<b>n.s.</b>	<b>ASD-P vs. DS-P 0.25</b>
Turkey	Gocken et al (2009) [57]	ASD-P n = 76 (38Mo/38Fa)	N-P n = 41 (21Mo/20Fa)	<b>n.s.</b>	<b>ASD-P vs. N-P 0.09</b>
UK	Happé et al (2001) [64]	ASD-P n = 43 (21Mo/22)	DLX-P n = 30 (15Mo/15Fa) TD-P n = 20 (10Mo/10Fa)	<b>n.s.</b>	<b>ASD-Mo vs. DLX-Mo 0.05</b> <b>ASD-Mo vs. TD-Mo 0.21</b> <b>ASD-Fa vs. DLX-Fa 0.28</b> <b>ASD-Fa vs. TD-Fa 0.11</b>
USA	Lindgren et al (2009) [47]	ALN-P n = 39 (20Mo/19Fa) ALI-P n = 62 (31Mo/31Fa)	SLI-P n = 70 (35Mo/35Fa)	<b>n.s.</b>	<b>ALN-Fa vs. ALI-Fa 0.81</b> <b>ALN-Fa vs. SLI-Fa 1.88</b> <b>ALI-Fa vs. SLI-Fa 0.97</b> <b>ALN-Mo vs. ALI-Mo 0.66</b> <b>ALN-Mo vs. SLI-Mo 1.61</b> <b>ALI-Mo vs. SLI-Mo 0.94</b>
USA	Losh & Piven (2007) [48]	ASD-P n = 48 (25Mo/23Fa) BAP(+) <i>Aloof</i> n = 13 BAP(+) <i>Rigid</i> n = 11 BAP(-) n = 24	TD/DS-P n = 22 TD-P n = 16 DS-P n = 6	<b>ASD-P &lt; TD/DS-P**</b>	<b>ASD-P vs. TD/DS-P 0.83</b>
USA	Losh et al (2008) [34]	MPX n=48 (25Mo/23Fa) SPX n=78	DS-P n=60	<b>MPX-P &lt; DS-P*</b> <b>SPX-P &lt; DS-P*</b>	
USA	Losh et al (2009) [56]	ASD-P n = 83 BAP(+) <i>Social</i> n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) <i>Social &amp; Rigid</i> n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	<b>n.s.</b>	<b>ASD-P vs.TD-P 0.33</b>
USA	Piven et al (1991) [68]	ASD-P n = 81 (42Mo/39Fa)	DS-P n = 34 (18Mo/16Fa)	<b>n.s.</b>	<b>ASD-P vs. DS-P 0.21</b>
USA	Schmidt et al	ASD-P n = 22	UA n = 22	<b>n.s.</b>	<b>ASD-P vs. UA 0.41</b>

				(2008) [10]	(14Mo/8Fa)	(14F/8M)	
Nonverbal Reasoning	Block Design & Matrix Reasoning	UK	Whitehouse et al (2007) [23]	ASD-P n = 30 (20Mo/10Fa)	SLI-P n= 30 (22Mo/8Fa) TD-P n = 30 (23Mo/7Fa)	n.s.	ASD-Fa vs. SLI-Fa 0.30 ASD-Mo vs. SLI-Mo 0.43 ASD-Fa vs. TD-Fa 0.01 ASD-Mo vs. TD-Mo 0.53
<b>Raven's Progressive Matrices</b>	Total Score	Germany / Austria / Switzerland	Bölte & Poustka (2003) [49]	ASD SPX-P n = 54 (26Mo/ 28Fa) ASD MPX-P n = 28 (16Mo/12Fa)	Sch SPX-P n = 31 (18Mo/ 13Fa) Sch MPX-P n = 4 (2Mo/2Fa) UA n = 22 (11F/11M)	n.s.	ASD MPX-P vs. Sch MPX-P 0.29 ASD MPX vs. Sch SPX-P 0.07 ASD MPX-P vs. UA 0.08 ASD SPX-P vs. Sch MPX-P 0.28 ASD SPX-P vs. Sch SPX-P 0.05 ASD SPX-P vs. UA 0.07
Nonverbal IQ (NVIQ)		Germany	Bölte & Poustka (2006) [50]	ASD n=62 (33Mo/29Fa)	EOS-P n = 36 (20Mo/16Fa) MR-P n = 30 (16Mo/14Fa)	n.s.	ASD-P vs. EOS-P 0.54 ASD-P vs. MR-P 0.45
		Germany	Bölte et al (2007) [51]	ASD SPX-P n = 87 (48Mo/39Fa) ASD MPX-P n = 38 (21Mo/17Fa)	OCD-P n = 37 (19Mo/18Fa) EOS-P n = 34 (20Mo/14Fa) MR-P n = 27 (15Mo/12Fa)	n.s.	MPX-P vs. OCD-P 0.13 MPX-P vs. EOS-P 0.52 MPX-P vs. MR-P 0.56 SPX-P vs. OCD-p 0.06 SPX-P vs. EOS-P 0.48 SPX-P vs. MR-P 0.57
		UK	Sucksmith et al (2013) [51]	ASD-P n = 310 (272Mo/38Fa)	UA n = 187 (93M/94F)	n.s.	ASD-P vs. UA 0.17
<b>Structural Language Abilities</b>	Peabody Picture Vocabulary Test (PPVT-III)	Receptive language	USA	Lindgren et al (2009) [47]	ALN-P n = 39 (20Mo/19Fa) ALI-P n = 62 (31Mo/31Fa)	SLI-P n = 70 (35Mo/35Fa)	ALN-Mo > ALI-Mo > SLI-Mo***
<b>Receptive Language</b>			USA	Schmidt et al (2008) [10]	ASD-P n = 22 (14Mo/8Fa)	UA n = 22 (14F/8M)	n.s.
	Test for Reception of Grammar-2	Receptive Grammar	UK	Whitehouse et al (2007) [23]	ASD-P n = 30 (20Mo/10Fa)	SLI-P n= 30 (22Mo/8Fa) TD-P n = 30	n.s.

		(TROG-2)		(23Mo/7Fa)				
<b>Expressive Language</b>	Expressive Vocabulary Test (EVT)	Expressive language	USA	Schmidt et al (2008) [10]	ASD-P n = 22 (14Mo/8Fa)	UA n = 22 (14F/8M)	n.s.	ASD-P vs. UA 0.10
	Verbal Fluency Subtest - Delis Kaplan Executive Function System (DK-EFS)	Letter fluency	USA	Schmidt et al (2008) [10]	ASD-P n = 22 (14Mo/8Fa)	UA n = 22 (14F/8M)	n.s.	ASD-P vs. UA 0.39
		Category fluency	USA	Schmidt et al (2008) [10]	ASD-P n = 22 (14Mo/8Fa)	UA n = 22 (14F/8M)	n.s.	ASD-P vs. UA 0.35
		Category switching	USA	Schmidt et al (2008) [10]	ASD-P n = 22 (14Mo/8Fa)	UA n = 22 (14F/8M)	n.s.	ASD-P vs. UA 0.16
		Switching Accuracy	USA	Schmidt et al (2008) [10]	ASD-P n = 22 (14Mo/8Fa)	UA n = 22 (14F/8M)	n.s.	ASD-P vs. UA 0.22
<b>Figurative Language</b>	Figurative Language Subtest - Test of Language Competence-Expanded Edition (TOLC-E)	Figurative Language	USA	Schmidt et al (2008) [10]	ASD-P n = 22 (14Mo/8Fa)	UA n = 22 (14F/8M)	n.s.	ASD-P vs. UA 0.28
<b>Phonological awareness</b>	Comprehensive Test of Phonological Processing (CTOPP)	Phonological Awareness	USA	Lindgren et al (2009) [47]	ALN-P n = 39 (20Mo/19Fa) ALI-P n = 62 (31Mo/31Fa)	SLI-P n = 70 (35Mo/35Fa)	ALN-Mo > ALI-Mo > SLI-Mo***	ALN-Fa vs. ALI-Fa 0.42 ALN-Fa vs. SLI-Fa 0.86 ALI-Fa vs. SLI-Fa 0.38 ALN-Mo vs. ALI-Mo 0.38 ALN-Mo vs. SLI-Mo 0.78 ALI-Mo vs. SLI-Mo 0.48
		Phonological memory	USA	Lindgren et al (2009) [47]	ALN-P n = 39 (20Mo/19Fa) ALI-P n = 62 (31Mo/31Fa)	SLI-P n = 70 (35Mo/35Fa)	n.s.	ALN-Fa vs. ALI-Fa 0.08 ALN-Fa vs. SLI-Fa 0.96 ALI-Fa vs. SLI-Fa 0.86 ALN-Mo vs. ALI-Mo 0.74 ALN-Mo vs. SLI-Mo 1.42

