## Supplementary Information: Cohort and dataset

#### Study dataset

Table 7: Summary statistics of this study's cohort dataset, compared with state of the art references on menstrual health studies through mobile apps.

Variable	This cohort	Cohort in (17)	Cohort in (65)
Number of users	378,694 (100.00%)	124,646 (32.92%)	212,967 (56.24%)
Number of observations	$\bar{1}\bar{1}\bar{7}, 0\bar{1}\bar{4}, \bar{5}\bar{9}\bar{7}$ $(\bar{1}\bar{0}\bar{0}, 0\bar{0}\bar{\%})$	NA	7,496,316 (6.41%)
Number of days of observation	$\overline{34,056,343}(\overline{100.00\%})$	NA	$\overline{33,675,453}$ $(98.88\%)$
Number of cycles	$\overline{4,881,697}(\overline{100.00\%})$	$\bar{6}1\bar{2},\bar{6}1\bar{3}(\bar{1}2.\bar{5}5\%)$	$\overline{2,732,424}$ (55.97%)

Table 8: High-level characteristics for this study's cohort dataset, compared with state of the art references on menstrual health studies through mobile apps.

	Full cohort		Cohort in (17)		Cohort in (65)	
Variable	Mean $\pm$ sd	Median	Mean $\pm$ sd	Median	Mean $\pm$ sd	Median
Age	$25.49 \pm 3.66$	25	30.3	NA	$30 \pm 6$	NA
Number of cycles	$12.89 \pm 9.11$	11.00	$\frac{1}{8.6}$	NA	$\bar{1}2.8\bar{3}(\bar{N}\bar{A})$	$\overline{NA}$
Cycle length	$\bar{29.73} \pm 5.7\bar{3}$	29.00	$\bar{29.3} \pm \bar{5.2}$	NA	<u>N</u> Ā	
Period length	$\bar{4.08} \pm \bar{1.76}$	4.00	$-4.0 \pm 1.5$	NA	<sub>NĀ</sub>	$-\bar{N}A$

### User demographics

Table 9: Per-age number of users and cycles for the full cohort, as well as for the consistently not highly variable and consistently highly variable user groups.

	Full cohort		Consistently not highly variable		Consistently highly variable	
Age	Number users	Number cycles	Number users	Number cycles	Number users	Number cycles
21	71,511	557,083	65,520	526,413	5,991	30,670
22	36,723	-500,736	33,338	$-478,\overline{3}9\overline{4}$	3,385	22,342
23	33,943	$-46\overline{6}, \overline{9}\overline{9}$	30,984	$-447,\overline{4}98$	2,959	19,501
-24	32,225	$-44\overline{2},\overline{0}\overline{5}\overline{3}$	$29,\overline{5}29$	$-42\overline{4}, 70\overline{6}$	-2,696	17,347
-25	30,651	$-42\overline{2},\overline{465}$	28,191	-406,519	-2,460	15,946
26	$   \overline{29}$ , $\overline{377}$ $ -$	$   \overline{402}$ , $\overline{905}$ $  -$	27,066	388,306		14,599
-27	-7.757	$-380,\overline{662}$	25,802	368,043	1,955	12,619
-28	$   \overline{25}, \overline{257}$ $ -$	$   \overline{353}$ , $\overline{535}$ $  -$	23,518	$-34\overline{2}, \overline{2}4\overline{5}$	1,739	11,290
29		-325,875	21,535	-316,637	1,456	$\overline{9},\overline{238}$
30	$   \overline{20,744}$ $ -$	$\bar{297}, \bar{814}$	19,462	-289,725	1,282	8,089
31	18,424	$   \overline{269},\overline{125}$ $ -$	17,358	$-26\overline{2}, 04\overline{5}$	1,066	7,080
$-32^{-}$		$   \bar{244}, \bar{483}$ $  -$	15,521	238,957	923	5,526
33	-12,647	$\bar{2}17,\bar{9}6\bar{2}$	11,782	$-10^{\circ}$ $-10^$	865	5,756

Table 10: Per-country user count in the full cohort, as well as for the consistently not highly variable and consistently highly variable user groups.

Country	Full cohort	Consistently not highly variable	Consistently highly variable
United States	97,955	6,911	91,044
United Kingdom	32,676		30,190
Mexico	32,155		29,053
Brazil	77,275		24,740
Germany	21,538	- $        -$	20,178
France	19,106		17,735
China	16,529	1,435	15,094
Canada	15,507		14,544
Australia	14,211		13,108
$\bar{S}$ pain	13,574	804	12,770
Italy			12,090
Japan			8,024
Denmark	7,520		<del></del>
Russia	<del>-</del> 7, <del>2</del> 0 <del>3</del>		6,807
Taiwan	$\frac{1}{5}, \overline{192}$		4,654
Colombia	$\frac{1}{5},024$	<del></del>	
India	$\frac{3}{3},\frac{3}{9}$		<del></del>
Switzerland	$\frac{3}{3},\frac{3}{3}=0$		
Sweden	$\frac{3}{3},\frac{3}{190}$		
Philippines	$\frac{3}{2},\frac{1}{8},\frac{1}{6}$		
Argentina	$\frac{2}{2},\frac{3}{7}=-$		<u>2,572</u>
Hong Kong	$\frac{2}{2},\frac{109}{706}$		
Singapore	$\frac{2,100}{2,635}$		
South Korea	$\frac{2,039}{1,910}$		
New Zealand	$\frac{1,310}{1,902}$		$\frac{1,709}{1,731}$
Peru Zealand Peru	$\frac{1,302}{1,897}$		$\frac{1,101}{1,692}$
Netherlands	$\frac{1,837}{1,832}$		$\frac{1,692}{1,697}$
Austria	$\frac{1,532}{1,512}$		1,395
Portugal	$\frac{1,512}{1,\overline{257}}$		1,147
Indonesia	$\frac{1,237}{1,\overline{187}}$		1,091
Malaysia	$\frac{1,107}{1,127}$		$\frac{1,091}{1,023}$
Ireland	$\frac{1}{1},\frac{127}{115}$		1,031
Chile	$\frac{1,113}{1,080}$		<del>1,031</del>
Ecuador	$\frac{1,080}{1,041}$		$\frac{900}{936}$
Turkey Poland	$-\frac{835}{710}$		$\frac{757}{667}$
Toland			
venezueia	690	<u>51</u>	639
Venezuela Finland Belgium	<del>4</del> 82	<del>4</del> 4	$\frac{438}{251}$
Deigium	389	<u>38</u>	$\frac{351}{2\bar{c_0}}$
Saudi Arabia	387	27	$\frac{360}{252}$
Ukraine	382	<del>29</del>	353
Vietnam		<del></del>	257
Guatemala	<del>8</del> 2	$\frac{12}{6}$	70
South Africa	76	6	70

# Cycle-statistics per user age

Table 11: Per-age average number of cycles per user for the full cohort, as well as for the consistently not highly variable and consistently highly variable user groups.

	Full cohort		Consistently not highly variable		Consistently highly variable	
Age	Mean $\pm$ sd (95% CI)	Median	Mean $\pm$ sd (95% CI)	Median	Mean $\pm$ sd (95% CI)	Median
21	$7.79 \pm 3.88 \ (1.00,14.00)$	8.00	$8.03 \pm 3.88 \ (1.00,14.00)$	8.00	$5.12 \pm 2.63 \ (1.00,11.00)$	5.00
-22	$7.74 \pm 3.92 (1.00,14.00)$	8.00	$7.97 \pm 3.92 (1.00,14.00)$	8.00	$-4.77 \pm 2.52 (1.00,11.00)$	4.00
23	$7.77 \pm 3.94 \ (1.00,14.00)$	8.00	$-8.00 \pm 3.93 (1.00,14.00)$	8.00	$-4.73 \pm 2.48 (1.00,10.00)$	4.00
$24^{-}$	$7.78 \pm 3.96 (1.00,14.00)$	8.00	$\bar{7.99} \pm \bar{3.96} (\bar{1.00}, \bar{14.00})$	8.00	$-4.74 \pm 2.46 (1.00,10.00)$	4.00
-25	$7.82 \pm 3.97 (1.00,14.00)$	8.00	$-8.\bar{0}3 \pm 3.\bar{9}6 (\bar{1}.\bar{0}0,\bar{1}4.\bar{0}0)$	8.00	$\bar{4.71} \pm \bar{2.47} (\bar{1.00}, \bar{10.00})^{-1}$	4.00
26	$7.85 \pm 3.99 (1.00,14.00)$	8.00	$-8.05 \pm 3.98 (1.00,14.00)$	8.00	$\bar{4.68} \pm \bar{2.40} (\bar{1.00,10.00})^{-1}$	4.00
-27	$7.86 \pm 4.02 (1.00,14.00)$	8.00	$-8.05 \pm 4.02 (1.00,14.00)$	8.00	$\bar{4.68} \pm \bar{2.48} (\bar{1.00}, \bar{10.00})^{-1}$	4.00
28	$7.93 \pm 4.03 (1.00,14.00)$	8.00	$-8.\overline{11} \pm 4.\overline{03} (\overline{1.00}, \overline{14.00})$	8.00	$\bar{4.70} \pm \bar{2.43} (\bar{1.00}, \bar{10.00})^{-}$	4.00
29	$8.00 \pm 4.06 (1.00,14.00)$	8.00	$-8.\overline{18} \pm 4.\overline{05} (\overline{1.00}, \overline{14.00})$	8.00	$\bar{4}.\bar{6}1 \pm \bar{2}.\bar{4}1 (\bar{1}.\bar{0}0,\bar{1}0.\bar{0}0)$	4.00
30	$-8.08 \pm 4.09 (1.00,15.00)$	8.00	$-8.\overline{26} \pm 4.\overline{08} (\overline{1.00}, \overline{15.00})$	9.00	$\bar{4.60} \pm \bar{2.36} (\bar{1.00}, \bar{10.00})^{-1}$	4.00
31	$8.\overline{13} \pm 4.\overline{11} (\overline{1.00}, \overline{15.00})$	8.00	$-8.\overline{28} \pm 4.\overline{11} (\overline{1.00}, \overline{15.00})$	9.00	$\bar{4.81} \pm \bar{2.42} (\bar{1.00}, \bar{10.00})^{-1}$	4.00
32	$8.\overline{23} \pm 4.\overline{15} (\overline{1.00}, \overline{15}.\overline{00})$	8.00	$8.\overline{39} \pm 4.\overline{13} (\overline{1.00}, \overline{15.00})$	9.00	$\bar{4.56} \pm \bar{2.46} (\bar{1.00,10.00})^{-1}$	4.00
33	$8.85 \pm 3.85 \ (3.00,15.00)$	9.00	$9.05 \pm 3.80 \ (3.00, 15.00)$	9.00	$4.88 \pm 2.25 \ (2.00,10.00)$	4.00

Table 12: Per-age average cycle length per user for the full cohort, as well as for the consistently not highly variable and consistently highly variable user groups.

	Full cohort		Consistently not highly variable		Consistently highly variable	
Age	$Mean \pm sd (95\% CI)$	Median	Mean $\pm$ sd (95% CI)	Median	Mean $\pm$ sd (95% CI)	Median
21	$30.24 \pm 6.23 \ (20.00,45.00)$	29.00	$29.86 \pm 5.25 \ (21.00,42.00)$	29.00	$36.83 \pm 13.66 \ (13.00,69.00)$	34.00
22	$30.\overline{16} \pm 6.0\overline{2} (20.\overline{00},44.\overline{00})$	29.00	$\bar{2}9.8\bar{5} \pm 5.2\bar{0} \ (\bar{2}1.00, \bar{4}2.0\bar{0})$	29.00	$36.82 \pm 13.67 (13.00,69.00)$	34.00
23	$30.\overline{10} \pm 5.9\overline{5} (2\overline{1}.\overline{00},4\overline{4}.\overline{00})$	29.00	$\bar{2}9.81 \pm 5.17 (\bar{2}1.00, \bar{4}2.00)$	29.00	$36.88 \pm 13.67 (13.00,69.00)$	34.00
24	$\overline{30.03} \pm \overline{5.84} (\overline{21.00,44.00})$	29.00	$\bar{2}9.74 \pm 5.09 (\bar{2}1.00, \bar{4}2.00)$	29.00	$3\overline{6.96} \pm 13.\overline{62} (13.\overline{00,68.00})$	34.00
-25	$\overline{29.95} \pm \overline{5.81} (\overline{21.00,44.00})$	29.00	$\bar{2}9.6\bar{6} \pm 5.0\bar{6} \ (\bar{2}1.00, \bar{4}2.0\bar{0})$	29.00	$\overline{37.14 \pm 13.76} (1\overline{3.00,69.00})^{-1}$	$\bar{34.00}^{-1}$
26	$\overline{29.85} \pm \overline{5.74} (\overline{21.00,44.00})$	29.00	$\bar{29.58} \pm 5.00 \ (\bar{22.00,41.00})^{-1}$	29.00	$\bar{37.25} \pm \bar{13.76} (\bar{13.00,69.00})^{-1}$	$\bar{35.00}^{-1}$
27	$\overline{29.71} \pm \overline{5.65} (\overline{21.00,43.00})$	29.00	$\bar{2}9.44 \pm 4.92 \ (\bar{2}2.00,\bar{4}1.00)$	29.00	$\overline{37.38} \pm \overline{13.92} (\overline{13.00,71.00})^{-}$	35.00
28	$\overline{29.57} \pm 5.5\overline{6} \ (\overline{22.00,43.00})$	29.00	$\bar{29.32} \pm 4.88 \ (\bar{22.00,41.00})$	29.00	$37.\overline{27} \pm 13.6\overline{0} \ (13.\overline{00,69.00})$	35.00
29	$\overline{29.42} \pm \overline{5.45} (\overline{22.00,42.00})$	29.00	$\bar{2}9.18 \pm 4.80 \ (\bar{2}2.00,\bar{4}1.00)$	28.00	$\overline{37.34 \pm 13.99} (\overline{13.00,71.00})^{-1}$	34.00
-30	$\overline{29.24} \pm \overline{5.35} (\overline{22.00,42.00})$	28.00	$\bar{2}9.01 \pm 4.71 \ (\bar{2}2.00, \bar{4}0.00)$	28.00	$\overline{37.37} \pm \overline{13.81} (\overline{14.00,70.00})^{-}$	$\bar{35.00}^{-1}$
31	$\overline{29.06} \pm 5.2\overline{3} (\overline{22.00,42.00})$	28.00	$\bar{2}8.84 \pm 4.62 \ (\bar{2}2.00, \bar{4}0.00)$	28.00	$\bar{37.21} \pm \bar{13.45} (\bar{13.00,67.00})^{-1}$	$\bar{35.00}^{-1}$
32	$\overline{28.85} \pm \overline{5.08} (\overline{22.00,41.00})$	28.00	$\bar{2}8.66 \pm 4.53 \ (\bar{2}2.00, \bar{3}9.00)$	28.00	$\overline{37.10} \pm \overline{13.71} (\overline{14.00,68.00})^{-1}$	34.00
33	$28.66 \pm 5.05 \ (22.00,40.00)$	28.00	$28.45 \pm 4.39 \ (22.00,39.00)$	28.00	$36.57 \pm 13.74 \ (13.00,70.00)$	33.00

Table 13: Per-age average period length per user for the full cohort, as well as for the consistently not highly variable and consistently highly variable user groups.

	Full cohort		Consistently not highly variable		Consistently highly variable	
Age	$\overline{\text{Mean} \pm \text{sd (95\% CI)}}$	Median	Mean $\pm$ sd (95% CI)	Median	Mean $\pm$ sd (95% CI)	Median
21	$4.18 \pm 1.74 \; (1.00, 7.00)$	4.00	$4.18 \pm 1.70 \ (1.00, 7.00)$	4.00	$4.23 \pm 2.33 \ (1.00, 8.00)$	4.00
-22	$-4.17 \pm 1.76 (1.00,7.00)$	4.00	$4.16 \pm 1.71 \ (1.00, 7.00)$	4.00	$-4.\overline{36} \pm 2.\overline{59} (1.\overline{00}, \overline{9.00})$	4.00
23	$4.14 \pm 1.76 \ (1.00, 7.00)$	4.00	$4.13 \pm 1.72 \ (1.00, 7.00)$	4.00	$-4.\overline{29} \pm 2.5\overline{5} (1.00, 9.00)$	4.00
-24	$4.\overline{12} \pm 1.\overline{75} (1.\overline{00}, 7.\overline{00})$	4.00	$4.1\overline{2} \pm 1.7\overline{1} \ (1.0\overline{0}, 7.\overline{0}0)$	4.00	$\bar{4}.\bar{3}\bar{2} \pm \bar{2}.\bar{5}\bar{5} \ (\bar{1}.\bar{0}\bar{0},\bar{9}.\bar{0}\bar{0})$	4.00
-25	$4.\overline{11} \pm 1.\overline{75} (1.\overline{00}, 7.0\overline{0})$	4.00	$4.10 \pm 1.71 \ (1.00, 7.00)$	4.00	$\bar{4.32} \pm \bar{2.53} (\bar{1.00}, \bar{9.00})$	4.00
26	$4.09 \pm 1.77 (1.00, 7.00)$	4.00	$4.08 \pm 1.7\overline{3} \ (1.00, 7.00)$	4.00	$\overline{4.34} \pm \overline{2.62} (\overline{1.00}, \overline{9.00})$	4.00
-27	$4.06 \pm 1.75 (1.00, 7.00)$	4.00	$4.05 \pm 1.73 \ (1.00, 7.00)$	4.00	$-4.34 \pm 2.39 (1.00, 9.00)$	4.00
28	$-4.04 \pm 1.75 (1.00,7.00)$	4.00	$4.03 \pm 1.72 \ (1.00, 7.00)$	4.00	$-4.\overline{28} \pm 2.\overline{57} (1.\overline{00}, \overline{9}.\overline{00})$	4.00
29	$-4.01 \pm 1.76 (1.00,7.00)$	4.00	$4.00 \pm 1.73 \ (1.00,7.00)$	4.00	$-4.\overline{22} \pm 2.\overline{61} (1.\overline{00}, \overline{9}.\overline{00})$	4.00
30	$\bar{3.99} \pm \bar{1.77} (\bar{1.00.7.00})$	4.00	$3.98 \pm 1.72 \ (1.00, 7.00)$	4.00	$\bar{4.28} \pm \bar{2.88} (\bar{1.00}, \bar{10.00})$	4.00
31	$3.97 \pm 1.77 (1.00, 7.00)$	4.00	$3.97 \pm 1.74 \ (1.00, 7.00)$	4.00	$-4.\overline{19} \pm 2.7\overline{3} (1.00, 9.02)$	4.00
-32	$3.95 \pm 1.78 (1.00, 7.00)$	4.00	$3.95 \pm 1.76 \ (1.00,7.00)$	4.00	$\bar{4}.\bar{1}4 \pm \bar{2}.\bar{4}7 \ (\bar{1}.\bar{0}0,\bar{9}.\bar{0}0)$	4.00
33	$3.91 \pm 1.78 (1.00, 7.00)$	4.00	$3.91 \pm 1.76 \ (1.00,7.00)$	4.00	$\overline{4.01} \pm \overline{2.52} \ (\overline{1.00}, \overline{9.00})$	4.00

Table 14: Per-age average median CLD per user for the full cohort, as well as for the consistently not highly variable and consistently highly variable user groups.

