

Denitrifying Bioreactors for Nitrate Removal: A Meta-analysis

Supplemental Material

7 tables

8 pages

Kelly Addy, Arthur J. Gold*, Laura E. Christianson, Mark B. David,

Louis A. Schipper, and Nicole A. Sacha

Supplemental Table S1: Design Data

Author	Year	Design	Experimental			Control	
			Removal Rate (g N m ⁻³ d ⁻¹)	Experimental SD†	# reps	Removal Rate (g N m ⁻³ d ⁻¹)	Control SD†
Cameron & Schipper	2010	Lab	6	1.1	35	0.1	0.01
Cameron & Schipper	2010	Lab	11	1	35	0.1	0.01
Cameron & Schipper	2010	Lab	3	0.5	40	0.1	0.01
Cameron & Schipper	2010	Lab	4.9	0.2	40	0.1	0.01
Cameron & Schipper	2010	Lab	3.8	0.3	7	0.1	0.01
Cameron & Schipper	2010	Lab	7.1	1.1	7	0.1	0.01
Cameron & Schipper	2010	Lab	3.3	0.8	8	0.1	0.01
Cameron & Schipper	2010	Lab	4.4	1	8	0.1	0.01
Christianson et al.	2011a	Bed	3.8	0.92	8	0.1	0.01
Christianson et al.	2011a	Bed	5.6	1.1	8	0.1	0.01
Christianson et al.	2011a	Bed	4.1	0.87	8	0.1	0.01
Christianson et al.	2011b	Bed	6.8	2.1	5	0.1	0.01
Christianson et al.	2011b	Bed	2.1	1.1	5	0.1	0.01
Christianson et al.	2012b	Bed	4	7.5	82	0.1	0.01
Christianson et al.	2012b	Bed	1.9	2.8	128	0.1	0.01
Christianson et al.	2012b	Bed	8.5	9.6	60	0.1	0.01
Christianson et al.	2012b	Bed	8.6	10.9	42	0.1	0.01
Christianson et al.	2013b	Bed	0.7	0.3	5	0.1	0.01
Chun et al.	2009	Lab	19.7	10.3	2.0	0.1	0.01
David et al.	in review	Bed	14.6	21	369	0.1	0.01
Elgood et al.	2010	Bed	0.6	0.4	29	0.1	0.01
Gibert et al.	2008	Lab	14.2	3.7	2	0.1	0.01
Greenan et al.	2006	Lab	3.9	0.07	12	0.1	0.01
Healy et al.	2012	Lab	1.8	0.3	3	0.1	0.01
Healy et al.	2014	Lab	1.5	0.3	3	0.1	0.01
Healy et al.	2006	Lab	0.6	0.1	125	0.1	0.01
Healy et al.	2006	Lab	0.4	0.1	125	0.1	0.01
Healy et al.	2006	Lab	2.2	0.1	125	0.1	0.01
Healy et al.	2006	Lab	1.5	0.5	125	0.1	0.01
Healy et al.	2006	Lab	0.8	0.3	125	0.1	0.01
Healy et al.	2006	Lab	3.3	1	125	0.1	0.01
Lepine et al.	in review	Bed	42	16.2	79	0.1	0.01
Lepine et al.	in review	Bed	24.7	11.5	79	0.1	0.01
Lepine et al.	in review	Bed	16.9	9.2	79	0.1	0.01
Lepine et al.	in review	Bed	13.3	7.4	79	0.1	0.01
Moorman et al.	2010	Wall	0.13	0.05	8	0.1	0.01
Puer et al.	in review	Bed	0.21	0.37	40	0.1	0.01
Puer et al.	in review	Bed	3.24	4.49	60	0.1	0.01
Puer et al.	in review	Bed	0.36	0.55	40	0.1	0.01
Puer et al.	in review	Lab	6.8	4.6	42	0.1	0.01
Robertson	2010	Lab	16.1	2.6	4	0.1	0.01
Robertson	2010	Lab	19.7	2.8	4	0.1	0.01
Robertson	2010	Lab	22.7	5	4	0.1	0.01
Robertson	2010	Lab	34.3	5	4	0.1	0.01
Robertson & Merkley	2009	Bed	2.6	1.9	51	0.1	0.01
Robertson et al.	2009	Bed	9.93	1.96	73	0.1	0.01
Schipper & Vojfodic-Vukovic	2000	Wall	0.2	0.2	5	0.1	0.01
Schipper et al.	2010a	Bed	16.1	10.2	33	0.1	0.01
Schipper et al.	2010a	Bed	2.7	2.4	63	0.1	0.01
Schipper et al.	2010a	Bed	1.4	1.3	21	0.1	0.01
Schmidt & Clark	2012	Wall	3.2	1.7	6	0.1	0.01
Warneke et al.	2011a	Bed	8.7	1.5	12	0.1	0.01
Warneke et al.	2011b	Bed	6.5	3.5	7	0.1	0.01
Warneke et al.	2011c	Lab	1.9	0.7	4	0.1	0.01
Warneke et al.	2011c	Lab	2.9	1.1	4	0.1	0.01
Warneke et al.	2011c	Lab	3.8	0.7	4	0.1	0.01
Woli et al.	2010	Bed	21.4	27.3	30	0.1	0.01

