

Novel Technologies

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Name of Instrument	Subdomain	Table Name
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Fitbit — Parent Pre/Post-Assessment Survey (Pilot)	Actigraphy	nt_p_fitb_qtn_plt

General Information

An overview of the ABCD Study® can be found at abcdstudy.org and detailed descriptions of the assessment protocols are available at [ABCD Protocols](#). This page describes the contents of various instruments available for download. To understand the context of this information, refer to the release note [Start Page](#).

Detailed information about the instruments, the constructs they are intended to measure, and relevant citations for each measure are provided in the following:

Bagot, K. S., Matthews, S. A., Mason, M., Squeglia, L. M., Fowler, J., Gray, K., Herting, M., May, A., Colrain, I., Godino, J., Tapert, S., Brown, S., & Patrick, K. (2018). Current, future and potential use of mobile and wearable technologies and social media data in the ABCD study to increase understanding of contributors to child health. *Developmental cognitive neuroscience*, 32, 121–129. [Find here](#)

Bagot, K. S., Tomko, R. L., Marshall, A. T., Hermann, J., Cummins, K., Ksinan, A., Kakalis, M., Breslin, F., Lisdahl, K. M., Mason, M., Redhead, J. N., Squeglia, L. M., Thompson, W. K., Wade, T., Tapert, S. F., Fuemmeler, B. F., & Baker, F. C. (2022). Youth screen use in the ABCD® study. *Developmental cognitive neuroscience*, 57, 101150. Advance online publication. [Find here](#)

Updates and Notes

Determining In-person, remote, and Hybrid for Overall Visit Type

Refer to the release note [Start Page](#).

Instrument Descriptions

Youth Instruments

Screen Time Questionnaire

Release 5.0 Data Table: nt_y_st

Measure Description: This measure includes customized questions about the overall amount of time that the youth spends using visual media on a typical weekday and weekend day. Media activities assessed include:

- Watching TV shows or movies
- Watching videos (such as YouTube)
- Playing video games (single- or multiplayer) on a computer, console, phone or other device
- Texting on a cell phone, tablet, or computer
- Visiting social media apps like Snapchat, Instagram, TikTok
- Video chat. Seven response options were: none, < 30 minutes, 30 minutes, 1 hour, 2 hours, 3 hours, and 4+ hours.

See *Modifications since initial administration* regarding substantial changes made to this measure starting at the 2-year follow-up.

ABCD Subdomain: Screen Use

Number of Variables: 198

Summary Score(s): Yes

Measurement Waves Administered: Annually since Baseline

Modifications since initial administration: From the 2-year follow-up on, response options were changed to an open format of number of hours and minutes spent on each screen usage activity. We also included the 6-item social media addiction and video game addiction questionnaires adapted from the Bergen Facebook Addiction Scale (Andreassen et al, 2012). Additionally, we added customized questions about timing of screen usage around bedtime, mobile phone ownership and usage, social media accounts, and online dating. A summary of changes is contained in the table below.

Youth Screen Usage Self-Report Questionnaire modifications made by year

Youth Questions	Baseline	1	2	3	4	5	6	7
Watch “or stream” TV shows or movies? (such as Hulu, Netflix or Amazon, not including videos on YouTube)	X ^a	X ^a	X	X [#]	X [#]			
Watch or stream videos or live stream (such as YouTube, Twitch)?	X ^b	X ^b	X					

Watch or stream movies, videos or TV shows? (such as Hulu, Netflix or Amazon, YouTube, Twitch)?						X*	X*	X*
Play video games on a computer, console, phone or other device (Xbox, Play Station, iPad)?	X	X						
Play single-player video games on a computer, console, phone or other digital/mobile technology (e.g. Xbox, Play Station, iPad, AppleTV)?			X ^e	X ^e	X ^e	X*	X*	X*
Play multiplayer video games on a computer, console, phone, or other digital/mobile technology (e.g. Xbox, Play Station, iPad, AppleTV) where you can interact with others in the game?			X ^f	X ^f	X ^f	X*	X*	X*
Text on a cell phone, tablet, computer, iPod, or other electronic device (e.g., GChat, WhatsApp, Kik etc.)?	X ^c	X ^c	X	X	X	X*	X*	X*
Visit social networking sites like Facebook, Twitter, Instagram, etc.?	X	X						
Visit social media apps (e.g., Snapchat, Facebook, Twitter, Instagram, TikTok, etc.)? (Do not include time spent editing photos or videos to post on social media.)			X	X	X	X*	X*	X*
Edit photos or videos to post on social media.			X					
Video chat (Skype, FaceTime, VRchat, etc.) that is NOT for school	X ^d	X ^d	X ^g	X	X	X*	X*	X*
Searching or browsing the internet (e.g., using Google) that is NOT for school.			X	X				
Spend in TOTAL on a computer, phone, tablet, iPod, or other digital/mobile technology or video game? Please do NOT include time spent on school related work, but do include watching TV, shows or videos, texting or chatting, playing games, or visiting social networking sites (e.g. Facebook, Twitter, Instagram).			X ^h	X	X	X	X	X
Spend in TOTAL on school-related work on a phone, tablet, computer, or other digital/mobile technology? Please do not include time during school.			X ⁱ			X	X	X

Note.

^aEarlier version read, "Watch TV shows or movies?";

^bEarlier version read, "Watch videos (such as YouTube)?"

^cEarlier version read, "Text on a cell phone, tablet, or computer (e.g. GChat, WhatsApp, etc.)?"

^dEarlier version read, "Video chat (Skype, Facetime, etc.)?"

^eEarlier version read, "Play single-player video games on a computer, console, phone or other device (Xbox, Play Station, iPad, AppleTV)?"

^fEarlier version read, "Play multiplayer video games on a computer, console, phone, or other device (Xbox, Play Station, iPad, AppleTV) where you can interact with others in the game?"

^gEarlier version read, "Video chat (Skype, FaceTime, VRchat, etc.)"

^hEarlier version read, "Spend in TOTAL on a computer, phone, tablet, iPod, or other device or video game? Please do NOT include time spent on school related work, but do include watching TV, shows or videos, texting or chatting, playing games, or visiting social networking sites (Facebook, Twitter, Instagram)."

ⁱEarlier version read, "Spend in TOTAL on school-related work on a phone, tablet, computer, or other computerized device? Please do not include time during school."

#Includes variables: screentime_1_wkdy2_hr, screentime_1_wkdy2_min, screentime_7_8_wknd_hr, screentime_7_8_wknd_min;

*Asked only for weekend days.

Notes and special considerations: None

Reference: Andreassen, C. S., Torsheim, T., Brunborg, G. S., & Pallesen, S. (2012). Development of a Facebook Addiction Scale. *Psychological reports*, 110(2), 501–517. [Find here](#)

EARS — Device Usage Statistics

Release 5.0 Data Table: nt_y_ears

Measure Description: Objective screen time and application use data from EARS ([Ksana Health](#)) for the passive assessment of mobile phone use. Data include measures of time spent in calls and total time spent in various app categories (e.g., Youtube, gaming, productivity, communication). These data are summary scores from the usage period.

ABCD Subdomain: Screen Use

Number of Variables: 1695

Summary Score(s): Yes

Measurement Waves Administered: 4-year follow-up

Modifications since initial administration: None

Notes and special considerations: None

Reference: Lind, M. N., Byrne, M. L., Wicks, G., Smidt, A. M., & Allen, N. B. (2018). The Effortless Assessment of Risk States (EARS) Tool: An Interpersonal Approach to Mobile Sensing. *JMIR mental health*, 5(3), e10334. [Find here](#)

EARS — Post-Assessment Survey

Release 5.0 Data Table: nt_y_ears_qtn

Measure Description: Questionnaire of weekday and weekend time on devices (e.g., “screen time”) for non-school activities and household rules for device and app usage. Youth and parents completed independent questionnaires with parents reporting on their youth (Parent Measure). These instruments were collected following participation in the EARS assessment of device and app usage.

ABCD Subdomain: Screen Time

Number of Variables: 22

Summary Score(s): Yes

Measurement Waves Administered: 4-year follow-up

Modifications since initial administration: None

Notes and special considerations: None

Reference: None

EARS — Device Usage Statistics (Pilot)

Release 5.0 Data Table: nt_y_ears_plt

Measure Description: Objective screen time and application use data from EARS ([Ksana Health](#)) for the passive assessment of mobile phone use. These data were collected during a pilot study of methods and compatibility of different software platforms for Device Usage Statistics. Data measures of time spent in calls and total time spent in various app categories (e.g., Youtube, gaming, productivity, communication). These data are summary scores from the usage period.

ABCD Subdomain: Screen Time

Number of Variables: 382

Summary Score(s): Yes

Measurement Waves Administered: 3-year follow-up

Modifications since initial administration: None

Notes and special considerations: As a pilot study, these data were collected at a subset of ABCD sites.

Reference: Lind, M. N., Byrne, M. L., Wicks, G., Smidt, A. M., & Allen, N. B. (2018). The Effortless Assessment of Risk States (EARS) Tool: An Interpersonal Approach to Mobile Sensing. *JMIR mental health*, 5(3), e10334. [Find here](#)

EARS and Vibrent — Pre/Post-Assessment Survey (Pilot)

Release 5.0 Data Table: nt_y_ears_vibr_qtn_plt

Measure Description: Pre- and post-questionnaires of weekday and weekend time on devices (e.g., “screen time”) for non-school activities and household rules for device and app usage. Youth and parents completed independent questionnaires with parents reporting on their youth Parent Measure. These data were collected during a pilot study of methods and compatibility of different software platforms for Device Usage Statistics.

ABCD Subdomain: Screen Time

Number of Variables: 59

Summary Score(s): No

Measurement Waves Administered: 3-year follow-up.

Modifications since initial administration: None

Notes and special considerations: As a pilot study, these data were collected at a subset of ABCD sites.

