**Appendix 7 (as supplied by the authors): Outcomes summary – autism spectrum disorder systematic reviews***

<table>
<thead>
<tr>
<th>Study</th>
<th>Type of Intervention</th>
<th>Outcome†</th>
<th>Included Studies meeting our Inclusion Criteria</th>
<th>Study Design of Included Studies</th>
<th>Number of participants</th>
<th>Measurement</th>
<th>Overall Effect Size and Calculation Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Behavioural interventions</strong></td>
<td></td>
<td></td>
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<tr>
<td>Oono 2013 ¹</td>
<td>Parent-mediated early intervention</td>
<td>Cognitive Function 1(1)</td>
<td>Drew 2002 ²</td>
<td>RCT</td>
<td>N=24</td>
<td>NR</td>
<td>NR. Authors state study did not report any difference between groups in developmental/intellectual gains</td>
</tr>
</tbody>
</table>
| Reichow 2012 ³ | EIBI | Cognitive Function 5(5) ² | Cohen 2006 ⁴ | Magiati 2007 ⁵ | Remington 2007 ⁶ | Howard 2005 ⁷ | Smith 2000 ⁸ | CCTs | RCT | N=200 | Composite IQ | Four studies were pooled (Cohen 2006; Magiati 2007; Remington 2007; Howard 2005) SMD: 0.76 (95% CI 0.040 to 1.11); I²=21%
One study was not pooled (Smith 2000): g=0.74 |
| | | | | | | | | | | | | Quality of Life 5(5) ³ | Cohen 2006 ⁴ | Magiati 2007 ⁵ | Remington 2007 ⁶ | Howard 2005 ⁷ | Smith 2000 ⁸ | CCTs | N=199 | Vineland | Four studies were pooled (Cohen 2006; Magiati 2007; Remington 2007; Howard 2005) SMD 0.55 (95% CI 0.24 to 0.87); I²=0%
One study was not pooled (Smith 2000): g=-0.03 |
<p>| | | | | | | | | | | | Harms 2012 ⁴ | ABA | Cognitive Function 3(3) ³ | Cohen 2006 ⁴ | Magiati 2007 ⁵ | Remington 2007 ⁶ | Howard 2005 ⁷ | Smith 2000 ⁸ | CCTs | RCT | N=200 | NA | No deterioration on primary outcomes or adverse events were reported as a result of treatment in any of the studies |
| Virues-Ortega 2010 ⁹ | ABA | Cognitive Function 3(3) ³ | Eikseth 2002 ¹⁰/2007 ¹¹ | Eldevik 2006 ¹² | Ben-Itzchak 2008 ¹³ | RCTs | CCTs | N=129 | IQ | Median effect size: 1.34 (0.60, 2.08) ² |
| Spreckley 2009 ¹⁴ | ABI | Cognitive Function 0 (0) ⁹ | No included studies ⁶ | RCT | NA | IQ | No studies ⁷ |
| <strong>Alternative interventions</strong> | | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th>Study Design of Included Studies</th>
<th>Number of participants</th>
<th>Measurement</th>
<th>Overall Effect Size and Calculation Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>conventional treatment</td>
<td>Wong 2010b: Leiter-R</td>
<td>general quotient MD 3.46 (95% CI -2.0 to 8.92)</td>
<td></td>
</tr>
<tr>
<td>Acupressure plus conventional treatment</td>
<td>Yan 2007: CPEP</td>
<td>Wong 2010b: No significant difference between the intervention and control groups in any of the domain scores</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zhou 2008: basic developmental assessment</td>
<td>Yan 2007: intervention group showed greater improvement in total score (MD 10.75, 95% CI 3.82 to 17.68, P = 0.002)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acupressure: Zhou 2008: no significant differences in developmental aspects</td>
<td></td>
</tr>
<tr>
<td>RCTs NA</td>
<td>N=357</td>
<td>Measurement not reported</td>
<td></td>
</tr>
<tr>
<td>Surgical site</td>
<td>Acupuncture: Two studies (Wong 2010a and Wong 2002) reported initial crying for fear and pain; one study (Wong 2010b) reported superficial bleeding or crying and irritability; one study (Wong 2008) reported worsening of sleeping patterns. Three studies (Wang 2007, Yan 2007, Allam 2008) did not report any adverse events</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acupressure: Two studies (Chan 2009 and Zhou 2008) did not report adverse effects</td>
<td></td>
<td></td>
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</tbody>
</table>

†Outcomes are reported with the number of included studies on children (the number of included studies on children aged 1-6); EIBI – Early Intensive Behavioural Intervention; BSID - Bayley Infant Development Measurement Scale; WISC – Weschler Intelligence Scale for Children, n/a – not available; ABI – Applied Behavioural Intervention; IQ – Intelligence Quotient, ABA – Applied Behavioural Analysis; GMDS - Griffiths Mental Developmental Scale; Leiter-R - Leiter International Performance Scale – Revised; CY-BOCS-PDD

‡There are four overlapping studies between these systematic reviews: Howard 2005, Cohen 2006, Remington 2007 and Smith 2000. For the purposes of this review we are only interested in unique studies, so we have considered these four studies within the Reichow 2012 systematic review and excluded them from our consideration of Virues-Ortega 2010 systematic review.

i Five studies reported on developmental/intellectual gains. The following studies were not included in our analysis based on the descriptions provided by the systematic review: Smith 200058 (control group received less intensive version of the intervention); Rickards 2007104 (control group received alternative intervention); Dawson 2010105 (control group received alternative intervention); Tonge 2006106/2012107 (as per characteristics of included the PEBM group was treated as the intervention with the PEAC group considered the control for the purpose of this review)

ii Five studies measured intelligence (IQ). All studies met our inclusion criteria (control groups defined as treatment as usual) and were included in our analysis.

iii Five studies measured quality of life. All studies met our inclusion criteria (control groups defined as treatment as usual) and were included in our analysis.

iv Five studies reported no adverse events. All studies met our inclusion criteria (control groups defined as treatment as usual) and were included in our analysis.

v Seventeen studies provided composite IQ scores; we have included three studies. Four studies were excluded because they had already been considered as part of another systematic review: Cohen 2006, Howard 2005, Remington 2007, Smith 2000. Eight studies were excluded because they did not include a control group: Ben-Itzchak 200711; Bimbriaue 199312; Harris 200026; Lovaas 198713; Matos 200528; Sallows 200529; Anderson 198714; Bibby 200115. Two studies were excluded because the control group did not meet our inclusion criteria: Smith 199732, control group received low intensity <10 weekly hours of intervention and Harris 199113, control group included typically developing children. Sheinkoff 199834 and Magiati 200735

vi Although this systematic review met all our inclusion criteria, no studies were included. Three studies reported on cognitive outcomes. Two of these studies were not considered with other systematic reviews: Smith 2000 and Eikseth 200731. One study (Sallows 200529) had a control group that received a parent-directed ABI.

vii Wong 200735 was not included as mean age including SD was not between 1 and 6 years.

viii Wong 200735 was not included as mean age including SD was not between 1 and 6 years.

References


35. Wong V, Sun JG, Yeung DWC. Randomized controlled trial of using tongue acupuncture in autism spectrum disorder using PET scan for clinical correlation. Unpublished manuscript.