ALI-Mo vs. SLI-Mo 0.70							
Rapid naming	USA	Lindgren et al (2009) [47]	ALN-P n = 39 (20Mo/19Fa) ALI-P n = 62 (31Mo/31Fa)	SLI-P n = 70 (35Mo/35Fa)	n.s.	ALN-Fa vs. ALI-Fa 0.02 ALN-Fa vs. SLI-Fa 0.34 ALI-Fa vs. SLI-Fa 0.36 ALN-Mo vs. ALI-Mo 0.09 ALN-Mo vs. SLI-Mo 0.47 ALI-Mo vs. SLI-Mo 0.41	
Non-word repetition	USA	Lindgren et al (2009) [47]	ALN-P n = 39 (20Mo/19Fa) ALI-P n = 62 (31Mo/31Fa)	SLI-P n = 70 (35Mo/35Fa)	ALN-Mo > ALI-Mo > SLI-Mo***	ALN-Fa vs. ALI-Fa 0.28 ALN-Fa vs. SLI-Fa 1.04 ALI-Fa vs. SLI-Fa 0.59 ALN-Mo vs. ALI-Mo 0.51 ALN-Mo vs. SLI-Mo 1.28 ALI-Mo vs. SLI-Mo 0.83	
	USA	Schmidt et al (2008) [10]	ASD-P n = 22 (14Mo/8Fa)	UA n = 22 (14F/8M)	ASD-P < UA**	ASD-P vs. UA 0.87	
Nonword Memory Test	Raw score	Australia	Bishop et al (2004b) [53]	ASD-P = 142 (77Mo/65Fa)	N-P n = 96 (57Mo/39Fa)	n.s.	ASD-Fa vs. N-Fa 0.04 ASD-Mo vs. N-Mo 0.02
Nonsense Passage Reading Test	Total score	Australia	Bishop et al (2004b) [53]	ASD-P = 145 (80Mo/65Fa)	N-P n = 96 (57Mo/39Fa)	n.s.	ASD-Fa vs. N-Fa 0.04 ASD-Mo vs. N-Mo 0.42
Nepsy Test Battery - Repetition of Nonsense Words Subtest	Raw score	UK	Whitehouse et al (2007) [23]	ASD-P n = 30 (20Mo/10Fa) TD-P n = 30 (23Mo/7Fa)	SLI-P n= 30 (22Mo/8Fa) TD-P n = 30 (23Mo/7Fa)	ASD-P > SLI-P**	ASD-P vs. SLI-P 0.88 ASD-P vs. TD-P 0.04
Battery of verbal tasks (emphasis on orthographic and phonological abilities)	Composite Verbal Score	France	Plumet et al (1995) [54]	ASD-P n = 47 (25Mo/22Fa)	DS-P n = 44 (23Mo/21Fa)	n.s.	ASD-P vs. DS-P 0.22

<b>Reading Skills</b>	Rapid Automated Naming (RAN)							
	<i>Number</i>	Time to complete	USA	Piven & Palmer (1997) [46]	MPX-P n= 48 (25Mo/23Fa)	DS-P n = 60 (30Mo/30Fa)	n.s.	<b>MPX-P vs. DS-P 0.19</b>
	<i>Letter</i>	Time to complete	USA	Piven & Palmer (1997) [46]	MPX-P n= 48 (25Mo/23Fa)	DS-P n = 60 (30Mo/30Fa)	n.s.	<b>MPX-P vs. DS-P 0.17</b>
	<i>Colour</i>	Time to complete	USA	Piven & Palmer (1997) [46]	MPX-P n= 48 (25Mo/23Fa)	DS-P n = 60 (30Mo/30Fa)	<b>MPX-P &gt; DS-P*</b>	<b>MPX-P vs. DS-P 0.72</b>
	<i>Object</i>	Time to complete	USA	Piven & Palmer (1997) [46]	MPX-P n= 48 (25Mo/23Fa)	DS-P n = 60 (30Mo/30Fa)	<b>MPX-P &gt; DS-P*</b>	<b>MPX-P vs. DS-P 0.58</b>
	<i>Color/Object combined</i>	Time to complete	USA	Losh et al (2010) [55]	ASD-P n = 301	TD-P/DS-P n = 87	<b>ASD-P &gt; TD-P/DS-P**</b>	
Woodcock-Johnson Psycho-Educational Battery - Revised (WJ-R)	Broad reading composite	USA	Lindgren et al (2009) [47]	ALN-P n = 39 (20Mo/19Fa) ALI-P n = 62 (31Mo/31Fa)	SLI-P n = 70 (35Mo/35Fa)	n.s.	<b>ALN-Fa vs. ALI-Fa 0.78</b> <b>ALN-Fa vs. SLI-Fa 2.11</b> <b>ALI-Fa vs. SLI-Fa 1.06</b> <b>ALN-Mo vs. ALI-Mo 0.48</b> <b>ALN-Mo vs. SLI-Mo 1.69</b> <b>ALI-Mo vs. SLI-Mo 1.26</b>	
	Reading skill composite	USA	Lindgren et al (2009) [47]	ALN-P n = 39 (20Mo/19Fa) ALI-P n = 62 (31Mo/31Fa)	SLI-P n = 70 (35Mo/35Fa)	n.s.	<b>ALN-Fa vs. ALI-Fa 0.69</b> <b>ALN-Fa vs. SLI-Fa 1.84</b> <b>ALI-Fa vs. SLI-Fa 1.00</b> <b>ALN-Mo vs. ALI-Mo 0.40</b> <b>ALN-Mo vs. SLI-Mo 1.67</b> <b>ALI-Mo vs. SLI-Mo 1.24</b>	
	Nonsense Word Reading – Reading age	USA	Folstein et al (1999) [30]	ASD-P n = 166	DS-P n = 75	<b>ASD-P &lt; DS-P*</b>	<b>ASD-P vs. DS-P 0.48</b>	
	Nonsense Word Reading – Reading grade	USA	Folstein et al (1999) [30]	ASD-P n = 166	DS-P n = 75	<b>ASD-P &lt; DS-P*</b>	<b>ASD-P vs. DS-P 0.40</b>	
	Dictation	USA	Lindgren et al (2009) [47]	ALN-P n = 39 (20Mo/19Fa) ALI-P n = 62 (31Mo/31Fa)	SLI-P n = 70 (35Mo/35Fa)	<b>ALN-Mo &gt; ALI-Mo &gt; SLI-Mo***</b>	<b>ALN-Fa vs. ALI-Fa 0.66</b> <b>ALN-Fa vs. SLI-Fa 1.65</b> <b>ALI-Fa vs. SLI-Fa 0.87</b> <b>ALN-Mo vs. ALI-Mo 0.36</b>	