Reference: None

Vibrent — Device Usage Statistics (Pilot)

Release 5.0 Data Table: nt_y_vibr_plt

Measure Description: Objective screen time and application use data from Vibrent ([Vibrent Health](#)) for the passive assessment of mobile phone use. These data were collected during a pilot study of methods and compatibility of different software platforms for Device Usage Statistics. Data measures of time spent in calls and total time spent in various app categories (e.g., Youtube, gaming, productivity, communication). These data are summary scores of usage

ABCD Subdomain: Screen Time

Number of Variables: 76

Summary Score(s): Yes

Measurement Waves Administered: 3-year follow-up

Modifications since initial administration: None

Notes and special considerations: As a pilot study, these data were collected at a subset of ABCD sites.

Reference: None

Fitbit — Physical Activity (Daily)

Release 5.0 Data Table: nt_y_fitb_act_d

Measure Description: This instrument includes daily physical activity (and sedentary behavior) at the minute level based on heart rate and accelerometer data from Fitbit. These are summary data from the usage period. Raw data are available and described below.

ABCD Subdomain: Actigraphy

Number of Variables: 46

Summary Score(s): Yes

Measurement Waves Administered: 2-year follow-up, 4-year follow-up.

Modifications since initial administration: None

Notes and special considerations: Participants (n=508) who already had deployed devices as part of their 2-year follow-up when ABCD sites closed in mid-March 2020 were asked to continue to wear the device. Of these, 160 participants spread across 18 of ABCD's 21 sites agreed to extend their Fitbit data collection for an additional 12 weeks. For more information about participants who provided extended-wear Fitbit data, visit the [ABCD 5.0 Changes and Known Issues release note](#) on the NIMH Data Archive. Note that this is available only to authenticated users.

Reference: Godino, J. G., Wing, D., de Zambotti, M., Baker, F. C., Bagot, K., Inkelis, S., Pautz, C., Higgins, M., Nichols, J., Brumback, T., Chevance, G., Colrain, I. M., Patrick, K., & Tapert, S. F. (2020). Performance of a commercial multi-sensor wearable (Fitbit Charge HR) in measuring physical activity and sleep in healthy children. *PLoS one*, 15(9), e0237719. [Find here](#)

Fitbit — Physical Activity (Weekly)

Release 5.0 Data Table: nt_y_fitb_act_w

Measure Description: Weekly physical activity (and sedentary behavior) for all days with sufficient wear time for inclusion (>600 minutes of daytime wear) from Fitbit. Data include minutes in a variety of activity intensities and steps taken that are broken into weekday only, weekend only, and all days of week. These are summary data from the usage period.

ABCD Subdomain: Actigraphy

Number of Variables: 25

Summary Score(s): Yes

Measurement Waves Administered: 2-year follow-up, 4-year follow-up

Modifications since initial administration: None

Notes and special considerations: Participants (n=508) who already had deployed devices as part of their 2-year follow-up when ABCD sites closed in mid-March 2020 were asked to continue to wear the device. Of these, 160 participants spread across 18 of ABCD's 21 sites agreed to extend their Fitbit data collection for an additional 12 weeks. For more information about participants who provided extended-wear Fitbit data, visit the [ABCD 5.0 Changes and Known Issues release note](#) on the NIMH Data Archive. Note that this is available only to authenticated users.

Reference: Godino, J. G., Wing, D., de Zambotti, M., Baker, F. C., Bagot, K., Inkelis, S., Pautz, C., Higgins, M., Nichols, J., Brumback, T., Chevance, G., Colrain, I. M., Patrick, K., & Tapert, S. F. (2020). Performance of a commercial multi-sensor wearable (Fitbit Charge HR) in measuring physical activity and sleep in healthy children. *PloS one*, 15(9), e0237719. [Find here](#)

Fitbit — Sleep (Daily)

Release 5.0 Data Table: nt_y_fitb_slp_d

Measure Description: This instrument includes sleep data for each participant night that had sufficient wear/sleep duration to achieve sleep "stages" – minimum of 180 minutes of in-bed time. Metrics include number of instances and number of minutes in each sleep stage. Data include average HR within each stage. These are summary data from the usage period. Raw data are available and described below.

ABCD Subdomain: Actigraphy

Number of Variables: 20

Summary Score(s): Yes

Measurement Waves Administered: 2-year follow-up, 4-year follow-up

Modifications since initial administration: None

Notes and special considerations: Participants (n=508) who already had deployed devices as part of their 2-year follow-up when ABCD sites closed in mid-March 2020 were asked to continue to wear the device. Of these, 160 participants spread across 18 of ABCD's 21 sites agreed to extend their Fitbit data collection for an additional 12 weeks. For more information about participants who provided extended-wear Fitbit data, visit the [ABCD 5.0 Changes and Known Issues release note](#) on the NIMH Data Archive. Note that this is available only to authenticated users.

Reference: Godino, J. G., Wing, D., de Zambotti, M., Baker, F. C., Bagot, K., Inkelis, S., Pautz, C., Higgins, M., Nichols, J., Brumback, T., Chevance, G., Colrain, I. M., Patrick, K., & Tapert, S. F. (2020). Performance of a commercial multi-sensor wearable (Fitbit Charge HR) in measuring physical activity and sleep in healthy children. *PloS one*, 15(9), e0237719. [Find here](#)

Fitbit — Sleep (Weekly)

Release 5.0 Data Table: nt_y_fitb_slp_w

Measure Description: Sleep level aggregated to the week level for all valid days (i.e. >180 minutes of sleep time). Metrics include sum of and average number of instances and number of minutes in each sleep stage. Average HR within each stage are included. Weeks are broken into weekday only, weekend only, and all days of week. These are summary data from the usage period.

ABCD Subdomain: Actigraphy

Number of Variables: 20

Summary Score(s): Yes

Measurement Waves Administered: 2-year follow-up, 4-year follow-up

Modifications since initial administration: None

Notes and special considerations: Participants (n=508) who already had deployed devices as part of their 2-year follow-up when ABCD sites closed in mid-March 2020 were asked to continue to wear the device. Of these, 160 participants spread across 18 of ABCD's 21 sites agreed to extend their Fitbit data collection for an additional 12 weeks. For more information about participants who provided extended-wear Fitbit data, visit the [ABCD 5.0 Changes and Known Issues release note](#) on the NIMH Data Archive. Note that this is available only to authenticated users.

Reference: Godino, J. G., Wing, D., de Zambotti, M., Baker, F. C., Bagot, K., Inkelis, S., Pautz, C., Higgins, M., Nichols, J., Brumback, T., Chevance, G., Colrain, I. M., Patrick, K., & Tapert, S. F. (2020). Performance of a commercial multi-sensor wearable (Fitbit Charge HR) in measuring physical activity and sleep in healthy children. *PloS one*, 15(9), e0237719. [Find here](#)

Fitbit — Pre/Post-Assessment Survey

Release 5.0 Data Table: nt_y_fitb_qtn

Measure Description: A customized questionnaire given to youth and parents (Parent Measure) in the Fitbit before and after the youth had worn the Fitbit. This pre-assessment survey established a self-report for youth of "baseline" of activity, sedentary behaviors, and sleep for participants in relation to their peers. The post-assessment survey form allows for comparisons of change from the pre-assessment survey of self-reported for youth, sedentary behaviors, and sleep for participants in relation to their peers.

ABCD Subdomain: Actigraphy

Number of Variables: 18

Summary Score(s): No

Measurement Waves Administered: 2-year follow-up, 4-year follow-up

Modifications since initial administration: None

Notes and special considerations: None

Fitbit — Pre/Post-Assessment Survey (Pilot)

Release 5.0 Data Table: nt_y_fitb_qtn_plt

Measure Description: A customized questionnaire given to youth and parents (Parent Measure) in the Fitbit before and after the youth had worn the Fitbit during the pilot testing of Fitbit. This pre-assessment survey established a self-report for youth of “baseline” of activity, sedentary behaviors, and sleep for participants in relation to their peers. The post-assessment survey form allows for comparisons of change from the pre-assessment survey of self-reported for youth, sedentary behaviors, and sleep for participants in relation to their peers.

ABCD Subdomain: Actigraphy

Number of Variables: 16

Summary Score(s): No

Measurement Waves Administered: 1-year follow-up

Modifications since initial administration: None

Notes and special considerations: As a pilot study, these data were collected at a subset of ABCD sites.

Reference: [Find here](#)

Parent Instruments

Parent Screen Time Questionnaire

Release 5.0 Data Table: nt_p_psq

Measure Description: This is a parent self-report of screentime behaviors and behavior modeling. The parent is asked about the amount of time that they themselves spend using various forms of visual media, on weekdays and weekends. Questions about screentime behavior modeling are from Tang et al. (2018).

ABCD Subdomain: Screen Time

Number of Variables: 47

Summary Score(s): No

Measurement Waves Administered: Annually since 3-year follow-up

Modifications since initial administration: None

Notes and special considerations: None

Reference: Tang, L., Darlington, G., Ma, D. W. L., Haines, J., & Guelph Family Health Study (2018). Mothers' and fathers' media parenting practices associated with young children's screen-time: a cross-sectional study. *BMC obesity*, 5, 37. [Find here](#)

Screen Time Questionnaire on Youth

Release 5.0 Data Table: nt_p_stq

Measure Description: This parent-reported measure evaluates the overall amount of time that the youth spends using visual media (e.g. cellphone, iPad, videos), on a typical weekday and weekend day, not including time spent on school-related work.

ABCD Subdomain: Screen Time

Number of Variables: 42

Summary Score(s): No

Measurement Waves Administered: Annually since Baseline

Modifications since initial administration: From 2-year follow-up, parents also answered questions about their experiences with their child's media use.

Notes and special considerations: None

Reference: Bagot, K. S., Matthews, S. A., Mason, M., Squeglia, L. M., Fowler, J., Gray, K., Herting, M., May, A., Colrain, I., Godino, J., Tapert, S., Brown, S., & Patrick, K. (2018). Current, future and potential use of mobile and wearable technologies and social media data in the ABCD study to increase understanding of contributors to child health. *Developmental cognitive neuroscience*, 32, 121–129. [Find here](#)

EARS — Parent Post-Assessment Survey

Release 5.0 Data Table: nt_p_ears_qtn

Measure Description: Parent-reported questionnaire of youth weekday and weekend time on devices (e.g., "screen time") for non-school activities and household rules for device and app usage. Youth and parents completed independent questionnaires with parents reporting on their youth (Youth Measure). These instruments were collected following participation in the EARS assessment of device and app usage.

