

Appendix D. Results from all included studies – Primary Outcomes

Source	Study design	Follow-up time point	Outcome measure (range)	Intervention ^a			Contrast ^a			MD [95% CI] ^b
				Total	Mean	SD _c	Total	Mean	SD _c	
General Populations										
Exercise vs. Control (short-term)										
Pain Intensity										
<i>Haufe et al.,²⁷ (2017)</i>	RCT	5-months	VAS (0-10)	92	1.88	2.24	97	2.54	2.5	-6.6 [-13.38 to 0.18]
<i>Barene et al.,¹⁷ (2014) (soccer)</i>	C-RCT (6 clusters)	3-months	Nordic Q. - VAS (0-10)	28	NR	NR	15	NR	NR	-1.0 [-10.70 to 8.70]
<i>Barene et al.,¹⁷ (2014) (zumba)</i>	C-RCT (6 clusters)	3-months	Nordic Q. - VAS (0-10)	30	NR	NR	16	NR	NR	2.0 [-6.75 to 10.75]
<i>Pedersen et al.,³⁴ (2013)</i>	C-RCT (57 cluster)	5-months	Nordic Q. - VAS (0-9)	157	1.13	1.13 _d	177	1.61	1.06 _d	-5.33 [-7.94 to -2.72]
Disability										
<i>Haufe et al.,²⁷ (2017)</i>	RCT	5-months	ODI (0-50)	92	7.69	8.08	97	8.87	8.57	-2.36 [-7.11 to 2.39]
Exercise and Education vs. Control (short-term)										
Pain Intensity										
<i>Lonn et al.,³² (1999)</i>	RCT	5-months	VAS (0-10)	43 _e	1.8	1.46 _r	38 _e	2.6	1.68 _r	-8.0 [-14.84 to -1.16]
<i>Soukup et al.,³⁶ (1999)</i>	RCT	5-months	VAS (0-100)	34	23	16	35	24	17	-1.0 [-8.79 to 6.79]
<i>Kamioka et al.,³⁰ (2011)</i>	C-RCT (4 clusters)	3-months	VAS (0-10)	22	5.0	1.9	12	4.1	2.5	9.0 [-5.95 to 23.95]
Disability										
<i>Lonn et al.,³² (1999)</i>	RCT	5-months	VAS LBP function (0-10)	43 _e	7	1.95 _r	38 _e	6.1	2.14 _r	-9.0 [-17.91 to -0.09]
<i>Soukup et al.,³⁶ (1999)</i>	RCT	5-months	VAS LBP function (0-100)	34	60	15.95 _r	35	61	20.58 _r	-1.0 [-9.70 to 7.70]
Exercise and Education vs. Control (long-term)										
Pain Intensity										
<i>Chaleat-Valayer et al.,⁸ (2016)</i>	RCT	18-months	VAS (0-100)	139	36.2	21	141	36.7	21	-0.50 [-5.42 to 4.42]
<i>Glomsrod et al.,²⁵ (2001); Lonn et al.,³² (1999)</i>	RCT	12-months	VAS (0-10)	38	2.2	1.9	35	3.3	2.1	-11.00 [-20.18 to -1.82]
