

Label:

- Urge to Use (13 point scale; $4 \times 90 = 360$ observations per person)
- Report of alcohol use (0/1; hourly: $24 \times 90 = 2160$ observations per person; or $4 \times 90 = 360$ observations per person)

General Feature issues

All 2 way interactions ($X_1 \times X_2$) between features

All second order polynomial effects of features (X^2)

1x administration total and subscale scores (screening/intake)

NOTE: Will not include items, only total and subscale scores

Overall level

Include all scores (1x)

3x administration measures (Intake, Follow-up 1, Follow-up 2)

NOTE: Will not include items, only total and subscale scores

Overall level

- Include all scores (up to 3x) to date [better than mean or weighted mean without much cost?]

Change

- Most recent score – previous score
- Most recent score – mean of all previous scores [more stable baseline but only different after 3rd admin?]

Variability

- None: Not including SD of scores b/c already captured mostly by change given only 3x admin?

4x Daily Surveys (up to $4 \times 90 = 360$ scores)

NOTE: Same functions applied to all items on 4x daily survey

Overall level

- All previous scores (could be many so cost of # features matter?) vs. alternatives that aggregate (e.g., most recent, mean over 24 hours, mean over past week, mean over past month, total mean to date)

Change

- Linear and quadratic function over time for all scores to date
- Most recent score - mean of previous 24 hours, week, month and total
- Mean of past 24 hours – mean of previous week, month and total
- Mean of past week – mean of previous month and total

- Set of normed versions of difference score features above (normed/divided by mean of history of same feature within subject)

Variability

- SD over 24 hours, over past week, over past month, over all scores to date
- Change in variability: SD in past 24 hours divided by SD for past week, past month and all scores; SD in past week divided by SD for past month and all scores

1x daily audio messages

Content

Acoustic characteristics

Need to consult with Dhavan Shah

SMS

Total contacts.

Contacts by people log?

Time of SMS?

Pattern of SMS (by time of day, day, time lag?)?

Content analysis (Dhavan).

Voice

See SMS except for content

GPS

Physiology

Sleep measures

Missing Data