ABCD Subdomain: Screen Time

Number of Variables: 22

Summary Score(s): No

Measurement Waves Administered: 2-year follow-up, 4-year follow-up

Modifications since initial administration: None

Notes and special considerations: None

Reference: None

EARS and Vibrent — Parent Pre/Post-Assessment Survey (Pilot)

Release 5.0 Data Table: nt_p_ears_vibr_qtn_plt

Measure Description: Pre- and post-questionnaires of weekday and weekend time on devices (e.g., “screen time”) for non-school activities and household rules for device and app usage. Youth and parents completed independent questionnaires with parents reporting on their youth (Youth Measure). These data were collected during a pilot study of methods and compatibility of different software platforms for Device Usage Statistics.

ABCD Subdomain: Screen Time

Number of Variables: 59

Summary Score(s): No

Measurement Waves Administered: 1-year follow-up

Modifications since initial administration: None

Notes and special considerations: As a pilot study, these data were collected at a subset of ABCD sites.

Reference: None

Fitbit — Parent Pre/Post-Assessment Survey

Release 5.0 Data Table: nt_p_fitb_qtn

Measure Description: A customized questionnaire given to youth and parents (Parent Measure) in the Fitbit before and after the youth had worn the Fitbit. This pre-assessment survey established a parent-report for youth of “baseline” of activity, sedentary behaviors, and sleep for participants in relation to their peers. The post-assessment survey form allows for comparisons of change from the pre-assessment survey of parent-reported for youth, sedentary behaviors, and sleep for participants in relation to their peers.

ABCD Subdomain: Actigraphy

Number of Variables: 50

Summary Score(s): No

Measurement Waves Administered: 2-year follow-up, 4-year follow-up

Modifications since initial administration: None

Notes and special considerations: None

Reference: None

Fitbit — Parent Pre/Post-Assessment Survey (Pilot)

Release 5.0 Data Table: nt_p_fitb_qtn_plt

Measure Description: A customized questionnaire given to youth and parents (Parent Measure) in the Fitbit before and after the youth had worn the Fitbit during the pilot testing of Fitbit. This pre-assessment survey established a parent-report for youth of “baseline” of activity, sedentary behaviors, and sleep for participants in relation to their peers. The post-assessment survey form allows for comparisons of change from the pre-assessment survey of parent-reported for youth, sedentary behaviors, and sleep for participants in relation to their peers.

ABCD Subdomain: Actigraphy

Number of Variables: 24

Summary Score(s): No

Measurement Waves Administered: 1-year follow-up

Modifications since initial administration: None

Notes and special considerations: As a pilot study, these data were collected at a subset of ABCD sites.

Reference: None

Fitbit Raw Data

The description of Fitbit Physical Activity (Daily) are [here](#) and Fitbit Sleep (Daily) data are [here](#). To download these raw data, follow the instructions at the [NDA ABCD page](#).

Details of data in Physical Activity raw data files

Daily Activity METs (metabolic equivalents) – used to estimate exercise intensity.

Variable Name	Description
Wear_Time	
METs	MET value (All MET values are multiplied by 10. Please divide by 10 to get accurate MET values). Value range is 1 to 88.

Daily Intensity – Time spent in one of four intensity categories

Variable**Name Description**

Wear_Time

Intensity Intensity value for the given minute (0 = Sedentary, 1 = Light, 2 = Moderate, 3 = Very Active)

Calories – Calories burned**Variable Name****Description**

Wear_Time

Calories Total number of estimated calories burned

Steps – Number of Steps**Variable Name****Description**

Wear_Time

Steps Number of steps

Heart rate**Variable Name****Description**

Wear_Time Date and time of measurement (minute resolution)

Value Measured heart rate

Details of data in Sleep raw data files**Sleep – Sleep classification****Variable Name****Description**

Wear_Time Date and time of measurement (minute resolution)

value Sleep state (1 = Asleep, 2 = Restless, 3 = Awake)

logId Unique log ID in Fitbit's system for the sleep record

Sleep Stage – Sleep stages and wakefulness

Variable Name	Description
LogId	Unique log ID in Fitbit's system for the sleep record
pGUID	Participant ID
Wear_Time	Date and time of measurement (30-second resolution)
Level	Sleep stage for the time interval (wake, light, deep, rem)
ShortWakes	Reported as "wake" if part of a short wake is detected. Short wakes are awakenings that last less than 180 seconds. Commonly used for visual distinction, but "physiologically equivalent" to longer wakes.
SleepStage	Combined Level and ShortWakes for true sleep stage time series.

Screentime Raw Data

EARS — Device Usage Statistics Raw Data

Description of data

The description of EARS — Device Usage Statistics are [here](#). Each participant and each event will have one to multiple files describing smart phone screen usage. The following describes the various tables that may be present. To download these raw data, follow the instructions at the [NDA ABCD page](#).

Application usage data

The application usage files take the following form [APPUSAGE_data_\[Participant ID\]_\[hex ID code\]_\[date\]_\[time\]](#)

Variable Name	Description
id_file	File ID number
epoch_usagewindow_start	App usage epoch start (device clock time)
epoch_usagewindow_end	App usage epoch end (device clock time)
epoch_lastused	App epoch last used (device clock time)
id_app	Description of app
n_foreground_ms	Time in foreground (ms)
timezone	Time zone (GMT)

Application header data

The application usage files take the following form `APPUSAGE_header_[Participant ID]_[hex ID code]_[date]_[time]`

Variable Name	Description
id_file	File ID number
filepath	File location on participant's device
filesize_bytes	Size of data file (bytes)
modelName	Device manufacturer
modelNumber	Device model number
osVersion	Device OS version
appVersion	EARS app version
timezone	Time zone (GMT)
studyVersion	Version of the study
n_datapoint	Data point number

Key Input Timestamps data

The application usage files take the following form `KeyInputTimestamps_data_[Participant ID]_[hex ID code]_[date]_[time]`

Variable Name	Description
id_file	File ID number
epoch_keystroke	Keystroke epoch (device clock time)
id_app	Name of app
val_gmtoffset_sec	GMT time zone offset (sec)
timezone	Time zone (GMT)

Key Input Timestamps header data

The application usage files take the following form `KeyInputTimestamps_header_[Participant ID]_[hex ID code]_[date]_[time]`

Variable Name	Description
id_file	File ID number
filepath	File location on participant's device
filesize_bytes	Size of data file (bytes)
modelName	Device manufacturer
modelNumber	Device model number
osVersion	Device OS version
appVersion	EARS app version
timezone	Time zone (GMT)
studyVersion	Version of the study
n_datapoint	Data point number

App usage data for session

The application usage files take the following form `NDAR_INV[Participant ID]_APPUSAGE_usageLog_[date]_[time]`

Variable Name	Description
id_app	Name of app
epoch_usagewindow_start	App usage window start (device clock time)
epoch_usagewindow_end	App usage window end (device clock time)
timezone	Time zone (GMT)
tm_usagewindow_start	Date and time of usage window start
tm_usagewindow_end	Date and time of usage window end
n_foreground_ms	Time app in foreground (ms)
id_participant	Participant ID

Key Input Timestamps data for session

The application usage files take the following form `NDAR_INV[Participant ID]_KeyInputTimestamps_session_[date]_[time]`

Variable Name	Description
id_app	Name of app
epoch_session_start	App usage epoch start (device clock time)
epoch_session_end	App usage epoch end (device clock time)
timezone	Time zone (GMT)
tm_session_start	Date and time of session start
tm_session_end	Date and time of session end
amt_keyboard_session_sec	Keyboard usage in session (sec)
n_record_session	Number of records in session
id_participant	Participant ID

Pilot Study – EARS Screentime Raw Data

Description of data

During planning for the rollout of a real-time screen time use app, ABCD performed pilot testing using two app platforms; EARS from [Ksana Health](#) and Vibrent from [Vibrent Health](#). The following describes the data available from the pilot study of the EARS app. To download these raw data, follow the instructions at the [NDA ABCD page](#).

Details of variables in the raw data files

Variable Name	Description
collection_id	NDA collection ID (not useful for analyses)
abcd_mte01_id	NDA table record number (not useful for analyses)
dataset_id	NDA dataset ID (not useful for analyses)
subjectkey	NDA Global Unique Identifier (GUID) (not useful for analyses)
src_subject_id	Participant ID
interview_date	Date of testing
interview_age	Age in months at testing
sex	Sex at birth

Variable Name	Description
eventname	ABCD event (wave) description
mt_pil_pguid	Participant ID
mt_pil_ears_act_goog_avg	Average daily duration Google Play Store category: Game - Action (minutes)
mt_pil_ears_act_goog_tot	Total duration Google Play Store category: Game - Action (minutes)
mt_pil_ears_act_goog_wday_avg	Average daily Weekday duration Google Play Store category: Game - Action (minutes)
mt_pil_ears_act_goog_wday_tot	Total weekday duration Google Play Store category: Game - Action (minutes)
mt_pil_ears_act_goog_wend_avg	Average daily Weekend duration Google Play Store category: Game - Action (minutes)
mt_pil_ears_act_goog_wend_tot	Total weekend duration Google Play Store category: Game - Action (minutes)
mt_pil_ears_adv_goog_avg	Average daily duration Google Play Store category: Game - Adventure (minutes)
mt_pil_ears_adv_goog_tot	Total duration Google Play Store category: Game - Adventure (minutes)
mt_pil_ears_adv_goog_wday_avg	Average daily Weekday duration Google Play Store category: Game - Adventure (minutes)
mt_pil_ears_adv_goog_wday_tot	Total weekday duration Google Play Store category: Game - Adventure (minutes)
mt_pil_ears_adv_goog_wend_avg	Average daily Weekend duration Google Play Store category: Game - Adventure (minutes)
mt_pil_ears_adv_goog_wend_tot	Total weekend duration Google Play Store category: Game - Adventure (minutes)
mt_pil_ears_app_dur_avg	Average per Day duration across all apps (minutes)
mt_pil_ears_app_dur_tot	Total duration across all apps (minutes)
mt_pil_ears_app_dur_wday_avg	Average per Weekday Day duration across all apps (minutes)
mt_pil_ears_app_dur_wend_avg	Average per Weekend Day duration across all apps (minutes)