							<b>ALN-Mo vs. SLI-Mo 1.26</b> <b>ALI-Mo vs. SLI-Mo 0.99</b>
		USA	Piven & Palmer (1997) [46]	MPX-P n= 48 (25Mo/23Fa)	DS-P n = 60 (30Mo/30Fa)	n.s.	<b>MPX-P vs. DS-P 0.17</b>
	Passage comprehension	USA	Lindgren et al (2009) [47]	ALN-P n = 39 (20Mo/19Fa) ALI-P n = 62 (31Mo/31Fa)	SLI-P n = 70 (35Mo/35Fa)	<b>ALN-Mo &gt; ALI-Mo &gt; SLI-Mo*</b>	<b>ALN-Fa vs. ALI-Fa 0.59</b> <b>ALN-Fa vs. SLI-Fa 1.54</b> <b>ALI-Fa vs. SLI-Fa 0.79</b> <b>ALN-Mo vs. ALI-Mo 0.50</b> <b>ALN-Mo vs. SLI-Mo 1.46</b> <b>ALI-Mo vs. SLI-Mo 1.01</b>
		USA	Piven & Palmer (1997) [46]	MPX-P n= 48 (25Mo/23Fa)	DS-P n = 60 (30Mo/30Fa)	<b>MPX-P &lt; DS-P*</b>	<b>MPX-P vs. DS-P 0.45</b>
	Word Attack	USA	Lindgren et al (2009) [47]	ALN-P n = 39 (20Mo/19Fa) ALI-P n = 62 (31Mo/31Fa)	SLI-P n = 70 (35Mo/35Fa)	n.s.	<b>ALN-Fa vs. ALI-Fa 0.48</b> <b>ALN-Fa vs. SLI-Fa 1.30</b> <b>ALI-Fa vs. SLI-Fa 0.75</b> <b>ALN-Mo vs. ALI-Mo 0.31</b> <b>ALN-Mo vs. SLI-Mo 1.35</b> <b>ALI-Mo vs. SLI-Mo 1.06</b>
		USA	Piven & Palmer (1997) [47]	MPX-P n= 48 (25Mo/23Fa)	DS –P n = 60 (30Mo/30Fa)	n.s.	<b>MPX-P vs. DS-P 0.09</b>
	Letter Word	USA	Piven & Palmer (1997) [46]	MPX-P n= 48 (25Mo/23Fa)	DS n = 60 (30Mo/30Fa)	n.s.	<b>MPX-P vs. DS-P 0.24</b>
Gray Oral Reading Test (GORT)	Comprehension	USA	Folstein et al (1999) [30]	ASD-P n = 166	DS-P n = 75	n.s.	<b>ASD-P vs. DS-P 0.12</b>
	Passage	USA	Folstein et al (1999) [30]	ASD-P n = 166	DS-P n = 75	n.s.	<b>ASD-P vs. DS-P 0.21</b>
	Reading age	UK	Fombonne et al (1997) [44]	ASD-P n = 160 (86Mo/74Fa)	DS-P n = 42 (23Mo/19Fa)	n.s.	<b>ASD-P vs. DS-P 0.36</b>
Edinburgh Reading Test (ERT)	Reading age	UK	Fombonne et al (1997) [44]	ASD-P n = 160 (86Mo/74Fa)	DS-P n = 42 (23Mo/19Fa)	n.s.	<b>ASD-P vs. DS-P 0</b>
National Adult	Error score	UK	Baron-Cohen &	AS-P n = 30	TD-P n = 30	n.s.	<b>ASD-P vs, N-P 0.20</b>

	Reading Test (NART)		Hammer (1997) [7]	(15Mo/15Fa)	(15Mo/15Fa)		
		UK	Fombonne et al (1997) [44]	ASD-P n = 160 (86Mo/74Fa)	DS-P n = 42 (23Mo/19Fa)	<b>ASD-P &lt; DS-P*</b>	<b>ASD-P vs. DS-P 0.44</b>
	Test of Word Reading Efficiency						
	Sight Word Efficiency Subtest (real words)	Standard score	UK	Whitehouse et al (2007) [23]	ASD-P n = 30 (20Mo/10Fa)	SLI-P n= 30 (22Mo/8Fa) TD-P n = 30 (23Mo/7Fa)	<b>n.s.</b>  <b>ASD-P vs. SLI-P 0.18</b> <b>ASD-P vs. TD-P 0.03</b>
	Phonemic Decoding Efficiency Subtest (nonsense words)	Standard score	UK	Whitehouse et al (2007) [23]	ASD-P n = 30 (20Mo/10Fa)	SLI-P n= 30 (22Mo/8Fa) TD-P n = 30 (23Mo/7Fa)	<b>ASD-P &gt; SLI-P*</b>  <b>ASD-P vs. SLI-P 0.62</b> <b>ASD-P vs. TD-P 0.24</b>
	Reading History Questionnaire (RHQ)	Reading difficulties	USA	Schmidt et al (2008) [10]	ASD-P n = 22 (14Mo/8Fa)	UA n = 22 (14F/8M)	<b>n.s.</b>  <b>ASD-P vs. UA 0.34</b>
<b>Spelling abilities</b>	Schonell Spelling Test (SST)	Total words correct	USA	Folstein et al (1999) [30]	ASD-P n = 166	DS-P n = 75	<b>n.s.</b>  <b>ASD-P vs. DS-P 0.13</b>
			UK	Fombonne et al (1997) [44]	ASD-P n = 160 (86Mo/74Fa)	DS-P n = 42 (23Mo/19Fa)	<b>ASD-P &gt; DS-P**</b>  <b>ASD-P vs. DS-P 0.62</b>
		Spelling age	USA	Folstein et al (1999) [30]	ASD-P n = 166	DS-P n = 75	<b>n.s.</b>  <b>ASD-P vs. DS-P 0.02</b>
	Speeded Dictation task	Raw Score	UK	Whitehouse et al (2007) [23]	ASD-P n = 30 (20Mo/10Fa)	SLI-P n= 30 (22Mo/8Fa) TD-P n = 30 (23Mo/7Fa)	<b>n.s.</b>

<b>Oromotor Functioning</b>	Oromotor Sequencing Subtest - NEPSY Test Battery	Raw score	UK	Whitehouse et al (2007) [23]	ASD-P n = 30 (20Mo/10Fa)	SLI-P n= 30 (22Mo/8Fa) TD-P n = 30 (23Mo/7Fa)	<b>ASD-P &gt; SLI-P**</b>	<b>ASD-P vs. SLI-P 0.54</b> <b>ASD-P vs. TD-P 0.43</b>
<b>Social Cognition</b>	Reading the Mind in Eyes Test	Accuracy	UK	Baron-Cohen & Hammer (1997) [7]	AS-P n = 30 (15Mo/15Fa)	TD-P n = 30 (15Mo/15Fa)	<b>ASD-Fa &lt; N-Fa**</b> <b>ASD-Mo &lt; N-Mo***</b>	<b>ASD-Fa vs. N-Fa 0.99</b> <b>ASD-Mo vs. N-Mo 1.51</b>
<b>Theory of Mind</b>			USA	Losh & Piven (2007) [46]	ASD-P n = 48 (25Mo/23Fa) BAP(+) Aloof n = 13 BAP(+) Rigid n = 11 BAP(-) n = 24	TD/DS-P n = 22 TD-P n = 16 DS-P n = 6	<b>BAP(+) Aloof &lt; TD/DS-P**</b> <b>BAP(+) Aloof &lt; BAP(-)**</b>	<b>BAP (+) Aloof vs. TD/DS-P 1.51</b> <b>BAP (+) Aloof vs. BAP(-) 1.49</b> <b>BAP (+) Aloof vs. BAP (+) Rigid 1.48</b>
			USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) Social n = 22 BAP(+) Rigid/Perfectionistic n = 34 BAP(+) Social & Rigid n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	<b>ASD-P &lt; TD-P*</b> <b>BAP(+) Social &lt; BAP(-)***</b> <b>BAP(+) Social &lt; TD-P***</b>	
			Turkey	Gocken et al (2009) [57]	ASD-P n = 76 (38Mo/38Fa)	N-P n = 41 (21Mo/20Fa)	<b>n.s.</b>	<b>ASD-P vs. N-P 0.43</b>
			Iran	Tajmirriyahi et al (2013) [58]	ASD-P n = 48 (38Mo/10Fa)	DS-P n = 31 (25Mo/6Fa) TD-P n = 30 (23Mo/7Fa)	<b>n.s.</b>	<b>ASD-P vs. DS-P 0.33</b> <b>ASD-P vs. TD-P 0.03</b>
<b>The Faces Test (mental state decoding)</b>	Accuracy	Iran	Gocken et al (2009) [57]	ASD-P n = 76 (38Mo/38Fa)	N-P n = 41 (21Mo/20Fa)	<b>n.s.</b>	<b>ASD-P vs. N-P 0.23</b>	
<b>Reading the Mind in the Voice Test</b>	Accuracy	Iran	Tajmirriyahi et al (2013) [58]	ASD-P n = 48 (38Mo/10Fa)	DS-P n = 31 (25Mo/6Fa) TD-P n = 30 (23Mo/7Fa)	<b>ASD-P &lt; DS-P**, TD-P***</b>	<b>ASD-P vs. DS-P 0.63</b> <b>ASD-P vs. TD-P 0.98</b>	

