

Supplementary Material

► **Supplementary Table 15** Characteristics of studies included in this systematic review.

Authors	Country	Participants	Age mean	Diagnos- tic criteria	Gender	Intervention	Frequency and duration per session	Interven- tion length	Intensity of exercise	Outcomes/measure
Singh, MA 2014 [29]	Australia	Exp: n = 22 Con: n = 27	aged > = 55 years	Petersen criteria	Mix	Exp: progressive resistance training Con: sham training	Twice/week 75 min per session	24 wks	high	Global cognition/ ADAS-Cog Executive function/CVFT
Hong, SG 2018 [30]	Korea	Exp: n = 12 Con: n = 10	Exp: 78.33 (3.21) Con: 78.33 (5.50)	Petersen criteria	Mix	Exp: elastic band exercise Con: current lifestyle	Twice/week 1 hour per session	12 wks	65% of 1RM	Global cognition / K-MoCA Executive function/COWAT Work- ing memory/ DSB
Jiaojiao lü 2015 [27]	China	Exp: n = 22 Con: n = 23	Exp: 69.00 (3.83) Con: 70.43 (5.53)	Petersen criteria	Mix	Exp: momentum-based dumbbell training Con: regular lifestyle routine without starting any new exercise activities	Three times/week 1 hour per session	12 wks	Not to mention	Global cognition / ADAS-Cog Executive Function/TMT-B Working memory/ DSB
Davis JC 2013 [24]	Canada	Exp: n = 28 Con: n = 28	Exp: 73.9 (3.4) Con: 75.1 (3.6)	Petersen criteria	Female	Exp: progressive resistance training Con: balance and tone exercises	Twice/week 1 hour per session	24 wks	high	Executive function/ SCT
Yoon, DH 2017 [28]	Korea	Exp: n = 14 Con: n = 7	Exp: 75.00 (3.46) Con: 78.00 (2.77)	Petersen criteria	Mix	Exp: high-speed resistance training based on elastic band Con: balance and tone exercises	Twice/week 1 hour per session	12 wks	somewhat hard (rate perceived exertion of 12–13)	Global cognition / MMSE, MoCA-K
Yoon, DH 2018 [32]	Korea	Exp: n = 9 Con: n = 7	Exp: 76.00 (3.94) Con: 78.00 (2.77)	Petersen criteria	Mix	Exp: low-speed resistance training based on elastic band Con: balance and tone exercises	Twice/week 1 hour per session	12 wks	Hard (rate perceived exertion of 15–16)	Global cognition / MMSE, MoCA-K
Yoon, DH 2018 [32]	Korea	Exp: n = 20 Con: n = 23	Exp: 73.82 (4.37) Con: 74.03 (4.27)	Clinical dementia rate (no dementia)	Mix	Exp: high-speed training based on elastic band Con: balance and band stretching	Twice/week 1 hour per session	16 wks	low	Executive function/ TMT-B Working memory/ DSB
Tsai, CL 2019 [31]	China Taiwan	Exp: n = 18 Con: n = 18	Exp: 65.44 (6.76) Con: 65.17 (7.00)	Petersen criteria	Mix	Exp: free weights and bodybuilding machines Con: current lifestyle	Three times/week 40 min per session	16 wks	60% – 75% of 1RM	Global cognition / MMSE Working memory/ DSB
ADAS-Cog, Alzheimer's Disease Assessment Scale-Cognitive Subscale; CVFT, Category Verbal Fluency Test; K-MoCA, Korean version of Montreal Cognitive Assessment; COWAT, Controlled Oral Word Association Test; DSB, Digit Span Backwards; SCT, Stroop Color Trails; MMSE, Mini-Mental State Examination; TMT-B, Trail Making Test part B.										