Denitrifying Bioreactors for Nitrate Removal: A Meta-analysis, Addy et al.
 Supplement Table S2: Bed Wood Source Data

Author	Year	Wood Source	Experimental Removal Rate (g N m ⁻³ d ⁻¹)	Experimental SD†	# reps	Control Removal Rate (g N m ⁻³ d ⁻¹)	Control SD†
Christianson et al.	2011a	hardwood	3.8	0.92	8	0.1	0.01
Christianson et al.	2011a	hardwood	5.6	1.1	8	0.1	0.01
Christianson et al.	2011a	hardwood	4.1	0.87	8	0.1	0.01
Christianson et al.	2011b	softwood	6.8	2.1	5	0.1	0.01
Christianson et al.	2011b	softwood	2.1	1.1	5	0.1	0.01
Christianson et al.	2013b	hardwood	0.7	0.3	5	0.1	0.01
David et al.	in review	hardwood	14.6	21	369	0.1	0.01
Elgood et al.	2010	softwood	0.6	0.4	29	0.1	0.01
Puer et al.	in review	hardwood	0.21	0.37	40	0.1	0.01
Puer et al.	in review	hardwood	3.24	4.49	60	0.1	0.01
Puer et al.	in review	hardwood	0.36	0.55	40	0.1	0.01
Schipper et al.	2010a	softwood	16.1	10.2	33	0.1	0.01
Schipper et al.	2010a	softwood	2.7	2.4	63	0.1	0.01
Schipper et al.	2010a	softwood	1.4	1.3	21	0.1	0.01
Warneke et al.	2011a	softwood	8.7	1.5	12	0.1	0.01
Warneke et al.	2011b	softwood	6.5	3.5	7	0.1	0.01
Woli et al.	2010	hardwood	21.4	27.3	30	0.1	0.01

