**Supplementary table 1: Critical appraisal of included articles (N=36) based on the tool by Sanderson et al.17**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Study** | **Author** | **Defined sample** | **Representative sample** | **Blinding** | **No author COI** | **Valid eye tests** | **Control for confounders** | **Appraisal score (/6)** |
|  | **FASD** |  |  |  |  |  |  |  |
| 1 | Hanson 1976 | 1 | 0 | 0 | 1 | 1 | 0 | **3** |
| 2 | Steinhausen 1982 | 1 | 0 | 0 | 1 | 1 | 0 | **3** |
| 3 | Strömland 1982 | 1 | 0 | 0 | 0 | 1 | 0 | **2** |
| 4 | Beattie 1983 | 1 | 0 | 0 | 1 | 1 | 0 | **3** |
| 5 | Strömland 1985 | 1 | 0 | 0 | 1 | 1 | 0 | **3** |
| 6 | Church & Gerkin1988 | 1 | 0 | 0 | 1 | 1 | 0 | **3** |
| 7 | Carones 1992 | 0 | 0 | 0 | 1 | 1 | 0 | **2** |
| 8 | Spohr 1993 | 1 | 0 | 0 | 1 | 1 | 0 | **3** |
| 9 | Spohr 1994 | 1 | 0 | 0 | 1 | 1 | 0 | **3** |
| 10 | Strömland 1996 | 1 | 0 | 0 | 1 | 1 | 0 | **3** |
| 11 | *Hellström 1997b* | 1 | 0 | 0 | 1 | 0 | 1 | **3** |
| 12 | *Hellström 1997a* | 0 | 0 | 0 | 1 | 0 | 1 | **2** |
| 13 | Egeland 1998 | 1 | 0 | 0 | 1 | 1 | 0 | **3** |
| 14 | *Hellström 1999* | 1 | 0 | 1 | 1 | 0 | 0 | **3** |
| 15 | Steinhausen 2003 | 1 | 0 | 0 | 1 | 1 | 0 | **3** |
| 16 | Kvigne 2004 | 1 | 0 | 0 | 1 | 1 | 1 | **4** |
| 17 | Carter 2005 | 1 | 1 | 1 | 1 | 1 | 1 | **6** |
| 18 | Viljoen 2005 | 1 | 1 | 1 | 1 | 1 | 1 | **6** |
| 19 | May 2006 | 1 | 1 | 1 | 1 | 1 | 1 | **6** |
| 20 | May 2007 | 1 | 1 | 1 | 1 | 1 | 1 | **6** |
| 21 | Elgen 2007 | 1 | 0 | 0 | 1 | 1 | 0 | **3** |
| 22 | Ervalahti 2007 | 1 | 0 | 0 | 1 | 1 | 0 | **3** |
| 23 | Moore 2007 | 1 | 1 | 0 | 1 | 1 | 1 | **5** |
| 24 | Ribeiro 2007 | 1 | 0 | 0 | 1 | 1 | 0 | **3** |
| 25 | Elliott 2008 | 1 | 0 | 0 | 1 | 1 | 0 | **3** |
| 26 | Andersson Grönlund 2010 | 1 | 1 | 0 | 1 | 1 | 0 | **4** |
| 27 | Landgren 2010 | 1 | 1 | 0 | 1 | 1 | 0 | **4** |
| 28 | May 2011 | 1 | 1 | 1 | 1 | 1 | 1 | **6** |
| 29 | Vernescu 2012 | 0 | 0 | 0 | 0 | 1 | 1 | **2** |
| 30 | Strömland 2015 | 1 | 0 | 1 | 1 | 1 | 0 | **4** |
| 31 | Blanck-Lubarsch 2019 | 1 | 0 | 1 | 1 | 1 | 0 | **4** |
|  |  |  |  |  |  |  |  |  |
|  | **PAE** |  |  |  |  |  |  |  |
| 32 | Majewski 1981 | 1 | 0 | 1 | 1 | 1 | 0 | **4** |
| 33 | Flanigan 2008 | 1 | 0 | 1 | 1 | 1 | 1 | **5** |
| 34 | Biyik 2019 | 1 | 1 | 0 | 1 | 1 | 1 | **5** |
|  |  |  |  |  |  |  |  |  |
|  | **FASD or PAE** |  |  |  |  |  |  |  |
| 35 | Astley 2010 | 1 | 0 | 1 | 1 | 1 | 1 | **5** |
| 36 | Suttie 2013 | 1 | 1 | 1 | 1 | 1 | 1 | **6** |

FASD = Fetal alcohol spectrum disorder; PAE = Prenatal alcohol exposure; 1 = Yes; 0 = No or Unsure; COI = Conflict of interest

*Italicised* papers appear to have overlapping participants and the same recruitment process, although different Control and/or children with FAS and measures were used so are reported in separate rows as appropriate.