	<b>False belief tasks: 'Smarties task'; Sally-Anne task; Unexpected transfer test</b>	No. of tasks passed	Italy	Di Michele et al (2007) [8]	ASD n = 46	DS-P n=14 TD-P n=12	<b>ASD-P &lt; TD-P***</b> <b>ASD-P &lt; DS-P***</b>
	<b>Unexpected Outcomes Test (UOT)</b>	Total score	Turkey	Gocken et al (2009) [57]	ASD-P n = 76 (38Mo/38Fa)	N-P n = 41 (21Mo/20Fa)	<b>ASD-P &lt; N-P**</b> <b>ASD-P vs. N-P 0.58</b>
	<b>The Hinting Task</b>	Accuracy	Turkey	Gocken et al (2009) [57]	ASD-P n = 76 (38Mo/38Fa)	N-P n = 41 (21Mo/20Fa)	<b>n.s.</b> <b>ASD-P vs. N-P 0.36</b>
<b>Empathy</b>	<b>Empathy Quotient (EQ)</b>	Mean score	UK	Sucksmith et al (2013) [52]	ASD-P n = 310 (272Mo/38Fa)	UA n = 187 (93M/94F)	<b>ASD-Fa &lt; UA-M*</b> <b>ASD-Fa vs. US-M 0.40</b> <b>ASD-Mo vs. UA-F 0.11</b>
<b>Affect Perception / Emotion Recognition</b>	<b>Pictures of Facial affect - 'Bubbles' method</b>	Accuracy	USA	Adolphs et al (2008) [59]	AD-P n = 42 total BAP(+) Aloof n = 15 (3Mo/12Fa) BAP(-) n = 27 (20Mo/7Fa)	TD-P n = 20 (8Mo/12Fa)	<b>n.s.</b>
		Reaction Time	USA	Adolphs et al (2008) [59]	AD-P n = 42 total BAP(+) Aloof n = 15 (3Mo/12Fa) BAP(-) n = 27 (20Mo/7Fa)	TD-P n = 20 (8Mo/12Fa)	<b>n.s.</b>
		Use of Facial Information <i>Eyes region</i> <i>Mouth region</i>	USA	Adolphs et al (2008) [59]	AD-P n = 42 total BAP(+) Aloof n = 15 (3Mo/12Fa) BAP(-) n = 27 (20Mo/7Fa)	TD-P n = 20 (8Mo/12Fa)	<b>BAP(+) &lt; BAP(-) &lt; TD-P***</b> <b>BAP(+) &gt; BAP(-) &gt; TD-P***</b>
	<b>Penn Emotion</b>	Time for correct	Brazil	das Neves et al	ASD-P n = 40	UA n = 41	<b>ASD-P &gt; UA***</b> <b>ASD-P vs. UA 1.09</b>

<b>Recognition Test (ER40)</b>	answers		(2011) [60]	(30Mo/10Fa)	(28F/13M)		
	Accuracy	Brazil	das Neves et al (2011) [60]	ASD-P n = 40 (30Mo/10Fa)	UA n = 41 (28F/13M)	<b>ASD-P &lt; UA***</b>	<b>ASD-P vs. UA 0.76</b>
	Female faces	Brazil	das Neves et al (2011) [60]	ASD-P n = 40 (30Mo/10Fa)	UA n = 41 (28F/13M)	<b>ASD-P &lt; UA***</b>	<b>ASD-P vs. UA 0.66</b>
	Male faces	Brazil	das Neves et al (2011) [60]	ASD-P n = 40 (30Mo/10Fa)	UA n = 41 (28F/13M)	<b>ASD-P &lt; UA*</b>	<b>ASD-P vs. UA 0.63</b>
	Mild emotions	Brazil	das Neves et al (2011) [60]	ASD-P n = 40 (30Mo/10Fa)	UA n = 41 (28F/13M)	<b>ASD-P &lt; UA*</b>	<b>ASD-P vs. UA 0.61</b>
	Extreme emotions	Brazil	das Neves et al (2011) [60]	ASD-P n = 40 (30Mo/10Fa)	UA n = 41 (28F/13M)	<b>ASD-P &lt; UA*</b>	<b>ASD-P vs. UA 0.54</b>
<b>Facial Affect Recognition Test (pictures by Ekman &amp; Friesen)</b>	Expected answers	Germany / Austria / Switzerland	Bölte & Poustka (2003) [49]	ASD SPX-P n = 54 (26Mo/ 28Fa) ASD MPX-P n = 28 (16Mo/12Fa)	Sch SPX-P n = 31 (18Mo/ 13Fa) Sch MPX-P n = 4 (2Mo/2Fa) UA n = 22 (11F/11M)	<b>n.s.</b>	<b>ASD MPX-P vs. Sch MPX-P 0.54</b> <b>ASD MPX vs. Sch SPX-P 0.36</b> <b>ASD MPX-P vs. UA 2.06</b> <b>ASD SPX-P vs. Sch MPX-P 1.39</b> <b>ASD SPX-P vs. Sch SPX-P 0.57</b> <b>ASD SPX-P vs. UA 0.32</b>
	Happiness	Turkey	Kadak et al (2014) [21]	ASD-P n=72 (36Mo/36Fa)	TD-P n=38 (19Mo/19Fa)	<b>ASD-P &lt; TD-P*</b>	<b>ASD-P vs. TD-P 0.05</b>
<b>Emotion Recognition Test - using set of photographs from Ekman &amp; Friesen's (1976) 'Photos of Facial Affect'</b>	Sadness	Turkey	Kadak et al (2014) [21]	ASD-P n=72 (36Mo/36Fa)	TD-P n=38 (19Mo/19Fa)	<b>n.s.</b>	<b>ASD-P vs. TD-P 0.07</b>
	Fearful	Turkey	Kadak et al (2014) [21]	ASD-P n=72 (36Mo/36Fa)	TD-P n=38 (19Mo/19Fa)	<b>n.s.</b>	<b>ASD-P vs. TD-P 0.19</b>
	Disgusted	Turkey	Kadak et al (2014) [21]	ASD-P n=72 (36Mo/36Fa)	TD-P n=38 (19Mo/19Fa)	<b>n.s.</b>	<b>ASD-P vs. TD-P 0.28</b>
	Angry	Turkey	Kadak et al (2014) [21]	ASD-P n=72 (36Mo/36Fa)	TD-P n=38 (19Mo/19Fa)	<b>n.s.</b>	<b>ASD-P vs. TD-P 0.09</b>
	Surprised	Turkey	Kadak et al (2014) [21]	ASD-P n=72 (36Mo/36Fa)	TD-P n=38 (19Mo/19Fa)	<b>ASD-P &lt; TD-P*</b>	<b>ASD-P vs. TD-P 0.40</b>
	Neutral	Turkey	Kadak et al	ASD-P n=72	TD-P n=38	<b>ASD-P &lt; TD-P*</b>	<b>ASD-P vs. TD-P 0.50</b>

			(2014) [21]	(36Mo/36Fa)	(19Mo/19Fa)		
<b>Karolinska Directed Emotional Faces task (KDEF)</b>	Mean accuracy p/emotion	UK	Sucksmith et al (2013) [52]	ASD-P n = 297 (261Mo/36Fa)	UA n = 184 (92M/92F)	n.s.	<b>ASD-Fa vs. UA-M 0.12</b> <b>ASD-Mo vs. UA-F 0.08</b>
	Overall mean accuracy adjusted response time p/emotion	UK	Sucksmith et al (2013) [52]	ASD-P n = 297 (261Mo/36Fa)	UA n = 184 (92M/92F)	n.s.	<b>ASD-Fa vs. UA-M 0.30</b> <b>ASD-Mo vs. UA-F 0.20</b>
<b>Point light basic emotions</b>							
<b>Positive emotions</b>	Accuracy	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) Social n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) Social & Rigid n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)		<b>ASD-P &lt; TD-P**</b>
<b>Negative emotions</b>	Accuracy	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) Social n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) Social & Rigid n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	n.s.	
<b>Point light trustworthiness</b>							
<b>Positive stimuli</b>	Accuracy	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) Social n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) Social & Rigid n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)		<b>ASD-P &lt; TD-P**</b> <b>BAP(+) Social &lt; BAP (-)**</b>

<b>Negative stimuli</b>	Accuracy	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) Social n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) Social & Rigid n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	<b>BAP(+) Social &gt; BAP(-)*</b>
<b>Trustworthiness of faces</b>						
<b>Positive faces</b>	Judgment of trustworthiness	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) Social n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) Social & Rigid n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	<b>ASD-P &gt; TD-P***</b>
<b>Negative faces</b>	Judgment of trustworthiness	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) Social n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) Social & Rigid n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	<b>BAP(+) Social &lt; BAP(-), TD-P***</b>
<b>The Morphed faces task</b>						
<b>Happy</b>	Accuracy	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) Social n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) Social & Rigid n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	<b>n.s.</b>