† SD, standard deviation

Author	Year	Nitrate (mg N l ⁻¹)	Nitrate Category	Experimental	Experimental SD†	# reps	Control	Control SD†
				Removal Rate (g N m ⁻³ d ⁻¹)			Removal Rate (g N m ⁻³ d ⁻¹)	
Christianson et al.	2011a	10.1	med	3.8	0.92	8	0.1	0.01
Christianson et al.	2011a	10.1	med	5.6	1.1	8	0.1	0.01
Christianson et al.	2011a	10.1	med	4.1	0.87	8	0.1	0.01
Christianson et al.	2011b	35.6	high	1.1	1.9	5	0.1	0.01
Christianson et al.	2011b	17.5	med	5.8	10.4	23	0.1	0.01
Christianson et al.	2011b	7.8	low	4.3	8.8	11	0.1	0.01
Christianson et al.	2011b	35.6	high	3	1.1	5	0.1	0.01
Christianson et al.	2011b	17.5	med	5.4	6	23	0.1	0.01
Christianson et al.	2011b	7.8	low	7.1	1.4	11	0.1	0.01
Christianson et al.	2012b	8.5	low	13.1	14.8	18	0.1	0.01
Christianson et al.	2012b	15.3	med	5.5	5	23	0.1	0.01
Christianson et al.	2012b	3.2	low	3.6	7.3	78	0.1	0.01
Christianson et al.	2012b	12.5	med	10.9	9.6	4	0.1	0.01
Christianson et al.	2012b	8.7	low	1.2	1.7	24	0.1	0.01
Christianson et al.	2012b	12.6	med	2.1	2.9	100	0.1	0.01
Christianson et al.	2012b	7.3	low	7.2	7.7	34	0.1	0.01
Christianson et al.	2012b	13.9	med	10.2	11.6	26	0.1	0.01
Christianson et al.	2013b	14.5	med	0.7	0.3	5	0.1	0.01
David et al.	in review	23.4	med	20.4	24.5	190	0.1	0.01
David et al.	in review	48.3	high	8.4	14.1	178	0.1	0.01
Elgood et al.	2010	2.8	low	0.6	0.4	29	0.1	0.01
Lepine et al.	in review	25.5	med	30.6	9.1	15	0.1	0.01
Lepine et al.	in review	52.6	high	44.6	16.5	64	0.1	0.01
Lepine et al.	in review	25.4	med	15.8	5.6	13	0.1	0.01
Lepine et al.	in review	53.5	high	26.4	11.6	66	0.1	0.01
Lepine et al.	in review	25.5	med	9.5	4.2	15	0.1	0.01
Lepine et al.	in review	52.6	high	18.6	9.2	64	0.1	0.01
Lepine et al.	in review	25.5	med	8.3	8.2	15	0.1	0.01
Lepine et al.	in review	52.6	high	14.4	6.7	64	0.1	0.01
Pluer et al.	in review		low	0.1	0.2	20	0.1	0.01
Pluer et al.	in review		med	0.3	0.5	20	0.1	0.01
Pluer et al.	in review		low	1.3	1.3	23	0.1	0.01
Pluer et al.	in review		med	4.5	5.27	37	0.1	0.01
Pluer et al.	in review		low	0.4	0.5	32	0.1	0.01
Pluer et al.	in review		med	0.4	0.8	8	0.1	0.01
Robertson & Merkley	2009	4.6	low	2.7	1.9	50	0.1	0.01
Schipper et al.	2010a	250	high	16.1	10.2	33	0.1	0.01
Schipper et al.	2010a	4.3	low	2.2	1.8	57	0.1	0.01
Schipper et al.	2010a	15.4	med	7.4	2.5	6	0.1	0.01
Schipper et al.	2010a	25.8	med	0.8	0.1	2	0.1	0.01
Schipper et al.	2010a	57.2	high	2	0.9	4	0.1	0.01
Warneke et al.	2011a	146	high	8.7	1.5	12	0.1	0.01
Warneke et al.	2011b	146	high	6.5	3.5	7	0.1	0.01
Woli et al.	2010	6.6	low	44.2	48	4	0.1	0.01
Woli et al.	2010	14.4	med	17.9	22.2	26	0.1	0.01

† SD, standard deviation

Denitrifying Bioreactors for Nitrate Removal: A Meta-analysis, Addy et al.
Supplemental Table 4: Bed HRT Data

