

Table 5. Description of raw features extracted in the present study.

Category	Feature	Description
Social engagement on smartphones ¹⁰⁰	Communication apps usage duration	Total duration of communication app usage.
	Social media apps usage duration	Total duration of social media app usage.
Mobility ⁴¹	Travel distance	Total distance between consecutive GPS coordinates
	Radius of Gyration	Root-mean-square distance of place centroids
Physical activity ⁴²	Walking probability	Average probabilities of walking
	On-Bicycle probability	Average probabilities of on bicycle
Environment ⁴³	Loudness	Average decibel level
	Brightness	Average illuminance
Phone-use intensity ⁴⁴	Total Screen-On Duration	Total screen-on time
	Screen Session Count	Number of discrete screen-on events

Note. Citations for each category reflect research demonstrating that the domain synergistically relates to mental health in combination with the other listed behaviors or environments.