	Full cohort Consistently not highly variable		Consistently highly variable			
Age	Mean $\pm$ sd (95% CI)	Median	Mean $\pm$ sd (95% CI)	Median	Mean $\pm$ sd (95% CI)	Median
21	$4.49 \pm 5.07 \ (1.00,19.00)$	3.00	$3.38 \pm 2.39 \ (1.00, 9.00)$	3.00	$16.82 \pm 9.00 \ (5.19,40.00)$	14.00
-22	$4.\overline{32} \pm 4.8\overline{3} (1.\overline{00}, \overline{17}.\overline{00})$	3.00	$3.40 \pm 2.56 \ (1.00, 9.50)$	3.00	$\overline{16.32} \pm 9.36 (4.00,42.00)$	13.50
23	$4.\overline{23} \pm 4.\overline{72} (1.\overline{00}, \overline{17}.\overline{00})$	3.00	$3.\overline{36} \pm 2.5\overline{2} (1.00, 9.00)$	3.00	$\overline{16.42 \pm 9.23}(\overline{4.00,41.00})$	14.00
-24	$4.\overline{10} \pm 4.\overline{53} (1.\overline{00}, \overline{16}.\overline{00})$	3.00	$\overline{3.30} \pm 2.5\overline{1} (1.00, 9.00)$	2.50	$\overline{16.03} \pm \overline{8.98} (\overline{3.00,39.35})$	$\bar{1}\bar{3}.\bar{50}$
25	$4.07 \pm 4.57 \ (1.00, 16.00)$	3.00	$3.\overline{26} \pm 2.4\overline{4} (1.00, 9.00)$	2.50	$\overline{16.50 \pm 9.30}$ $\overline{(4.00,41.29)}$	13.50
26	$3.99 \pm 4.61 \ (1.00, 16.00)$	3.00	$3.\overline{19} \pm 2.4\overline{8} (1.00, 9.00)$	2.50	$\overline{16.59 \pm 9.67}(\overline{3.00,43.00})^{-1}$	$\bar{1}\bar{3}.\bar{50}$
27	$3.86 \pm 4.43 \ (0.50, 15.50)$	-2.50	$3.\overline{13} \pm 2.\overline{37} (0.50, 9.\overline{00})$	2.50	$\overline{16.59 \pm 9.54} (\overline{3.34,42.66})^{-}$	14.00
28	$3.81 \pm 4.38 \ (1.00, 15.00)$	$-\bar{2}.\bar{5}0^{-}$	$3.10 \pm 2.39 \ (0.50, 9.00)$	2.50	$\overline{16.60 \pm 9.49} (\overline{4.00,43.00})^{-1}$	13.50
29	$3.70 \pm 4.25 \ (1.00,14.50)$	$-\bar{2}.\bar{5}0^{-}$	$3.05 \pm 2.38 \ (0.50, 9.00)$	2.50	$\overline{16.60 \pm 9.45}(\overline{4.00,42.00})^{-}$	$\bar{1}\bar{3}.\bar{50}$
30	$3.59 \pm 4.16 \ (1.00,14.00)$	-2.50	$2.95 \pm 2.18 \ (0.50, 8.50)$	2.00	$\overline{16.73} \pm \overline{9.65} (\overline{3.00,41.00})$	13.50
31	$3.\overline{52} \pm 4.0\overline{4} \ (0.\overline{50}, \overline{14}.\overline{00})$	$-\bar{2}.\bar{5}0^{-}$	$2.92 \pm 2.28 (0.50, 8.50)$	2.00	$\overline{16.42} \pm \overline{9.00} (\overline{4.00,37.95})$	$\bar{14.00}^{-1}$
32	$\bar{3.42} \pm 4.01 \ (0.50, 13.00)$	$-\bar{2}.\bar{0}0^{-}$	$2.87 \pm 2.22 \ (0.50, 8.50)$	2.00	$\bar{1}6.87 \pm 10.05  (\bar{3}.00, \bar{4}3.00)$	13.50
33	$3.44 \pm 4.25 \ (1.00,14.00)$	2.00	$2.73 \pm 1.99 \ (1.00, 8.00)$	2.00	$17.58 \pm 9.49 \ (7.00,45.00)$	14.00

Table 15: Per-age average maximum CLD per user for the full cohort, as well as for the consistently not highly variable and consistently highly variable user groups.

	Full cohort		Consistently not highly variable		Consistently highly variable	
Age	Mean $\pm$ sd (95% CI)	Median	Mean $\pm$ sd (95% CI)	Median	Mean $\pm$ sd (95% CI)	Median
21	$9.48 \pm 7.29 \ (1.00,30.00)$	8.00	$8.18 \pm 5.34 \ (1.00,21.00)$	7.00	$23.81 \pm 10.10 \ (9.00,51.00)$	22.00
22	$9.\overline{14} \pm \overline{6.91} (\overline{1.00,28.00})$	7.00	$-8.08 \pm 5.26 (1.00,21.00)$	7.00	$\overline{23.05} \pm \overline{10.14} (7.00,50.00)$	21.00
23	$-8.97 \pm 6.84 (1.00,28.00)$	7.00	$\bar{7.96} \pm \bar{5.23} (\bar{1.00,21.00})^{-1}$	7.00	$\overline{23.10} \pm \overline{10.19} (7.00,50.00)$	21.00
$^{-24}$	$8.70 \pm 6.65 (1.00,27.00)$	7.00	$\bar{7}.\bar{7}6 \pm \bar{5}.\bar{1}1 (\bar{1}.\bar{0}0,\bar{2}0.\bar{0}0)$	7.00	$2\overline{2}.\overline{7}8 \pm \overline{10}.\overline{16} (5.\overline{00}, 4\overline{9}.\overline{00})$	21.00
25	$8.\overline{67} \pm \overline{6.72} (\overline{1.00,28.00})$	7.00	$\bar{7}.\bar{7}2 \pm \bar{5}.\bar{1}2 (\bar{1}.\bar{0}0,\bar{2}0.\bar{0}0)$	7.00	$2\overline{3}.\overline{39} \pm \overline{10}.\overline{26} (7.\overline{00}, 5\overline{1}.\overline{00})$	22.00
26	$8.\overline{51} \pm 6.64 \ (1.\overline{00}, \overline{27}.\overline{00})$	7.00	$7.\overline{59} \pm \overline{5.09} (\overline{1.00,20.00})$	6.00	$2\overline{3}.\overline{15} \pm \overline{10.29} (6.\overline{00}, \overline{50}.\overline{00})$	21.00
27	$8.\overline{26} \pm 6.\overline{47} (\overline{1.00,26.00})$	7.00	$\bar{7}.\bar{40} \pm \bar{4}.\bar{9}\bar{3}(\bar{1}.\bar{0}0,\bar{1}\bar{9}.\bar{0}0)$	6.00	$\overline{23.22 \pm 10.48} (\overline{6.00,50.32})$	21.00
28	$-8.\overline{17} \pm 6.\overline{40} (\overline{1.00,26.00})$	6.00	$\bar{7}.\bar{3}\bar{5} \pm \bar{4}.\bar{9}\bar{4} (\bar{1}.\bar{0}0,\bar{1}\bar{9}.\bar{0}0)$	6.00	$\overline{23.09} \pm \overline{10.17} (7.00,49.\overline{15})$	21.00
29	$-8.\overline{01} \pm 6.\overline{35} (\overline{1.00,26.00})$	6.00	$\bar{7}.\bar{2}4 \pm \bar{4}.\bar{9}4 (\bar{1}.\bar{0}0,\bar{1}9.\bar{0}0)$	6.00	$\overline{23.42} \pm \overline{10.31} (\overline{6.00,50.35})$	22.00
30	$7.82 \pm 6.13 (1.00,25.00)$	6.00	$\bar{7}.\bar{0}7 \pm \bar{4}.\bar{7}1 (\bar{1}.\bar{0}0,\bar{1}8.\bar{0}0)$	6.00	$\overline{23.16} \pm \overline{10.29} (\overline{7.00,50.00})$	21.00
31	$7.71 \pm 6.04 (1.00,25.00)$	6.00	$\bar{7.00} \pm \bar{4.74} (\bar{1.00,18.00})$	6.00	$\overline{23.00} \pm \overline{9.65} (8.00, \overline{48.00})$	22.00
32	$7.\overline{54} \pm 5.88 (1.\overline{00,24.00})$	6.00	$\overline{6.91} \pm \overline{4.64} (\overline{1.00,18.00})$	6.00	$2\overline{2}.\overline{94} \pm \overline{10.35} (5.\overline{00}, 5\overline{2}.\overline{00})$	21.00
33	$7.\overline{72} \pm 6.\overline{21} (\overline{2.00}, \overline{26.00})$	6.00	$\overline{6.90 \pm 4.63}(\overline{1.00,18.00})$	6.00	$\overline{24.01} \pm \overline{10.10} \ (\overline{11.00,51.92})^{-1}$	22.00

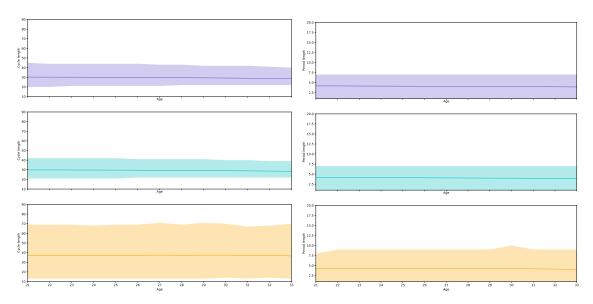


Figure 11: For users with cycles at an specific age, we average cycle (left) and period length (right) across three different groups: the entire user cohort (top, purple), the consistently not highly variable user cohort (middle, teal), and the consistently highly variable user cohort (bottom, orange). This allows us to visualize how cycle and period length vary with age for each group, on average and in terms of standard deviation. We observe that cycle and period length statistics are stationary over the studied age range within each plot. We note that the top and middle plots look similar in each figure (i.e., the consistently not highly variable group looks similar to the overall population in terms of both cycle and period length), but the wider shaded orange spread of the bottom plot demonstrates the higher degree of variability in the consistently highly variable group. In addition, this spread is consistently wider for all ages in the orange plot. This showcases that the consistently highly variable group represents a large degree of the variability that we see in the data overall.

# Supplementary Information: Results

#### Assessing differences in reported symptoms across user groups

The following table provides the Kolmogorov-Smirnov statistic for the empirical cumulative distributions of the proportion of cycles with symptom out of cycles with category  $(\lambda_s)$  for the different user groups.

Table 16: Kolmogorov-Smirnov test results for symptoms per-group

Category	Symptom	KS statistic (95% CI)	p-value
Period flow	heavy	$0.181\ (0.178, 0.183)$	< 0.000000
Stool health	normal	$\overline{0.135}(\overline{0.130},\overline{0.140})$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Period flow	medium	$\overline{0.134}$ $\overline{(0.132,0.137)}$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Social behavior	sociable	$-\overline{0.127}(\overline{0.121},\overline{0.132})$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Mental state	distracted	$-\overline{0.123}(\overline{0.118},\overline{0.127})$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Period flow	$-\overline{light}$	$\overline{0.121}(0.\overline{118},\overline{0.124})$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Food cravings	sweet craving	$-\overline{0.120}(\overline{0.115},\overline{0.125})$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Energy level	low energy	$\overline{0.118}(\overline{0.114},\overline{0.121})$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Motivation level	unproductive	$ \overline{0.117}$ $(0.112, 0.122)$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Digestive health	bloated	$-\overline{0.116}(\overline{0.111},\overline{0.122})$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Emotional state	sensitive	$-\overline{0.115}(\overline{0.112},\overline{0.118})$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Digestive health	gassy	$-\overline{0.114}(\overline{0.109},\overline{0.119})$	$\bar{<} \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Emotional state	$-\frac{\circ}{\text{happy}}$	$-\overline{0.108}(\overline{0.105},\overline{0.111})$	$\bar{<} \bar{0}.\bar{0}0\bar{0}\bar{0}\bar{0}\bar{0}$
Mental state	$ \frac{1}{\text{calm}}$	$-\overline{0.104}(\overline{0.099},\overline{0.108})$	$\bar{<} \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Type of pain experienced	cramps	$ \overline{0.101}$ $(0.097, 0.104)$	$\bar{<} \bar{0}.\bar{0}0\bar{0}\bar{0}\bar{0}\bar{0}$
Hours of sleep	- <del> </del>	$ \overline{0.100}$ $(0.097, 0.103)$ $-$	$\bar{<} \bar{0}.\bar{0}0\bar{0}\bar{0}\bar{0}\bar{0}$
Food cravings	carbs craving	$-\overline{0.098}(\overline{0.094},\overline{0.103})$	$\bar{<} \bar{0}.\bar{0}0\bar{0}\bar{0}\bar{0}\bar{0}$
Motivation level	motivated	$-\overline{0.098}(\overline{0.094},\overline{0.103})$	$-<\bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Motivation level	unmotivated	$-\overline{0.098}(\overline{0.092},\overline{0.103})$	$-<\bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Type of pain experienced	ovulation pain	$ \overline{0.096}$ $\overline{(0.093,0.099)}$ $-$	$-<\bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Skin health	acne skin	$-\overline{0.093}(\overline{0.088},\overline{0.098})$	$-<\bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Social behavior	withdrawn	$-\overline{0.093}(\overline{0.087},\overline{0.098})$	$-<\bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Skin health	oily skin	$-\overline{0.093}(\overline{0.089},\overline{0.096})$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Hair health	bad hair	$ 0.\overline{0}9\overline{2}$ $(0.\overline{0}87, \overline{0}.\overline{0}97)$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Vaginal discharge type	creamy	$\overline{0.091}(\overline{0.086},\overline{0.095})$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Type of pain experienced	headache	$ 0.\overline{0}89$ $(0.\overline{0}87, \overline{0}.\overline{0}92)$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Hair health	good hair	$-\overline{0.089}(\overline{0.083},\overline{0.095})$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Period flow	spotting	$-\overline{0.089}(\overline{0.087},\overline{0.092})$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Emotional state	pms	$-\overline{0.086}(\overline{0.083},\overline{0.089})$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Digestive health	great digestion	$-\overline{0.085}(\overline{0.081},\overline{0.089})$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Skin health	good skin	$-\overline{0.085}(\overline{0.081},\overline{0.088})$	$\bar{<} \bar{0}.\bar{0}0\bar{0}\bar{0}\bar{0}\bar{0}$
Food cravings	salty cravings	$-\overline{0.084}(\overline{0.080},\overline{0.089})$	$\bar{<} \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Method for period collection	pad	$-\overline{0.083}(\overline{0.077},\overline{0.090})$	$\bar{<} \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Type of pain experienced	tender breasts	$-\overline{0.082}(\overline{0.080},\overline{0.084})$	$\bar{<} \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Hours of sleep	6-9	$ \overline{0.079}$ $(0.076,0.083)$	$\bar{<} \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Mental state	stressed	$-\overline{0.079}(\overline{0.074},\overline{0.083})$	$\bar{<} \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Stool health	constipated	$-\overline{0.078}(\overline{0.074},\overline{0.083})$	$\bar{<} \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Sexual health	unprotected sex	$-\bar{0}.\bar{0}78(\bar{0}.\bar{0}74,\bar{0}.\bar{0}81)$	$\bar{0.000000}$
Physical maladies	$ \frac{1}{\text{cold}}$ /flu	$ \bar{0}.\bar{0}77$ $(\bar{0}.\bar{0}67,\bar{0}.\bar{0}87)$ $-$	$\bar{<} \bar{0}.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Method for period collection	$ \frac{1}{tampon}$	$ \overline{0.076}$ $(0.070, 0.083)$	$\bar{<}0.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Type of medication taken	$-\frac{1}{\operatorname{cold}}$ flu	$-\overline{0.076}(\overline{0.067},\overline{0.085})$	$\bar{<}0.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Emotional state	$-\frac{1}{sad}$	$ \overline{0.076}$ $(0.07\overline{3}, 0.07\overline{9})$ $-$	$\bar{<}0.\bar{0}0\bar{0}0\bar{0}\bar{0}$
Social behavior	supportive	$-\overline{0.075}(\overline{0.071},\overline{0.079})$	$\bar{<}0.\bar{0}0\bar{0}0\bar{0}\bar{0}$

