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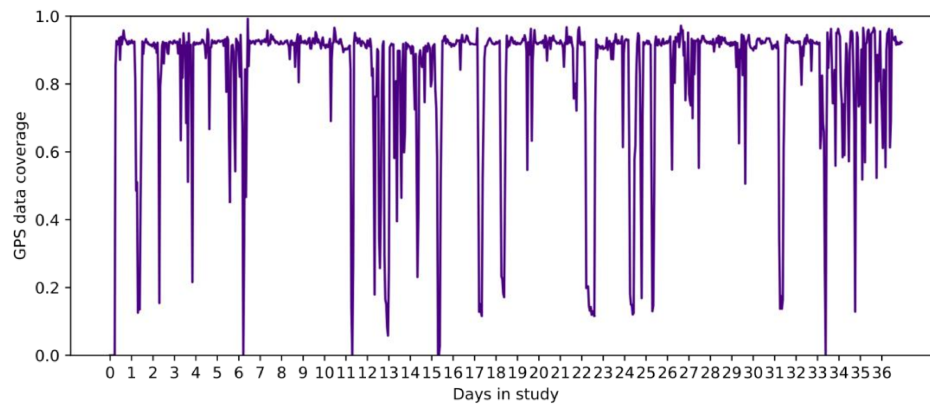