

## Figure S1: Example search strategy for MEDLINE

MEDLINE:

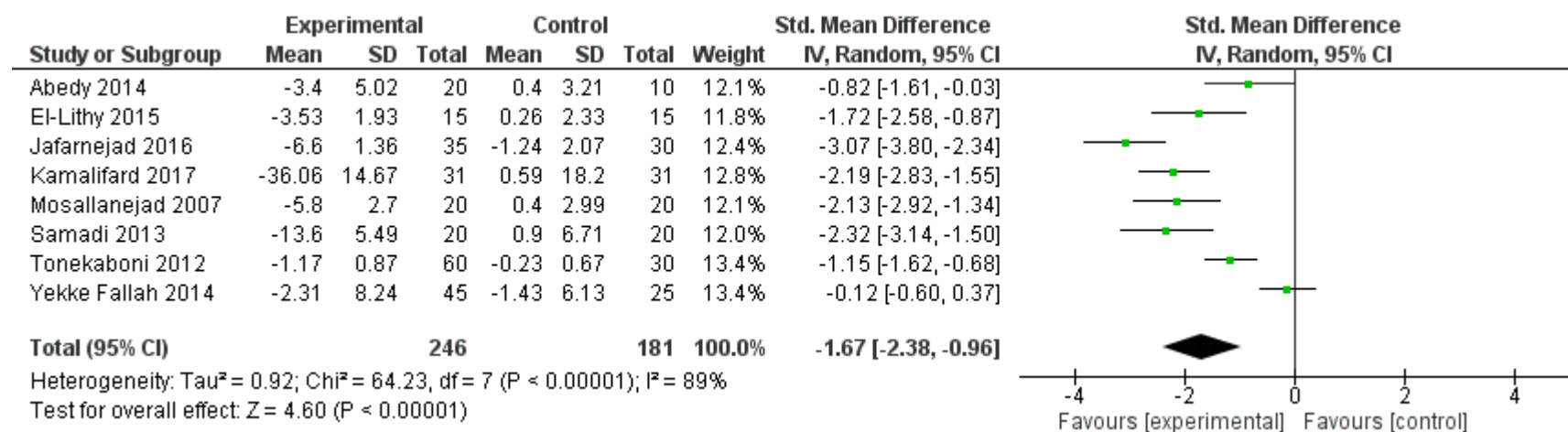
- 1 exp "premenstrual syndrome"/
- 2 exp "premenstrual dysphoric disorder"/
- 3 PMS.ti,ab.
- 4 PMDD.ti,ab.
- 5 "premenstrual dysphoric disorder".ti,ab.
- 6 (menstrua\* adj2 tens\*).ti,ab.
- 7 (menstrua\* adj2 symptom\*).ti,ab.
- 8 "premenstrual syndrome".ti,ab.
- 9 or/1-8
- 10 exp exercise/
- 11 exp exercise therapy/
- 12 exp physical fitness/
- 13 exp physical exertion/
- 14 exp running/
- 15 exp swimming/
- 16 exp walking/
- 17 exp tai ji/
- 18 exp yoga/
- 19 exp dancing/
- 20 exp gardening/
- 21 exp sports/
- 22 exerci\*.ti,ab.
- 23 "physical activit\*".ti,ab.
- 24 sport\*.ti,ab.
- 25 stretch\*.ti,ab.
- 26 fitness.ti,ab.
- 27 jog\*.ti,ab.
- 28 running.ti,ab.
- 29 swim\*.ti,ab.
- 30 (cycl\* adj2 train\*).ti,ab.
- 31 walk\*.ti,ab.
- 32 yoga.ti,ab.
- 33 "tai ji".ti,ab.
- 34 "tai chi".ti,ab.
- 35 pilates.ti,ab.
- 36 "physical train\*".ti,ab.
- 37 "resistance train\*".ti,ab.
- 38 athlet\*.ti,ab.
- 39 "weight train\*".ti,ab.
- 40 isometric\*.ti,ab.
- 41 danc\*.ti,ab.
- 42 or/10-41
- 43 9 and 42
- 44 Randomized Controlled Trials as Topic/
- 45 randomized controlled trial/
- 46 Random Allocation/
- 47 Double Blind Method/

48 Single Blind Method/  
49 clinical trial/  
50 clinical trial, phase i.pt.  
51 clinical trial, phase ii.pt.  
52 clinical trial, phase iii.pt.  
53 clinical trial, phase iv.pt.  
54 controlled clinical trial.pt.  
55 randomized controlled trial.pt.  
56 multicenter study.pt.  
57 clinical trial.pt.  
58 exp Clinical Trials as Topic/  
59 or/44-58  
60 (clinical adj trial\$.tw.  
61 ((singl\$ or doubl\$ or trebl\$ or tripl\$) adj (blind\$3 or mask\$3)).tw.  
62 PLACEBOS/  
63 placebo\$.tw.  
64 randomly allocated.tw.  
65 (allocated adj2 random\$.tw.  
66 or/60-65  
67 59 or 66  
68 case report.tw.  
69 letter/  
70 exp Historical article/  
71 or/68-70  
72 67 not 71  
73 43 and 72