Category	Symptom	KS statistic (95% CI)	p-value
Physical exercise	 running	$0.\overline{074}(\overline{0.067},\overline{0.081})$	< 0.0000000
Party-related experiences	cigarettes	$-\bar{0}.\bar{0}74(\bar{0}.\bar{0}67,\bar{0}.\bar{0}81)$	$\bar{<}0.\bar{0}0\bar{0}0\bar{0}0\bar{0}$
Stool health	diarrhea	-0.071(0.066,0.076)	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}0\bar{0}$
Motivation level	productive	-0.071(0.067,0.075)	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}0\bar{0}$
Food cravings	chocolate cravings	$0.\overline{071} (0.\overline{066}, \overline{0.075})$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}0\bar{0}$
Mental state	focused	$\overline{0.069} (\overline{0.066}, \overline{0.073})^{-}$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}0\bar{0}$
Vaginal discharge type	atypical	$\overline{0.069} \ \overline{(0.065,0.074)}^{-}$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}0\bar{0}$
Sexual health	protected sex	$\overline{0.069} (\overline{0.065}, \overline{0.073})^{-1}$	$< \bar{0}.\bar{0}0\bar{0}0\bar{0}0\bar{0}$
Method for period collection	menstrual cup	$\bar{0.067}(\bar{0.063}, \bar{0.072})$	< 0.000000
Skin health	$-\frac{1}{d}$ ry skin	$\bar{0.067}(\bar{0.063}, \bar{0.072})$	< 0.000000
Hair health	dry hair	$\overline{0.067}(\overline{0.061},\overline{0.073})$	< 0.000000
Hair health	oily hair	$0.\overline{067}(\overline{0.062},\overline{0.072})$	< 0.000000
Vaginal discharge type	sticky	$0.\overline{066} (0.\overline{062}, \overline{0.070})$	< 0.000000
Energy level	exhausted	$0.\overline{066} (0.\overline{063}, \overline{0.069})$	< 0.000000
Stool health	great	$0.\overline{065} (0.\overline{060}, \overline{0.071})$	< 0.000000
Digestive health	nauseated	$0.\overline{064} \ (0.0\overline{59}, \overline{0.069})$	< 0.000000
Energy level	high energy	$0.\overline{063} (0.\overline{061}, \overline{0.066})$	< 0.000000
Party-related experiences	big night party	$0.\overline{063} \ (0.057, \overline{0.071})$	< 0.000000
Social behavior	conflict	$0.\overline{062} (0.0\overline{59}, \overline{0.068})$	< 0.000000
Vaginal discharge type	egg white	$0.\overline{062} (0.058, \overline{0.067})$	< 0.000000
Physical exercise	yoga	$\overline{0.062}(\overline{0.055}, \overline{0.068})$	< 0.000000
Physical maladies	allergy	$\overline{0.061} (\overline{0.053}, \overline{0.069})$	0.000001
Hours of sleep	>9	$\overline{0.061} (\overline{0.057}, \overline{0.064})$	< 0.000000
Method for period collection	panty liner	$\begin{bmatrix} 0.057 & (0.053, 0.061) \end{bmatrix}$	< 0.000000
Physical exercise	biking	$\begin{bmatrix} 0.056 & (0.049, 0.062) \end{bmatrix}$	< 0.000000
Party-related experiences	hangover	$\begin{bmatrix} 0.055 & (0.051, 0.063) \end{bmatrix}$	< 0.000000
Energy level	energized	$\begin{bmatrix} 0.052 & (0.049, 0.055) \end{bmatrix}$	< 0.000000
Sexual health	high sex drive	$\begin{bmatrix} 0.052 & (0.051, 0.055) \end{bmatrix}$	< 0.000000
Type of medication taken	$_{ m pain}$	$\begin{bmatrix} 0.046 & (0.041, 0.054) \end{bmatrix}$	0.000548
Sexual health	withdrawal sex	0.045 (0.044,0.048)	< 0.000000
Physical maladies	_ <u>fever</u>	0.044 (0.037,0.054)	0.001015
Type of medication taken	antibiotic	$\begin{bmatrix} 0.044 & (0.036, 0.053) \end{bmatrix}$	0.001040
Party-related experiences	drinks party	0.042 (0.037, 0.050)	0.000028
Hours of sleep		0.041 (0.039,0.044)	< 0.000000
Physical maladies	_ injury	0.040(0.034, 0.049)	0.003686
Physical exercise	_ swimming	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0.000003
Type of medication taken	antihistamine	$\overline{0.032}$ $\overline{(0.029,0.041)}$	0.032955

The following table provides the odds ratio of how likely users in the consistently highly variable group to the consistently not highly variable group are not to track a symptom throughout their cycle history (i.e., in very few of their cycles).

Table 17: Likelihood of low proportion ( $\lambda_s < 0.05$ ) of cycles with symptom out of cycles with category per group, with the associated odds ratio. 95% confidence intervals attained via bootstrapping with 100,000 samples are shown in parentheses.

Period flow         medium         0.009 (0.009,0.009)         0.003 (0.003,0.003)         3.140 (2.826,3.522)           Period flow         light         0.036 (0.036,0.036)         0.014 (0.013,0.015)         2.568 (2.445,2.700)           Period flow         heavy         0.170 (0.169,0.170)         0.098 (0.096,0.100)         1.734 (1.763,1.766)           Type of pain experienced         cramps         0.105 (0.104,0.105)         0.073 (0.071,0.074)         1.436 (1.404,1.470)           Skin health         acne skin         0.174 (0.173,0.176)         0.132 (0.129,0.135)         1.319 (1.286,1.353)           Period flow         spotting         0.314 (0.313,0.315)         0.239 (0.237,0.241)         1.314 (1.300,1.328)           Mental state         stressed         0.243 (0.242,0.245)         0.186 (0.182,0.189)         1.312 (1.286,1.340)           Type of medication         pain         0.212 (0.209,0.215)         0.167 (0.160,0.174)         1.274 (1.220,1.334)           taken         Emotional state         sad         0.348 (0.346,0.349)         0.273 (0.270,0.276)         1.273 (1.260,1.286)           Emotional state         sad         0.348 (0.346,0.349)         0.273 (0.270,0.276)         1.273 (1.260,1.286)           Motivation level         unmotivated         0.168 (0.167,0.170)         0.133 (0.130,0.333)         1.270 (	Category	Symptom	High variability group	Low variability group	Odds ratio
Period flow	Period flow	medium	0.009 (0.009, 0.009)	$0.003 \ (0.003, 0.003)$	3.140 (2.826, 3.522)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Period flow	$-\overline{light}$	0.036 (0.036, 0.036)	0.014 (0.013,0.015)	
Richard   Skin   health   acne skin   0.174 (0.173,0.176)   0.132 (0.129,0.135)   1.319 (1.286,1.353)     Period flow   spotting   0.314 (0.313,0.315)   0.239 (0.237,0.241)   1.314 (1.300,1.328)     Mental state   stressed   0.243 (0.242,0.245)   0.186 (0.182,0.189)   1.312 (1.286,1.340)     Type of medication   pain   0.212 (0.209,0.215)   0.167 (0.160,0.174)   1.274 (1.220,1.334)     Type of medication   pain   0.348 (0.346,0.349)   0.273 (0.270,0.276)   1.273 (1.260,1.287)     Emotional state   sad   0.348 (0.346,0.349)   0.273 (0.270,0.276)   1.273 (1.260,1.287)     Emotional state   pms   0.395 (0.394,0.396)   0.310 (0.307,0.313)   1.273 (1.261,1.286)     Motivation level   unmotivated   0.168 (0.167,0.170)   0.133 (0.129,0.136)   1.271 (1.237,1.307)     Party-related experiences   Emotional state   sensitive   0.176 (0.164,0.168)   0.131 (0.126,0.136)   1.270 (1.219,1.325)     Stool health   diarrhea   0.369 (0.367,0.371)   0.299 (0.295,0.304)   1.234 (1.214,1.254)     Stool health   diarrhea   0.369 (0.367,0.371)   0.299 (0.295,0.304)   1.234 (1.214,1.254)     Stool health   diarrhea   0.369 (0.367,0.371)   0.299 (0.295,0.304)   1.218 (1.188,1.249)     Hours of sleep   6-9   0.161 (0.160,0.162)   0.133 (0.130,0.135)   1.218 (1.196,1.240)     Type of pain experienced   Energy level   exhausted   0.312 (0.311,0.313)   0.258 (0.255,0.261)   1.208 (1.194,1.223)     Vaginal discharge   egg white   0.359 (0.357,0.361)   0.298 (0.293,0.303)   1.206 (1.186,1.226)     type   Physical maladies   cold/flu   0.234 (0.231,0.238)   0.195 (0.187,0.202)   1.204 (1.158,1.254)     Social behavior   conflict   0.379 (0.377,0.381)   0.318 (0.313,0.323)   1.194 (1.174,1.215)     Digestive health   gassy   0.219 (0.217,0.221)   0.184 (0.180,0.112)   1.174 (1.151,1.198)     Digestive health   nauseated   0.427 (0.425,0.429)   0.365 (0.360,0.370)   1.170 (1.153,1.187)	Period flow	heavy	0.170(0.169,0.170)	0.098(0.096,0.100)	$-1.73\overline{4} (1.703, 1.766)$
Richard   Skin   health   acne skin   0.174 (0.173,0.176)   0.132 (0.129,0.135)   1.319 (1.286,1.353)     Period flow   spotting   0.314 (0.313,0.315)   0.239 (0.237,0.241)   1.314 (1.300,1.328)     Mental state   stressed   0.243 (0.242,0.245)   0.186 (0.182,0.189)   1.312 (1.286,1.340)     Type of medication   pain   0.212 (0.209,0.215)   0.167 (0.160,0.174)   1.274 (1.220,1.334)     Type of medication   pain   0.348 (0.346,0.349)   0.273 (0.270,0.276)   1.273 (1.260,1.287)     Emotional state   sad   0.348 (0.346,0.349)   0.273 (0.270,0.276)   1.273 (1.260,1.287)     Emotional state   pms   0.395 (0.394,0.396)   0.310 (0.307,0.313)   1.273 (1.261,1.286)     Motivation level   unmotivated   0.168 (0.167,0.170)   0.133 (0.129,0.136)   1.271 (1.237,1.307)     Party-related experiences   Emotional state   sensitive   0.176 (0.164,0.168)   0.131 (0.126,0.136)   1.270 (1.219,1.325)     Stool health   diarrhea   0.369 (0.367,0.371)   0.299 (0.295,0.304)   1.234 (1.214,1.254)     Stool health   diarrhea   0.369 (0.367,0.371)   0.299 (0.295,0.304)   1.234 (1.214,1.254)     Stool health   diarrhea   0.369 (0.367,0.371)   0.299 (0.295,0.304)   1.218 (1.188,1.249)     Hours of sleep   6-9   0.161 (0.160,0.162)   0.133 (0.130,0.135)   1.218 (1.196,1.240)     Type of pain experienced   Energy level   exhausted   0.312 (0.311,0.313)   0.258 (0.255,0.261)   1.208 (1.194,1.223)     Vaginal discharge   egg white   0.359 (0.357,0.361)   0.298 (0.293,0.303)   1.206 (1.186,1.226)     type   Physical maladies   cold/flu   0.234 (0.231,0.238)   0.195 (0.187,0.202)   1.204 (1.158,1.254)     Social behavior   conflict   0.379 (0.377,0.381)   0.318 (0.313,0.323)   1.194 (1.174,1.215)     Digestive health   gassy   0.219 (0.217,0.221)   0.184 (0.180,0.112)   1.174 (1.151,1.198)     Digestive health   nauseated   0.427 (0.425,0.429)   0.365 (0.360,0.370)   1.170 (1.153,1.187)	Type of pain expe-	cramps	$0.1\overline{05}$ $(0.\overline{104}, 0.\overline{105})$	0.073(0.071,0.074)	$-1.\overline{436}$ $(1.\overline{404}, 1.\overline{470})$
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				, ,	, , ,
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Skin health	acne skin	0.174 (0.173, 0.176)	$\overline{0.132}$ $\overline{(0.129,0.135)}$	$\overline{1.319}$ $\overline{(1.286,1.353)}$
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Period flow	spotting	$0.\overline{314} (0.\overline{313}, 0.\overline{315})$	$0.\overline{239} (0.\overline{237}, 0.\overline{241})$	$1.\overline{314} (1.\overline{300}, 1.\overline{328})$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Mental state	stressed	$0.2\overline{43}(0.2\overline{42},0.2\overline{45})$	0.186 (0.182, 0.189)	$-1.\overline{312}$ $(1.\overline{286},1.\overline{340})$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	· -	pain	$ \overline{0.212}  \overline{(0.209, 0.215)}  \overline{} $	0.167 (0.160,0.174)	$\overline{1.274} (\overline{1.220}, \overline{1.334})$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			0.348 (0.346,0.349)	0.273 (0.270,0.276)	$\overline{1.273}$ ( $\overline{1.260}$ , $\overline{1.287}$ )
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			, , ,		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		1 0	, , ,	, , ,	, , ,
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Emotional state	sensitive	0.176(0.175,0.177)	0.143 (0.140,0.145)	$\overline{1.234}$ $\overline{(1.214,1.254)}$
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				, , ,	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$			,	, , ,	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Hours of sleep		$0.1\overline{61}(0.\overline{160},0.\overline{162})$	-0.133(0.130,0.135)	$-1.\overline{218}$ $(1.\overline{196},1.\overline{240})$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		headache	$0.3\overline{2}6(0.\overline{3}2\overline{5},0.\overline{3}\overline{2}7)$	-0.269 (0.266, 0.272)	$-1.\overline{212}$ $(1.\overline{199},1.\overline{225})$
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				, ,	, , ,
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Energy level	exhausted	0.312 (0.311,0.313)	0.258 (0.255, 0.261)	$\overline{1.208}$ $\overline{(1.194,1.223)}$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Vaginal discharge	egg white	$0.3\overline{5}9 (0.\overline{3}\overline{5}7, 0.\overline{3}\overline{6}1)$	0.298 (0.293,0.303)	$-1.\overline{206}$ ( $1.\overline{186}$ , $1.\overline{226}$ )
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	type		, , ,	,	, , ,
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Physical maladies	$-\overline{\mathrm{cold}}/\mathrm{flu}$	$0.\overline{234}$ $(0.\overline{231}, 0.\overline{238})$	$0.\overline{195}$ $(0.\overline{187}, 0.\overline{202})$	$\overline{1.204}$ ( $\overline{1.158}$ , $\overline{1.254}$ )
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		conflict	$0.\overline{379}(0.\overline{377},0.\overline{381})$	0.318 (0.313,0.323)	$1.\overline{194}$ $(1.\overline{174},\overline{1.215})$
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Digestive health	gassy	$0.\overline{219} (0.\overline{217}, 0.\overline{221})$	0.184 (0.180,0.188)	$\overline{1.189}$ (1.162,1.217)
Energy level low energy $0.129 \ (0.128, 0.130) \ 0.110 \ (0.108, 0.112) \ 1.174 \ (1.151, 1.198)$ Digestive health nauseated $0.427 \ (0.425, 0.429) \ 0.365 \ (0.360, 0.370) \ 1.170 \ (1.153, 1.187)$	Motivation level	unproductive	0.207 (0.205,0.208)	0.175 (0.171, 0.179)	1.179(1.152,1.207)
Digestive health nauseated $0.427 \ (0.425, 0.429)$ $0.365 \ (0.360, 0.370)$ $1.170 \ (1.153, 1.187)$	Energy level		0.129 (0.128, 0.130)	0.110 (0.108,0.112)	1.174(1.151,1.198)
	Digestive health		$0.4\overline{27}$ $(0.4\overline{25}, 0.4\overline{29})$	$0.\overline{365} (0.\overline{360}, 0.\overline{370})$	-1.170(1.153,1.187)
Digestive health bloated $0.151 (0.150, 0.153) 0.130 (0.126, 0.133) 1.165 (1.133, 1.199)$	Digestive health	bloated	$0.1\overline{51}$ $(0.150,0.153)$	0.130(0.126,0.133)	$1.\overline{165}$ $(1.\overline{133},\overline{1.199})$
Stool health constipated 0.358 (0.356,0.360) 0.309 (0.304,0.314) 1.160 (1.141,1.180)	Stool health	constipated	0.358 (0.356, 0.360)	0.309 (0.304,0.314)	-1.160(1.141,1.180)
Food cravings chocolate $0.350 \ (0.348, 0.351) \ 0.302 \ (0.297, 0.306) \ 1.159 \ (1.142, 1.178)$ craving	Food cravings		0.350 (0.348,0.351)	0.302 (0.297,0.306)	$-1.\overline{159}$ $(1.\overline{142},1.\overline{178})$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		productive	$\overline{0.354}  \overline{(0.352, 0.356)}$	0.308 (0.304,0.313)	$\overline{1.148} (\overline{1.130}, \overline{1.167})$
Food cravings salty craving $0.\overline{295}$ $(0.\overline{293}, 0.\overline{296})$ $0.\overline{257}$ $(0.\overline{253}, 0.\overline{261})$ $1.\overline{147}$ $(1.\overline{127}, 1.\overline{168})$		salty craving	0.295 (0.293,0.296)	0.257 (0.253,0.261)	1.147 (1.127,1.168)
Food cravings sweet crav- $0.144 (0.143, 0.146)$ $0.126 (0.123, 0.129)$ $1.146 (1.116, 1.178)$		`			
ing			(,)	- (,)	- (,)
Type of pain expertender $0.366 (0.365, 0.367) 0.320 (0.317, 0.322) 1.145 (1.134, 1.156)$	Type of pain expe-		0.366 (0.365.0.367)	0.320 (0.317.0.322)	1.145 (1.134.1.156)
rienced breasts			(	( )	- (
Food cravings carbs craving $0.310 \ (0.309, 0.312)$ $0.271 \ (0.267, 0.276)$ $1.144 \ (1.125, 1.164)$			0.310 (0.309.0.312)	0.271 (0.267.0.276)	-1.144(1.125.1.164)
Physical exercise running 0.250 (0.248,0.253) 0.219 (0.214,0.224) 1.144 (1.116,1.174)					
Sexual health protected sex $0.533 (0.531, 0.534)$ $0.466 (0.462, 0.469)$ $1.143 (1.134, 1.152)$				, , ,	