<b>Low morphedness</b>	Accuracy	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) Social n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) Social & Rigid n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	<b>n.s.</b>
<b>High morphedness</b>	Accuracy	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) Social n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) Social & Rigid n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	<b>n.s.</b>
<b>Sad</b>	Accuracy	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) Social n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) Social & Rigid n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	<b>n.s.</b>
<b>Low morphedness</b>	Accuracy	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) Social n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) Social & Rigid n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	<b>n.s.</b>
<b>High morphedness</b>	Accuracy	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) Social n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34	TD-P n = 32 (19Mo/13Fa)	<b>n.s.</b>

				BAP(+) <i>Social &amp; Rigid</i> n = 13 (5Mo/8Fa) BAP(-) n = 40		
<b>Afraid</b>	Accuracy	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) <i>Social</i> n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) <i>Social &amp; Rigid</i> n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	<b>ASD-P &lt; TD-P**</b>
<b>Low morphedness</b>	Accuracy	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) <i>Social</i> n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) <i>Social &amp; Rigid</i> n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	<b>BAP(+) Social &lt; TD-P*</b>
<b>High morphedness</b>	Accuracy	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) <i>Social</i> n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) <i>Social &amp; Rigid</i> n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	<b>n.s.</b>
<b>The Movie Stills task</b>	Accuracy				TD-P n = 32 (19Mo/13Fa)	<b>n.s.</b>
<b>Without faces</b>		USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) <i>Social</i> n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) <i>Social &amp; Rigid</i> n = 13 (5Mo/8Fa)		

				BAP(-) n = 40		
<b>Sad</b>	Accuracy	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) <i>Social</i> n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) <i>Social &amp; Rigid</i> n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	<b>ASD-P &lt; TD-P**</b>
<b>Angry</b>	Accuracy	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) <i>Social</i> n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) <i>Social &amp; Rigid</i> n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	<b>ASD-P &lt; TD-P*</b>
<b>Afraid</b>	Accuracy	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) <i>Social</i> n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) <i>Social &amp; Rigid</i> n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	<b>ASD-P &gt; TD-P***</b>
<b>With faces</b>	Accuracy	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) <i>Social</i> n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) <i>Social &amp; Rigid</i> n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	<b>BAP(+) Social &lt; BAP(-),</b> <b>TD-P*</b>
<b>Sad</b>	Accuracy	USA	Losh et al (2009)[56]	ASD-P n= 83 BAP(+) <i>Social</i> n = 22 BAP(+)	TD-P n = 32 (19Mo/13Fa)	<b>n.s.</b>

				<i>Rigid/Perfectionistic</i> n = 34 BAP(+) <i>Social &amp; Rigid</i> n = 13 (5Mo/8Fa) BAP(-) n = 40		
<b>Angry</b>	Accuracy	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) <i>Social</i> n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) <i>Social &amp; Rigid</i> n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	<b>ASD-P &lt; TD-P**</b>
<b>Afraid</b>	Accuracy	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) <i>Social</i> n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) <i>Social &amp; Rigid</i> n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	<b>n.s.</b>
<b>Schematic Line Drawings (emotional labeling of facial patterns)</b>						
<b>Anger</b>		Italy	Palermo et al (2006) [61]	ASD-P n= 40 (20Mo/20Fa)	TD-P n= 40 (20Mo/20Fa)	<b>n.s</b>
<b>Happiness</b>		Italy	Palermo et al (2006) [61]	ASD-P n= 40 (20Mo/20Fa)	TD-P n= 40 (20Mo/20Fa)	<b>n.s.</b>
<b>Sadness</b>		Italy	Palermo et al (2006) [61]	ASD-P n= 40 (20Mo/20Fa)	TD-P n= 40 (20Mo/20Fa)	<b>ASD-P &lt; TD-P**</b>
<b>Surprise</b>		Italy	Palermo et al (2006) [61]	ASD-P n= 40 (20Mo/20Fa)	TD-P n= 40 (20Mo/20Fa)	<b>n.s.</b>

	<b>Disgust</b>	Italy	Palermo et al (2006) [61]	ASD-P n= 40 (20Mo/20Fa)	TD-P n= 40 (20Mo/20Fa)	<b>ASD-P &lt; TD-P**</b>	
	<b>Overall recognition</b>	Italy	Palermo et al (2006) [61]	ASD-P n= 40 (20Mo/20Fa)	TD-P n= 40 (20Mo/20Fa)	<b>ASD-P &lt; TD-P**</b>	
	<b>Emotion Matching Task</b>	USA	Smalley & Asarnow (1990) [45]	ASD-P n = 15	TD-P n = 12	n.s.	<b>ASD-P vs. TD-P 0.06</b>
	<b>Emotion Labeling Task</b>	USA	Smalley & Asarnow (1990) [45]	ASD-P n = 15	TD-P n = 12	n.s.	<b>ASD-P vs. TD-P 0.19</b>
<b>Executive Function</b>	<b>Intradimensional - Extradimensional set-shifting task (IDED)</b>	Perseveration (EDS Stage)	Australia	Wong et al (2006)[62]	ASD-P n = 145 (80Mo/65Fa)	TD-P n = 96 (57Mo/39Fa)	n.s.
<i>Set-Shifting</i>		Learned irrelevance (EDS Stage)	Australia	Wong et al (2006) [62]	ASD-P n = 145 (80Mo/65Fa)	TD-P n = 96 (57Mo/39Fa)	<b>ASD-P &gt; TD-P*</b> <b>ASD-Fa &gt; TD-Fa*</b>
		Trials to criterion (EDS Stage)	France	Hughes et al (1997) [63]	ASD-P n=40 (20Mo/20Fa)	LD-P n=40 (22Mo/18Fa) UA n=36 (18M, 15F)	<b>ASD-P &gt; LD-P**</b> <b>ASD-P &gt; UA***</b>
		Errors to criterion (EDS Stage)	France	Hughes et al (1997) [63]	ASD-P n=40 (20Mo/20Fa)	LD-P n=40 (22Mo/18Fa) UA n=36 (18M, 15F)	<b>ASD-P vs. LD-P 0.69</b> <b>ASD-P vs. UA 0.83</b>
	<b>Wisconsin Card Sorting Test (WCST)</b>	Perservative errors	Germany	Bölte & Poustka (2006) [50]	ASD-P n=62 (33Mo/29Fa)	EOS-P n = 36 (20Mo/16Fa) MR-P n = 30 (16Mo/14Fa)	n.s.
	<b>Trail Making Test (A &amp; B)</b>	Total time to complete	Germany	Bölte & Poustka (2006) [50]	ASD-P n=62 (33Mo/29Fa)	EOS-P n = 36 (20Mo/16Fa) MR-P n = 30 (16Mo/14Fa)	<b>ASD-P vs. EOS-P 0.38</b> <b>ASD-P vs. MR-P 0.13</b>

		USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) Social n = 22 BAP(+)  <i>Rigid/Perfectionistic</i> n = 34 BAP(+) Social & Rigid n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	n.s.		
<b>Planning</b>	<b>Tower of London (ToL)</b>	Number of extra moves	France	Hughes et al (1997) [63]	ASD-P n=40 (20Mo/20Fa)	LD-P n=40 (22Mo/18Fa) UA n=36 (18M, 15F)	ASD-P > UA*	ASD-P vs. LD-P 0.41 ASD-P vs. UA 0.93
		Adjusted extra moves score	Australia	Wong et al (2006) [62]	ASD-P n = 145 (80Mo/65Fa)	TD-P n = 96 (57Mo/39Fa)	n.s.	ASD-P vs. TD-P 0.07
		Rule violations	Australia	Wong et al (2006) [62]	ASD-P n = 145 (80Mo/65Fa)	TD-P n = 96 (57Mo/39Fa)	n.s.	
		Solutions correct	France	Hughes et al (1997) [63]	ASD-P n=40 (20Mo/20Fa)	LD-P n=40 (22Mo/18Fa) UA n=36 (18M, 15F)	ASD-P < UA***	ASD-P vs. LD-P 0.34 ASD-P vs. UA 0.93
<b>Tower of Hanoi (ToH)</b>	Total time to complete	Germany	Bölte & Poustka (2006) [50] <i>4 ring version</i>	ASD-P n=62 (33Mo/29Fa)	EOS-P n = 36 (20Mo/16Fa) MR-P n = 30 (16Mo/14Fa)	n.s.	ASD-P vs. EOS-P 0.45 ASD-P vs. MR-P 0.01	
		USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) Social n = 22 BAP(+)  <i>Rigid/Perfectionistic</i> n = 34 BAP(+) Social & Rigid n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	n.s.		
	Planning efficiency score	USA	Piven & Palmer (1997) [46]	MPX-P n= 48 (25Mo/23Fa)	DS-P n = 60 (30Mo/30Fa)	3 ring version MPX-P < DS-P*	3 ring version MPX-P vs. DS-P 0.40	