Variable Name	Description
mt_pil_ears_app_dur_wend_tot	Total weekend duration across all apps (minutes)
mt_pil_ears_app_open_cnt	Total number of times apps were opened across all apps over duration (count)
mt_pil_ears_app_open_cnt_avg	Average per Day number of times apps were opened across all apps (count)
mt_pil_ears_app_unique_cnt	Total number of unique apps used over duration (count)
mt_pil_ears_app_unique_cnt_avg	Average per day number of unique apps used over duration (count)
mt_pil_ears_app_wday_dur_tot	Total weekday duration across all apps (minutes)
mt_pil_ears_arc_goog_avg	Average daily duration Google Play Store category: Game - Arcade (minutes)
mt_pil_ears_arc_goog_tot	Total duration Google Play Store category: Game - Arcade (minutes)
mt_pil_ears_arc_goog_wday_avg	Average daily Weekday duration Google Play Store category: Game - Arcade (minutes)
mt_pil_ears_arc_goog_wday_tot	Total weekday duration Google Play Store category: Game - Arcade (minutes)
mt_pil_ears_arc_goog_wend_avg	Average daily Weekend duration Google Play Store category: Game - Arcade (minutes)
mt_pil_ears_arc_goog_wend_tot	Total weekend duration Google Play Store category: Game - Arcade (minutes)
mt_pil_ears_art_goog_wday_avg	Average daily Weekday duration Google Play Store category: Art & Design (minutes)
mt_pil_ears_art_goog_wday_tot	Total weekday duration Google Play Store category: Art & Design (minutes)
mt_pil_ears_art_goog_wend_avg	Average daily Weekend duration Google Play Store category: Art & Design (minutes)
mt_pil_ears_art_goog_wend_tot	Total weekend duration Google Play Store category: Art & Design (minutes)

Variable Name	Description
mt_pil_ears_artdes_goog_avg	Average daily duration Google Play Store category: Art & Design (minutes)
mt_pil_ears_artdes_goog_tot	Total duration Google Play Store category: Art & Design (minutes)
mt_pil_ears_beau_goog_avg	Average daily duration Google Play Store category: Beauty (minutes)
mt_pil_ears_beau_goog_tot	Total duration Google Play Store category: Beauty (minutes)
mt_pil_ears_beau_goog_wday_avg	Average daily Weekday duration Google Play Store category: Beauty (minutes)
mt_pil_ears_beau_goog_wday_tot	Total weekday duration Google Play Store category: Beauty (minutes)
mt_pil_ears_beau_goog_wend_avg	Average daily Weekend duration Google Play Store category: Beauty (minutes)
mt_pil_ears_beau_goog_wend_tot	Total weekend duration Google Play Store category: Beauty (minutes)
mt_pil_ears_biz_goog_avg	Average daily duration Google Play Store category: Business (minutes)
mt_pil_ears_biz_goog_tot	Total duration Google Play Store category: Business (minutes)
mt_pil_ears_biz_goog_wday_avg	Average daily Weekday duration Google Play Store category: Business (minutes)
mt_pil_ears_biz_goog_wday_tot	Total weekday duration Google Play Store category: Business (minutes)
mt_pil_ears_biz_goog_wend_avg	Average daily Weekend duration Google Play Store category: Business (minutes)
mt_pil_ears_biz_goog_wend_tot	Total weekend duration Google Play Store category: Business (minutes)
mt_pil_ears_book_goog_avg	Average daily duration Google Play Store category: Books & Reference (minutes)
mt_pil_ears_book_goog_tot	Total duration Google Play Store category: Books & Reference (minutes)

Variable Name	Description
mt_pil_ears_book_goog_wday_avg	Average daily Weekday duration Google Play Store category: Books & Reference (minutes)
mt_pil_ears_book_goog_wday_tot	Total weekday duration Google Play Store category: Books & Reference (minutes)
mt_pil_ears_book_goog_wend_avg	Average daily Weekend duration Google Play Store category: Books & Reference (minutes)
mt_pil_ears_book_goog_wend_tot	Total weekend duration Google Play Store category: Books & Reference (minutes)
mt_pil_ears_brd_goog_avg	Average daily duration Google Play Store category: Game - Board (minutes)
mt_pil_ears_brd_goog_tot	Total duration Google Play Store category: Game - Board (minutes)
mt_pil_ears_brd_goog_wday_avg	Average daily Weekday duration Google Play Store category: Game - Board (minutes)
mt_pil_ears_brd_goog_wday_tot	Total weekday duration Google Play Store category: Game - Board (minutes)
mt_pil_ears_brd_goog_wend_avg	Average daily Weekend duration Google Play Store category: Game - Board (minutes)
mt_pil_ears_brd_goog_wend_tot	Total weekend duration Google Play Store category: Game - Board (minutes)
mt_pil_ears_call_abcd_avg	Average per Day duration (minutes) ABCD single-app category: Phone Calls
mt_pil_ears_call_abcd_tot	Total duration (minutes) ABCD single-app category: Phone Calls
mt_pil_ears_call_abcd_wend_avg	Average per Weekend Day duration (minutes) ABCD single-app category: Phone Calls
mt_pil_ears_call_abcd_wend_tot	Total weekend duration (minutes) ABCD single-app category: Phone Calls
mt_pil_ears_call_open_cnt	Total number of times phone call app opened over duration (count)
mt_pil_ears_call_open_cnt_avg	Average Day number of times phone call app opened (count)

Variable Name	Description
mt_pil_ears_card_goog_avg	Average daily duration Google Play Store category: Game - Card (minutes)
mt_pil_ears_card_goog_tot	Total duration Google Play Store category: Game - Card (minutes)
mt_pil_ears_card_goog_wday_avg	Average daily Weekday duration Google Play Store category: Game - Card (minutes)
mt_pil_ears_card_goog_wday_tot	Total weekday duration Google Play Store category: Game - Card (minutes)
mt_pil_ears_card_goog_wend_avg	Average daily Weekend duration Google Play Store category: Game - Card (minutes)
mt_pil_ears_card_goog_wend_tot	Total weekend duration Google Play Store category: Game - Card (minutes)
mt_pil_ears_cas_goog_avg	Average daily duration Google Play Store category: Game - Casino (minutes)
mt_pil_ears_cas_goog_tot	Total duration Google Play Store category: Game - Casino (minutes)
mt_pil_ears_cas_goog_wday_avg	Average daily Weekday duration Google Play Store category: Game - Casino (minutes)
mt_pil_ears_cas_goog_wday_tot	Total weekday duration Google Play Store category: Game - Casino (minutes)
mt_pil_ears_cas_goog_wend_avg	Average daily Weekend duration Google Play Store category: Game - Casino (minutes)
mt_pil_ears_cas_goog_wend_tot	Total weekend duration Google Play Store category: Game - Casino (minutes)
mt_pil_ears_com_goog_avg	Average daily duration Google Play Store category: Comics (minutes)
mt_pil_ears_com_goog_tot	Total duration Google Play Store category: Comics (minutes)
mt_pil_ears_com_goog_wday_avg	Average daily Weekday duration Google Play Store category: Comics (minutes)
mt_pil_ears_com_goog_wday_tot	Total weekday duration Google Play Store category: Comics (minutes)

Variable Name	Description
mt_pil_ears_com_goog_wend_avg	Average daily Weekend duration Google Play Store category: Comics (minutes)
mt_pil_ears_com_goog_wend_tot	Total weekend duration Google Play Store category: Comics (minutes)
mt_pil_ears_comm_abcd_avg	Average per Day duration (minutes) ABCD composite category: Communications
mt_pil_ears_comm_abcd_tot	Total duration (minutes) ABCD composite category: Communications
mt_pil_ears_comm_abcd_wday_avg	Average per Weekday Day duration (minutes) ABCD composite category: Communications
mt_pil_ears_comm_abcd_wday_tot	Total weekday duration (minutes) ABCD composite category: Communications
mt_pil_ears_comm_abcd_wend_avg	Average per Weekend Day duration (minutes) ABCD composite category: Communications
mt_pil_ears_comm_abcd_wend_tot	Total weekend duration (minutes) ABCD composite category: Communications
mt_pil_ears_comm_goog_avg	Average daily duration Google Play Store category: Communications (minutes)
mt_pil_ears_comm_goog_tot	Total duration Google Play Store category: Communications (minutes)
mt_pil_ears_comm_goog_wday_avg	Average daily Weekday duration Google Play Store category: Communications (minutes)
mt_pil_ears_comm_goog_wday_tot	Total weekday duration Google Play Store category: Communications (minutes)
mt_pil_ears_comm_goog_wend_avg	Average daily Weekend duration Google Play Store category: Communications (minutes)
mt_pil_ears_comm_goog_wend_tot	Total weekend duration Google Play Store category: Communications (minutes)
mt_pil_ears_csl_goog_avg	Average daily duration Google Play Store category: Game - Casual (minutes)