Category	Symptom	High variability group	Low variability group	Odds ratio
Type of pain experienced	ovulation pain	$\overline{0.721}$ $\overline{(0.720,0.722)}$		$-1.\overline{139}(\overline{1.133},\overline{1.144})$
Party-related expe-	$\frac{\text{pain}}{\text{big}} = \frac{\text{pain}}{\text{night}}$	$0.5\overline{22} (0.5\overline{19}, 0.5\overline{25})$	0.460 (0.452,0.468)	1.136 (1.116,1.156)
riences	party	( / /	( ,)	( -,,
Hair health	oily hair	$\overline{0.363}(\overline{0.361},\overline{0.365})$	$\overline{0.320} \ (0.\overline{314}, 0.\overline{325})$	$-1.\overline{135}$ $(1.\overline{114},\overline{1.157})$
Method for period	tampon	$0.6\overline{3}0\ (0.628, 0.6\overline{3}\overline{3})$	$0.557 \ (0.551, 0.563)$	$\overline{1.131}$ $\overline{(1.119,1.144)}$
collection				
Physical exercise	yoga	0.551 (0.548,0.553)	0.489 (0.483,0.496)	1.125 (1.110, 1.141)
Hair health	good hair	$0.2\overline{17} \ (0.2\overline{15}, 0.2\overline{19})$	0.194 (0.189,0.199)	$1.\overline{120} (1.\overline{091}, 1.\overline{150})$
Party-related expe-	hangover	0.512 (0.509, 0.515)	0.458 (0.450,0.465)	1.119 (1.100, 1.139)
riences				
Stool health	$-\frac{\text{great}}{3-6}$	$\begin{array}{c} -0.595 \ (0.593, 0.597) \\ -0.259 \ (0.258, 0.260) \end{array}$		$\begin{array}{c} -1.\overline{118} \ (\overline{1.106},\overline{1.130}) \\ -1.\overline{117} \ (\overline{1.102},\overline{1.131}) \end{array}$
Hours of sleep Sexual health		$0.259 (0.258, 0.260) \\ 0.469 (0.467, 0.470)$	$0.232 (0.229, 0.235) \\ 0.420 (0.417, 0.424)$	$\frac{1.117}{1.115} \frac{(1.102,1.131)}{(1.105,1.124)}$
sexuai neami	high sex drive	0.409 (0.407,0.470)	0.420 (0.417,0.424)	1.113 (1.105,1.124)
Hours of sleep	- =	0.587 (0.586,0.588)	$-0.5\overline{30}$ $(0.5\overline{26}, 0.5\overline{33})$	$-1.\overline{108}(\overline{1.101},\overline{1.115})$
Vaginal discharge	- <u> </u>	-0.367 (0.360,0.360) - 0.439 (0.437,0.441)	0.399 (0.394,0.404)	$-\frac{1.105}{1.101} (1.086, 1.115)$
type	201011)	0.100 (0.101,0.111)	0.000 (0.00 1,0.10 1)	11101 (11000,11110)
Hair health		0.324 (0.322,0.326)	0.295 (0.289,0.300)	-1.099(1.078,1.121)
Mental state	distracted	$0.\overline{204}$ $(0.\overline{202}, 0.\overline{205})$	-0.187(0.183,0.190)	-1.091(1.069,1.115)
Skin health	good skin	0.384 (0.382, 0.386)	$0.\overline{352} (0.\overline{348}, 0.\overline{357})$	$\overline{1.091}$ $(1.076, 1.105)$
Vaginal discharge type	creamy	0.342 (0.340,0.344)	0.315 (0.310,0.319)	-1.087(1.071,1.105)
Sexual health	unprotected -	$\overline{0.378}$ $\overline{(0.376,0.379)}$	$ \bar{0.348}  \bar{(0.344, 0.351)}  \bar{-}  $	$-1.08\overline{6}(\overline{1.075},\overline{1.097})$
	sex			
Energy level	high energy	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	0.363 (0.360,0.367)	1.085 (1.075, 1.095)
Physical exercise	biking	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0.660 (0.654,0.666)	1.083 (1.072,1.093)
Method for period collection	menstrual	0.880 (0.879,0.882)	0.814 (0.809,0.818)	-1.082 (1.075, 1.088)
Mental state	$-\frac{\text{cup}}{\text{focused}}$	0.407 (0.405, 0.409)	0.377 (0.372,0.381)	-1.081(1.067, 1.095)
Type of medication	- locuscu - cold/flu	0.569 (0.565, 0.573)	-0.577 (0.512,0.501) -0.527 (0.517,0.536)	$-\frac{1.081}{1.080} \left( \frac{1.067}{1.060}, \frac{1.033}{1.01} \right)$
taken	cola/ Ila	0.303 (0.300,0.313)	0.021 (0.011,0.000)	1.000 (1.000,1.101)
Motivation level	motivated -	0.299 (0.297,0.301)	0.278 (0.273,0.282)	-1.075(1.057,1.094)
Sexual health	withdrawal	$0.5\overline{9}6 (0.595, 0.598)$	$0.5\overline{56}$ $(0.55\overline{2}, 0.5\overline{59})$	$1.07\overline{3} (1.065, 1.080)$
	sex	, , ,	, , ,	, , ,
Social behavior	supportive	0.412 (0.410,0.414)	0.386 (0.380,0.391)	1.069 (1.054, 1.085)
Physical maladies	fever	0.704 (0.701,0.708)	0.661 (0.653,0.670)	1.065 (1.050,1.080)
Hair health	dry hair	$0.441 \ (0.439, 0.443)$	0.415 (0.409,0.421)	$1.063 \ (1.047, 1.079)$
Type of medication	antibiotic	0.712 (0.709, 0.716)	$0.671 \ (0.662, 0.680)$	$1.061\ (1.047, 1.076)$
taken				
Skin health	_ dry skin _ <del>.   .</del> – – – –	0.493 (0.491,0.494)	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1.060 (1.049,1.072)
Physical maladies	$\lim_{-1} \frac{\text{injury}}{1} = \lim_{-1} \frac{1}{1} = 1$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0.692 (0.684,0.701)	$\frac{1.057}{1.054} (1.044, 1.071)$
Energy level	energized	$\begin{array}{c} 0.6\overline{25} \ (0.6\overline{24}, 0.6\overline{26}) \\ \hline 0.6\overline{25} \ (0.6\overline{24}, 0.6\overline{26}) \end{array}$	0.593 (0.590,0.596)	$\begin{array}{c} -1.054 \ (1.047, 1.060) \\ -1.053 \ (1.040, 1.066) \end{array}$
Method for period collection	panty liner	0.553 (0.551,0.555)	0.525 (0.519,0.531)	1.055 (1.040,1.000)
Skin health	oily skin	$\overline{0.372}$ $(\overline{0.371}, \overline{0.374})$	$\overline{0.355}$ $\overline{(0.351,0.360)}$	$-1.0\overline{48}$ $(1.0\overline{34}, 1.0\overline{62})$
Physical exercise	swimming	0.841 (0.840,0.843)	0.803 (0.798,0.808)	-1.047(1.040,1.054)
Hours of sleep	<u>-</u> <u>0</u> - <u>3</u>	$0.7\overline{62}(0.7\overline{61},0.7\overline{63})$	$0.7\overline{31} (0.7\overline{28}, 0.7\overline{34})$	$1.04\overline{3} (1.0\overline{38}, 1.0\overline{47})$
Type of medication taken	antihistamine	0.767 (0.763,0.770)	$-0.7\overline{36} \ (0.7\overline{27}, 0.7\overline{44})$	$\overline{1.042} \ \overline{(1.030,1.055)}$
Social behavior	sociable			

Category	Symptom	High variability group	Low variability group	Odds ratio
Physical maladies	allergy	0.581 (0.578, 0.585)	$0.5\overline{60} \ (0.551, 0.5\overline{69})$	$\overline{1.037}(\overline{1.019},\overline{1.056})$
Emotional state	happy	$0.281 \ (0.280, 0.282)$	$0.\overline{275} \ (0.\overline{272}, 0.\overline{278})$	$1.0\overline{24} \ (\overline{1.013}, \overline{1.035})$
Mental state	$\overline{\mathrm{calm}}$	$0.293 \ (0.292, 0.295)$	$0.\overline{290} \ (0.\overline{286}, 0.\overline{295})$	$1.010 \ (0.995, 1.027)$
Digestive health	great diges-	$0.388 \ (0.386, 0.390)$	$0.388 \ (0.383, 0.393)$	1.002 (0.988, 1.016)
	tion			
Stool health	normal	$0.181 \ (0.179, 0.182)$	$0.\overline{181} (0.\overline{177}, 0.\overline{185})$	$0.998 \ (0.975, 1.022)$
Vaginal discharge	atypical	$0.6\overline{64} \ (0.6\overline{62}, 0.6\overline{66})$	0.673 (0.668,0.678)	$0.986 \ (0.978, 0.993)$
type				
Party-related expe-	cigarettes	0.581 (0.578,0.585)	0.608 (0.601,0.616)	$0.95\overline{6} \ (0.943, 0.969)$
riences				
Method for period	$\operatorname{pad}$	0.214 (0.212,0.216)	0.236 (0.231,0.241)	0.907 (0.886,0.929)
collection				

The following table provides the odds ratio of how likely users in the consistently highly variable group to the consistently not highly variable group are to consistently track a symptom throughout their cycle history (i.e., in almost every cycle where they track the category).

Table 18: Likelihood of high proportion ( $\lambda_s > 0.95$ ) of cycles with symptom out of cycles with category per group, with the associated odds ratio. 95% confidence intervals attained via bootstrapping with 100,000 samples are shown in parentheses.

Category	Symptom	High variability group	Low variability group	Odds ratio
Hours of sleep	0-3	$0.035\ (0.034, 0.035)$	$0.020\ (0.019, 0.021)$	$1.750\ (1.667, 1.839)$
Period flow	spotting	0.067 (0.066, 0.067)	0.039 (0.037,0.040)	1.729 (1.679, 1.782)
Type of pain ex-	tender breasts	$0.\overline{193} (0.\overline{192}, 0.\overline{194})$	$0.1\overline{13} \ (0.1\overline{11}, 0.1\overline{15})$	$\overline{1.715}$ $\overline{(1.684,1.746)}$
perienced				
Vaginal discharge	atypical	$0.100 \ (0.099, 0.101)$	$0.059 \ (0.056, 0.061)$	1.706 (1.636, 1.780)
type				
Energy level	energized	$0.075 \ (0.074, 0.075)$	0.044 (0.043,0.046)	1.686 (1.633, 1.741)
Type of pain experienced	headache	0.218 (0.217,0.219)	0.131 (0.129,0.133)	1.663 (1.636,1.691)
Skin health	$\overline{dry}$ skin	0.155 (0.154, 0.157)	0.096 (0.093,0.098)	$1.\overline{626} (1.\overline{579}, \overline{1.676})$
Type of medica-	cold/flu	0.179 (0.176,0.182)	0.112 (0.107,0.118)	1.590 (1.506,1.681)
tion_taken				
Skin health	oily skin	$0.250 \ (0.248, 0.251)$	$0.159 \ (0.155, 0.162)$	1.575 (1.540,1.611)
Hair health	dry hair	$0.170 \ (0.169, 0.172)$	0.109 (0.105,0.113)	1.565 (1.510,1.624)
Digestive health	great digestion	0.241 (0.239,0.243)	$0.158 \ (0.154, 0.162)$	$1.528 \ (1.490, 1.567)$
Social behavior	supportive	$0.215 \ (0.213, 0.216)$	$0.141 \ (0.138, 0.145)$	$1.5\overline{19} \ (1.477, 1.5\overline{62})$
Emotional state	happy	$0.3\overline{07} \ (0.306, 0.308)$		$1.5\overline{18} (1.498, 1.5\overline{38})$
Skin health	good skin	$ 0.242 \ (0.241, 0.244) $	$0.160 \ (0.156, 0.163)$	1.518 (1.485,1.552)
Hair health	bad hair	$0.2\overline{66} \ (0.2\overline{64}, 0.2\overline{68})$	0.175 (0.171, 0.180)	1.514 (1.474, 1.557)
Digestive health	$_{ m nauseated}$	$0.170 \ (0.168, 0.171)$	0.112 (0.109, 0.116)	$1.5\overline{11} \ (1.4\overline{66}, 1.5\overline{58})$
Stool health	great	$0.1\overline{0}1 \ (0.100, 0.102)$	0.068 (0.065,0.071)	1.487 (1.428, 1.549)
Emotional state	$\operatorname{sad}$	0.171 (0.170,0.172)	0.115 (0.113, 0.117)	1.486 (1.459, 1.513)
Method for pe-	panty liner	$0.174 \ (0.172, 0.175)$	0.118 (0.114, 0.122)	1.471 (1.422, 1.523)
riod collection				
Stool health	constipated	0.246 (0.244,0.248)	$0.169 \ (0.165, 0.173)$	$1.454 \ (1.420, 1.491)$
Mental state	focused	0.218 (0.216,0.219)	$0.150 \ (0.147, 0.153)$	1.451 (1.417,1.486)
Mental state	$\operatorname{calm}$	$0.327 \ (0.325, 0.328)$	$ 0.225 \ (0.221, 0.229) $	$1.450 \ (1.424, 1.477)$
Vaginal discharge	sticky	0.214 (0.212,0.216)	0.148 (0.145,0.152)	1.442 (1.406, 1.479)
type				
Type of medication taken	antihistamine	0.099 (0.096,0.101)	0.069 (0.064,0.074)	$1.\overline{437} (1.\overline{337}, 1.5\overline{48})$
Hours of sleep	<u>- 3-6</u>	$0.3\overline{2}2 (0.\overline{3}21, 0.\overline{3}24)$	$0.225 \ (0.222, 0.228)$	$1.4\overline{31} \ (1.4\overline{13}, 1.4\overline{50})$
Motivation level	motivated	$0.3\overline{2}1 \ (0.\overline{3}19, 0.\overline{3}\overline{2}\overline{2})$	$0.225 \ (0.220, 0.229)$	$1.\overline{428} (1.401,1.457)$
Hours of sleep		0.093 (0.092, 0.094)	$0.0\overline{65} \ (0.0\overline{64}, 0.0\overline{67})$	$\overline{1.425}$ $\overline{(1.388,1.464)}$
Physical exercise	swimming	$0.0\overline{61} \ (0.0\overline{60}, 0.0\overline{62})$	$0.043 \ (0.040, 0.045)$	$\overline{1.423}$ ( $\overline{1.339}$ , $\overline{1.516}$ )
Motivation level	unproductive	0.387 (0.386, 0.389)	$0.\overline{272} \ (0.\overline{268}, 0.\overline{277})$	$1.\overline{422} (1.\overline{398}, 1.\overline{447})$
Mental state	distracted	0.407 (0.405, 0.409)	$0.\overline{286} (0.\overline{282}, 0.\overline{290})$	$-1.42\overline{2}(1.400,1.444)$
Type of pain experienced	ovulation pain	0.044 (0.043,0.044)	0.031 (0.030,0.032)	$\overline{1.419} (\overline{1.369}, \overline{1.473})$
Emotional state	sensitive	0.380 (0.378,0.381)	$0.\overline{269}$ $(0.\overline{266}, 0.\overline{272})$	$\overline{1.411}$ $\overline{(1.395,1.426)}$
Food cravings	carbs craving	$0.3\overline{34} (0.\overline{332}, 0.\overline{336})$	$-0.\overline{238}(0.\overline{234},0.\overline{242})$	$-1.40\overline{3}(1.\overline{378},1.4\overline{29})$
Energy level	high energy	0.214 (0.213, 0.215)	0.153(0.150,0.155)	-1.400(1.377,1.423)
Social behavior	$-\frac{3}{\text{conflict}}$	$0.\overline{208}(0.\overline{206},0.\overline{210})$	0.149(0.145,0.153)	$-1.\overline{399}$ $(1.\overline{362},1.\overline{438})$

