Do Adults' Physical Activity Levels Effect Their Perceptions of Benefits/Barriers to Exercise and Their Perceptions of Physical Self?

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Study Protocol

This is a cross-sectional study. Permission was received from the Ondokuz Mayıs University Institute of Social Sciences and Humanities Ethics Committee for this study protocol (Decision No. 2020/666). Confirmation was obtained from all individuals participating in the study that they had accepted the informed consent form before the survey. Healthy individuals between the ages of 18-65 were included in the study. Individuals who were engaged in professional sports, had any cognitive problems, had a recent surgical operation, were in COVID-19 quarantine or had any health problem that could affect their physical activity level and a BMI > 35 kg/m2 were not included in the study. The sample size of the study was found to be a total of 381 people with a 95% confidence interval and a 5% margin of error, taking the study of Yazıcıoğlu and Erdoğan as a reference. Consequently, 450 individuals were invited to the research (Yazıcıoğlu & Erdoğan, 2014). The study was completed with 243 individuals. [Figure 1 is near here].

Data collection tools

Participants filled out a demographic information form online, asking for age, height, weight, gender, body mass index, disease, and exercise history. The physical activity levels of the participants were determined with the International Physical Activity Questionnaire-Short Form (UAFAA-International Physical Activity Questionnaire-Short Form)(Craig et al., 2003). A validity and reliability study of the survey was conducted in Turkey (Saglam et al., 2010). In our study, the short form of the questionnaire, which could be self-administered and included the "last seven days," was used to evaluate the physical activity level. This short form consists of seven questions and provides information about sitting, walking, moderate-intensity activities, and time spent in vigorous activities. Calculating the short form total score includes the sum of the duration (minutes) and frequency (days) of walking, moderate-intensity activity,

and vigorous activity. The seating score is calculated separately. In evaluating all activities, the criterion is that each activity is done for at least 10 minutes at a time. A score of "MET-minute/week" is obtained by multiplying the minute, day, and MET value (multiples of resting oxygen consumption). In calculating the walking score, walking time (minutes) is multiplied by 3.3 METs. In the calculation, a value of 4 MET is taken for moderately intense activity and 8 MET for vigorous activity. Physical activity level is classified into three groups: inactive, minimally active, and very active groups (Craig et al., 2003; Saglam et al., 2010).

The Exercise Benefit/Barrier Scale was used to measure participants' perceptions of benefits and barriers to exercise (Sechrist et al., 1987). A validity and reliability study of the questionnaire was conducted in Turkey (Ortabag et al., 2010). Consisting of a total of 43 items, 29 items of the scale measure the perception of benefits towards exercise, while the remaining 14 items measure the person's perception of obstacles to exercise. As the total score on the scale increases, the individual's perception of the benefits of exercise also increases. On the exercise barrier scale, unlike the exercise benefit scale and the combined scale, as the scale score increases, the perceived barrier to exercise also increases (Ortabag et al., 2010; Sechrist et al., 1987). In our study, participants' perceptions of exercise barriers and benefits were calculated separately.

The Physical Self-Perception Profile (PSPP) was used to evaluate the participants' physical self-perception. Validity and reliability studies of this inventory were conducted by Aşçı et al. in 1996 in Turkey (F. Aşçı, 1996). In the inventory, the participant is first asked to evaluate two different options and then decide how similar the participant is to each of these options. Scoring is done on a scale of one to four. The inventory consists of 30 questions consisting of five sub-parameters. The parameters are listed as sports ability, physical condition, body attractiveness, strength and general physical ability. (F. Aşçı, 1996; Fox & Corbin, 1989).

Analysis of data

In the analysis of the data obtained, since the assumption of homogeneity and normality between the groups could not be achieved according to the level of physical activity, the Kruskal Wallis test and the post-hoc test with Benforroni correction were used where differences between groups were detected. Since the assumption of homogeneity and normality could not be achieved in the groups separated according to exercise habits, the Mann Whitney U test was used.

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