Variable Name	Description
mt_pil_ears_csl_goog_tot	Total duration Google Play Store category: Game - Casual (minutes)
mt_pil_ears_csl_goog_wday_avg	Average daily Weekday duration Google Play Store category: Game - Casual (minutes)
mt_pil_ears_csl_goog_wday_tot	Total weekday duration Google Play Store category: Game - Casual (minutes)
mt_pil_ears_csl_goog_wend_avg	Average daily Weekend duration Google Play Store category: Game - Casual (minutes)
mt_pil_ears_csl_goog_wend_tot	Total weekend duration Google Play Store category: Game - Casual (minutes)
mt_pil_ears_date_goog_avg	Average daily duration Google Play Store category: Dating (minutes)
mt_pil_ears_date_goog_tot	Total duration Google Play Store category: Dating (minutes)
mt_pil_ears_date_goog_wday_avg	Average daily Weekday duration Google Play Store category: Dating (minutes)
mt_pil_ears_date_goog_wday_tot	Total weekday duration Google Play Store category: Dating (minutes)
mt_pil_ears_date_goog_wend_avg	Average daily Weekend duration Google Play Store category: Dating (minutes)
mt_pil_ears_date_goog_wend_tot	Total weekend duration Google Play Store category: Dating (minutes)
mt_pil_ears_ed_game_goog_avg	Average daily duration Google Play Store category: Game - Educational (minutes)
mt_pil_ears_edgamgoog_tot	Total duration Google Play Store category: Game - Educational (minutes)
mt_pil_ears_edgamgoog_wday_avg	Average daily Weekday duration Google Play Store category: Game - Educational (minutes)
mt_pil_ears_edgamgoog_wday_tot	Total weekday duration Google Play Store category: Game - Educational (minutes)
mt_pil_ears_edgamgoog_wend_avg	Average daily Weekend duration Google Play Store category: Game - Educational (minutes)

Variable Name	Description
mt_pil_ears_edgamgoog_wend_tot	Total weekend duration Google Play Store category: Game - Educational (minutes)
mt_pil_ears_educ_goog_avg	Average daily duration Google Play Store category: Education (minutes)
mt_pil_ears_educ_goog_tot	Total duration Google Play Store category: Education (minutes)
mt_pil_ears_educ_goog_wday_avg	Average daily Weekday duration Google Play Store category: Education (minutes)
mt_pil_ears_educ_goog_wday_tot	Total weekday duration Google Play Store category: Education (minutes)
mt_pil_ears_educ_goog_wend_avg	Average daily Weekend duration Google Play Store category: Education (minutes)
mt_pil_ears_educ_goog_wend_tot	Total weekend duration Google Play Store category: Education (minutes)
mt_pil_ears_ent_goog_avg	Average daily duration Google Play Store category: Entertainment (minutes)
mt_pil_ears_ent_goog_tot	Total duration Google Play Store category: Entertainment (minutes)
mt_pil_ears_ent_goog_wday_avg	Average daily Weekday duration Google Play Store category: Entertainment (minutes)
mt_pil_ears_ent_goog_wday_tot	Total weekday duration Google Play Store category: Entertainment (minutes)
mt_pil_ears_ent_goog_wend_avg	Average daily Weekend duration Google Play Store category: Entertainment (minutes)
mt_pil_ears_ent_goog_wend_tot	Total weekend duration Google Play Store category: Entertainment (minutes)
mt_pil_ears_evnt_goog_avg	Average daily duration Google Play Store category: Events (minutes)
mt_pil_ears_evnt_goog_tot	Total duration Google Play Store category: Events (minutes)
mt_pil_ears_evnt_goog_wday_avg	Average daily Weekday duration Google Play Store category: Events (minutes)

Variable Name	Description
mt_pil_ears_evnt_goog_wday_tot	Total weekday duration Google Play Store category: Events (minutes)
mt_pil_ears_evnt_goog_wend_avg	Average daily Weekend duration Google Play Store category: Events (minutes)
mt_pil_ears_evnt_goog_wend_tot	Total weekend duration Google Play Store category: Events (minutes)
mt_pil_ears_fin_goog_avg	Average daily duration Google Play Store category: Finance (minutes)
mt_pil_ears_fin_goog_tot	Total duration Google Play Store category: Finance (minutes)
mt_pil_ears_fin_goog_wday_avg	Average daily Weekday duration Google Play Store category: Finance (minutes)
mt_pil_ears_fin_goog_wday_tot	Total weekday duration Google Play Store category: Finance (minutes)
mt_pil_ears_fin_goog_wend_avg	Average daily Weekend duration Google Play Store category: Finance (minutes)
mt_pil_ears_fin_goog_wend_tot	Total weekend duration Google Play Store category: Finance (minutes)
mt_pil_ears_food_goog_avg	Average daily duration Google Play Store category: Food & Drink (minutes)
mt_pil_ears_food_goog_tot	Total duration Google Play Store category: Food & Drink (minutes)
mt_pil_ears_food_goog_wday_avg	Average daily Weekday duration Google Play Store category: Food & Drink (minutes)
mt_pil_ears_food_goog_wday_tot	Total weekday duration Google Play Store category: Food & Drink (minutes)
mt_pil_ears_food_goog_wend_avg	Average daily Weekend duration Google Play Store category: Food & Drink (minutes)
mt_pil_ears_food_goog_wend_tot	Total daily Weekend duration Google Play Store category: Food & Drink (minutes)
mt_pil_ears_game_abcd_avg	Average per Day duration (minutes) ABCD composite category: Gaming

Variable Name	Description
mt_pil_ears_game_abcd_tot	Total duration (minutes) ABCD composite category: Gaming
mt_pil_ears_game_abcd_wday_avg	Average per Weekday Day duration (minutes) ABCD composite category: Gaming
mt_pil_ears_game_abcd_wday_tot	Total weekday duration (minutes) ABCD composite category: Gaming
mt_pil_ears_game_abcd_wend_avg	Average per Weekend Day duration (minutes) ABCD composite category: Gaming
mt_pil_ears_game_abcd_wend_tot	Total weekend duration (minutes) ABCD composite category: Gaming
mt_pil_ears_goog_wday_avg	Average daily Weekday duration Google Play Store category: Music & Audio (minutes)
mt_pil_ears_goog_wday_tot	Total weekday duration Google Play Store category: Music & Audio (minutes)
mt_pil_ears_hlth_goog_avg	Average daily duration Google Play Store category: Health & Fitness (minutes)
mt_pil_ears_hlth_goog_tot	Total duration Google Play Store category: Health & Fitness (minutes)
mt_pil_ears_hlth_goog_wday_avg	Average daily Weekday duration Google Play Store category: Health & Fitness (minutes)
mt_pil_ears_hlth_goog_wday_tot	Total weekday duration Google Play Store category: Health & Fitness (minutes)
mt_pil_ears_hlth_goog_wend_avg	Average daily Weekend duration Google Play Store category: Health & Fitness (minutes)
mt_pil_ears_hlth_goog_wend_tot	Total weekend duration Google Play Store category: Health & Fitness (minutes)
mt_pil_ears_home_goog_avg	Average daily duration Google Play Store category: House & Home (minutes)
mt_pil_ears_home_goog_tot	Total duration Google Play Store category: House & Home (minutes)
mt_pil_ears_home_goog_wday_avg	Average daily Weekday duration Google Play Store category: House & Home (minutes)

Variable Name	Description
mt_pil_ears_home_goog_wday_tot	Total weekday duration Google Play Store category: House & Home (minutes)
mt_pil_ears_home_goog_wend_avg	Average daily Weekend duration Google Play Store category: House & Home (minutes)
mt_pil_ears_home_goog_wend_tot	Total weekend duration Google Play Store category: House & Home (minutes)
mt_pil_ears_lengthdays	Number of days during usage tracking period with at least 1 upload (days)
mt_pil_ears_lengthdays_wday	Number of weekday days during usage tracking period with at least 1 upload (days)
mt_pil_ears_lengthdays_wend	Number of weekendend days during usage tracking period with at least 1 upload (days)
mt_pil_ears_lib_goog_avg	Average daily duration Google Play Store category: Libraries & Demo (minutes)
mt_pil_ears_lib_goog_tot	Total duration Google Play Store category: Libraries & Demo (minutes)
mt_pil_ears_lib_goog_wday_avg	Average daily Weekday duration Google Play Store category: Libraries & Demo (minutes)
mt_pil_ears_lib_goog_wday_tot	Total weekday duration Google Play Store category: Libraries & Demo (minutes)
mt_pil_ears_lib_goog_wend_avg	Average daily Weekend duration Google Play Store category: Libraries & Demo (minutes)
mt_pil_ears_lib_goog_wend_tot	Total weekend duration Google Play Store category: Libraries & Demo (minutes)
mt_pil_ears_ls_goog_avg	Average daily duration Google Play Store category: Lifestyle (minutes)
mt_pil_ears_ls_goog_tot	Total duration Google Play Store category: Lifestyle (minutes)
mt_pil_ears_ls_goog_wday_avg	Average daily Weekday duration Google Play Store category: Lifestyle (minutes)
mt_pil_ears_ls_goog_wday_tot	Total weekday duration Google Play Store category: Lifestyle (minutes)

Variable Name	Description
mt_pil_ears_ls_goog_wend_avg	Average daily Weekend duration Google Play Store category: Lifestyle (minutes)
mt_pil_ears_ls_goog_wend_tot	Total weekend duration Google Play Store category: Lifestyle (minutes)
mt_pil_ears_maps_goog_avg	Average daily duration Google Play Store category: Maps & Navigation (minutes)
mt_pil_ears_maps_goog_tot	Total duration Google Play Store category: Maps & Navigation (minutes)
mt_pil_ears_maps_goog_wday_avg	Average daily Weekday duration Google Play Store category: Maps & Navigation (minutes)
mt_pil_ears_maps_goog_wday_tot	Total weekday duration Google Play Store category: Maps & Navigation (minutes)
mt_pil_ears_maps_goog_wend_avg	Average daily Weekend duration Google Play Store category: Maps & Navigation (minutes)
mt_pil_ears_maps_goog_wend_tot	Total weekend duration Google Play Store category: Maps & Navigation (minutes)
mt_pil_ears_med_goog_avg	Average daily duration Google Play Store category: Medical (minutes)
mt_pil_ears_med_goog_tot	Total duration Google Play Store category: Medical (minutes)
mt_pil_ears_med_goog_wday_avg	Average daily Weekday duration Google Play Store category: Medical (minutes)
mt_pil_ears_med_goog_wday_tot	Total weekday duration Google Play Store category: Medical (minutes)
mt_pil_ears_med_goog_wend_avg	Average daily Weekend duration Google Play Store category: Medical (minutes)
mt_pil_ears_med_goog_wend_tot	Total weekend duration Google Play Store category: Medical (minutes)
mt_pil_ears_mus_abcd_avg	Average per Day duration (minutes) ABCD composite category: Music
mt_pil_ears_mus_abcd_tot	Total duration (minutes) ABCD composite category: Music