								<i>4 ring version</i> MPX-P < DS-P*	<i>4 ring version</i> MPX-P vs. DS-P 0.48
		USA	Losh et al (2009) [56]	ASD-P n = 83 BAP(+) Social n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) Social & Rigid n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	n.s.			
<i>Generativity / Ideational Fluency</i>	<b>Pattern Meanings</b>	Overall response generativity	Australia	Wong et al (2006) [62]	ASD-P n = 145 (80Mo/65Fa)	TD-P n = 96 (57Mo/39Fa)	<b>ASD-P &lt; TD-P***</b>	<b>ASD-P vs. TD-P 0.51</b>	
<i>Spatial Working Memory / Inhibition</i>	<b>Visual Search Test</b>	Between search errors	France	Hughes et al (1997) [63]	ASD-P n=40 (20Mo/20Fa)	LD-P n=40 (22Mo/18Fa) UA n=36 (18M, 15F)	<b>ASD-P &gt; UA*</b> <b>ASD-Fa &gt; UA-M*</b>	<b>ASD-P vs. LD-P 0.27</b> <b>ASD-P vs. UA 0.95</b>	
		Within search errors	France	Hughes et al (1997) [63]	ASD-P n=40 (20Mo/20Fa)	LD-P n=40 (22Mo/18Fa) UA n=36 (18M, 15F)	n.s.		
	<b>The Delayed Oculomotor Task</b>	Percent premature saccades	USA	Koczat et al (2002) [77]	ASD-P n = 11 (7Mo/4Fa)	UA n = 17 (8F/9M)	n.s.	<b>ASD-P vs. UA 0.18</b> <b>ASD-P vs. UA 0.55</b>	
	<b>(Eye movement abnormality)</b>	1s delay 3s delay							
		Latency remembered saccades	USA	Koczat et al (2002) [77]	ASD-P n = 11 (7Mo/4Fa)	UA n = 17 (8F/9M)	n.s.	<b>ASD-P vs. UA 0.41</b> <b>ASD-P vs. UA 0.04</b>	
		1s delay 3s delay							
		Spatial error of remembered saccades (accuracy)	USA	Koczat et al (2002) [77]	ASD-P n = 11 (7Mo/4Fa)	UA n = 17 (8F/9M)	<b>ASD-P &lt; UA**</b>	<b>ASD-P vs. UA 1.27</b> <b>ASD-P vs. UA 0.68</b>	
		1s delay 3s delay							

	<b>Response Inhibition and Load (RIL)</b>	No. of errors	Australia	Wong et al (2006) [62]	ASD-P n = 141	TD-P n = 94	n.s.	ASD-P vs. TD-P 0.28
<b>Verbal Working Memory</b>	Auditory Consonant Trigrams (ACT)	Reaction time for correct responses	Australia	Wong et al (2006) [62]	ASD-P n = 141	TD-P n = 94	n.s.	ASD-P vs. TD-P 0.04
		Working memory measure	Australia	Wong et al (2006) [62]	ASD-P n = 141	TD-P n = 94	n.s.	ASD-P vs. TD-P 0.08
		Accuracy	Turkey	Gocken et al (2009) [57]	ASD-P n = 76 (38Mo/38Fa)	N-P n = 41 (21Mo/20Fa)	ASD-P < N-P**	ASD-P vs. N-P 0.55
<b>Central Coherence (Local visual processing)</b>	Embedded Figures Test (EFT)	Accuracy	Turkey	Gocken et al (2009) [57]	ASD-P n = 76 (38Mo/38Fa)	N-P n = 41 (21Mo/20Fa)	n.s.	ASD-P vs. N-P 0.26
		Interference score	Turkey	Gocken et al (2009) [57]	ASD-P n = 76 (38Mo/38Fa)	N-P n = 41 (21Mo/20Fa)	n.s.	ASD-P vs. N-P 0.2
		Reaction Time	UK	Baron-Cohen & Hammer (1997) [7]	AS-P n = 30 (15Mo/15Fa)	TD-P n = 30 (15Mo/15Fa)	ASD-Fa > N-Fa** ASD-Mo > N-Mo**	ASD-Fa vs. N-Fa 0.51 ASD-Mo vs. N-Fa 0.68
<b>Disembedding Performance</b>		Germany		Bölte & Poustka (2006) [7]	ASD-P n=62 (33Mo/29Fa)	EOS-P n = 36 (20Mo/16Fa) MR-P n = 30 (16Mo/14Fa)	ASD-P > EOS-P*** ASD-P > MR-P*	ASD-P vs. EOS-P 1.60 ASD-P vs. MR-P 0.79
				de Jonge et al (2006) [65]	MPX-P n=51 (26Mo/25Fa)	DS-P n = 54 (28Fa/26Mo)	n.s.	MPX-P vs. DS-P 0.01 MPX-Fa vs. DS-Fa 0.04 MPX-Mo vs. DS-Mo 0.09
		Netherlands		Happé et al (2001) [64]	ASD-P n = 43 (21Mo/22Fa)	DLX-P n = 30 (15Mo/15Fa) TD-P n = 20 (10Mo/10Fa)	ASD-Fa > DLX-Fa** ASD-Fa > TD-Fa**	ASD-Mo vs. DLX-Mo 0.54 ASD-Mo vs. TD-Mo 0.64 ASD-Fa vs. DLX-Fa 1.11 ASD-Fa vs. TD-Fa 1.09
				Losh et al	ASD-P n=83	TD-P n = 32	n.s.	

<b>Mental Segmentation Ability</b>	Accuracy	Netherlands	(2009) [56]	BAP(+) <i>Social</i> n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) <i>Social &amp; Rigid</i> n = 13 (5Mo/8Fa) BAP(-) n = 40	DS-P n = 54 (28Fa/26Mo)	n.s.	<b>MPX-P vs. DS-P 0.16</b> <b>MPX-Fa vs. DS-Fa 0.21</b> <b>MPX-Mo vs. DS-Mo 0.11</b>
			de Jonge et al (2006) [65]	MPX-P n=51 (26Mo/25Fa)	DS-P n = 54 (28Fa/26Mo)	n.s.	<b>MPX-P vs. DS-P 0.16</b> <b>MPX-Fa vs. DS-Fa 0.21</b> <b>MPX-Mo vs. DS-Mo 0.11</b>
		UK	Happé et al (2001) [64]	ASD-P n = 43 (21Mo/22Fa)	DLX-P n = 30 (15Mo/15Fa) TD-P n = 20 (10Mo/10Fa)	n.s.	<b>ASD-Mo vs. DLX-Mo 0.26</b> <b>ASD-Mo vs. TD-Mo 0.77</b> <b>ASD-Fa vs. DLX-Fa 0.17</b> <b>ASD-Fa vs. TD-Fa 0.31</b>
	No. of incorrect responses	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) <i>Social</i> n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) <i>Social &amp; Rigid</i> n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	n.s.	
			de Jonge et al (2006) [65]	MPX-P n=51 (26Mo/25Fa)	DS-P n = 54 (28Fa/26Mo)	<b>ASD-Fa &lt; DS-Fa*</b>	<b>MPX-P vs. DS-P 0.32</b> <b>MPX-Fa vs. DS-Fa 0.52</b> <b>MPX-Mo vs. DS-Mo 0.18</b>
		UK	Happé et al (2001) [64]	ASD-P n = 43 (21Mo/22Fa)	DLX-P n = 30 (15Mo/15Fa) TD-P n = 20 (10Mo/10Fa)	<b>ASD-Fa &lt; DLX-Fa*</b>	
		UK	Happé et al (2001) [64]	ASD-P n = 43 (21Mo/22Fa)	DLX-P n = 30 (15Mo/15Fa) TD-P n = 20 (10Mo/10Fa)	<b>ASD-Fa &gt; TD-Fa*</b>	<b>ASD-Mo vs. DLX-Mo 0.54</b> <b>ASD-Mo vs. TD-Mo 0.24</b> <b>ASD-Fa vs. DLX-Fa 0.64</b> <b>ASD-Fa vs. TD-Fa 0.84</b>
	Unsegmented Block Design task (adaptation from Weschler subtest)	Reaction time	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) <i>Social</i> n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n =	TD-P n = 32 (19Mo/13Fa)	n.s.	

