

## APPENDIX

**TABLE S1**

Feature Clustering Quantity of the Crosscheck  
Dataset

Features Name	Number of Levels
filled_pct	3
accel_mean	3
app_lists_num_apps_opened_sum	2
call_log_duration_count_1	2
call_log_duration_count_2	2
call_log_duration_count_3	2
call_log_duration_count_5	2
call_log_duration_count_6	2
call_log_duration_sum_1	2
call_log_duration_sum_2	2
call_log_duration_sum_3	2
conversation_duration_count	3
conversation_duration_sum	2
distance_sum	2
loc_1_time	3
loc_2_time	3
loc_other_time	3
screen_locks_screen_sum	3
screen_sum_1hr_screen_duration_sum	2
sleep_duration	3
sleep_end	3
sleep_start	3
sms_log_is_read_count_1	2
sms_log_is_read_count_2	2
sms_log_is_read_count_3	2
sms_log_is_read_count_4	2
sms_log_is_read_count_5	2
sms_log_is_read_count_6	2

**TABLE S2**

Feature Clustering Quantity of the  
StudentLife Dataset

Features Name	Number of Levels
activity_stationary_count	7
activity_walking_count	6
activity_running_count	6
activity_unknown_count	4
audio_silence_count	4
audio_voice_count	6
audio_noise_count	4
audio_unknown_count	1
wifi_location_count_cluster	2

TABLE S3

Feature Clustering Quantity of the Globem Dataset

Features Name	Number of Levels
f_loc:phone_locations_doryab_totaldistance:allday	8
f_loc:phone_locations_doryab_timeathome:allday	7
f_loc:phone_locations_doryab_locationentropy:allday	8
f_screen:phone_screen_rapids_sumdurationunlock:allday	5
f_screen:phone_screen_rapids_avgdurationunlock:allday	7
f_call:phone_calls_rapids_incoming_sumduration:allday	6
f_call:phone_calls_rapids_outgoing_sumduration:allday	8
f_blue:phone_bluetooth_doryab_uniquedeviceothers:allday	6
f_steps:fitbit_steps_intraday_rapids_sumsteps:allday	6
f_steps:fitbit_steps_intraday_rapids_countepisodesedentarybout:allday	7
f_steps:fitbit_steps_intraday_rapids_sumdurationsedentarybout:allday	7
f_steps:fitbit_steps_intraday_rapids_countepisodeactivebout:allday	7
f_steps:fitbit_steps_intraday_rapids_sumdurationactivebout:allday	7
f_slp:fitbit_sleep_intraday_rapids_sumdurationasleepunifiedmain:allday	6
f_slp:fitbit_sleep_intraday_rapids_sumdurationawakeunifiedmain:allday	5