Variable Name	Description
mt_pil_ears_mus_abcd_wday_avg	Average per Weekday Day duration (minutes) ABCD composite category: Music
mt_pil_ears_mus_abcd_wday_tot	Total weekday duration (minutes) ABCD composite category: Music
mt_pil_ears_mus_abcd_wend_avg	Average per Weekend Day duration (minutes) ABCD composite category: Music
mt_pil_ears_mus_abcd_wend_tot	Total weekend duration (minutes) ABCD composite category: Music
mt_pil_ears_mus_game_goog_avg	Average daily duration Google Play Store category: Game - Music (minutes)
mt_pil_ears_mus_game_goog_tot	Total duration Google Play Store category: Game - Music (minutes)
mt_pil_ears_mus_goog_avg	Average daily duration Google Play Store category: Music & Audio (minutes)
mt_pil_ears_mus_goog_tot	Total duration Google Play Store category: Music & Audio (minutes)
mt_pil_ears_mus_goog_wday_tot	Total weekday duration Google Play Store category: Game - Music (minutes)
mt_pil_ears_mus_goog_wend_avg	Average daily Weekend duration Google Play Store category: Music & Audio (minutes)
mt_pil_ears_mus_goog_wend_tot	Total weekend duration Google Play Store category: Music & Audio (minutes)
mt_pil_ears_musgamgoog_wday_av	Average daily Weekday duration Google Play Store category: Game - Music (minutes)
mt_pil_ears_musgamgoog_wend_av	Average daily Weekend duration Google Play Store category: Game - Music (minutes)
mt_pil_ears_musgamgoog_wend_to	Total weekend duration Google Play Store category: Game - Music (minutes)
mt_pil_ears_news_abcd_avg	Average per Day duration (minutes) ABCD composite category: News
mt_pil_ears_news_abcd_tot	Total duration (minutes) ABCD composite category: News

Variable Name	Description
mt_pil_ears_news_abcd_wday_avg	Average per Weekday Day duration (minutes) ABCD composite category: News
mt_pil_ears_news_abcd_wday_tot	Total weekday duration (minutes) ABCD composite category: News
mt_pil_ears_news_abcd_wend_avg	Average per Weekend Day duration (minutes) ABCD composite category: News
mt_pil_ears_news_abcd_wend_tot	Total weekend duration (minutes) ABCD composite category: News
mt_pil_ears_news_goog_avg	Average daily duration Google Play Store category: News & Magazines (minutes)
mt_pil_ears_news_goog_tot	Total duration Google Play Store category: News & Magazines (minutes)
mt_pil_ears_news_goog_wday_avg	Average daily Weekday duration Google Play Store category: News & Magazines (minutes)
mt_pil_ears_news_goog_wday_tot	Total weekday duration Google Play Store category: News & Magazines (minutes)
mt_pil_ears_news_goog_wend_avg	Average daily Weekend duration Google Play Store category: News & Magazines (minutes)
mt_pil_ears_news_goog_wend_tot	Total weekend duration Google Play Store category: News & Magazines (minutes)
mt_pil_ears_phon_abcd_wday_avg	Average per Weekday Day duration (minutes) ABCD single-app category: Phone Calls
mt_pil_ears_phon_abcd_wday_tot	Total weekday duration (minutes) ABCD single-app category: Phone Calls
mt_pil_ears_pic_goog_avg	Average daily duration Google Play Store category: Photography (minutes)
mt_pil_ears_pic_goog_tot	Total duration Google Play Store category: Photography (minutes)
mt_pil_ears_pic_goog_wday_avg	Average daily Weekday duration Google Play Store category: Photography (minutes)

Variable Name	Description
mt_pil_ears_pic_goog_wday_tot	Total weekday duration Google Play Store category: Photography (minutes)
mt_pil_ears_pic_goog_wend_avg	Average daily Weekend duration Google Play Store category: Photography (minutes)
mt_pil_ears_pic_goog_wend_tot	Total weekend duration Google Play Store category: Photography (minutes)
mt_pil_ears_prnt_goog_avg	Average daily duration Google Play Store category: Parenting (minutes)
mt_pil_ears_prnt_goog_tot	Total duration Google Play Store category: Parenting (minutes)
mt_pil_ears_prnt_goog_wday_avg	Average daily Weekday duration Google Play Store category: Parenting (minutes)
mt_pil_ears_prnt_goog_wday_tot	Total weekday duration Google Play Store category: Parenting (minutes)
mt_pil_ears_prnt_goog_wend_avg	Average daily Weekend duration Google Play Store category: Parenting (minutes)
mt_pil_ears_prnt_goog_wend_tot	Total weekend duration Google Play Store category: Parenting (minutes)
mt_pil_ears_prod_goog_avg	Average daily duration Google Play Store category: Productivity (minutes)
mt_pil_ears_prod_goog_tot	Total duration Google Play Store category: Productivity (minutes)
mt_pil_ears_prod_goog_wday_avg	Average daily Weekday duration Google Play Store category: Productivity (minutes)
mt_pil_ears_prod_goog_wday_tot	Total weekday duration Google Play Store category: Productivity (minutes)
mt_pil_ears_prod_goog_wend_avg	Average daily Weekend duration Google Play Store category: Productivity (minutes)
mt_pil_ears_prod_goog_wend_tot	Total weekend duration Google Play Store category: Productivity (minutes)
mt_pil_ears_prs_goog_avg	Average daily duration Google Play Store category: Personalization (minutes)

Variable Name	Description
mt_pil_ears_prs_goog_tot	Total duration Google Play Store category: Personalization (minutes)
mt_pil_ears_prs_goog_wday_avg	Average daily Weekday duration Google Play Store category: Personalization (minutes)
mt_pil_ears_prs_goog_wday_tot	Total weekday duration Google Play Store category: Personalization (minutes)
mt_pil_ears_prs_goog_wend_avg	Average daily Weekend duration Google Play Store category: Personalization (minutes)
mt_pil_ears_prs_goog_wend_tot	Total weekend duration Google Play Store category: Personalization (minutes)
mt_pil_ears_puz_goog_avg	Average daily duration Google Play Store category: Game - Puzzle (minutes)
mt_pil_ears_puz_goog_tot	Total duration Google Play Store category: Game - Puzzle (minutes)
mt_pil_ears_puz_goog_wday_avg	Average daily Weekday duration Google Play Store category: Game - Puzzle (minutes)
mt_pil_ears_puz_goog_wday_tot	Total weekday duration Google Play Store category: Game - Puzzle (minutes)
mt_pil_ears_puz_goog_wend_avg	Average daily Weekend duration Google Play Store category: Game - Puzzle (minutes)
mt_pil_ears_puz_goog_wend_tot	Total weekend duration Google Play Store category: Game - Puzzle (minutes)
mt_pil_ears_race_goog_avg	Average daily duration Google Play Store category: Game - Racing (minutes)
mt_pil_ears_race_goog_tot	Total duration Google Play Store category: Game - Racing (minutes)
mt_pil_ears_race_goog_wday_avg	Average daily Weekday duration Google Play Store category: Game - Racing (minutes)
mt_pil_ears_race_goog_wday_tot	Total weekday duration Google Play Store category: Game - Racing (minutes)

Variable Name	Description
mt_pil_ears_race_goog_wend_avg	Average daily Weekend duration Google Play Store category: Game - Racing (minutes)
mt_pil_ears_race_goog_wend_tot	Total weekend duration Google Play Store category: Game - Racing (minutes)
mt_pil_ears_read_abcd_avg	Average per Day duration (minutes) ABCD composite category: Reading
mt_pil_ears_read_abcd_tot	Total duration (minutes) ABCD composite category: Reading
mt_pil_ears_read_abcd_wday_avg	Average per Weekday Day duration (minutes) ABCD composite category: Reading
mt_pil_ears_read_abcd_wday_tot	Total weekday duration (minutes) ABCD composite category: Reading
mt_pil_ears_read_abcd_wend_avg	Average per Weekend Day duration (minutes) ABCD composite category: Reading
mt_pil_ears_read_abcd_wend_tot	Total weekend duration (minutes) ABCD composite category: Reading
mt_pil_ears_rp_goog_avg	Average daily duration Google Play Store category: Game - Role Playing (minutes)
mt_pil_ears_rp_goog_tot	Total duration Google Play Store category: Game - Role Playing (minutes)
mt_pil_ears_rp_goog_wday_avg	Average daily Weekday duration Google Play Store category: Game - Role Playing (minutes)
mt_pil_ears_rp_goog_wday_tot	Total weekday duration Google Play Store category: Game - Role Playing (minutes)
mt_pil_ears_rp_goog_wend_avg	Average daily Weekend duration Google Play Store category: Game - Role Playing (minutes)
mt_pil_ears_rp_goog_wend_tot	Total weekend duration Google Play Store category: Game - Role Playing (minutes)
mt_pil_ears_scrn_dur_avg	Average per Day duration (minutes) screen-on when not on an app (e.g., systems app; if screen on while charging)
mt_pil_ears_scrn_dur_tot	Total duration (minutes) screen-on when not on an app (e.g., systems app; if screen on while charging)