Vaginal discharge	Category	Symptom	High variability group	Low variability group	Odds ratio
Social behavior   Sociable   O.444 (0.442,0.446)   O.320 (0.315,0.325)   I.388 (1.365,1.411)	Vaginal discharge	creamy	$0.\overline{314}$ $(0.\overline{312}, 0.\overline{316})$	$0.\overline{224}$ $(0.\overline{220}, 0.\overline{228})$	$1.\overline{399}$ $(1.\overline{372}, 1.4\overline{27})$
Sexual health   withdrawal sex   0.159 (0.158,0.160)   0.115 (0.112,0.117)   1.386 (1.358,1.415)			,		,
Energy level   exhausted   0.235 (0.234.0.236)   0.170 (0.167.0.172)   1.382 (1.361.1.403)	Social behavior	sociable	$0.444 \ (0.442, 0.446)$	$0.\overline{320} \ (0.\overline{315}, 0.\overline{325})$	
Scoil health   normal   0.475 (0.473.0.477)   0.344 (0.399.0.349)   1.381 (1.361.1.402)	Sexual health	withdrawal sex	$0.1\overline{59} \ (0.1\overline{58}, 0.1\overline{60})$	$0.1\overline{15}$ $(0.1\overline{12},0.1\overline{17})$	$1.\overline{386} (1.\overline{358}, \overline{1.415})$
Digestive health   Gassy   0.400 (0.398.0.402)   0.290 (0.285.0.294)   1.381 (1.368,1.405)	Energy level	exhausted	$0.2\overline{35} \ (0.2\overline{34}, 0.2\overline{36})$	$\overline{0.170}$ $\overline{(0.167,0.172)}$	$1.\overline{382} (1.\overline{361}, \overline{1.403})$
Hair health   Oily hair   0.244 (0.242 0.246]   0.178 (0.173 0.183)   1.368 (1.332 1.407)	Stool health	$\overline{\mathrm{normal}}$	0.475 (0.473, 0.477)	0.344 (0.339,0.349)	$\overline{1.381}$ $\overline{(1.361,1.402)}$
Hair health   oily hair   0.244 (0.242,0.246)   0.178 (0.173,0.183)   1.368 (1.332,1.407)	Digestive health	gassy	0.400 (0.398,0.402)	0.290 (0.285,0.294)	$1.\overline{381} (1.\overline{358}, 1.405)$
Emotional state   Food cravings   chocolate cravers   chocolate	Hair health		0.244 (0.242, 0.246)	0.178 (0.173,0.183)	$\overline{1.368}$ $\overline{(1.332,1.407)}$
Motivation level   productive   0.266 (0.264,0.267)   0.197 (0.193,0.201)   1.347 (1.318,1.376)   Physical maladies   injury   0.105 (0.102,0.107)   0.078 (0.073,0.083)   1.346 (1.260,1.442)   Type of medication taken   Party-related experiences   hangover   0.200 (0.198,0.203)   0.149 (0.144,0.155)   1.343 (1.293,1.337)   Party-related experiences   hangover   0.236 (0.233,0.239)   0.176 (0.169,0.183)   1.343 (1.293,1.337)   Party-related experiences   big night party   0.215 (0.212,0.217)   0.160 (0.154,0.166)   1.342 (1.293,1.393)   Party-related experiences   hangover   0.290 (0.287,0.293)   0.217 (0.211,0.223)   1.337 (1.297,1.379)   Party-related experiences   hangover   0.290 (0.287,0.293)   0.217 (0.211,0.223)   1.337 (1.297,1.379)   Party-related experiences   hangover   0.397 (0.395,0.393)   0.217 (0.211,0.223)   1.330 (1.298,1.363)   Food cravings   salty craving   0.331 (0.330,0.333)   0.249 (0.245,0.253)   1.330 (1.307,1.353)   Energy level   low energy   0.489 (0.488,0.491)   0.376 (0.373,0.379)   1.302 (1.2901,1.314)   Digestive health   biloated   0.502 (0.500,0.504)   0.390 (0.385,0.395)   1.297 (1.271,1.313)   Digestive health   biloated   0.502 (0.500,0.504)   0.390 (0.385,0.395)   1.287 (1.270,1.305)   Food cravings   sweet craving   0.357 (0.526,0.529)   0.411 (0.406,0.146)   1.283 (1.268,1.299)   Mental state   stressed   0.353 (0.351,0.354)   0.396 (0.385,0.395)   1.287 (1.270,1.305)   Sexual health   improtected   0.354 (0.353,0.356)   0.276 (0.272,0.280)   1.277 (1.257,1.298)   Sexual health   good hair   0.421 (0.419,0.424)   0.336 (0.331,0.342)   1.253 (1.251,1.276)   Period flow   light   0.250 (0.249,0.251)   0.203 (0.200,0.205)   1.233 (1.291,1.245)   1.297 (1.251,1.288)   1.298 (1.294,0.251)   0.298 (0.297,0.300)   0.244 (0.240,0.249)   1.222 (1.199,1.245)   1.299 (1.212,1.215)   1.299 (1.212,1.215)   1.299 (1.212,1.215)   1.299 (1.212,1.215)   1.299 (1.212,1.215)   1.299 (1.212,1.215)   1.299 (1.212,1.215)   1.299 (1.212,1.215)   1.299 (1.212,1.215)   1.299 (1.212,1.215)   1.29	Physical maladies	fever	$0.1\overline{19}$ $(0.\overline{116},0.\overline{121})$	0.087 (0.082,0.092)	$1.\overline{368} (1.\overline{285}, 1.4\overline{58})$
Motivation level   productive   0.266 (0.264,0.267)   0.197 (0.193,0.201)   1.347 (1.318,1.376)   Physical maladies   injury   0.105 (0.102,0.107)   0.078 (0.073,0.083)   1.346 (1.260,1.442)   Type of medica   antibiotic   0.123 (0.120,0.126)   0.092 (0.086,0.097)   1.345 (1.264,1.433)   tion taken   hangover   0.200 (0.198,0.203)   0.149 (0.144,0.155)   1.343 (1.293,1.397)   Party-related experiences   physical maladies   allergy   0.236 (0.233,0.239)   0.176 (0.169,0.183)   1.343 (1.293,1.393)   Party-related experiences   big night party   0.215 (0.212,0.217)   0.160 (0.154,0.166)   1.342 (1.293,1.393)   periences   periences   periences   0.290 (0.287,0.293)   0.217 (0.211,0.223)   1.337 (1.297,1.379)   periences   Stool health   diarrhea   0.225 (0.223,0.226)   0.169 (0.165,0.173)   1.330 (1.298,1.363)   Food cravings   salty craving   0.331 (0.330,0.333)   0.249 (0.245,0.253)   1.330 (1.307,1.353)   Sexial health   bloated   0.502 (0.390,0.364)   0.376 (0.373,0.379)   1.302 (1.290,1.314)   Social behavior   withdrawn   0.397 (0.395,0.399)   0.307 (0.302,0.312)   1.294 (1.272,1.317)   Sexual health   bloated   0.502 (0.500,0.504)   0.390 (0.385,0.395)   1.227 (1.271,1.313)   Digestive health   bloated   0.502 (0.500,0.504)   0.390 (0.385,0.395)   1.227 (1.271,1.313)   Food cravings   sweet craving   0.527 (0.526,0.529)   0.117 (0.171,0.176)   1.292 (1.271,1.313)   Exc.   Motivation level   unmotivated   0.354 (0.353,0.356)   0.276 (0.272,0.280)   1.277 (1.257,1.298)   Sexual health   good hair   0.421 (0.419,0.424)   0.336 (0.331,0.342)   1.223 (1.291,1.248)   Skin health   acne skin   0.489 (0.487,0.491)   0.400 (0.395,0.405)   1.222 (1.297,1.237)   Vaginal discharge   egg white   0.298 (0.297,0.300)   0.244 (0.243,0.445)   1.198 (1.189,1.246)   Physical exercise   biking   0.129 (0.128,0.131)   0.109 (0.165,0.113)   1.188 (1.144,1.235)   Physical exercise   biking   0.129 (0.128,0.131)   0.109 (0.165,0.113)   1.188 (1.144,1.235)   Physical exercise   biking   0.129 (0.128,0.131)   0.400 (0.396,0.403)	Emotional state	 pms	$0.1\overline{60}$ $(0.1\overline{59}, 0.1\overline{61})$	$0.\overline{117} (0.\overline{115}, 0.\overline{119})$	$\overline{1.367}$ $(1.342,1.393)$
Motivation level   Productive   0.266 (0.264,0.267)   0.197 (0.193,0.201)   1.347 (1.318,1.376)   Physical maladies   injury   0.105 (0.102,0.107)   0.092 (0.086,0.097)   1.345 (1.260,1.442)   Type of medication taken   Party-related experiences   Physical maladies   allergy   0.236 (0.233,0.239)   0.149 (0.144,0.155)   1.343 (1.293,1.397)   Physical maladies   allergy   0.236 (0.233,0.239)   0.176 (0.169,0.183)   1.343 (1.293,1.397)   0.275 (0.212,0.217)   0.160 (0.154,0.166)   1.342 (1.293,1.393)   Party-related experiences   party-related experiences   diarrhea   0.225 (0.223,0.226)   0.217 (0.211,0.223)   1.337 (1.297,1.379)   Productive   Diagnosis	Food cravings	chocolate crav-	0.263 (0.261, 0.264)	0.194 (0.190,0.198)	1.357 (1.329, 1.386)
Physical maladies   Type of medical antibiotic   Color   Col		ing			
Type of medication taken	Motivation level	productive	$0.2\overline{66} \ (0.2\overline{64}, 0.2\overline{67})$	0.197 (0.193,0.201)	$\overline{1.347}$ $\overline{(1.318,1.376)}$
Party-related experiences	Physical maladies		0.105 (0.102, 0.107)	0.078 (0.073,0.083)	1.346 (1.260, 1.442)
Party-related experiences	Type of medica-	antibiotic	$0.1\overline{23}(0.1\overline{20},0.1\overline{26})$	0.092 (0.086,0.097)	1.345 (1.264, 1.433)
Periences	tion taken		,		,
Physical maladies   allergy   0.236 (0.233,0.239)   0.176 (0.169,0.183)   1.343 (1.289,1.402)     Party-related experiences   big night party   0.215 (0.212,0.217)   0.160 (0.154,0.166)   1.342 (1.293,1.393)     Party-related experiences   party-related experiences   cigarettes   0.290 (0.287,0.293)   0.217 (0.211,0.223)   1.337 (1.297,1.379)     Periences   periences   Stool health   diarrhea   0.225 (0.223,0.226)   0.169 (0.165,0.173)   1.330 (1.298,1.363)     Food cravings   salty craving   0.331 (0.330,0.333)   0.249 (0.245,0.253)   1.330 (1.397,1.353)     Energy level   low energy   0.489 (0.488,0.491)   0.376 (0.373,0.379)   1.302 (1.290,1.314)     Social behavior   withdrawn   0.397 (0.395,0.399)   0.307 (0.302,0.312)   1.294 (1.272,1.317)     Sexual health   high sex drive   0.224 (0.223,0.226)   0.174 (0.171,0.176)   1.292 (1.271,1.313)     Digestive health   bloated   0.502 (0.500,0.504)   0.390 (0.385,0.395)   1.287 (1.270,1.305)     Food cravings   sweet craving   0.527 (0.526,0.529)   0.411 (0.406,0.416)   1.283 (1.268,1.299)     Mental state   stressed   0.353 (0.351,0.354)   0.276 (0.272,0.280)   1.277 (1.257,1.298)     Sexual health   unprotected   0.354 (0.353,0.356)   0.279 (0.276,0.282)   1.271 (1.256,1.286)     sex   Motivation level   unmotivated   0.446 (0.444,0.448)   0.352 (0.347,0.356)   1.270 (1.251,1.288)     Hair health   good hair   0.421 (0.419,0.424)   0.336 (0.331,0.342)   1.253 (1.231,1.276)     Period flow   light   0.250 (0.249,0.251)   0.203 (0.200,0.205)   1.233 (1.219,1.248)     Skin health   acne skin   0.489 (0.487,0.491)   0.400 (0.395,0.405)   1.222 (1.207,1.237)     Vaginal discharge   egg white   0.298 (0.297,0.300)   0.244 (0.249,0.249)   1.222 (1.207,1.237)     Vaginal discharge   egg white   0.298 (0.297,0.300)   0.424 (0.439,0.445)   1.198 (1.188,1.141,1.235)     Physical exercise   biking   0.129 (0.128,0.131)   0.109 (0.105,0.113)   1.188 (1.171,1.198)     Physical exercise   biking   0.129 (0.128,0.131)   0.109 (0.105,0.113)   1.186 (1.144,1.194)     Method f	Party-related ex-	hangover	$\overline{0.200}$ $(0.\overline{198}, 0.\overline{203})$	$\overline{0.149} \ \overline{(0.144,0.155)} \ \overline{}$	$\bar{1}.\bar{3}\bar{4}\bar{3}$ $(\bar{1}.\bar{2}9\bar{3},\bar{1}.\bar{3}9\bar{7})$
Party-related experiences					
Periences Party-related experiences Party-related experiences Stool health diarrhea 0.225 (0.223,0.226) 0.169 (0.165,0.173) 1.337 (1.297,1.379) periences Stool health diarrhea 0.225 (0.223,0.226) 0.169 (0.165,0.173) 1.330 (1.298,1.363) Food cravings salty craving 0.331 (0.330,0.333) 0.249 (0.245,0.253) 1.330 (1.307,1.353) Energy level low energy 0.489 (0.488,0.491) 0.376 (0.373,0.379) 1.302 (1.290,1.314) Social behavior withdrawn 0.397 (0.395,0.399) 0.307 (0.302,0.312) 1.294 (1.272,1.317) Sexual health high sex drive 0.224 (0.223,0.226) 0.174 (0.171,0.176) 1.292 (1.271,1.313) Digestive health bloated 0.502 (0.500,0.504) 0.390 (0.385,0.395) 1.287 (1.270,1.305) Food cravings sweet craving 0.527 (0.526,0.529) 0.411 (0.406,0.416) 1.283 (1.268,1.299) Mental state stressed 0.353 (0.351,0.354) 0.276 (0.272,0.280) 1.277 (1.257,1.298) Sexual health unprotected 0.354 (0.353,0.356) 0.279 (0.276,0.282) 1.271 (1.256,1.286) Sex unmotivated 0.446 (0.444,0.448) 0.352 (0.347,0.356) 1.270 (1.251,1.288) Hair health good hair 0.421 (0.419,0.424) 0.336 (0.331,0.342) 1.253 (1.231,1.276) Period flow light 0.250 (0.249,0.251) 0.203 (0.200,0.205) 1.233 (1.219,1.248) Skin health acne skin 0.489 (0.487,0.491) 0.400 (0.395,0.405) 1.222 (1.199,1.245) type Type of pain experienced Sexual health protected sex 0.219 (0.218,0.220) 0.183 (0.181,0.186) 1.196 (1.178,1.215) Physical exercise biking 0.129 (0.128,0.230) 0.183 (0.181,0.186) 1.198 (1.189,1.206) Physical exercise biking 0.129 (0.128,0.231) 0.109 (0.105,0.113) 1.188 (1.144,1.235) Hours of sleep 6-9 0.474 (0.473,0.476) 0.400 (0.396,0.403) 1.188 (1.177,1.198) Physical exercise yoga 0.262 (0.260,0.265) 0.223 (0.217,0.228) 1.179 (1.151,1.209) Physical exercise yoga 0.262 (0.260,0.265) 0.233 (0.217,0.228) 1.179 (1.151,1.209) Physical exercise running 0.563 (0.560,0.566) 0.490 (0.484,0.496) 1.149 (1.133,1.164)	Physical maladies	allergy	$0.2\overline{36} \ (0.2\overline{33}, 0.2\overline{39})$	0.176 (0.169, 0.183)	$1.34\overline{3} \ (1.289, 1.402)$
Party-related ex cigarettes	Party-related ex-	big night party	0.215 (0.212, 0.217)	$0.160 \ (0.154, 0.166)$	1.342 (1.293, 1.393)
Periences   Stool health	periences				
Stool health         diarrhea         0.225 (0.223,0.226)         0.169 (0.165,0.173)         1.330 (1.298,1.363)           Food cravings         salty craving         0.331 (0.330,0.333)         0.249 (0.245,0.253)         1.330 (1.397,1.353)           Energy level         low energy         0.489 (0.488,0.491)         0.376 (0.373,0.379)         1.302 (1.290,1.314)           Social behavior         withdrawn         0.397 (0.395,0.399)         0.307 (0.302,0.312)         1.294 (1.272,1.317)           Sexual health         high sex drive         0.224 (0.223,0.226)         0.174 (0.171,0.176)         1.292 (1.271,1.313)           Digestive health         bloated         0.502 (0.500,0.504)         0.390 (0.385,0.395)         1.287 (1.270,1.305)           Food cravings         sweet craving         0.527 (0.526,0.529)         0.411 (0.406,0.416)         1.283 (1.268,1.299)           Mental state         stressed         0.354 (0.353,0.356)         0.276 (0.272,0.280)         1.277 (1.257,1.298)           Sexual health         unprotected         0.354 (0.353,0.356)         0.279 (0.276,0.282)         1.271 (1.256,1.286)           Hair health         good hair         0.421 (0.419,0.424)         0.336 (0.331,0.342)         1.253 (1.231,1.276)           Period flow         light         0.250 (0.249,0.251)         0.203 (0.200,0.205)         1.233	Party-related ex-	cigarettes	$0.290 \ (0.287, 0.293)$	0.217 (0.211,0.223)	$1.\overline{337}$ $(1.\overline{297}, 1.\overline{379})$
Food cravings	periences				
Energy level   low energy   0.489 (0.488,0.491)   0.376 (0.373,0.379)   1.302 (1.290,1.314)		diarrhea	$0.2\overline{25} \ (0.2\overline{23}, 0.2\overline{26})$	$0.169 \ (0.165, 0.173)$	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Food cravings	salty craving	0.331 (0.330,0.333)	$0.249 \ (0.245, 0.253)$	$1.\overline{330} (1.\overline{307}, 1.\overline{353})$
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Energy level	low energy	0.489 (0.488,0.491)	$0.376 \ (0.373, 0.379)$	1.302 (1.290, 1.314)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Social behavior	withdrawn	0.397 (0.395, 0.399)	0.307 (0.302,0.312)	1.294 (1.272, 1.317)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Sexual health	high sex drive	$0.2\overline{24} \ (0.2\overline{23}, 0.2\overline{26})$	$0.174 \ (0.171, 0.176)$	1.292 (1.271, 1.313)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Digestive health	bloated	0.502 (0.500,0.504)	$0.390 \ (0.385, 0.395)$	1.287 (1.270, 1.305)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Food cravings	sweet craving	$0.5\overline{27} \ (0.5\overline{26}, 0.5\overline{29})$	0.411 (0.406,0.416)	1.283 (1.268, 1.299)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Mental state	stressed	$0.3\overline{5}3 \ (0.3\overline{5}1, 0.3\overline{5}4)$	$0.\overline{276} \ (0.\overline{272}, 0.\overline{280})$	$1.\overline{277} (1.\overline{257}, 1.\overline{298})$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Sexual health	unprotected	$0.3\overline{5}4 \ (0.3\overline{5}3, 0.3\overline{5}6)$	$0.279 \ (0.276, 0.282)$	$1.\overline{271} (1.\overline{256}, 1.\overline{286})$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		sex			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Hair health	good hair			, , ,
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		-light			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Skin health	acne skin			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Vaginal discharge	egg white	$0.298 \ (0.297, 0.300)$	$0.244 \ (0.240, 0.249)$	$1.\overline{222} (1.\overline{199}, 1.\overline{245})$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	type				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Type of pain ex-	cramps	$0.5\overline{29} \ (0.5\overline{28}, 0.5\overline{30})$	0.442 (0.439,0.445)	1.198 (1.189,1.206)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	perienced				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		protected sex			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Physical exercise				1.188 (1.144, 1.235)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-	6-9			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-				$1.179 \ (1.151, 1.209)$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		′	`		
Physical exercise running 0.563 (0.560,0.566) 0.490 (0.484,0.496) 1.149 (1.133,1.164)	_	pad	$0.583 \ (0.581, 0.585)^{-2}$	$0.505 \ (0.499, 0.511)^{-}$	$1.155 \ (1.141, 1.170)$
Period flow medium $0.388 (0.387, 0.389) 0.345 (0.342, 0.347) 1.126 (1.117, 1.136)$		_ running			
	Period flow	$_{-}$ medium $_{-}$ $_{-}$ $_{-}$ $_{-}$ $_{-}$ $_{-}$	0.388 (0.387, 0.389)	0.345 (0.342, 0.347)	1.126 (1.117, 1.136)

Category	Symptom	High variability group	Low variability group	Odds ratio
Party-related experiences	drinks party	0.635 (0.632,0.638)	0.594 (0.587,0.602)	1.069 (1.055,1.084)
Type of medication taken	pain	0.597 (0.593,0.601)	0.561 (0.552,0.571)	1.063 (1.044,1.082)
Method for period collection	tampon	0.210 (0.209,0.212)	0.218 (0.213,0.223)	0.967 (0.943,0.991)
Period flow	heavy	0.078 (0.077,0.079)	0.096 (0.094, 0.097)	$\overline{0.817}$ $\overline{(0.802,0.833)}$
Method for period collection	menstrual cup	0.075 (0.074,0.076)	0.100 (0.096,0.103)	0.755 (0.726,0.785)

The following figures showcase the empirical cumulative distributions of the proportion of cycles with symptom out of cycles with category between different user groups — the consistently highly variable group is indicated in orange, and the consistently not highly variable group is indicated in teal. Figures are organized based on their Kolmogorov-Smirnov test value, in descending order. The mean (dotted line) and %95 confidence interval (shaded region) of the bootstrapped CDF with 100,000 samples is also shown.

