## **Supplemental information**

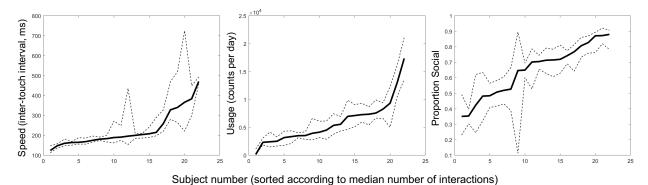
Striatal dopamine synthesis capacity

reflects smartphone social activity

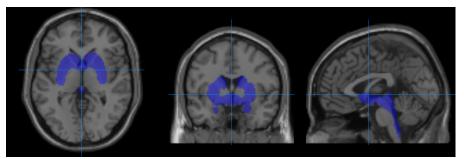
Andrew Westbrook, Arko Ghosh, Ruben van den Bosch, Jessica I. Määttä, Lieke Hofmans, and Roshan Cools

## **Supplemental Information**

## **Supplemental Data**



**Figure S1. Independent Variables by Participant.** Median (solid line) and inter-quartile range (dashed lines), across days, for three smartphone usage variables used in our main analyses, for all participants. Related to STAR Methods.



**Figure S2. Small Volume Mask for Multiple Comparisons Correction.** Volume encompasses all voxels with greater than 3 standard deviations above the mean dopamine synthesis capacity signal across the whole brain. Crosshairs are at MNI [0,0,0]. Related to STAR Methods.

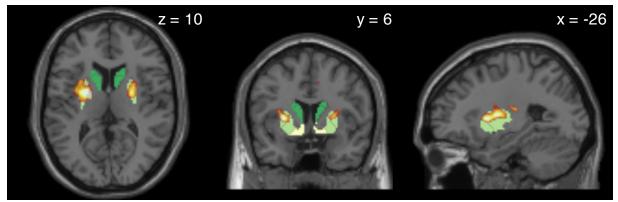
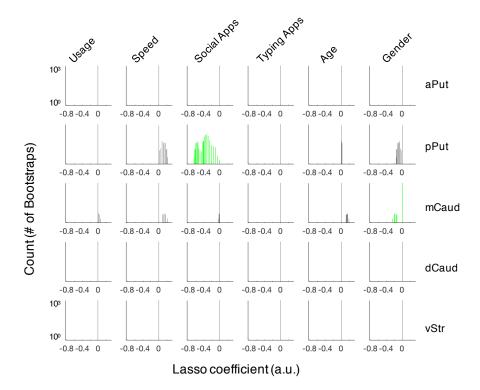


Figure S3. Thresholded Clusters where the Proportion of Social Interactions Correlates with Dopamine Synthesis Capacity, Related to Figure 1B. Clusters of voxels showing a reliable relationship between dopamine synthesis capacity and the proportion of social interactions following P < 0.001 thresholded cluster formation and small volume cluster correction at FWE P < 0.05. As in the main text, clusters overlap an independently-defined segmentation of the striatum including the caudate nucleus (dark green), anterior and posterior putamen (yellow-green), and ventral striatum (pale yellow). Related to Figure 1B.



**Figure S4. Lasso Regression of All Independent Variables in All Striatal Subregions.** Distributions of lasso regression coefficients testing for relationships between dopamine synthesis capacity in striatal subregions and key predictors of interest. Regression coefficients different from 0 based on 0.5 and 99.5 percentile range of the 1000 bootstrapped lasso coefficients are shown in green. Related to STAR Methods.