				34 BAP(+) <i>Social &amp; Rigid</i> n = 13 (5Mo/8Fa) BAP(-) n = 40			
<b>Segmented Block Design task (adaptation from Weschler subtest)</b>	Reaction time	UK	Happé et al (2001) [64]	ASD-P n = 43 (21Mo/22Fa)	DLX-P n = 30 (15Mo/15Fa) TD-P n = 20 (10Mo/10Fa)	n.s.	ASD-Mo vs. DLX-Mo 0.04 ASD-Mo vs. TD-Mo 0.63 ASD-Fa vs. DLX-Fa 0.10 ASD-Fa vs. TD-Fa 0.17
		USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) <i>Social</i> n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) <i>Social &amp; Rigid</i> n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	n.s.	
<b>Block Design task (Weschler subtest)</b>	Reaction time	Netherlands	Scheeren & Stauder (2008) [24]	ASD-P n= 25 (12Mo/13Fa)	TD-P n= 25 (12Mo/13Fa)	n.s.	ASD-Fa vs. TD-Fa 0.19 ASD-Mo vs. TD-Mo 0.11
		Germany	Bölte & Poustka (2006) [50]	ASD n=62 (33Mo/29Fa)	EOS-P n = 36 (20Mo/16Fa) MR-P n = 30 (16Mo/14Fa)	n.s.	ASD-P vs. EOS-P 0.33 ASD-P vs. MR-P 0.52
<b>Block design reconstruction task (patterns by Akshoomoff &amp; Stiles)</b>	Accuracy	Netherlands	de Jonge et al (2009) [66]	MPX-P n = 51 (26Mo/25Fa)	DS-P n = 57 (28Mo/29Fa)	n.s.	MPX-P vs. DS-P 0.16
	Reconstruction time	Netherlands	de Jonge et al (2009) [66]	MPX-P n = 51 (26Mo/25Fa)	DS-P n = 57 (28Mo/29Fa)	n.s.	
	Mean no. of errors	Netherlands	de Jonge et al (2009) [66]	MPX-P n = 51 (26Mo/25Fa)	DS-P n = 57 (28Mo/29Fa)	n.s.	MPX-P vs. DS-P 0.10
<b>Attentional</b>	<b>Detection Task (Reaction time task)</b>	Eyes task (social)	Netherlands	Scheeren & Stauder (2008) [24]	ASD-P n= 25 (12Mo/13Fa)	TD-P n= 25 (12Mo/13Fa)	ASD-Fa > TD-Fa*
		Arrows task	Netherlands	Scheeren &	ASD-P n= 25	TD-P n= 25	n.s.

<b>Engagement</b>		(non-social)		Stauder (2008) [24]	(12Mo/13Fa)	(12Mo/13Fa)		
<b>Global Sentence Completions</b>	Sentence Completion task	Errors (local completions) and long delays	UK	Happé et al (2001) [64]	ASD-P n = 43 (21Mo/22Fa)	DLX-P n = 30 (15Mo/15Fa) TD-P n = 20 (10Mo/10Fa)	<b>ASD-P &gt; DLX-P &gt; TD-P***</b> <b>ASD-Fa &gt; DLX – Fa***</b> <b>ASD-Fa &gt; TD-Fa***</b> <b>ASD-Mo &gt; DLX-Mo**</b> <b>ASD-Mo &gt;TD-Mo**</b>	
		Frequency of errors (no. of global responses)	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) Social n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) Social & Rigid n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	<b>ASD-P &gt; TD-P**</b>	
		Response time	USA	Losh et al (2009) [56]	ASD-P n= 83 BAP(+) Social n = 22 BAP(+) <i>Rigid/Perfectionistic</i> n = 34 BAP(+) Social & Rigid n = 13 (5Mo/8Fa) BAP(-) n = 40	TD-P n = 32 (19Mo/13Fa)	<b>ASD-P &gt; TD-P*</b> <b>BAP(+) &lt; Rigid/Perfectionistic &lt; TD-P**</b> <b>BAP(-) &lt; TD-P*</b>	
Visual Processing	Vistech contrast sensitivity charts	Mean contrast sensitivity threshold	Netherlands	de Jonge et al (2007) [67]	MPX-P n = 51 (26Mo/25Fa)	DS-P n = 52 (25Fa/27Mo)	n.s.	<b>MPX-P vs. DS-P 0.55</b>
Contrast Sensitivity								
Motion Discrimination	Motion Coherence Task	Mean motion coherence threshold	Netherlands	de Jonge et al (2007) [67]	MPX-P n = 51 (26Mo/25Fa)	DS-P n = 52 (25Fa/27Mo)	n.s.	<b>MPX-P vs. DS-P 0.25</b>
	Moving Shape Task	Reaction time	Netherlands	de Jonge et al (2007) [67]	MPX-P n = 51 (26Mo/25Fa)	DS-P n = 52 (25Fa/27Mo)	n.s.	<b>MPX-P vs. DS-P 0.17</b>

<b>Form Discrimination</b>	<b>Form Discrimination (Shape) Task</b>	Reaction Time	Netherlands	de Jonge et al (2007) [67]	MPX-P n = 51 (26Mo/25Fa)	DS-P n = 52 (25Fa/27Mo)	<b>n.s.</b>	<b>MPX-P vs. DS-P 0.05</b>
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Note: ASD, Autism Spectrum Disorder; BAP, Broad Autism Phenotype; BAP(+), BAP present; BAP (-), BAP absent; P, Parent; Mo, Mother; Fa, Father; M, Male; F, Female; MPX, Multiple incidence autism families; SPX, Single incidence autism families; ALN, Autism without language impairment; ALI, Autism with language impairment; DLX, Dyslexia; DS, Down Syndrome; EOS, Early onset Schizophrenia; LBW, low birth weight; LD, learning difficulties; N, Normative sample; MR, Mental Retardation; Sch SPX, single incidence Schizophrenia families; Sch MPX, multiple incidence Schizophrenia families; SLI, Specific Language Impairment; TD, typically developing; UA, Unaffected adult

\*p<0.05; \*\*p<0.01; \*\*\*p<0.001

**Supplementary Table 3. Other Psychiatric Conditions Endophenotype Matrix – Review of studies of parents of autistic probands.**