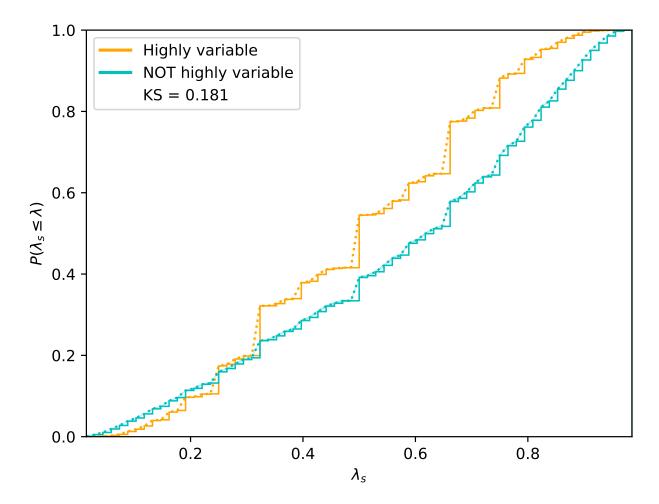


Figure 12: Heavy period flow.

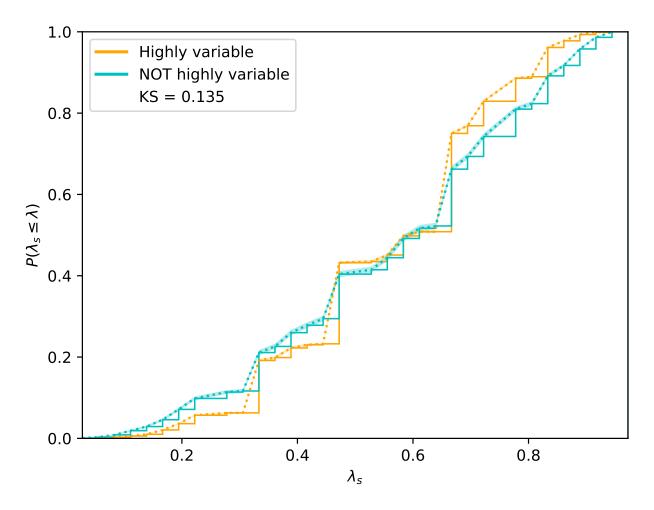


Figure 13: Normal stool health.

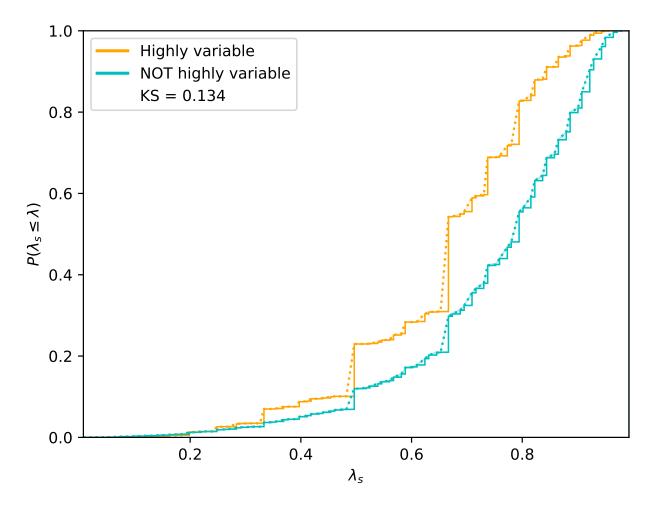


Figure 14: Medium period flow.

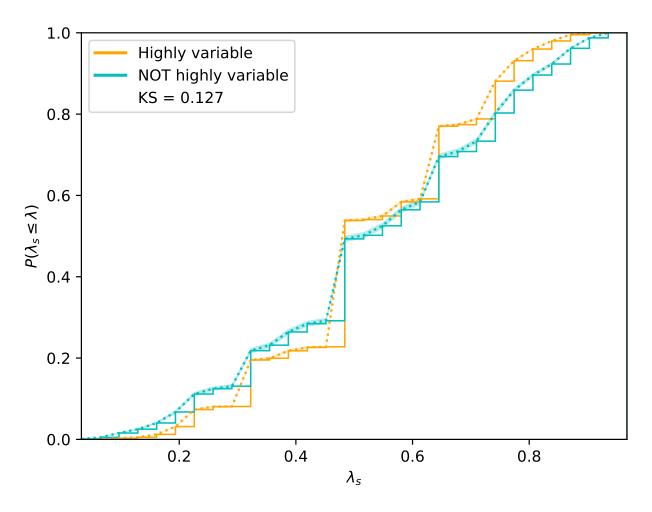


Figure 15: Sociable social behavior.

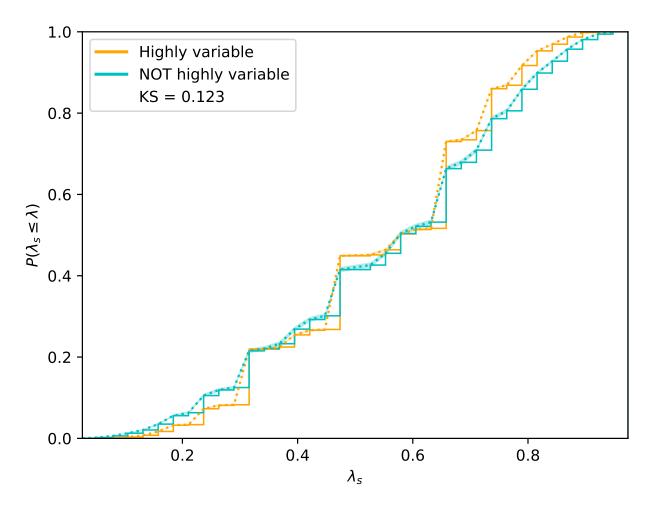


Figure 16: Distracted mental state.

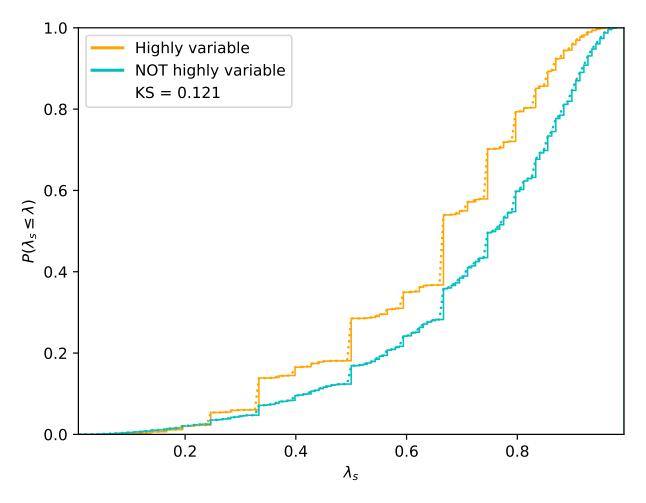


Figure 17: Light period flow.

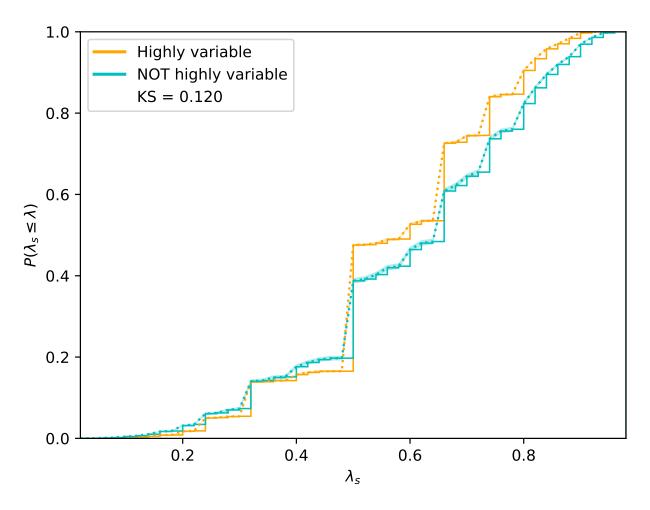


Figure 18: Sweet food craving experienced.

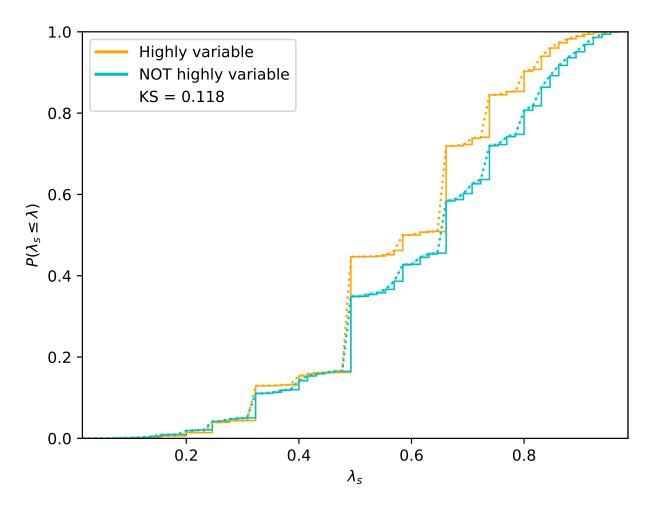


Figure 19: Low energy level.

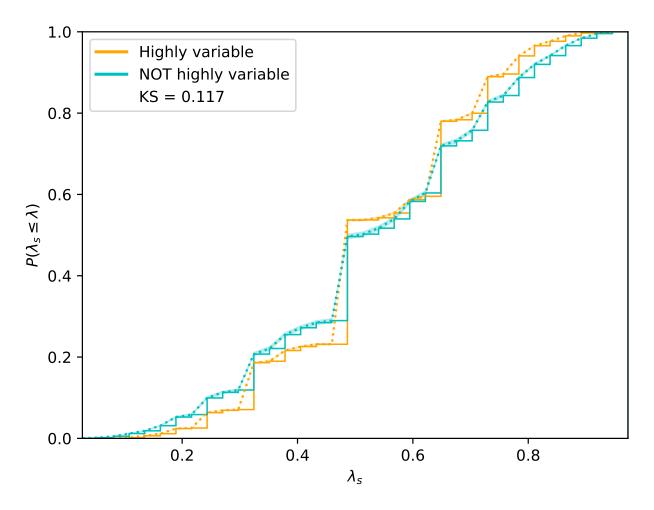


Figure 20: Unproductive motivation level.

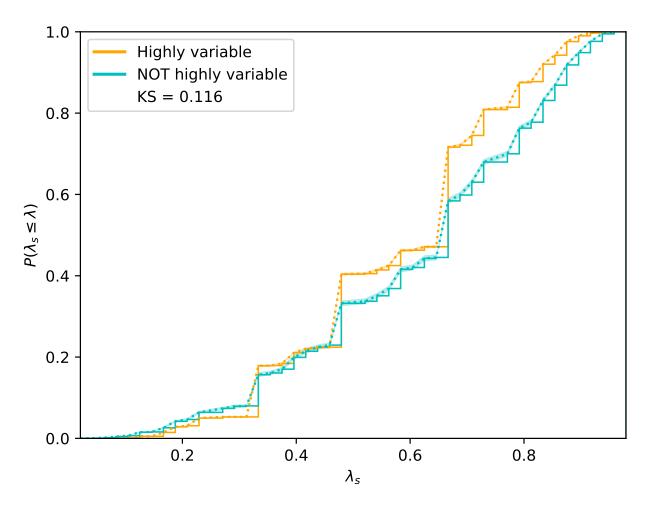


Figure 21: Bloated digestive health.

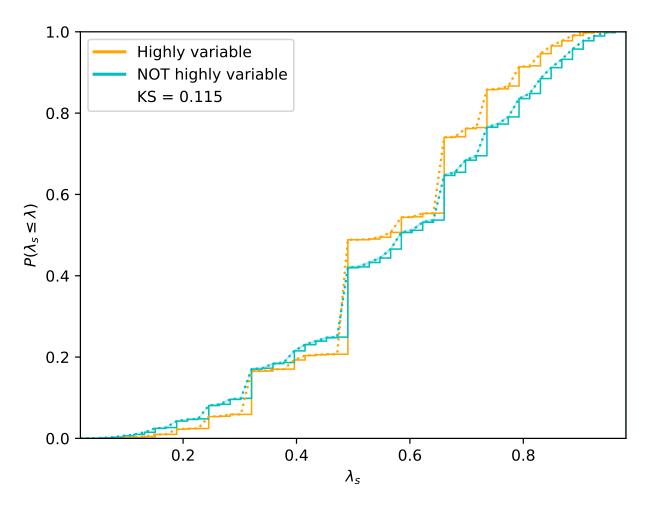


Figure 22: Sensitive emotional state.

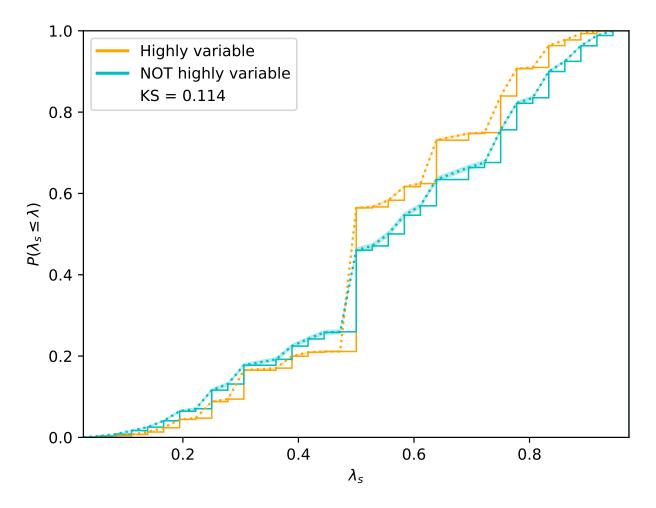


Figure 23: Gassy digestive health.

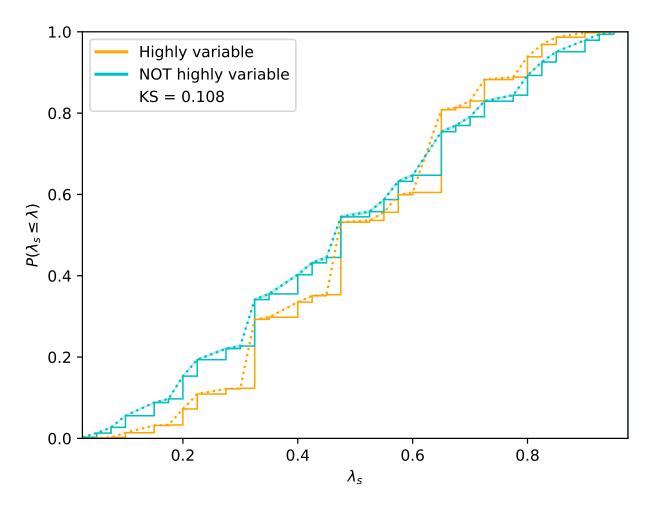


Figure 24: Happy emotional state.

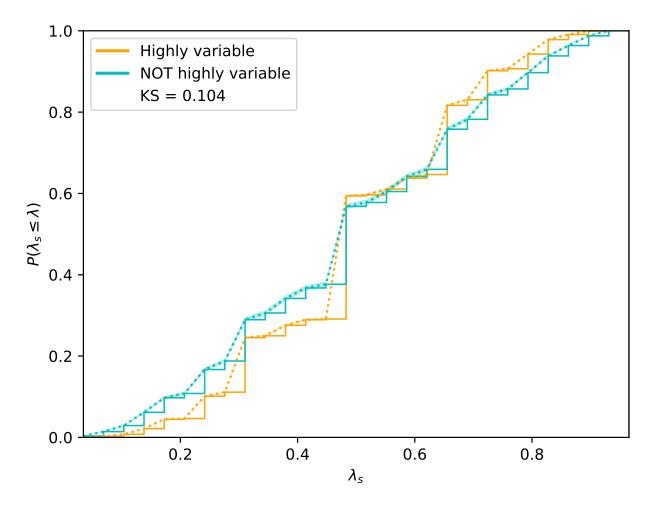


Figure 25: Calm mental state.

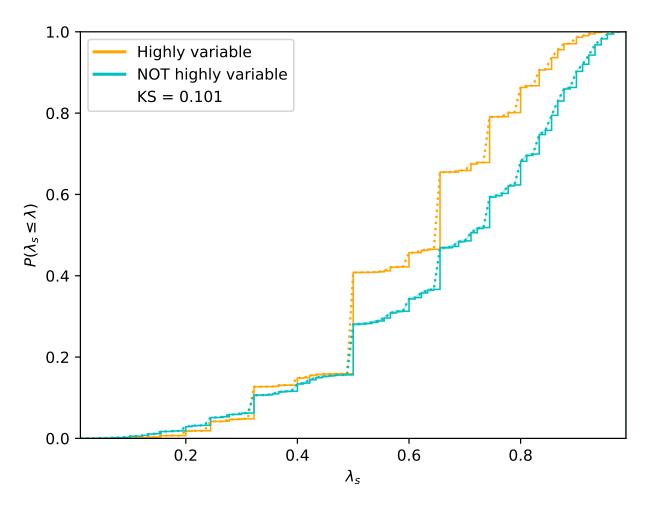


Figure 26: Cramps pain experienced.

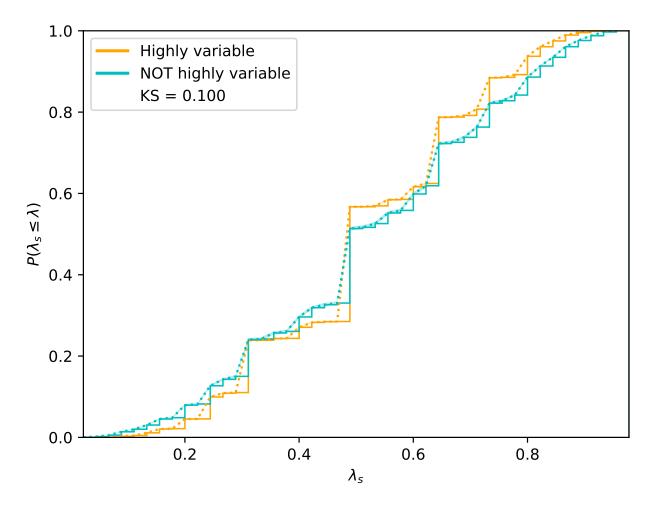


Figure 27: 3-6 hours of sleep.