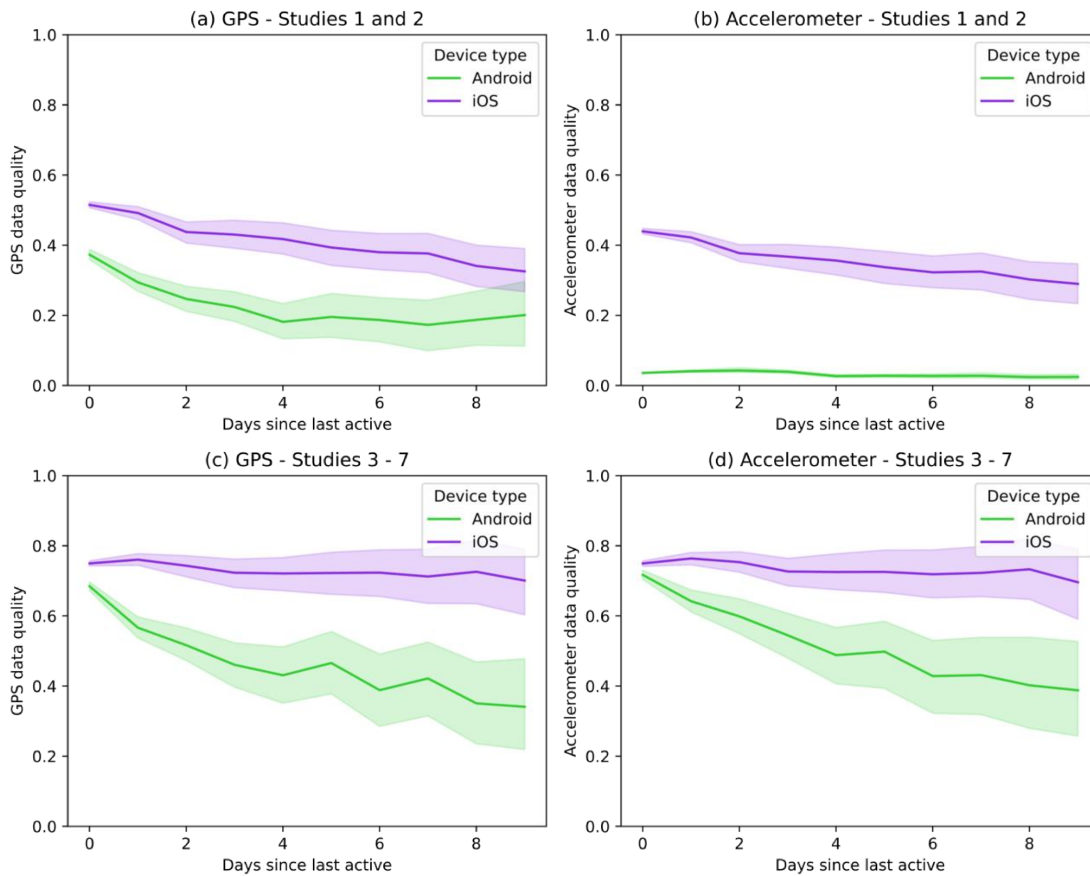
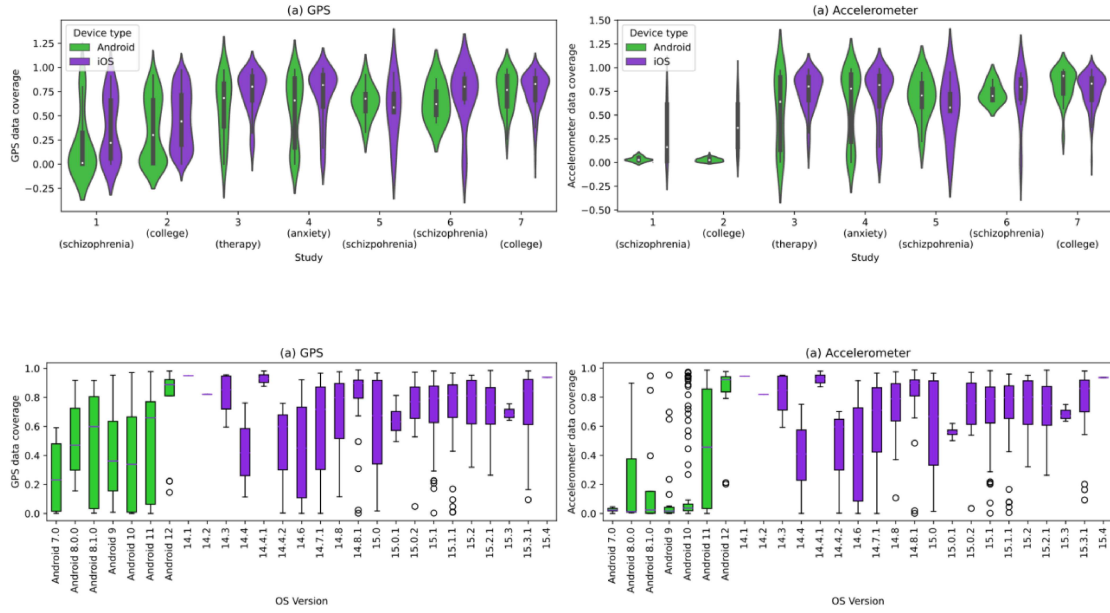*BMJ Ment Health*