<i>Soukup et al.,³⁷ (2001); Soukup et al.,³⁶ (1999)</i>	RCT	12-months	VAS (0-100)	34	26	19	35	32	23	-6.00 [-15.97 to 3.97]
<i>Warming et al.,⁴⁰ (2008) (TTPT)</i>	C-RCT (11 clusters)	12-months	Nordic Q. - VAS (0-10)	28	1.17	1.49	21	1.63	2.1	-4.60 [-14.64 to 5.44]
Disability										
<i>Chaleat-Valayer et al.,⁸ (2016)</i>	RCT	18-months	QBPDs (0-100)	139	19.8	15.8	141	24.4	16.4	-4.60 [-8.37 to -0.83]
<i>Glomsrod et al.,²⁵ (2001); Lonn et al.,³² (1999)</i>	RCT	12-months	VAS LBP function (0-10)	38	6.7	2.3	35	5.2	2.3	-15.00 [-25.56 to -4.44]
<i>Soukup et al.,³⁷ (2001); Soukup et al.,³⁶ (1999)</i>	RCT	12-months	VAS LBP function (0-100)	34	58	23	35	52	23	-6.00 [-16.85 to 4.85]
<i>Warming et al.,⁴⁰ (2008) (TTPT)</i>	C-RCT (11 clusters)	12-months	Disability Quest. (0-38)	28	3.29	2.79	21	5.85	4.52	-6.74 [-12.14 to -1.34]
Education vs. Control (short-term)										
Pain Intensity										
<i>Donaldson et al.,¹⁸ (1993)</i>	RCT	3-months	McGill Pain Quest. (0-78)	86 _e	10.7	11.2	86 _e	11.9	12.2	-1.54 [-5.97 to 2.89]
<i>Irvine et al.,²⁹ (2015) (FitBack program)</i>	RCT	4-months	VAS (0-10)	190	0.56	1	98	0.98	1.43	-4.20 [-7.04 to -1.36]
<i>Irvine et al.,²⁹ (2015) (alternative care)</i>	RCT	4-months	VAS (0-10)	196	0.89	1.3	98	0.98	1.43	-0.90 [-4.16 to 2.36]
<i>Ketola et al.,³¹ (2002) (ergonomics education)</i>	RCT	10-months	Pain score (1-5)	31	2.7	1.11 _d	26	2.6	1.01 _d	0.10 [-0.45 to 0.65] _d
<i>Menzel et al.,³³ (2006)</i>	RCT	3-months	VAS (0-100)	12	25.9	14	11	17.4	15.9	8.50 [-3.72 to 20.72]
Disability										
<i>Irvine et al.,²⁹ (2015) (FitBack program)</i>	RCT	4-months	VAS (1-10)	190	3.03	1.88	98	3.74	2.22	-7.10 [-11.98 to -2.22]
<i>Irvine et al.,²⁹ (2015) (alternative care)</i>	RCT	4-months	VAS (1-10)	196	3.31	2	98	3.74	2.22	-4.30 [-9.33 to 0.73]
<i>Menzel et al.,³³ (2006)</i>	RCT	3-months	ODI (0-50)	13	15.1	3.8	11	14.1	4.6	2.00 [-4.72 to 8.72]
<i>Tuchin et al.,³⁸ (1998)</i>	RCT	6-months	ODI (0-50)	34	7.1	9.5	27	9.9	9.3	-5.60 [-15.11 to 3.91]