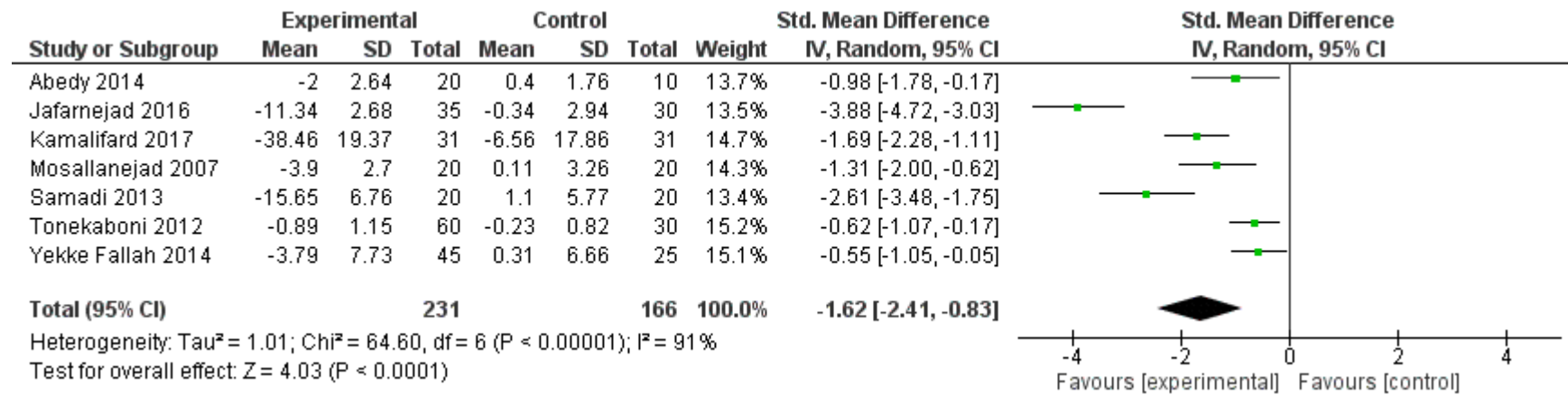
**Table S1: Excluded studies with reasons**

<b>First Author</b>	<b>Year</b>	<b>Reason(s) for Exclusion</b>
Azhari	2005	Unable to retrieve full text
Bharati	2016	Not RCT
Choudhary	2013	Not RCT
Dehghan Manshadi	2008	Not RCT
Fotokian	2008	Incorrect outcome measure
Ghanbari	2008	Not RCT
Hippensteel	1989	Not RCT
Janda	2015	Not RCT
Jang	2004	Not exercise
Karimian	2006	Unable to retrieve full text
Koons	1999	Not exercise
Lemos	1991	Comparison of two interventions
Luoto	2012	Not PMS
Maged	2018	Incorrect outcome measure
Nikbakht	2007	Unable to retrieve full text
Noor	2015	Intervention duration too short
Omidali	2015a	Intervention duration too short
Omidali	2015b	Intervention duration too short
Omidali	2016a	Intervention duration too short
Omidali	2016b	Intervention duration too short
Parkhad Suchitra	2013	Not PMS
Pearlstein	1992	Intervention duration too short
Prior	1986	Not RCT, non-exclusion of diabetics
Prior	1987	Not RCT, non-exclusion of diabetics
Rahimi	2018	No reply from author, unpublished paper
Rani	2011a	Not PMS
Rani	2011b	Not PMS
Rani	2016	Not PMS
Ruprai	2015	Not RCT
Sabaei	2015	Not RCT
Sevimli	2012	Intervention duration too short
Sharma	2013	Incorrect outcome measure
Sridvei	1996	Not RCT
Vishnupriya	2011	Intervention duration too short
Weitzman	1993	Unable to retrieve full text
Yonglitthipagon	2016	Incorrect outcome measure
Zoodfekr	2018	Incorrect outcome measure

**Figure S2: Forest plot for secondary outcome: Exercise versus control for psychological symptom reduction**



**Figure S3: Forest plot for secondary outcome: Exercise versus control for physical symptom reduction**



**Figure S4: Forest plot for secondary outcome: Exercise versus control for behavioural symptom reduction**

