

## [Abstract](#)

**Background:** The purpose of this study was to assess the psychometric properties of a self-reported physical activity (PA) questionnaire based on data from the pilot phase of the AZAR Cohort Study.

**Methods:** In this cross-sectional study, all 35-70 years old people living in Khameneh, a city in East Azarbaijan, Iran were invited to take part in the pilot phase of the AZAR Cohort Study. A total of 952 people completed the self-reported PA questionnaire and the International Physical Activity Questionnaire (IPAQ). Construct validity was evaluated by exploratory and confirmatory factor analyses (EFA and CFA). Spearman's correlation coefficient between the scores of the two instruments was used to examine the concurrent validity. Reliability was measured using intraclass correlation coefficient (ICC) and Cronbach's alpha coefficient.

**Results:** In EFA applying principal component analysis with varimax rotation, four factors were identified including recreational leisure time (variance = 52.73%), sedentary leisure time (variance = 38.68%), household/gardening work (variance = 38.66%), and occupation work (variance = 12.67%). The extracted factors were also supported by the CFA (CFI = 0.98, GFI = 0.936, RMSEA = 0.057). The results indicated moderate concurrent validity ( $\rho = 0.62$ ,  $P < 0.001$ ). ICC and Cronbach's alpha were 0.59 and 0.7, respectively.

**Conclusion:** These results showed acceptable and moderate psychometric properties for the self-reported PA questionnaire to assess PA in this population-based study.

**Keywords:** [Physical activity](#), [Validity](#), [Reliability](#), [Questionnaire](#)