Variable Name	Description
mt_pil_ears_scrn_dur_wday_avg	Average per Weekday Day duration (minutes) screen-on when not on an app (e.g., systems app; if screen on while charging)
mt_pil_ears_scrn_dur_wday_tot	Total duration (minutes) screen-on weekday when not on an app (e.g., systems app; if screen on while charging)
mt_pil_ears_scrn_dur_wend_avg	Average per Weekend Day duration (minutes) screen-on when not on an app (e.g., systems app; if screen on while charging)
mt_pil_ears_scrn_dur_wend_tot	Total duration (minutes) screen-on weekend when not on an app (e.g., systems app; if screen on while charging)
mt_pil_ears_scrn_on_cnt	Total number of times screen is turned on over total duration (count)
mt_pil_ears_scrn_on_cnt_avg	Average per Day number of times screen is turned on (count)
mt_pil_ears_shop_goog_avg	Average daily duration Google Play Store category: Shopping (minutes)
mt_pil_ears_shop_goog_tot	Total duration Google Play Store category: Shopping (minutes)
mt_pil_ears_shop_goog_wday_avg	Average daily Weekday duration Google Play Store category: Shopping (minutes)
mt_pil_ears_shop_goog_wday_tot	Total weekday duration Google Play Store category: Shopping (minutes)
mt_pil_ears_shop_goog_wend_avg	Average daily Weekend duration Google Play Store category: Shopping (minutes)
mt_pil_ears_shop_goog_wend_tot	Total weekend duration Google Play Store category: Shopping (minutes)
mt_pil_ears_sim_goog_avg	Average daily duration duration Google Play Store category: Game - Simulation (minutes)
mt_pil_ears_sim_goog_tot	Total duration Google Play Store category: Game - Simulation (minutes)
mt_pil_ears_sim_goog_wday_avg	Average daily Weekday duration Google Play Store category: Game - Simulation (minutes)
mt_pil_ears_sim_goog_wday_tot	Total weekday duration Google Play Store category: Game - Simulation (minutes)

Variable Name	Description
mt_pil_ears_sim_goog_wend_avg	Average daily Weekend duration Google Play Store category: Game - Simulation (minutes)
mt_pil_ears_sim_goog_wend_tot	Total weekend duration Google Play Store category: Game - Simulation (minutes)
mt_pil_ears_sms_abcd_avg	Average per Day duration (minutes) ABCD single-app category: SMS Messages
mt_pil_ears_sms_abcd_tot	Total duration (minutes) ABCD single-app category: SMS Messages
mt_pil_ears_sms_abcd_wday_avg	Average per Weekday Day duration (minutes) ABCD single-app category: SMS Messages
mt_pil_ears_sms_abcd_wday_tot	Total weekday duration (minutes) ABCD single-app category: SMS Messages
mt_pil_ears_sms_abcd_wend_avg	Average per Weekend Day duration (minutes) ABCD single-app category: SMS Messages
mt_pil_ears_sms_abcd_wend_tot	Total weekend duration (minutes) ABCD single-app category: SMS Messages
mt_pil_ears_sms_open_cnt	Total number of times sms message app opened over duration (count)
mt_pil_ears_sms_open_cnt_avg	Average Day number of times sms message app opened (count)
mt_pil_ears_soc_abcd_avg	Average per Day duration (minutes) ABCD composite category: Social Media
mt_pil_ears_soc_abcd_tot	Total duration (minutes) ABCD composite category: Social Media
mt_pil_ears_soc_abcd_wday_avg	Average per Weekday Day duration (minutes) ABCD composite category: Social Media
mt_pil_ears_soc_abcd_wday_tot	Total weekday duration (minutes) ABCD composite category: Social Media
mt_pil_ears_soc_abcd_wend_avg	Average per Weekend Day duration (minutes) ABCD composite category: Social Media

Variable Name	Description
mt_pil_ears_soc_abcd_wend_tot	Total weekend duration (minutes) ABCD composite category: Social Media
mt_pil_ears_soc_goog_avg	Average daily duration Google Play Store category: Social (minutes)
mt_pil_ears_soc_goog_tot	Total duration Google Play Store category: Social (minutes)
mt_pil_ears_soc_goog_wday_avg	Average daily Weekday duration Google Play Store category: Social (minutes)
mt_pil_ears_soc_goog_wday_tot	Total weekday duration Google Play Store category: Social (minutes)
mt_pil_ears_soc_goog_wend_avg	Average daily Weekend duration Google Play Store category: Social (minutes)
mt_pil_ears_soc_goog_wend_tot	Total weekend duration Google Play Store category: Social (minutes)
mt_pil_ears_sprt_game_goog_avg	Average daily duration Google Play Store category: Game - Sports (minutes)
mt_pil_ears_sprt_game_goog_tot	Total duration Google Play Store category: Game - Sports (minutes)
mt_pil_ears_sprt_goog_avg	Average daily duration Google Play Store category: Sports (minutes)
mt_pil_ears_sprt_goog_tot	Total duration Google Play Store category: Sports (minutes)
mt_pil_ears_sprt_goog_wday_avg	Average daily Weekday duration Google Play Store category: Sports (minutes)
mt_pil_ears_sprt_goog_wday_tot	Total weekday duration Google Play Store category: Sports (minutes)
mt_pil_ears_sprt_goog_wend_avg	Average daily Weekend duration Google Play Store category: Sports (minutes)
mt_pil_ears_sprt_goog_wend_tot	Total weekend duration Google Play Store category: Sports (minutes)
mt_pil_ears_sprtggog_wday_avg	Average daily Weekday duration Google Play Store category: Game - Sports (minutes)

Variable Name	Description
mt_pil_ears_sprtgamgog_wday_to	Total weekday duration Google Play Store category: Game - Sports (minutes)
mt_pil_ears_sprtgamgog_wend_av	Average daily Weekend duration Google Play Store category: Game - Sports (minutes)
mt_pil_ears_sprtgamgog_wend_to	Total weekend duration Google Play Store category: Game - Sports (minutes)
mt_pil_ears_stg_goog_avg	Average daily duration Google Play Store category: Game - Strategy (minutes)
mt_pil_ears_stg_goog_tot	Total duration Google Play Store category: Game - Strategy (minutes)
mt_pil_ears_stg_goog_wday_avg	Average daily Weekday duration Google Play Store category: Game - Strategy (minutes)
mt_pil_ears_stg_goog_wday_tot	Total weekday duration Google Play Store category: Game - Strategy (minutes)
mt_pil_ears_stg_goog_wend_avg	Average daily Weekend duration Google Play Store category: Game - Strategy (minutes)
mt_pil_ears_stg_goog_wend_tot	Total weekend duration Google Play Store category: Game - Strategy (minutes)
mt_pil_ears_strm_abcd_avg	Average per Day duration (minutes) ABCD composite category: Streaming
mt_pil_ears_strm_abcd_tot	Total duration (minutes) ABCD composite category: Streaming
mt_pil_ears_strm_abcd_wday_avg	Average per Weekday Day duration (minutes) ABCD composite category: Streaming
mt_pil_ears_strm_abcd_wday_tot	Total weekday duration (minutes) ABCD composite category: Streaming
mt_pil_ears_strm_abcd_wend_avg	Average per Weekend Day duration (minutes) ABCD composite category: Streaming
mt_pil_ears_strm_abcd_wend_tot	Total weekend duration (minutes) ABCD composite category: Streaming
mt_pil_ears_tls_goog_avg	Average daily duration Google Play Store category: Tools (minutes)

Variable Name	Description
mt_pil_ears_tls_goog_tot	Total duration Google Play Store category: Tools (minutes)
mt_pil_ears_tls_goog_wday_avg	Average daily Weekday duration Google Play Store category: Tools (minutes)
mt_pil_ears_tls_goog_wday_tot	Total weekday duration Google Play Store category: Tools (minutes)
mt_pil_ears_tls_goog_wend_avg	Average daily Weekend duration Google Play Store category: Tools (minutes)
mt_pil_ears_tls_goog_wend_tot	Total weekend duration Google Play Store category: Tools (minutes)
mt_pil_ears_triv_goog_avg	Average daily duration Google Play Store category: Game - Trivia (minutes)
mt_pil_ears_triv_goog_tot	Total duration Google Play Store category: Game - Trivia (minutes)
mt_pil_ears_triv_goog_wday_avg	Average daily Weekday duration Google Play Store category: Game - Trivia (minutes)
mt_pil_ears_triv_goog_wday_tot	Total weekday duration Google Play Store category: Game - Trivia (minutes)
mt_pil_ears_triv_goog_wend_avg	Average daily Weekend duration Google Play Store category: Game - Trivia (minutes)
mt_pil_ears_triv_goog_wend_tot	Total weekend duration Google Play Store category: Game - Trivia (minutes)
mt_pil_ears_trvl_goog_avg	Average daily duration Google Play Store category: Travel & Local (minutes)
mt_pil_ears_trvl_goog_tot	Total duration Google Play Store category: Travel & Local (minutes)
mt_pil_ears_trvl_goog_wday_avg	Average daily Weekday duration Google Play Store category: Travel & Local (minutes)
mt_pil_ears_trvl_goog_wday_tot	Total weekday duration Google Play Store category: Travel & Local (minutes)
mt_pil_ears_trvl_goog_wend_avg	Average daily Weekend duration Google Play Store category: Travel & Local (minutes)

Variable Name	Description
mt_pil_ears_trvl_goog_wend_tot	Total weekend duration Google Play Store category: Travel & Local (minutes)
mt_pil_ears_usetracking_end	End of usage tracking period
mt_pil_ears_usetracking_start	Start of usage tracking period
mt_pil_ears_veh_goog_avg	Average daily duration Google Play Store category: Auto & Vehicles (minutes)
mt_pil_ears_veh_goog_tot	Total duration Google Play Store category: Auto & Vehicles (minutes)
mt_pil_ears_veh_goog_wday_avg	Average daily Weekday duration Google Play Store category: Auto & Vehicles (minutes)
mt_pil_ears_veh_goog_wday_tot	Total weekday duration Google Play Store category: Auto & Vehicles (minutes)
mt_pil_ears_veh_goog_wend_avg	Average daily Weekend duration Google Play Store category: Auto & Vehicles (minutes)
mt_pil_ears_veh_goog_wend_tot	Total weekend duration Google Play Store category: Auto & Vehicles (minutes)
mt_pil_ears_vid_goog_avg	Average daily duration Google Play Store category: Video Players & Editors (minutes)
mt_pil_ears_vid_goog_tot	Total duration Google Play Store category: Video Players & Editors (minutes)
mt_pil_ears_vid_goog_wday_avg	Average daily Weekday duration Google Play Store category: Video Players & Editors (minutes)
mt_pil_ears_vid_goog_wday_tot	Total weekday duration Google Play Store category: Video Players & Editors (minutes)
mt_pil_ears_vid_goog_wend_avg	Average daily Weekend duration Google Play Store category: Video Players & Editors (minutes)
mt_pil_ears_vid_goog_wend_tot	Total weekend duration Google Play Store category: Video Players & Editors (minutes)
mt_pil_ears_word_goog_avg	Average daily duration Google Play Store category: Game - Word (minutes)

