Objective: Smartphones have many features such as communication, internet, photography, multimedia and navigation, and are currently one of the most popular technological devices. Usage of smartphones has increased rapidly and this rapid increase has brought about addiction and problematic usage. To our knowledge, there is no scale, which can be used to assess addiction to smartphones in the Turkish population. The aim of this study was to adapt Turkish terminology and to assess the reliability and validity of the Turkish version of the Smartphone Addiction Scale.

Methods: The sample was composed of 301 students studying at the Faculty of Medicine, Süleyman Demirel University, who used smartphones. In the study, in addition to the Smartphone Addiction Scale, an Information Form, the Internet Addiction Scale and the Problem Mobile Phone Use Scale were used as tools for collecting data. The scales were given to all attendees in mixed order and the Information Form was always given at the first stage. It took about 20 minutes to complete the scales. Test-retest application was made with 30 randomly selected students (with the help of nicknames) three weeks later. The factor structure of the scale was examined by factor analysis and the Varimax Rotation method. Internal consistency, split-half reliability and test-retest reliability analyses were conducted for the reliability analysis. Pearson correlation analysis was used to analyze criterion-related validity.

Results: Factor analysis revealed a seven-factor structure and factor loadings of items that ranged from 0.349 to 0.824. The Cronbach’s alpha coefficient was founded to be 0.947 for the scale. Correlations between the Smartphone Addiction Scale-Turkish version and the other scales were statistically significant. The test-retest reliability was high ($r=0.814$). The Guttman Split-half coefficient was calculated to be 0.893 in the split-half reliability analysis. The average total scores for girls were significantly higher than those for boys ($p=0.03$). There was a non-significant negative correlation between age and scale total score ($r=-0.086$, $p=0.13$). Average scale scores were the highest in users who used smartphones for over 16 hours. Average scale scores were significantly higher in users who used smartphones for over 16 hours compared with users of smartphones for less than 4 hours ($p=0.01$). We recorded the highest scale score in the game category. We didn’t observe any statistical significance when comparing game scores with those of the internet ($p=0.44$) and social networking ($p=0.98$) categories. Additionally, total scores for gaming were significantly higher than those for voice calling ($p=0.02$), short text messaging ($p=0.02$) and other categories ($p=0.04$). Moreover, the participants who selected the answers ‘agree’ or ‘unsure’ as self-rating for smartphone addiction obtained significantly higher scores than the participants who answered ‘disagree’ ($p=0.01$).

Conclusion: In this study, we found that the Turkish version of the Smartphone Addiction Scale is a reliable and valid measurement tool for the evaluation of smartphone addiction.