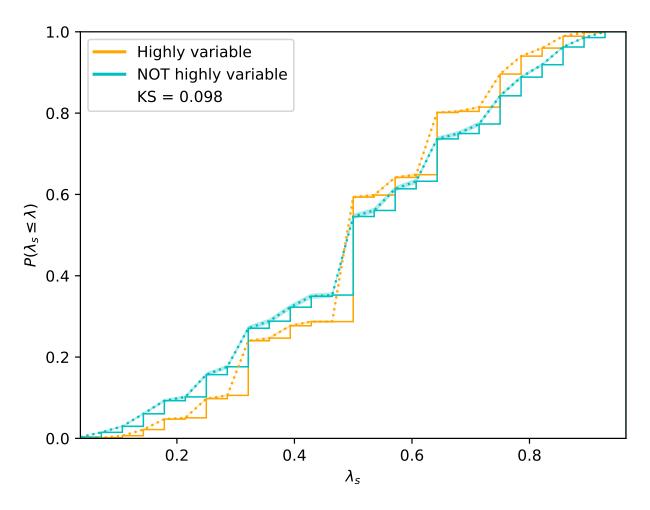


Figure 28: Carbs food craving experienced.

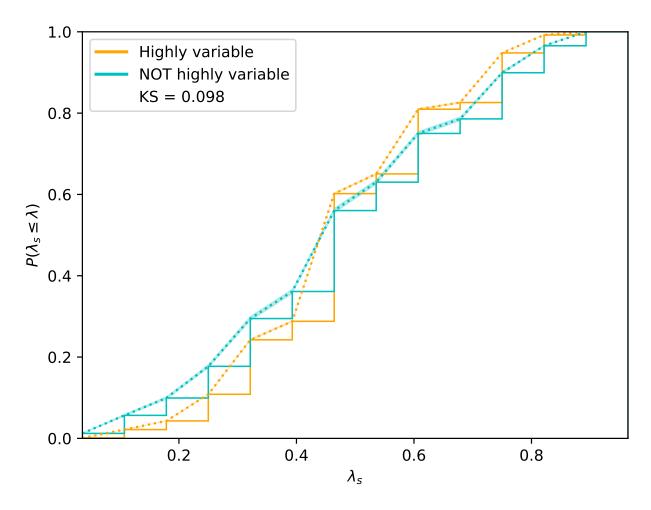


Figure 29: Motivated motivation level.

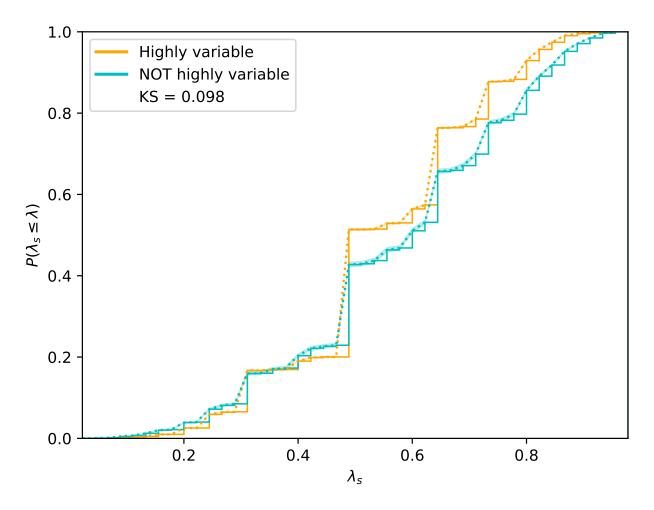


Figure 30: Unmotivated motivation level.

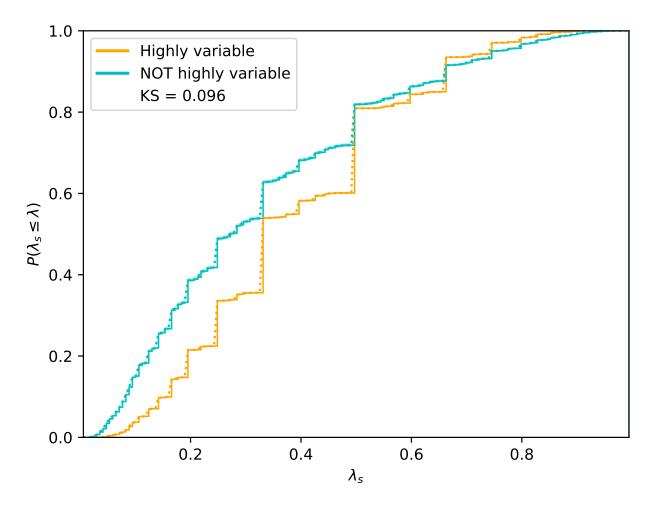


Figure 31: Ovulation pain experienced.

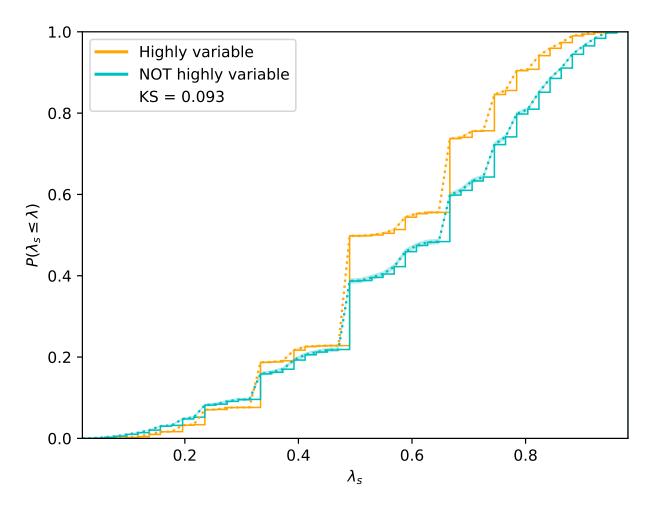


Figure 32: Acne skin health reported.

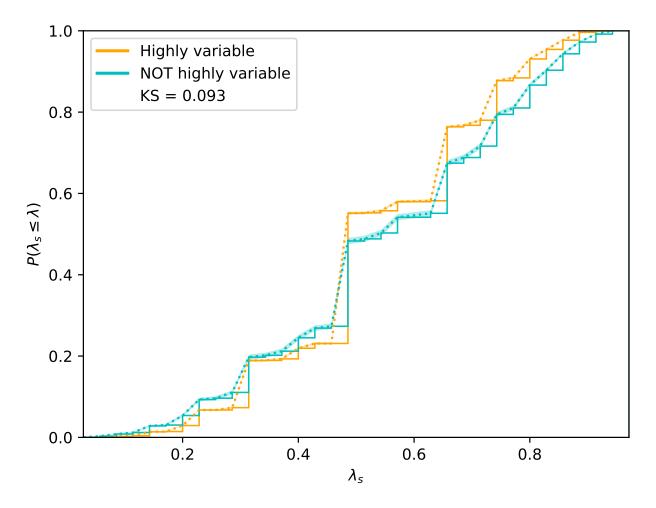


Figure 33: Withdrawn social behavior.

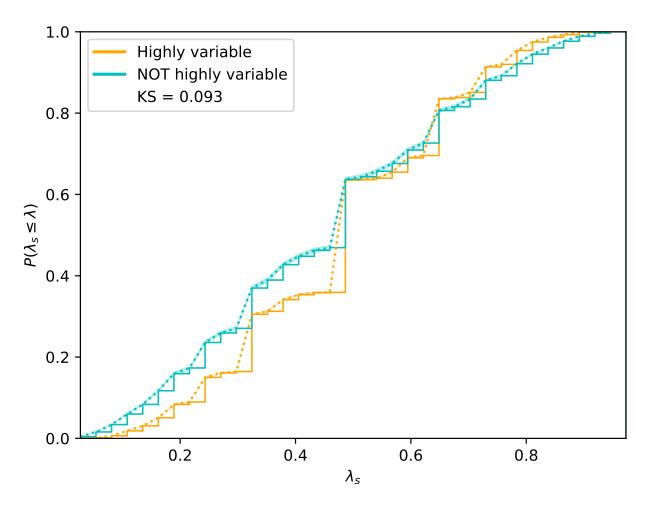


Figure 34: Oily skin health reported.

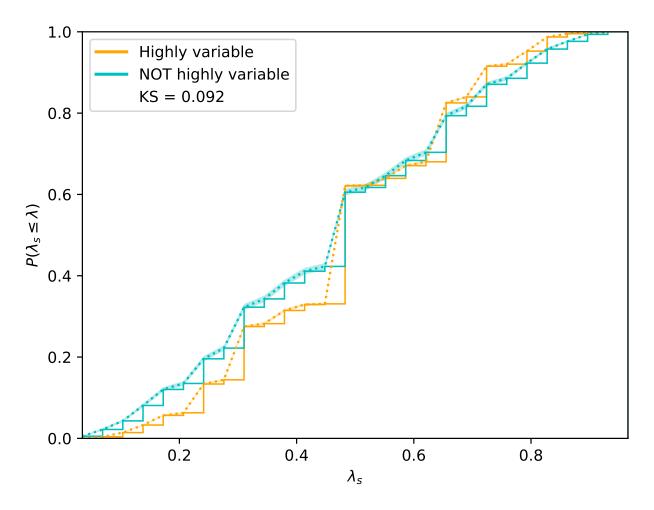


Figure 35: Bad hair reported.

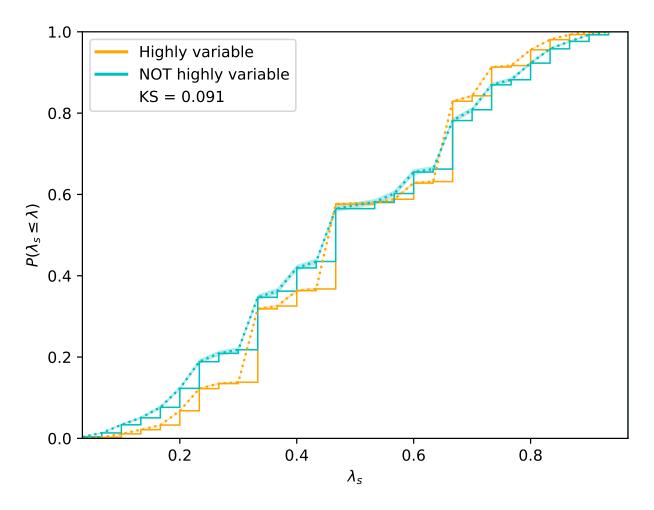


Figure 36: Creamy vaginal discharge type.

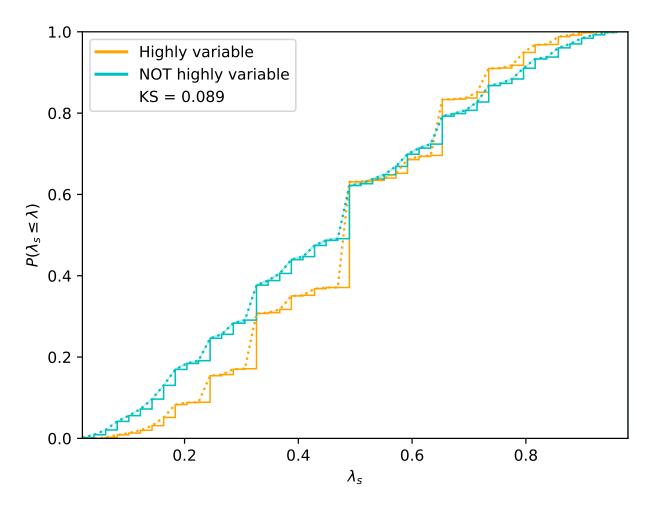


Figure 37: Headache pain experienced.

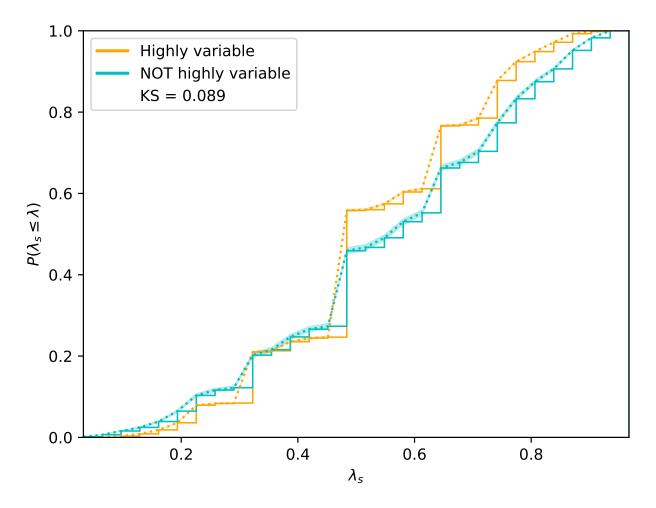


Figure 38: Good hair reported.

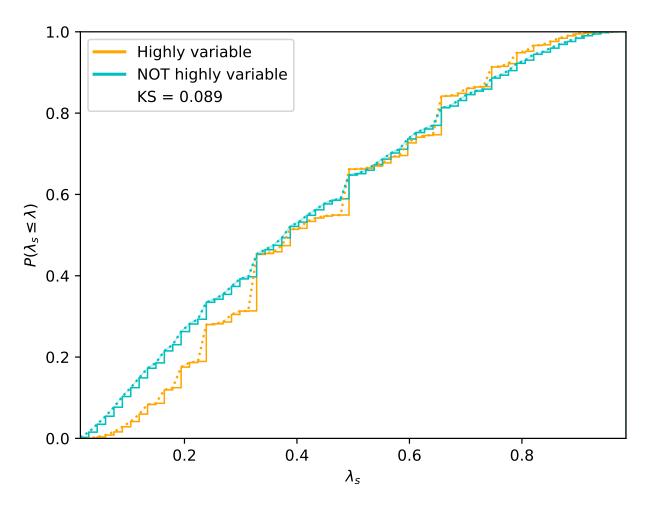


Figure 39: Spotting period flow.

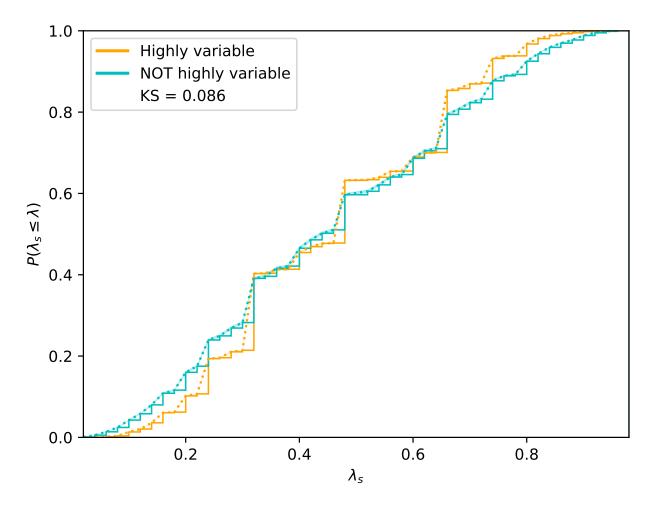


Figure 40: PMS emotional state.

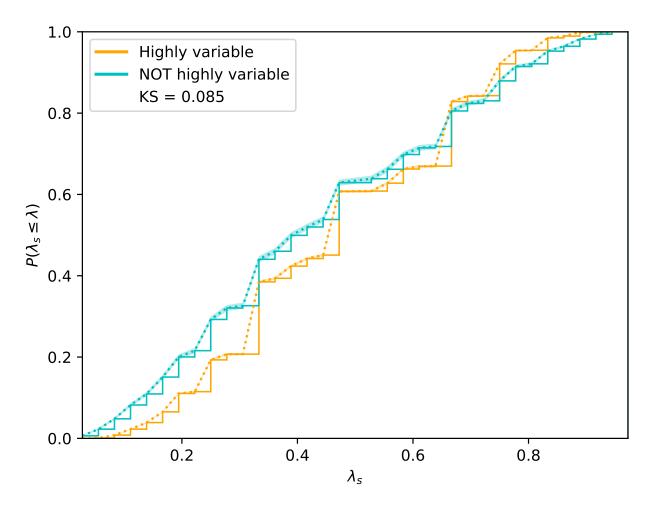


Figure 41: Great digestive health.

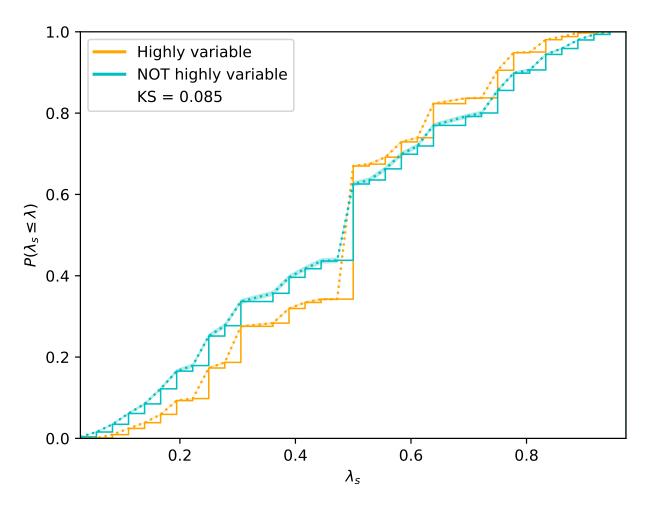


Figure 42: Good skin health reported.