Domain	Method / Measure	Factors / Subscales	Country	Study	ASD Parent Group Characteristics	Control Group Characteristics	Key Findings in relation to Proband Diagnosis	
							P value	Effect Size ( <i>d</i> )
Other Psychiatric Conditions	Brief Psychiatric Rating Scale (BPRS)	Anxiety	Iran	Gocken et al (2009) [57]	ASD-P n = 76 (38Mo/38Fa)	N-P n = 41 (21Mo/20Fa)	n.s.	ASD-P vs. N-P 0.29
		Depression	Iran	Gocken et al (2009) [57]	ASD-P n = 76 (38Mo/38Fa)	N-P n = 41 (21Mo/20Fa)	ASD-P > N-P*	ASD-P vs. N-P 0.44
Personality Style and Disorder Inventory (PSSI)	Reserved/schizoid	Reserved/schizoid	Germany	Bölte et al (2007) [51]	ASD SPX-P n = 87 (48Mo/39Fa) ASD MPX-P n = 38 (21Mo/17Fa)	OCD-P n = 37 (19Mo/18Fa) EOS-P n = 34 (20Mo/14Fa) MR-P n = 27 (15Mo/12Fa)	SPX-P / MPX-P > OCD-P, EOS-P**	MPX-P vs. OCD-P 1.07 MPX-P vs. EOS-P 1.09 MPX-P vs. MR-P 0.14 SPX-P vs. OCD-p 1.06 SPX-P vs. EOS-P 1.18 SPX-P vs. MR-P 0.15
		Self-critical/insecure	Germany	Bölte et al (2007) [51]	ASD SPX-P n = 87 (48Mo/39Fa) ASD MPX-P n = 38 (21Mo/17Fa)	OCD-P n = 37 (19Mo/18Fa) EOS-P n = 34 (20Mo/14Fa) MR-P n = 27 (15Mo/12Fa)	ASD SPX-P /ASD MPX-P > EOS-P**	MPX-P vs. OCD-P 0.31 MPX-P vs. EOS-P 1.15 MPX-P vs. MR-P 0.32 SPX-P vs. OCD-p 0.02 SPX-P vs. EOS-P 0.86 SPX-P vs. MR-P 0.02
		Critical/negativistic	Germany	Bölte et al (2007) [51]	ASD SPX-P n = 87 (48Mo/39Fa) ASD MPX-P n = 38 (21Mo/17Fa)	OCD-P n = 37 (19Mo/18Fa) EOS-P n = 34 (20Mo/14Fa) MR-P n = 27 (15Mo/12Fa)	SPX-P /MPX-P > EOS-P**	MPX-P vs. OCD-P 0.29 MPX-P vs. EOS-P 0.92 MPX-P vs. MR-P 0.03 SPX-P vs. OCD-p 0.17 SPX-P vs. EOS-P 0.74 SPX-P vs. MR-P 0.06
	Spontaneous/borderline	Spontaneous/borderline	Germany	Bölte et al (2007) [51]	ASD SPX-P n = 87 (48Mo/39Fa) ASD MPX-P n = 38 (21Mo/17Fa)	OCD-P n = 37 (19Mo/18Fa) EOS-P n = 34 (20Mo/14Fa) MR-P n = 27 (15Mo/12Fa)	MPX-P > EOS-P**	MPX-P vs. OCD-P 0.18 MPX-P vs. EOS-P 0.25 MPX-P vs. MR-P 0.09 SPX-P vs. OCD-p 0.39 SPX-P vs. EOS-P 0.72 SPX-P vs. MR-P 0.04
		Quiet/depressive	Germany	Bölte et al (2007) [51]	ASD SPX-P n = 87 (48Mo/39Fa) ASD MPX-P n = 38 (21Mo/17Fa)	OCD-P n = 37 (19Mo/18Fa) EOS-P n = 34 (20Mo/14Fa)	SPX-P /MPX-P > EOS-P**	MPX-P vs. OCD-P 0.53 MPX-P vs. EOS-P 1.03 MPX-P vs. MR-P 0.31 SPX-P vs. OCD-p 0.35

					MR-P n = 27 (15Mo/12Fa)		SPX-P vs. EOS-P 0.87 SPX-P vs. MR-P 0.16
Symptom Checklist-90- Revised (SCL-90-R)	Depression	Germany	Bölte et al (2007) [51]	ASD SPX-P n = 87 (48Mo/39Fa) ASD MPX-P n = 38 (21Mo/17Fa)	OCD-P n = 37 (19Mo/18Fa) EOS-P n = 34 (20Mo/14Fa) MR-P n = 27 (15Mo/12Fa)	MPX-P > OCD-P, EOS- P**	MPX-P vs. OCD-P 0.89 MPX-P vs. EOS-P 1.06 MPX-P vs. MR-P 0.66 SPX-P vs. OCD-p 0.42 SPX-P vs. EOS-P 0.57 SPX-P vs. MR-P 0.15
	Anxiety	Germany	Bölte et al (2007) [51]	ASD SPX-P n = 87 (48Mo/39Fa) ASD MPX-P n = 38 (21Mo/17Fa)	OCD-P n = 37 (19Mo/18Fa) EOS-P n = 34 (20Mo/14Fa) MR-P n = 27 (15Mo/12Fa)	n.s.	MPX-P vs. OCD-P 0.17 MPX-P vs. EOS-P 0.92 MPX-P vs. MR-P 0.29 SPX-P vs. OCD-p 0.01 SPX-P vs. EOS-P 0.66 SPX-P vs. MR-P 0.10
	Phobic-anxiety	Germany	Bölte et al (2007) [51]	ASD SPX-P n = 87 (48Mo/39Fa) ASD MPX-P n = 38 (21Mo/17Fa)	OCD-P n = 37 (19Mo/18Fa) EOS-P n = 34 (20Mo/14Fa) MR-P n = 27 (15Mo/12Fa)	SPX-P / MPX-P > OCD-P, EOS-P**	MPX-P vs. OCD-P 0.25 MPX-P vs. EOS-P 1.33 MPX-P vs. MR-P 0.45 SPX-P vs. OCD-p 0 SPX-P vs. EOS-P 0.91 SPX-P vs. MR-P 0.19
	Paranoid ideation	Germany	Bölte et al (2007) [51]	ASD SPX-P n = 87 (48Mo/39Fa) ASD MPX-P n = 38 (21Mo/17Fa)	OCD-P n = 37 (19Mo/18Fa) EOS-P n = 34 (20Mo/14Fa) MR-P n = 27 (15Mo/12Fa)	MPX-P > EOS-P**	MPX-P vs. OCD-P 0.44 MPX-P vs. EOS-P 0.93 MPX-P vs. MR-P 0.57 SPX-P vs. OCD-p 0.19 SPX-P vs. EOS-P 0.65 SPX-P vs. MR-P 0.29
Schedule for Affective Disorders and Schizophrenia - Lifetime Version (SADS-L)	Anxiety	USA	Piven et al (1991) [68]	ASD-P n = 81 (42Mo/39Fa)	DS-P n = 34 (18Mo/16Fa)	ASD-P > DS-P*	
	Major Depressive Disorder	USA	Piven et al (1991) [68]	ASD-P n = 81 (42Mo/39Fa)	DS-P n = 34 (18Mo/16Fa)	n.s	
Schedule for Affective Disorders and Schizophrenia -	Major Depressive Disorder	USA	Piven & Palmer (1999) [69]	MPX-P n= 48 (25Mo/23Fa)	DS-P n = 60 (30Mo/30Fa)	ASD-P > DS-P**	

<b>Lifetime Version Modified for the Study of Anxiety Disorders, Revised (SADS-LA-R)</b>	Social phobia	USA	Piven & Palmer (1999) [69]	MPX-P n = 48 (25Mo/23Fa)	DS-P n = 60 (30Mo/30Fa)	<b>ASD-P &gt; DS-P*</b>	
<b>Parental Questionnaire (Devised by Author and results validated by consented medical records from GP)</b>	Depression	UK	Micali et al (2004) [70]	ASD-P n = 152 (79Mo/73Fa)	ODP-P n = 114 (59Mo/55Fa)	<b>ASD-Mo &gt; ODP-Mo*</b>	
	Anxiety	UK	Micali et al (2004) [70]	ASD-P n = 152 (79Mo/73Fa)	ODP-P n = 114 (59Mo/55Fa)	<b>ASD-Mo &gt; ODP-Mo***</b>	
<b>The Centre for Epidemiological Studies – Depression Scales (CESD)</b>	Depressed Mood	USA	Ingersoll et al (2011) [25]	ASD-Mo n = 71 (Only Mo)	N-Mo n = 94 (Only Mo)	<b>ASD-Mo &gt; N-Mo*</b>	<b>ASD-Mo vs. N-Mo 0.35</b>
<b>Beck Depression Inventory (BDI)</b>	Depression	UK	Berthoz et al (2013) [40]	ASD-P n = 87 (28%Fa)	UA n = 47 (62%M)	n.s.	<b>ASD-P vs. UA 0.50</b>
<b>State-Trait Anxiety Inventory Form Y (STAI-Y)</b>							
<i>State scale (STAI-S)</i>	Anxiety (State portion)	UK	Berthoz et al (2013) [40]	ASD-P n = 87 (28%Fa)	UA n = 47 (62%M)	n.s.	<b>ASD-P vs. UA 0.19</b>
<i>Trait scale (STAI-T)</i>	Anxiety (Trait portion)	UK	Berthoz et al (2013) [40]	ASD-P n = 87 (28%Fa)	UA n = 47 (62%M)	n.s.	<b>ASD-P vs. UA 1.24</b>

Note: ASD, Autism Spectrum Disorder; BAP, Broad Autism Phenotype; BAP(+), BAP present; BAP (-), BAP absent; P, Parent; Mo, Mother; Fa, Father; M, Male; F, Female; MPX, Multiple incidence autism families; SPX, Single incidence autism families; DS, Down Syndrome; EOS, Early onset Schizophrenia; MR, Mental Retardation; N, Normative sample; OCD, Obsessive Compulsive Disorder; ODP, Other developmental problems without autism; UA, Unaffected adult

\* $p<0.05$ ; \*\* $p<0.01$ ; \*\*\* $p<0.001$