Author	Year	HRT (h)	HRT Category	Experimental Removal Rate (g N m ⁻³ d ⁻¹)	Adjusted Experimental Rate (g N/m3)	Experimental SD†	Adjusted Experimental SD†	# reps	Control Removal Rate (g N m ⁻³ d ⁻¹)	Adjusted Control Rate (g N/m3)	Control SD†
Christianson et al.	2011a	4	low	3.8	0.6	0.92	0.15	8	0.1	0.05	0.005
Christianson et al.	2011a	4.6	low	5.6	1.1	1.1	0.21	8	0.1	0.05	0.005
Christianson et al.	2011a	4.1	low	4.1	0.7	0.87	0.15	8	0.1	0.05	0.005
Christianson et al.	2011b	96	high	6.8	27.2	2.1	8.40	5	0.1	0.05	0.005
Christianson et al.	2011b	36	high	2.1	3.2	1.1	1.65	5	0.1	0.05	0.005
Christianson et al.	2012b	3.6	low	14.7	2.2	11.6	1.74	23	0.1	0.05	0.005
Christianson et al.	2012b	86.8	high	0.5	1.8	0.3	1.09	6	0.1	0.05	0.005
Christianson et al.	2012b	5.9	low	7.2	1.8	8.9	2.19	23	0.1	0.05	0.005
Christianson et al.	2012b	19	med	1.7	1.3	1.9	1.50	12	0.1	0.05	0.005
Christianson et al.	2012b	50.2	high	5.6	11.7	13.4	28.03	8	0.1	0.05	0.005
Christianson et al.	2012b	3.4	low	12	1.7	9.7	1.37	37	0.1	0.05	0.005
Christianson et al.	2012b	20.2	high	2.3	1.9	2.6	2.19	7	0.1	0.05	0.005
Christianson et al.	2012b	69.1	high	0.3	0.9	0.2	0.58	4	0.1	0.05	0.005
Christianson et al.	2012b	5.9	low	1	0.2	1.6	0.39	21	0.1	0.05	0.005
Christianson et al.	2012b	17.2	med	0.4	0.3	0.2	0.14	26	0.1	0.05	0.005
Christianson et al.	2013b	2.7	low	0.8	0.1	0.2	0.02	3	0.1	0.05	0.005
Christianson et al.	2013b	18.8	med	0.5	0.4	0.2	0.16	2	0.1	0.05	0.005
David et al.	in review	6.2	med	19.3	5.0	27.6	7.13	215	0.1	0.05	0.005
David et al.	in review	16.7	med	10.5	7.3	9.3	6.47	113	0.1	0.05	0.005
David et al.	in review	182.8	high	2.3	17.5	2.3	17.52	40	0.1	0.05	0.005
Elgood et al.	2010	27.3	high	0.7	0.8	0.4	0.46	11	0.1	0.05	0.005
Elgood et al.	2010	52	high	0.4	0.9	0.21	0.46	18	0.1	0.05	0.005
Lepine et al.	in review	6.3	med	45.5	11.9	14.2	3.73	24	0.1	0.05	0.005
Lepine et al.	in review	12.2	med	40.4	20.5	16.9	8.59	55	0.1	0.05	0.005
Lepine et al.	in review	20	med	24.7	20.6	11.5	9.58	79	0.1	0.05	0.005
Lepine et al.	in review	19.8	med	19.7	16.3	6.4	5.28	27	0.1	0.05	0.005
Lepine et al.	in review	43.7	high	15.4	28.0	10.1	18.39	52	0.1	0.05	0.005
Lepine et al.	in review	29.1	high	16.4	19.9	5	6.06	26	0.1	0.05	0.005
Lepine et al.	in review	62.3	high	11.3	29.3	7.2	18.69	52	0.1	0.05	0.005
Schipper et al.	2010a	5.28	low	16.1	3.5	10.2	2.24	33	0.1	0.05	0.005
Schipper et al.	2010a	0.97	low	2.7	0.1	2.4	0.10	63	0.1	0.05	0.005
Schipper et al.	2010a	31.2	high	1.4	1.8	1.3	1.69	21	0.1	0.05	0.005
Warneke et al.	2011a	127.7	high	8.7	46.3	1.5	7.98	12	0.1	0.05	0.005
Warneke et al.	2011b	131	high	6.5	35.5	3.5	19.10	7	0.1	0.05	0.005
Woli et al.	2010	1.4	low	21.4	1.2	27.3	1.59	30	0.1	0.05	0.005

† SD, standard deviation

Denitrifying Bioreactors for Nitrate Removal: A Meta-analysis, Addy et al.

