

Exercise Motivation Among Special Populations

Gust, A. Math, Science, and Technology Department, University of Minnesota Crookston

Exercise is associated with improved quality of life and physical function, particularly in older adults and persons with chronic health conditions. Physical activity declines with age, with chronic health conditions potentially adding to the decline.

PURPOSE: To investigate physical activity and exercise motivation among persons with various chronic health conditions, apparently healthy older adults, and among persons participating in community exercise programs associated with older adults and those with chronic disease.

METHODS: Surveys comprising of demographics, physical activity (PA) (Physical Activity Scale for the Elderly (PASE)), and exercise motivation (Behavioral Regulation in Exercise Questionnaire (BREQ2)), were distributed to participants across a five state Midwestern region and local community exercise programs targeting special populations (N=222).

RESULTS: A significant main effect for health condition was found for identified regulation F (1,220) =2.37, p=.03) and intrinsic regulation F (1,220) =2.41, p=.03, and for obesity on amotivation F (1,220)=3.03, p=.05, identified regulation F (1,220)=10.46, p<.001, and intrinsic regulation F (1,220)=6.91, p=.001. Post hoc analyses revealed significant differences for amotivation between those with pulmonary disease (M=0.84 \pm 0.74) and those with Parkinson's disease (M=0.32 \pm 0.46, p=.04) and heart disease (M=0.31 \pm 0.52, p=.02); identified regulation between those with pulmonary (M=2.06 \pm 1.41) and those with no health condition (M=2.26 \pm 1.09, p=.04), Parkinson's disease (M=3.82 \pm 0.75, p=.00), heart disease (M=2.98 ± 0.85, p=.01), and cancer (M=3.00 ± 0.83, p=.02); and intrinsic regulation between those with pulmonary disease (M= 1.49 ± 0.75) and those with no health condition (M= $2.12 \pm$ 1.83, p=.04), Parkinson's disease (M= 2.80 ± 2.47, p=.05), and heart disease (M=2.49 ± 2.12, p=.01) and between those with orthopedic conditions (M= 1.91 ± 1.63) and those with Parkinson's disease (M= 2.80 \pm 2.47, p=.01), and heart disease (M=2.49 \pm 2.12, p=.01). Significant difference were found between non-obese persons and obese and morbidly obese for identified regulation (M=2.87 \pm 1.02 vs. 2.27 \pm 1.12, p=.001) and (M=2.87 ± 1.02 vs. 2.00 ± 1.3, p=.002) respectively and for intrinsic regulation $(M=2.29 \pm 1.19 \text{ vs } 1.82 \pm 1.25, p=.04)$ and morbidly obese $(M=2.29 \pm 1.02 \text{ vs. } 2.00 \pm 1.3, p=.002)$. Significant differences were found between those who participate in a community exercise program (N=77) and those who do not (N=145) for amotivation (M=.32 \pm .50 vs. .64 \pm .84, p<.001), identified regulation (M= $3.14 \pm .81$ vs. $2.35 \pm 1.17 p < .001$), and intrinsic regulation (M= $2.61 \pm .95$ vs. 1.80 ± 1.29 , *p*<.001).

CONCLUSION: Overall, health conditions did not appear to have an impact on physical activity or exercise motivation. However, those with pulmonary disease had lower physical activity and exercise motivation compared to participants with other health conditions. Obese and morbidly obese participants had less exercise motivation compared to their non-obese counterparts. Participation in community programs appeared to have a positive impact on exercise motivation. Further analysis is expected comparing community programs type.