Study	Patients with schizophrenia Total	Mean	SD	Healthy controls Total	Mean	SD	Standardised Mean Difference	SMD	95%–CI	Weight (fixed)	Weight (random)
medication_status = medicated and unmedicated											
da Silva Alves et al. 2011	18	6.37	1.0956	23	6.44	1.3500		−0.05	[−0.67; 0.56]	5.4%	6.9%
Kegeles et al. 2012	32	0.00	0.0011	22	0.00	0.0005		−0.27	[−0.82; 0.27]	6.9%	7.7%
Kaminski et al. 2019	55	7.92	1.0900	35	8.22	0.9000		−0.29	[−0.72; 0.13]	11.4%	9.3%
Fixed effect model	105			80				−0.23	[−0.52; 0.07]	23.7%	−−
Random effects model								−0.23	[−0.52; 0.07]	−−	23.9%
Heterogeneity: $I^2 = 0\%$, $\tau^2 = 0$, $p = 0.81$											
medication_status = naïve											
Goto et al. 2012	18	0.79	0.2800	18	0.67	0.4000		0.35	[−0.31; 1.01]	4.8%	6.4%
Smesny et al. 2015	31	11.61	1.0800	31	10.49	1.6840		0.79	[0.28; 1.31]	7.7%	8.1%
Chen et al. 2017	24	1.64	2.1514	24	1.28	1.8677		0.18	[−0.39; 0.75]	6.4%	7.4%
Fixed effect model	73			73				0.46	[0.13; 0.80]	18.9%	−−
Random effects model								0.46	[0.08; 0.84]	−−	21.9%
Heterogeneity: $I^2 = 23\%$, $\tau^2 = 0.0256$, $p = 0.27$											
medication_status = medicated											
Jessen et al. 2013	20	2.11	0.3000	20	2.06	0.3300		0.16	[−0.46; 0.78]	5.3%	6.8%
Coughlin et al. 2015	25	1.40	0.2300	16	1.37	0.2060		0.12	[−0.51; 0.75]	5.2%	6.7%
Goldstein et al. 2015	42	1.17	0.0766	15	1.12	0.0500		0.68	[0.07; 1.28]	5.7%	7.0%
Hugdahl et al. 2015	18	7.75	4.7804	26	10.60	4.1410		−0.65	[−1.26; −0.03]	5.4%	6.9%
Iwata et al. 2019	64	14.02	1.5500	26	13.94	1.3200		0.05	[−0.40; 0.51]	9.9%	8.9%
Wang et al. 2019	72	6.41	0.7500	84	6.65	0.5200		−0.38	[−0.69; −0.06]	20.4%	10.9%
Fixed effect model	241			187				−0.10	[−0.30; 0.10]	52.0%	−−
Random effects model								−0.03	[−0.38; 0.32]	−−	47.3%
Heterogeneity: $I^2 = 63\%$, $\tau^2 = 0.1150$, $p = 0.02$											
medication_status = unclear											
Maddock et al. 2018	17	0.90	0.0700	25	0.90	0.0800		0.00	[−0.62; 0.62]	5.4%	6.9%
Fixed effect model	17			25				0.00	[−0.62; 0.62]	5.4%	−−
Random effects model								0.00	[−0.62; 0.62]	−−	6.9%
Heterogeneity: not applicable											
Fixed effect model	**436**			**365**				**−0.02**	**[−0.16; 0.12]**	**100.0%**	**−−**
Random effects model								**0.03**	**[−0.19; 0.26]**	**−−**	**100.0%**
Heterogeneity: $I^2 = 57\%$, $\tau^2 = 0.0962$, $p < 0.01$											
Residual heterogeneity: $I^2 = 46\%$, $p = 0.06$											

−1 −0.5 0 0.5 1