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| Supplemental Digital Content 1*Included Articles* |
| Author, Year, Location | Design | Theory | SampleCharacteristics | Intervention | Results |
| Arkkukangas et al., (2019)Sweden | Randomized controlledtrial | Transtheoretical Model | Mean age of all groups: 83Exercise Program n=61ExerciseProgram +Motivational Interviewing (MI) n=58CON n=56 | **Intervention Duration** **(Months):** 3**Interventionist**: Physical Therapists**Intervention:** Otago Exercise Program (OEP)/OEP with MI | **Outcome Measure:** Frändin/Grimby ActivityScaleNo difference between groupsin the Frändin/Grimby ActivityScaleWithin groups, the OEP + MI group significantly improved(*P* = .02) physicalperformance, fall self-efficacy, activity levels, handgrip strength, adherence to the exercises and decline infall frequencyDifferences in the OEP and control groups in the Frändin/Grimby Activity Scalenot significant |
| Barreto et al., (2018)France | Randomized controlledtrial | None Noted | Multi domain + Omega 3: mean age: 76, n=417Omega3: mean age: 76.1, n=422Multidomain: Mean age, 75.5n=420Placebo + usual care: Mean age: 75.6, n=420 | **Intervention Duration** **(Months):** 36**Interventionist:** PA instructor**Intervention:** Cognitive training,Nutritional and PA counseling, Omega 3 supplements | **Outcome Measure:** MET-min/weekNutritional and PA counselingincreased MET-min/week at 6 months (*p*≤ 0.002) and had limited decline at 2 and 3 yearfollow up. Omega-3 supplementationdid not affect PA levels |
| Bickmore, et al., (2013)United States | Randomized controlled trial | None Noted | Mean age of all participants: 71.3Treatment n=132CON: n=131 | **Intervention Duration** **(Months):** 12**Interventionist**:Embodied Conversational Agent**Intervention:**Coaching daily for 2 months then intermittently for 10month maintenancephase | **Outcome measure:** Steps via pedometerStatistically significant increase at 2 months ( *p*=.01)No longer significant at 12 months (*p* =.09) |
| De Vries, et al., (2015) | Randomized controlledtrial | None Noted | Intervention:mean age: 78.4, n=64CON: mean age:78.6,n=65 | **Intervention Duration** **(Months): 6** **Interventionist**: Physical Therapists**Intervention:** Coach2Move**.** Goal oriented treatment planfitting barriers of thepatient and his or herenvironment. | **Outcome Measure:** LASAPhysical Activity Questionnaire (LAPAQ).Between group mean differences for PA: 17.9 minper day at 6 months |
| Herhelegiu et al., (2017)Romania | Randomized controlledtrial  | TranstheoreticalModel  | Mean age: Intervention: 74.8, n=100CON: Mean age: 75, n=100 | **Intervention Duration** **(Months):** 6**Interventionist**:Geriatrician**Intervention:** Monthly 15-30-minute counseling sessions | **Outcome Measures:**  Metscollected via the International Physical Activity Questionnaire (IPAQ)Intervention: PA increased by a median of 180.0 MET minutes/week (95% confidence interval (CI)43.4±316.6, *p* = 0.01)Control group: PA decreased by a median of 346.5 MET minutes/week (95% CI 178.4±514.6, *p* <0.001) due to seasonal effect |
| Kerr et al., (2018)United States | Clusterrandomized controlled trial | Social CognitiveTheory | Intervention: Mean age: 85.3.n=151CON: Mean age 81.9, n=156  | **Intervention Duration** **(Months):** 12**Interventionist:** Health Educators and Peer Leaders**Intervention:** Individual-goal setting, Interpersonal- group walks, and community level-pedestrian advocated improvementsin walkability | **Outcome Measure:** Accelerometer readingIntervention; Significant increase in PA (about 56 min of moderate-vigorous PA per week or 119 min of light PA) Control group: no change overall  |