Supplemental Table 5: Bed Age Data

Author	Year	Age	Experimental	Experimental	# reps	Control	Control
			Removal Rate (g N m ⁻³ d ⁻¹)			Removal Rate (g N m ⁻³ d ⁻¹)	
Christianson et al.	2011b	<13 mos	6.8	2.1	5	0.1	0.01
Christianson et al.	2011b	<13 mos	2.1	1.1	5	0.1	0.01
Christianson et al.	2012b	<13 mos	20.1	15	11	0.1	0.01
Christianson et al.	2012b	13-24 mos	5.8	4.9	24	0.1	0.01
Christianson et al.	2012b	> 24 mos	0.4	0.4	7	0.1	0.01
Christianson et al.	2012b	<13 mos	16.3	13.1	13	0.1	0.01
Christianson et al.	2012b	13-24 mos	9.3	6.8	27	0.1	0.01
Christianson et al.	2012b	> 24 mos	2.4	5.8	20	0.1	0.01
Christianson et al.	2012b	> 24 mos	1.6	1.8	7	0.1	0.01
Christianson et al.	2012b	> 24 mos	4.2	7.8	75	0.1	0.01
Christianson et al.	2012b	<13 mos	0.7	1.1	49	0.1	0.01
Christianson et al.	2012b	13-24 mos	4.8	3.4	28	0.1	0.01
Christianson et al.	2013b	13-24 mos	0.7	0.3	5	0.1	0.01
David et al.	in review	<13 mos	43.1	22.8	83	0.1	0.01
David et al.	in review	13-24 mos	7.9	13.6	158	0.1	0.01
David et al.	in review	> 24 mos	4.3	4.6	127	0.1	0.01
Elgood et al.	2010	> 24 mos	0.6	0.4	29	0.1	0.01
Lepine et al.	in review	<13 mos	42	16.2	79	0.1	0.01
Lepine et al.	in review	<13 mos	24.7	11.5	79	0.1	0.01
Lepine et al.	in review	<13 mos	16.9	9.2	79	0.1	0.01
Lepine et al.	in review	<13 mos	13.3	7.4	79	0.1	0.01
Puer et al.	in review	13-24 mos	0.21	0.37	40	0.1	0.01
Puer et al.	in review	> 24 mos	3.24	4.49	60	0.1	0.01
Puer et al.	in review	13-24 mos	0.4	0.55	40	0.1	0.01
Robertson & Merkley	2009	<13 mos	3.5	1.7	34	0.1	0.01
Robertson & Merkley	2009	13-24 mos	0.8	0.6	17	0.1	0.01
Robertson et al.	2009	<13 mos	15.7	7.1	8	0.1	0.01
Robertson et al.	2009	13-24 mos	8.4	3.4	17	0.1	0.01
Robertson et al.	2009	> 24 mos	9.2	18	7	0.1	0.01
Robertson et al.	2009	> 24 mos	4.35	0.91	41	0.1	0.01
Schipper et al.	2010a	<13 mos	19.9	9.6	23	0.1	0.01
Schipper et al.	2010a	13-24 mos	7.5	5.3	10	0.1	0.01
Schipper et al.	2010a	<13 mos	2.3	2	50	0.1	0.01
Schipper et al.	2010a	13-24 mos	4.2	3.2	13	0.1	0.01
Schipper et al.	2010a	<13 mos	1.4	1.3	21	0.1	0.01
Warneke et al.	2011b	13-24 mos	4.6	4	3	0.1	0.01
Warneke et al.	2011b	> 24 mos	8	2.7	4	0.1	0.01
Woli et al.	2010	<=12 mos	31.3	32.9	14	0.1	0.01
Woli et al.	2010	13-24 mos	12.7	18.3	16	0.1	0.01

† SD, standard deviation

Supplemental Table 6: Bed N Limitation Data

Author	Year	N limitation	Experimental	Experimental		Control	Control
			Removal Rate	Removal Rate	SD†	# reps	Removal Rate
			(g N m ⁻³ d ⁻¹)	(g N m ⁻³ d ⁻¹)		(g N m ⁻³ d ⁻¹)	
Christianson et al.	2011a	N	3.8	0.92	8	0.1	0.01
Christianson et al.	2011a	Y	4.1	0.87	8	0.1	0.01
Christianson et al.	2011b	Y	6.8	2.1	5	0.1	0.01
Christianson et al.	2011b	Y	2.1	1.1	5	0.1	0.01
Christianson et al.	2012b	Y	17	13.6	7	0.1	0.01
Christianson et al.	2012b	N	4	9.7	35	0.1	0.01
Christianson et al.	2012b	Y	0.2	0.2	7	0.1	0.01
Christianson et al.	2012b	N	9.6	9.7	53	0.1	0.01
Christianson et al.	2012b	Y	1.9	4.7	33	0.1	0.01
Christianson et al.	2012b	N	5.4	8.7	48	0.1	0.01
Christianson et al.	2012b	Y	0.4	0.3	10	0.1	0.01
Christianson et al.	2012b	N	2.3	3	97	0.1	0.01
Christianson et al.	2012b	N	5.6	1.1	8	0.1	0.01
Christianson et al.	2013b	N	0.8	0.2	4	0.1	0.01
David et al.	in review	Y	41.9	18.7	34	0.1	0.01
David et al.	in review	N	11.8	19.2	334	0.1	0.01
Elgood et al.	2010	Y	0.1	0.1	4	0.1	0.01
Elgood et al.	2010	N	0.6	0.3	25	0.1	0.01
Lepine et al.	in review	Y	35	7.2	14	0.1	0.01
Lepine et al.	in review	N	45.1	17.7	57	0.1	0.01
Lepine et al.	in review	Y	19.5	9.6	19	0.1	0.01
Lepine et al.	in review	N	28.3	12	48	0.1	0.01
Lepine et al.	in review	Y	17.6	9.8	20	0.1	0.01
Lepine et al.	in review	N	19.7	9.5	40	0.1	0.01
Lepine et al.	in review	Y	10.6	5.5	23	0.1	0.01
Lepine et al.	in review	N	17.1	7.7	38	0.1	0.01
Pluer et al.	in review	Y	0.21	0.37	40	0.1	0.01
Pluer et al.	in review	Y	3.24	4.49	60	0.1	0.01
Pluer et al.	in review	Y	0.36	0.55	40	0.1	0.01
Robertson & Merkley	2009	Y	2.1	1.4	22	0.1	0.01
Robertson & Merkley	2009	N	3	2.1	29	0.1	0.01
Robertson et al.	2009	Y	4.87	1.38	73	0.1	0.01
Schipper et al.	2010a	N	16.1	10.2	33	0.1	0.01
Schipper et al.	2010a	Y	2.5	2	51	0.1	0.01
Schipper et al.	2010a	N	3.5	3.6	12	0.1	0.01
Schipper et al.	2010a	Y	1.3	1.1	6	0.1	0.01
Warneke et al.	2011a	N	8.7	1.5	12	0.1	0.01
Warneke et al.	2011b	N	6.5	3.5	7	0.1	0.01
Woli et al.	2010	Y	39.4	52.1	4	0.1	0.01
Woli et al.	2010	N	18.6	18	26	0.1	0.01