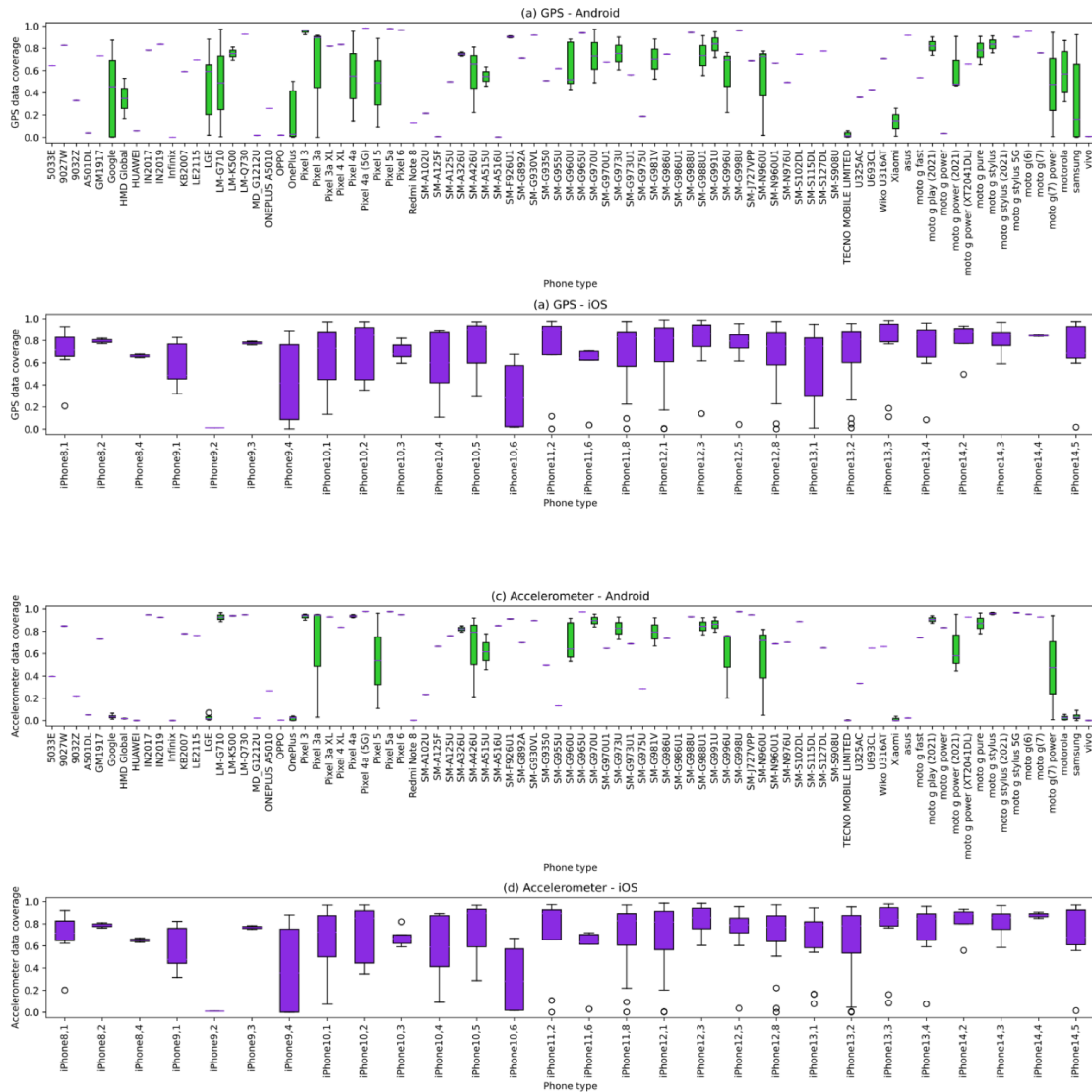**Appendices**

Appendix A:

The plot shows the hour-by-hour GPS data coverage for the participant used in the downsampling experiment. The average 1-second data coverage was 83%. The 10-minute data coverage was 98%.

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Appendix B:

The graphs show the data coverage versus the number of days since the participant last completed an activity in the app. The top row shows (a) GPS and (b) accelerometer coverage for the oldest two studies in this dataset, Study 1 and 2. The bottom row shows (c) GPS and (d) accelerometer coverage for all of the most recent studies (Studies 3-7).
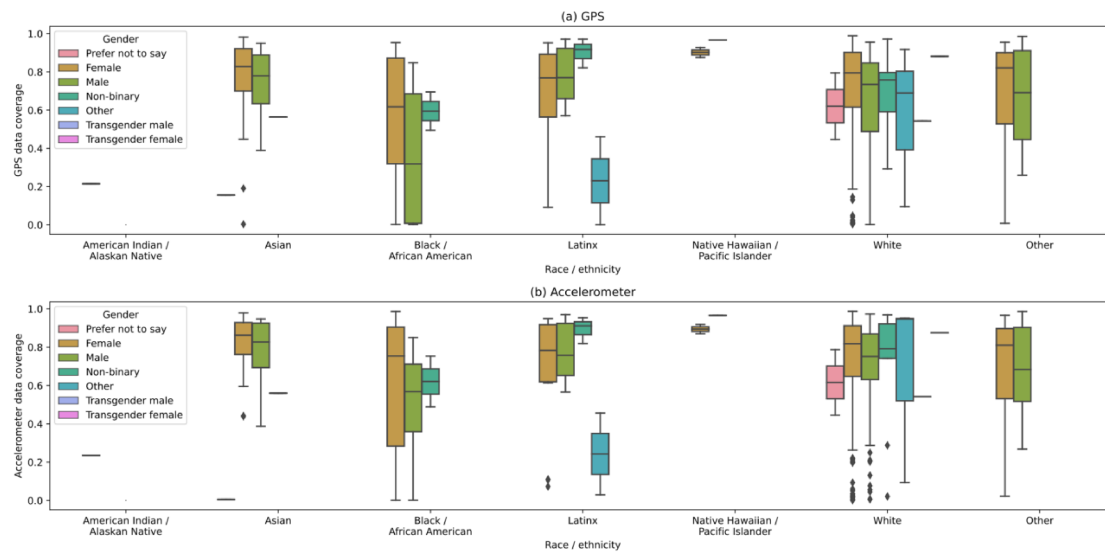
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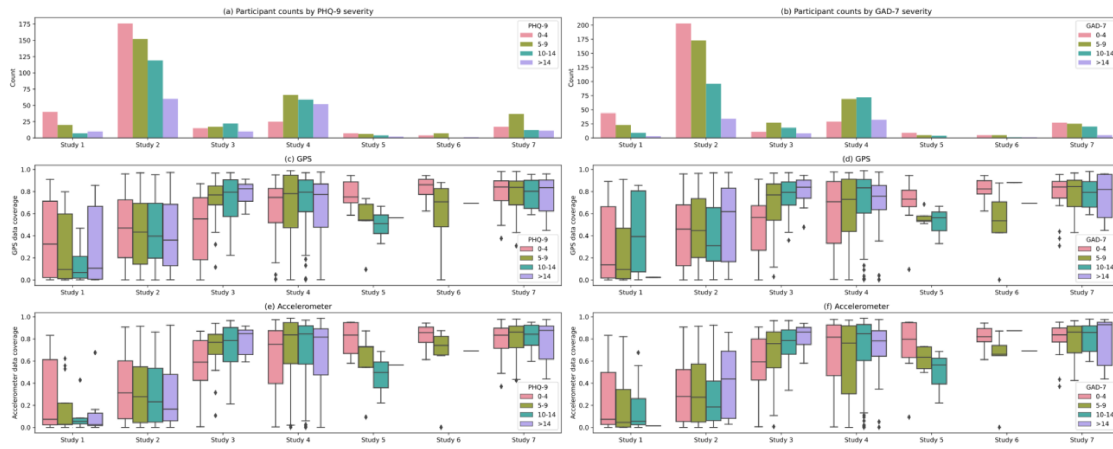
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Appendix C:

Appendix C.1: This plot shows the data coverage across all studies, separate by Android or iOS device.*

Appendix C.2: These boxplots show the data coverage across different operating system versions across both Android (green) and iOS (purple).*

Appendix C.3: These boxplots show the data coverage across different phone types across both

Android (green) and iOS (purple).*

*Device type, operating system version, and phone type was not available for all participants in all studies. All information was available for only 553 participants.

Appendix D:

Appendix D.1: (a) shows participant counts for each PHQ-9 severity level and (b) shows counts

for GAD-7 (groups: <5, 5-9, 9-14, >14). (c) and (e) show boxplots of the data coverage for GPS

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and accelerometer across the PHQ-9 groups and (d) and (f) show boxplots of the data coverage

for GPS and accelerometer across the GAD-7 groups.

Appendix D.2: Boxplots of (a) GPS and (b) accelerometer data coverage are shown across

different race / ethnicity and gender groups. Race / ethnicity and gender information is shown in

tables 2a and 2b respectively.

Table D.3 Gender information from all studies.