| Kolt et al., (2012)New Zealand | Cluster randomized controlled trial | None Noted | Intervention: Mean age: 73.9, n=165CON: Mean age: 74.3, n=165 | **Intervention Duration** **(Months):** 3**Interventionist:** Primary Care Physician**Intervention:** Group 1: Green prescription with pedometer andin person prescription followed by 3 telephone counseling sessions provided by activitycounselorGroup 2: Green within person prescriptionfollowed by 3 telephonecounseling sessions provided by activity counselor- No pedometer-focus on setting time goals rather than step counting | Group 1 (pedometer-based)increased leisurewalking by 63.0 min/wk on average, more than double theincrease in Group 2 (no pedometer) of 30.9 min/wk at 3-4 months |
| McMurdo,et al., (2010)Scotland | Randomized controlledtrial | Self-regulation Theory | Mean age of allgroups: 77.3BCI n=68 BCI + pedometern=68CON n= 68 | **Intervention Duration****(Months):** 6**Interventionist:**Trained study coordinators**Intervention:** Group1: Behavioral Change Intervention (BCI)Group 2: BehavioralChange Intervention(BCI) plus pedometerGroup 3: Usual CareParticipants were contacted 1x/week forthe first month, then every 2 weeks for 2 months, and then monthly  | **Outcome Measure:** Accelerometer readingSecondary outcome- lower extremity functionResults: PA at 3 months was higher in the BCI group than in the control group (*p*=.002) and the pedometer plus group(*p*=.04).No significant difference between BCI group and BCI + pedometer |
| Mutrie et al., (2012)United Kingdom | Randomized controlledtrial | Social CognitiveTheory | Interventionmeanage of 71.6Control meanage of 70.0n=20CON n=21 | **Intervention Duration** **(Months):** 3**Interventionist:** Nurse **Intervention:** Two 30-minute nurseled counseling sessions, use of pedometerControl group: received intervention 12 weeks later | **Outcome Measures:** Sealed pedometers and an *activ*PALtm monitor.**Results:**12 Weeks: Interventionincreased step countsby 2119 steps/day (*p* = .001) |
| Rasinaho et al.,(2011) Finland | Randomized controlled trial | Social Cognitive Theory TranstheoreticalModel | Mean age of both groups: 77.6Intervention: n=318CON: n=314 | **Intervention Duration****(Months):** 24**Interventionist:**Physiotherapist**Intervention:** 1 hour of face to face counseling followed by phone counseling sessions 3 times per year  | **Outcome Measures:** Numberof physical activities attended **Results:** Effect wassignificant for water aerobics(odds ratio (OR) 2.49, 95%confidence interval CI 1.16–5.36), and for walking for fitness (OR 1.58, 95% CI 1.05–2.40)Participants followed for 3.5 years |
| Robare et al., (2011)United States | Randomized controlled trial | Social LearningTheory | Mean age ofboth groups: 73.9 Lifestyle Plus n = 188Education andCounseling n = 201 | **Intervention Duration****(Months):** 24**Interventionist:** HealthCounselors**Intervention:** BECI: Brief education and counseling interventionsBECI-plus: Receivedbrief education and counseling interventionplus a physical activity intervention (the Key to Life Exercise Intervention) and, for those with a history of hypertension, a dietary sodium nutritional intervention | **Outcome Measures:** Modified Activity Questionnaire**Results:** Levels of PADeclined 1.6 hours per week in the BECI-plus group |
| Thompson et al., (2014) United States | Randomized controlledtrial  | None Noted | Mean age: 79.5Intervention: n=25CON: n=24 | **Intervention Duration****(Months):** 12**Interventionist:** Counselor**Intervention:** Face toface counseling every 2months, phone counseling weeklyandFitBit. Utilized READY, get SET, and GO from theGo4Lifematerials Controlgroup: FitBit only | **Outcome Measures:** Activity units (using accelerometer), B/P, Cholesterol, weight, %body fat, glucose, Hgb a1c%**Results:** No significant differences between intervention group and control group |