† SD, standard deviation

Denitrifying Bioreactors for Nitrate Removal: A Meta-analysis, Addy et al.
 Supplemental Table 7: Bed Temperature Data

Author	Year	Temp (°C)	Temp Category	Experimental	Experimental		Control	Control
				Removal Rate (g N m ⁻³ d ⁻¹)	SD†	# reps	Removal Rate (g N m ⁻³ d ⁻¹)	SD†
Christianson et al.	2011a	13	med	3.8	0.92	8	0.1	0.01
Christianson et al.	2011a	13	med	5.6	1.1	8	0.1	0.01
Christianson et al.	2011a	13	med	4.1	0.87	8	0.1	0.01
Christianson et al.	2011b	8.8	med	6.8	2.1	5	0.1	0.01
Christianson et al.	2011b	8.8	med	2.1	1.1	5	0.1	0.01
Christianson et al.	2012b	4.7	low	1.48	1.8	11	0.1	0.01
Christianson et al.	2012b	12.6	med	14.48	13.26	27	0.1	0.01
Christianson et al.	2012b	4.6	low	2.9	3.4	13	0.1	0.01
Christianson et al.	2012b	12.6	med	10.1	10.7	33	0.1	0.01
Christianson et al.	2012b	17.8	high	13	10.7	3	0.1	0.01
Christianson et al.	2012b	4.4	low	2.7	3.4	21	0.1	0.01
Christianson et al.	2012b	13.3	med	3.4	3.3	30	0.1	0.01
Christianson et al.	2012b	18.7	high	0.6	0.3	14	0.1	0.01
Christianson et al.	2013b	13.4	med	0.7	0.3	5	0.1	0.01
David et al.	in review	5.7	low	6.3	7.7	98	0.1	0.01
David et al.	in review	12.1	med	5.2	5.3	163	0.1	0.01
David et al.	in review	17.3	high	7.6	4.4	23	0.1	0.01
Elgood et al.	2010	3.1	low	0.4	0.1	11	0.1	0.01
Elgood et al.	2010	14.2	med	0.7	0.4	18	0.1	0.01
Lepine et al.	in review	13.9	med	43.2	16	29	0.1	0.01
Lepine et al.	in review	20	high	41.2	16.5	50	0.1	0.01
Lepine et al.	in review	13.9	med	26.9	12.3	29	0.1	0.01
Lepine et al.	in review	20	high	23.4	10.9	50	0.1	0.01
Lepine et al.	in review	13.9	med	21.3	9.9	29	0.1	0.01
Lepine et al.	in review	20	high	14.3	7.8	50	0.1	0.01
Lepine et al.	in review	13.9	med	18.2	8.1	29	0.1	0.01
Lepine et al.	in review	20	high	10.4	5.2	50	0.1	0.01
Robertson & Merkley	2009	3.6	low	2.9	2.3	22	0.1	0.01
Robertson & Merkley	2009	11.6	med	2.5	1.5	26	0.1	0.01
Robertson & Merkley	2009	20	high	1.8	3	3	0.1	0.01
Robertson et al.	2009	7.7	med	9.93	2	73	0.1	0.01
Warneke et al.	2011a	19	high	8.7	1.5	12	0.1	0.01
Warneke et al.	2011c	16.1	med	3.4	4.7	2	0.1	0.01
Warneke et al.	2011c	19.9	high	7.8	2.4	5	0.1	0.01

† SD, standard deviation