Source	Study design	Follow-up time point	Outcome measure (range)	Intervention ^a			Contrast ^a			MD [95% CI] ^b
				Total	Mean	SD ^c	Total	Mean	SD ^c	
Yassi et al, ⁴¹ (2001) (Arm B)	C-RCT (9 clusters)	6-months	ODI (0-50)	46	7.2	9.5	22	5.8	9.3	2.80 [-6.79 to 12.39]
Yassi et al, ⁴¹ (2001) (Arm C)	C-RCT (9 clusters)	6-months	ODI (0-50)	48	6.7	9	21	5.8	9.3	1.80 [-7.52 to 11.12]
Education vs. Control (long-term)										
Pain Intensity										
Jensen et al, ⁷ (2006) (SMI)	C-RCT (19 clusters)	24-months	VAS (0-10)	35	2	2.1	43	1.8	2.7	2.00 [-8.93 to 12.93]
Warming et al, ⁴⁰ (2008) (TT)	C-RCT (11 clusters)	12-months	Nordic Q. VAS (0-10)	27	1.77	1.88	21	1.63	2.1	1.40 [-9.88 to 12.68]
Disability										
Warming et al, ⁴⁰ (2008) (TT)	C-RCT (11 clusters)	12-months	Disability Quest. (0-38)	27	5.92	3.93	21	5.85	4.52	0.18 [-6.12 to 6.47]
Yassi et al, ⁴¹ (2001) (Arm B)	C-RCT (9 clusters)	12-months	ODI (0-50)	43	6.7	8.7	20	6.4	10.6	0.60 [-9.30 to 10.50]
Yassi et al, ⁴¹ (2001) (Arm C)	C-RCT (9 clusters)	12-months	ODI (0-50)	45	5.4	7.6	20	6.4	10.6	-2.00 [-11.08 to 7.08]
Ergonomic vs. Control (short-term)										
Pain Intensity										
Gatty et al, ²⁴ (2004)	RCT	4-months	Pain score (1-4)	6	2.3	0.82	7	1.9	1.21	0.40 [-0.74 to 1.54] _g
Ketola et al, ³¹ (2002) (intensive ergonomics)	RCT	10-months	Pain score (1-5)	28	2.5	1.05 _d	26	2.6	1.01 _d	-0.10 [-0.65 to 0.45] _g
Driessen et al, ²⁰ (2011)	C-RCT (37 clusters)	6-months	VAS (0-10)	256	1.62	2.8	296	1.48	2.8	1.40 [-3.28 to 6.08]
Ergonomic vs. Control (long-term)										
Pain Intensity										
Driessen et al, ²⁰ (2011)	C-RCT (37 clusters)	12-months	VAS (0-10)	252	1.63	2.8	286	1.43	2.8	2.00 [-2.74 to 6.74]
Ergonomic and Education vs. Control (short-term)										
Pain Intensity										
Ijzelenberg et al, ²⁸ (2007)	C-RCT (18 clusters)	6-months	VAS (0-10)	101	1.9	2.8	91	1.8	2.8	1.00 [-6.93 to 8.93]
Disability										
Ijzelenberg et al, ²⁸ (2007)	C-RCT (18 clusters)	6-months	RMDQ (0-24)	101	1.7	3.7	91	1.2	2.9	2.08 [-1.87 to 6.03]
Ergonomic and Education vs. Control (long-term)										
Pain Intensity										
Ijzelenberg et al, ²⁸ (2007)	C-RCT (18 clusters)	12-months	VAS (0-10)	95	1.9	2.9	89	1.9	2.9	0.00 [-8.38 to 8.38]
Jensen et al, ⁷ (2006) (TTI)	C-RCT (19 clusters)	24-months	VAS (0-10)	38	1.8	2.4	44	1.8	2.7	0.00 [-11.14 to 11.14]
Disability										
Ijzelenberg et al, ²⁸ (2007)	C-RCT (18 clusters)	12-months	RMDQ (0-24)	95	1.7	4	89	1.4	3.1	1.25 [-3.08 to 5.58]
Pregnant Population										
Exercise vs. Control (short-term)										
Pain Intensity										
Eggen et al, ²¹ (2012)	RCT	8-months	VAS (0-10)	116	1.9	2.47 _r	124	2.2	2.55 _r	-3.00 [-9.36 to 3.36]
Garshasbi et al, ²³ (2005)	RCT	3-months	VAS (0-100)	107	30.48	15.46	105	33	20.39	-2.52 [-7.38 to 2.34]
Disability										
Eggen et al, ²¹ (2012)	RCT	8-months	RMDQ (0-24)	116	2.4	3.57 _r	124	3.1	4.25 _r	-2.91 [-7.06 to 1.24]
Children Population										
Exercise and Education vs. Control (short-term)										
Pain Intensity										
Fanucchi et al, ²² (2009)	RCT	6-months	VAS (0-10)	38	1.5	2.7	32	1.5	2.2	0.00 [-11.68 to 11.68]

Abbreviations: SD, Standard Deviation; MD, Mean Difference; CI, Confidence Interval; RCT, Randomised Controlled Trial; C-RCT, Cluster-Randomised Controlled Trial; NR, Not Reported; RMDQ, Rolland Morris Disability Questionnaire; VAS, Visual Analogue Scale; Nordic Q., Nordic Musculoskeletal Questionnaire; ODI, Oswestry Disability Index; LBP, Low Back Pain; QBPDS, Quebec Back Pain Disability Scale.

^a Values presented in the original scale as measured.

^b Value presented on 0-100 scale unless otherwise indicated.

^c Value presented as standard deviation unless otherwise indicated.

^d SD obtained from standard error following Cochrane Handbook recommendations.

^e Only baseline data was available.

^f SD obtained from 95% Confidence Interval following Cochrane Handbook recommendations.

^g Value presented on study original scale.

A negative value of the mean difference estimate represents an effect in favour of the intervention group.

Short-term indicates follow-up assessment of less than 12-months.

Long-term indicates follow-up assessment of 12-months or more.