Study	Total*	Female	Male	Nonbinary	Other**	Transgender Male**	Transgender Female**
Study 1 (schizophrenia)	92	29	45	0	0	0	0
Study 2 (college)	644	400	225	16	0	0	0
Study 3 (therapy)	92	58	22	3	2	1	0
Study 4 (anxiety)	220	142	29	6	2	0	0
Study 5 (schizophrenia)	22	10	3	0	2	0	0
Study 6 (schizophrenia)	12	5	5	1	0	0	1
Study 7 (college)	96	63	28	5	0	0	0
Total	1178	707	357	31	6	1	1

*Some participants chose not to report demographic information which accounts for the discrepancy in counts.

**Only Study 5 and 6 reported if participants were transgender. All other studies only had categories Female, Male, Nonbinary, and Other.
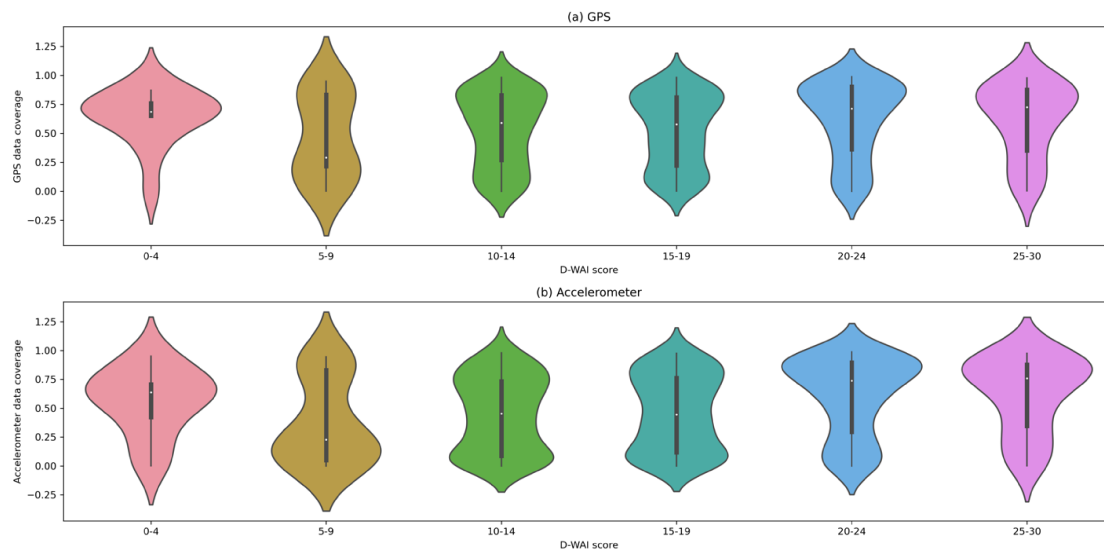
Table D.4 Race / ethnicity information from all studies.

Study	Total*	American Indian / Alaskan Native	Asian	African American	Latinx **	Native Hawaiian / Pacific Islander	White	Other
Study 1 (schizophrenia)	92	1	2	17	0	0	40	14
Study 2 (college)	644	2	133	52	117	6	298	34
Study 3 (therapy)	92	0	2	0	8	1	65	9
Study 4 (anxiety)	220	1	9	9	10	0	145	8
Study 5 (schizophrenia)	22	0	0	4	1	0	9	1
Study 6 (schizophrenia)	12	0	0	1	1	0	9	1

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Study 7 (college)	96	0	30	5	6	1	53	1
Total	1178	4	176	88	143	8	619	68

*Some participants chose not to report demographic information which accounts for the discrepancy in counts.

**Study 3, 5 and 6 asked for race and Latinx / Non-Latinx separately. In these studies, participants were included in Latinx only if they marked race as "other/multiracial" and Latinx.

Appendix E:

Violin plots show data coverage across different D-WAI score ranges. Low D-WAI scores indicate low alliance with the app.*

*D-WAI scores were only available for participants in studies 2, 4, and 7 (n = 627).