Variable Name	Description
mt_pil_ears_word_goog_tot	Total duration Google Play Store category: Game - Word (minutes)
mt_pil_ears_word_goog_wday_avg	Average daily Weekday duration Google Play Store category: Game - Word (minutes)
mt_pil_ears_word_goog_wday_tot	Total weekday duration Google Play Store category: Game - Word (minutes)
mt_pil_ears_word_goog_wend_avg	Average daily Weekend duration Google Play Store category: Game - Word (minutes)
mt_pil_ears_word_goog_wend_tot	Total weekend duration Google Play Store category: Game - Word (minutes)
mt_pil_ears_wthr_goog_avg	Average daily duration Google Play Store category: Weather (minutes)
mt_pil_ears_wthr_goog_tot	Total duration Google Play Store category: Weather (minutes)
mt_pil_ears_wthr_goog_wday_avg	Average daily Weekday duration Google Play Store category: Weather (minutes)
mt_pil_ears_wthr_goog_wday_tot	Total weekday duration Google Play Store category: Weather (minutes)
mt_pil_ears_wthr_goog_wend_avg	Average daily Weekend duration Google Play Store category: Weather (minutes)
mt_pil_ears_wthr_goog_wend_tot	Total weekend duration Google Play Store category: Weather (minutes)
mt_pil_ears_yt_abcd_avg	Average per Day duration (minutes) ABCD single-app category: YouTube
mt_pil_ears_yt_abcd_tot	Total duration (minutes) ABCD single-app category: YouTube
mt_pil_ears_yt_abcd_wday_avg	Average per Weekday Day duration (minutes) ABCD single-app category: YouTube
mt_pil_ears_yt_abcd_wday_tot	Total weekday duration (minutes) ABCD single-app category: YouTube
mt_pil_ears_yt_abcd_wend_avg	Average per Weekend Day duration (minutes) ABCD single-app category: YouTube

Variable Name	Description
mt_pil_ears_yt_abcd_wend_tot	Total weekend duration (minutes) ABCD single-app category: YouTube
collection_title	Title of NDA collection

Pilot Study – Vibrent Screentime Raw Data

Description of data

During planning for the rollout of a real-time screen time use app, ABCD performed pilot testing using two app platforms; EARS from [Ksana Health](#) and Vibrent from [Vibrent Health](#). The following describes the data available from the pilot study of the Vibrent app. To download these raw data, follow the instructions at the [NDA ABCD page](#).

Details of variables in the raw data files

Variable Name	Description
collection_id	NDA collection ID (not useful for analyses)
abcd_mte01_id	NDA table record number (not useful for analyses)
dataset_id	NDA dataset ID (not useful for analyses)
subjectkey	NDA Global Unique Identifier (GUID) (not useful for analyses)
src_subject_id	Participant ID
interview_date	Date of testing
interview_age	Age in months at testing
sex	Sex at birth
eventname	ABCD event (wave) description
mt_pil_pguid	Participant ID
mt_pilot_vib_device	Type of device
mt_pilot_vib_os	Device operating system
mt_pilot_vib_phonecall_total	Total time (minutes) used for a standard phone call
mt_pilot_vib_usage_tot	Total time (minutes) applications in use

Variable Name	Description
mt_pilot_vib_usage_wkday_tot	Total time (minutes) applications in use on a weekday
mt_pilot_vib_usage_wkend_tot	Total time (minutes) applications in use on a weekend
mt_pilot_vib_screenon_total	Total time (minutes) the screen is on
mt_pilot_vib_lengthdays	Total number of days of data collected
mt_pilot_vib_lastupload_date	Last Uploaded (yyyy:mm:dd ::hh:mm)
mt_pilot_vib_dataused_mb	Data used by Vibrent app
mt_pilot_vib_inccalls	Amount of time (minutes) used on calls that were received
mt_pilot_vib_outgocalls	Amount of time (minutes) used on calls the participant made
mt_pilot_vib_youtube	Total minutes using Youtube
mt_pilot_vib_game	App category: Gaming (a composite of gaming categories (e.g., Action; Arcade) compiled by Vibrent). Total minutes
mt_pilot_vib_socialcomm	App category: social & communication (as labeled by Google Playstore). Total minutes
mt_pilot_vib_streaming	App category: streaming (as labeled by Google Playstore). Total minutes
mt_pilot_vib_productivity	App category: productivity (as labeled by Google Playstore). Total minutes
mt_pilot_vib_weather	App category: weather (as labeled by Google Playstore). Total minutes
mt_pilot_vib_daydream	App category: daydream (as labeled by Google Playstore). Total minutes
mt_pilot_vib_artdesign	App category: art & design (as labeled by Google Playstore). Total minutes
mt_pilot_vib_vehicles	App category: auto & vehicles (as labeled by Google Playstore). Total minutes
mt_pilot_vib_beauty	App category: beauty (as labeled by Google Playstore). Total minutes
mt_pilot_vib_books	App category: books & reference (as labeled by Google Playstore). Total minutes

Variable Name	Description
mt_pilot_vib_business	App category: business (as labeled by Google Playstore). Total minutes
mt_pilot_vib_comics	App category: comics (as labeled by Google Playstore). Total minutes
mt_pilot_vib_communication	App category: communication (as labeled by Google Playstore). Total minutes
mt_pilot_vib_dating	App category: dating (as labeled by Google Playstore). Total minutes
mt_pilot_vib_education	App category: education (as labeled by Google Playstore). Total minutes
mt_pilot_vib_entertainment	App category: entertainment (as labeled by Google Playstore). Total minutes
mt_pilot_vib_events	App category: events (as labeled by Google Playstore). Total minutes
mt_pilot_vib_finance	App category: finance (as labeled by Google Playstore). Total minutes
mt_pilot_vib_food	App category: food & drink (as labeled by Google Playstore). Total minutes
mt_pilot_vib_healthfitness	App category: health & fitness (as labeled by Google Playstore). Total minutes
mt_pilot_vib_house	App category: house & home (as labeled by Google Playstore). Total minutes
mt_pilot_vib_libraries	App category: libraries & demo (as labeled by Google Playstore). Total minutes
mt_pilot_vib_lifestyle	App category: lifestyle (as labeled by Google Playstore). Total minutes
mt_pilot_vib_maps	App category: maps & navigation (as labeled by Google Playstore). Total minutes
mt_pilot_vib_medical	App category: medical (as labeled by Google Playstore). Total minutes

Variable Name	Description
mt_pilot_vib_musicaudio	App category: music & audio (as labeled by Google Playstore). Total minutes
mt_pilot_vib_news	App category: news & magazine (as labeled by Google Playstore). Total minutes
mt_pilot_vib_parenting	App category: parenting (as labeled by Google Playstore). Total minutes
mt_pilot_vib_personalisation	App category: personalisation (as labeled by Google Playstore). Total minutes
mt_pilot_vib_photo	App category: photography (as labeled by Google Playstore). Total minutes
mt_pilot_vib_shopping	App category: shopping (as labeled by Google Playstore). Total minutes
mt_pilot_vib_social	App category: social (as labeled by Google Playstore). Total minutes
mt_pilot_vib_sports	App category: sports (as labeled by Google Playstore). Total minutes
mt_pilot_vib_tools	App category: tool (as labeled by Google Playstore). Total minutes
mt_pilot_vib_travel	App category: travel & local (as labeled by Google Playstore). Total minutes
mt_pilot_vib_video	App category: video players & editors (as labeled by Google Playstore). Total minutes
mt_pilot_vib_wearos	App category: wear OS by Google (as labeled by Google Playstore). Total minutes
mt_pilot_vib_action_game	App category: action (as labeled by Google Playstore). Total minutes
mt_pilot_vib_adventure_game	App category: adventure (as labeled by Google Playstore). Total minutes
mt_pilot_arcade_game	App category: arcade (as labeled by Google Playstore). Total minutes
mt_pilot_board_game	App category: board (as labeled by Google Playstore). Total minutes
mt_pilot_card_game	App category: card (as labeled by Google Playstore). Total minutes

Variable Name	Description
mt_pilot_casino_game	App category: casino (as labeled by Google Playstore). Total minutes
mt_pilot_casual_game	App category: casual (as labeled by Google Playstore). Total minutes
mt_pilot_education_game	App category: educational (as labeled by Google Playstore). Total minutes
mt_pilot_music_game	App category: music (as labeled by Google Playstore). Total minutes
mt_pilot_puzzle_game	App category: puzzle (as labeled by Google Playstore). Total minutes
mt_pilot_racing_game	App category: racing (as labeled by Google Playstore). Total minutes
mt_pilot_roleplaying_game	App category: role playing (as labeled by Google Playstore). Total minutes
mt_pilot_simulation_game	App category: simulation (as labeled by Google Playstore). Total minutes
mt_pilot_strategy_game	App category: strategy (as labeled by Google Playstore). Total minutes
mt_pilot_trivia_game	App category: trivia (as labeled by Google Playstore). Total minutes
mt_pilot_word_game	App category: word (as labeled by Google Playstore). Total minutes
mt_pilot_5andup_game	App category: Ages 5 & under (as labeled by Google Playstore). Total minutes
mt_pilot_6to8_game	App category: Ages 6 to 8 (as labeled by Google Playstore). Total minutes
mt_pilot_9andup_game	App category: Ages 9 & over (as labeled by Google Playstore). Total minutes
mt_pilot_popcharacters_game	App category: popular characters (as labeled by Google Playstore). Total minutes
mt_pilot_actionadv_game	App category: action & adventure (as labeled by Google Playstore). Total minutes

Variable Name	Description
mt_pilot_brain_game	App category: brain games (as labeled by Google Playstore). Total minutes
mt_pilot_creativity_game	App category: creativity (as labeled by Google Playstore). Total minutes
mt_pilot_musicandvideo_game	App category: music and video (as labeled by Google Playstore). Total minutes
mt_pilot_pretend_game	App category: pretend play (as labeled by Google Playstore). Total minutes
collection_title	collection_title