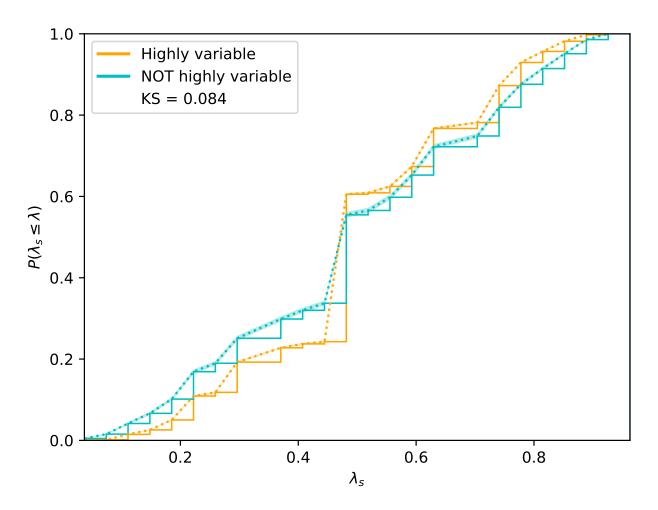


Figure 43: Salty food craving experienced.

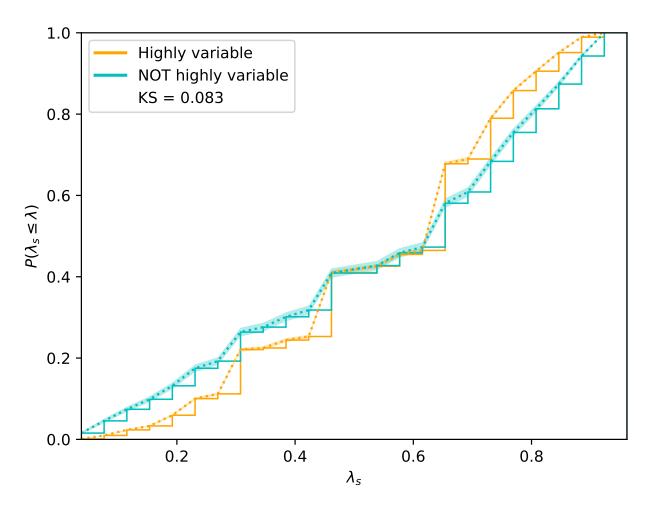


Figure 44: Pad method used for period collection.

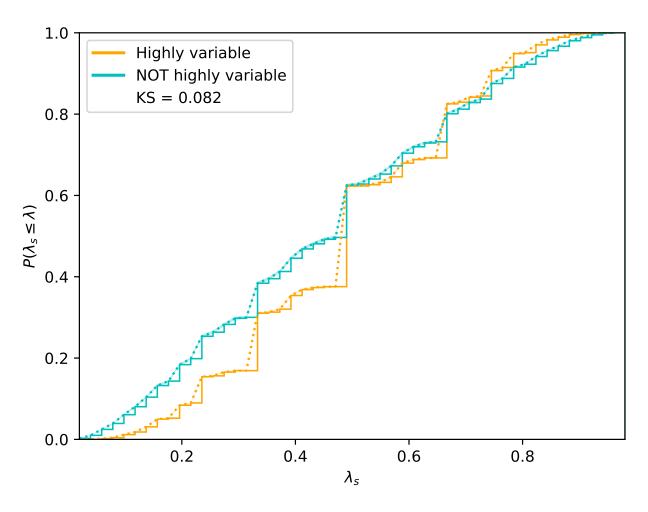


Figure 45: Tender breasts pain experienced.

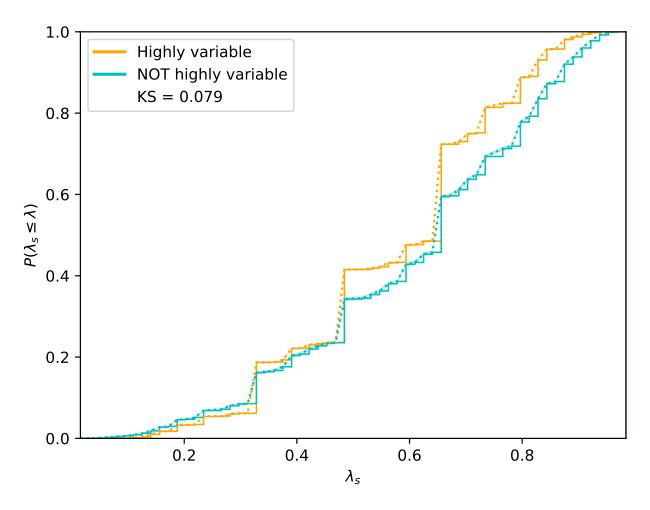


Figure 46: 6-9 hours of sleep.

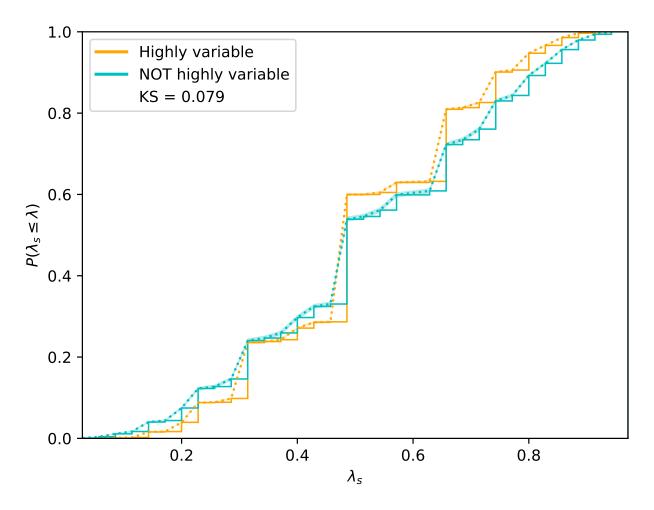


Figure 47: Stressed mental state.

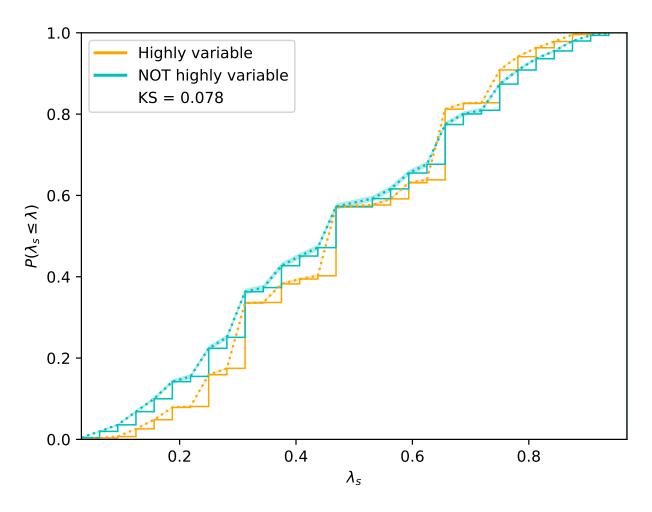


Figure 48: Constipated stool health.

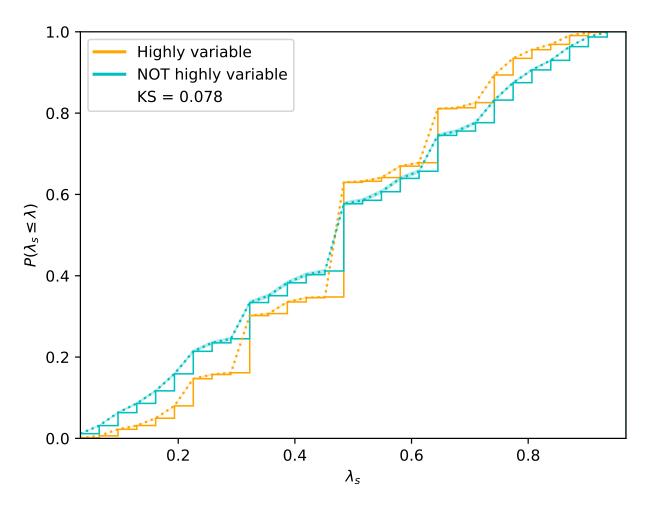


Figure 49: Unprotected sex reported.

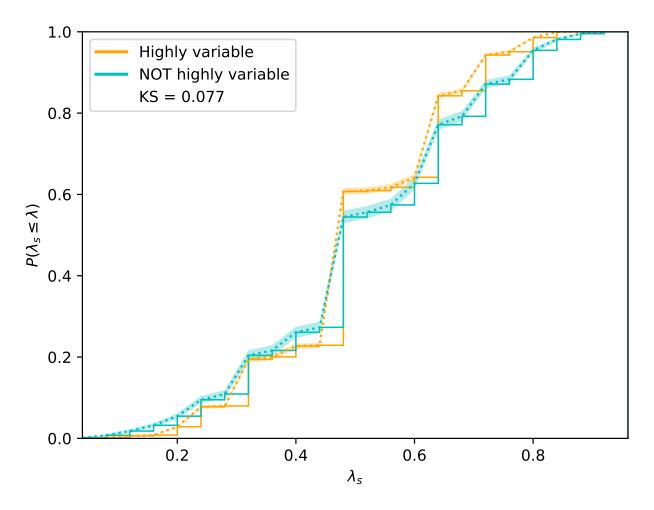


Figure 50: Physical maladies: cold/flu.

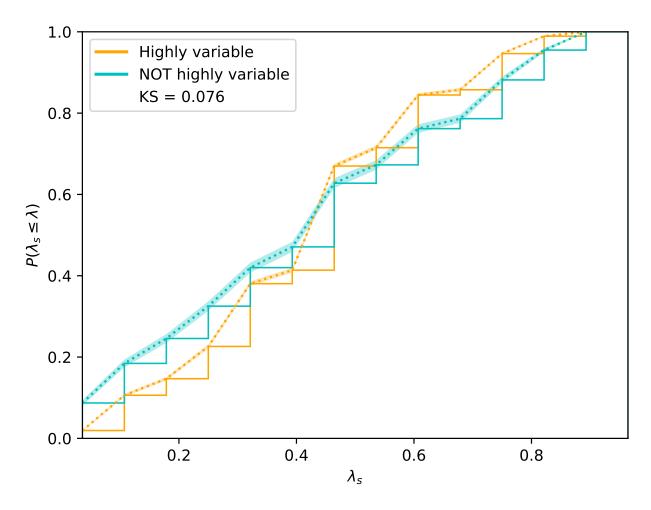


Figure 51: Tampon method used for period collection.

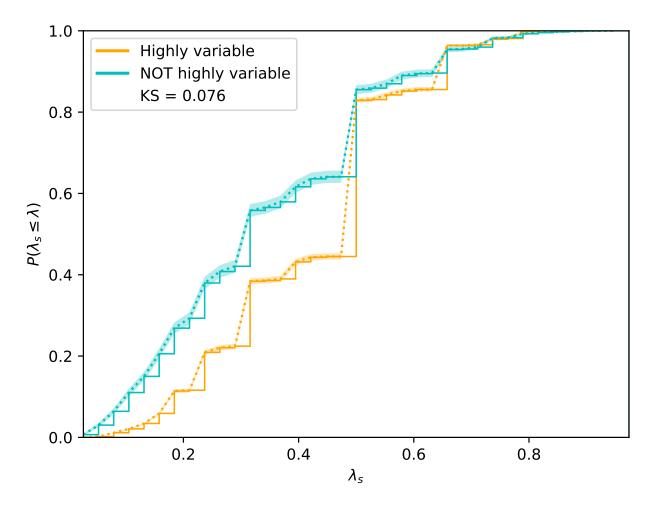


Figure 52: Cold/flu medication taken.

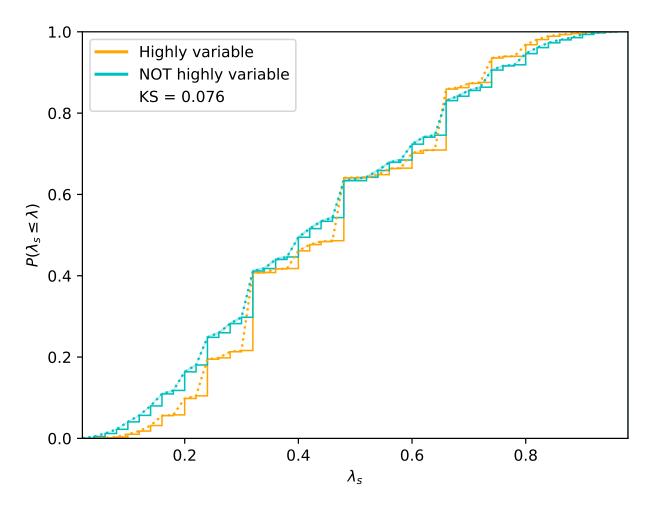


Figure 53: Sad emotional state.

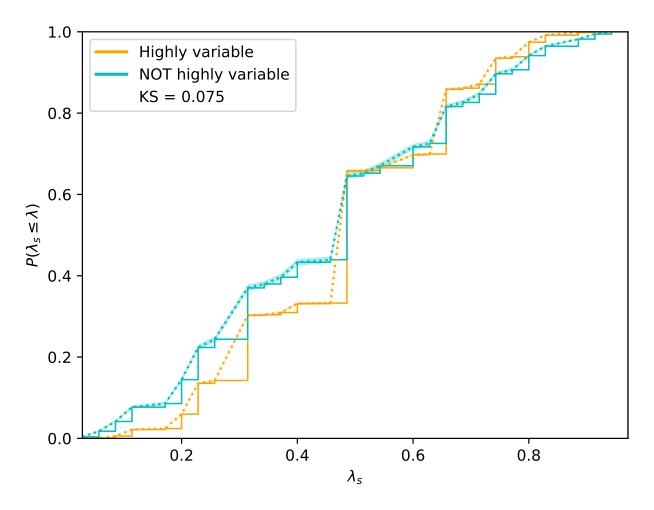


Figure 54: Supportive social behavior.

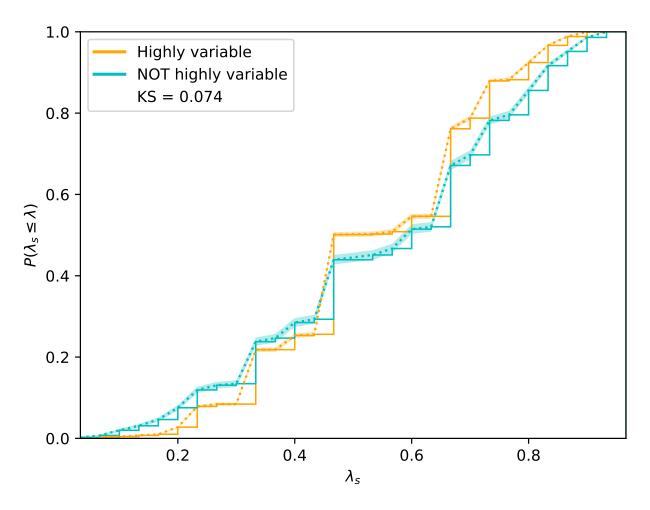


Figure 55: Physical exercise: running.

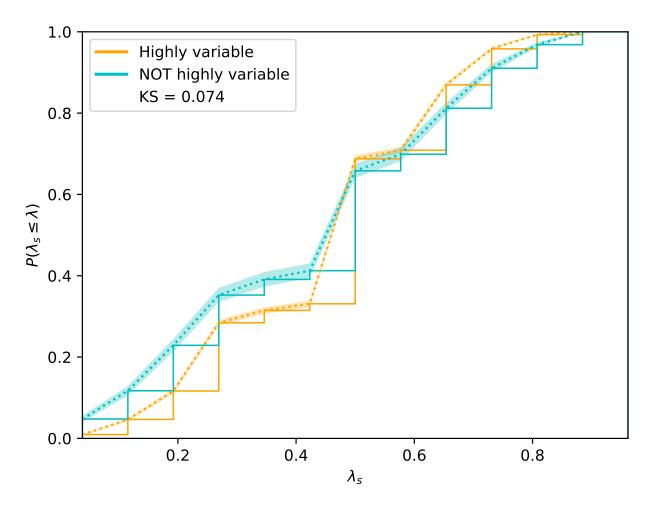


Figure 56: Party-related experience: cigarettes.

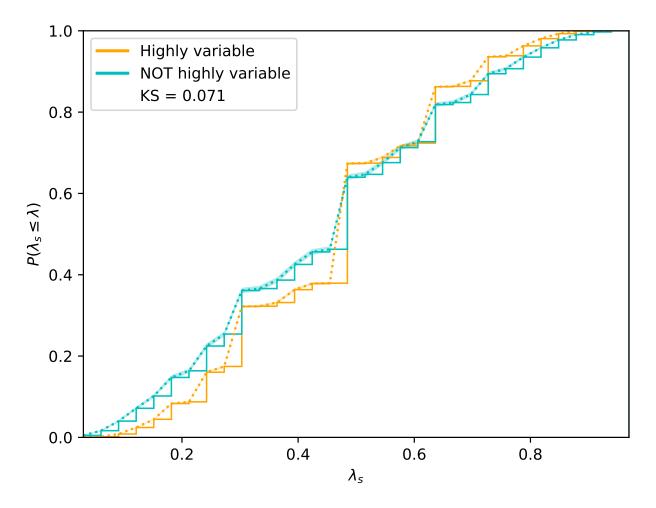


Figure 57: Diarrhea stool health.

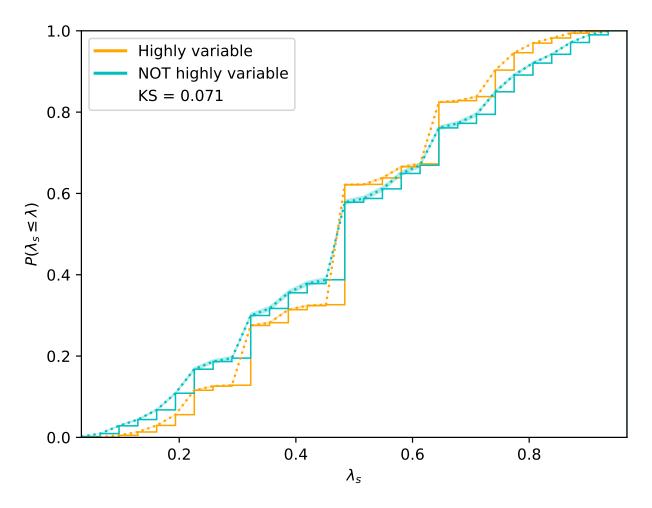


Figure 58: Productive motivation level.

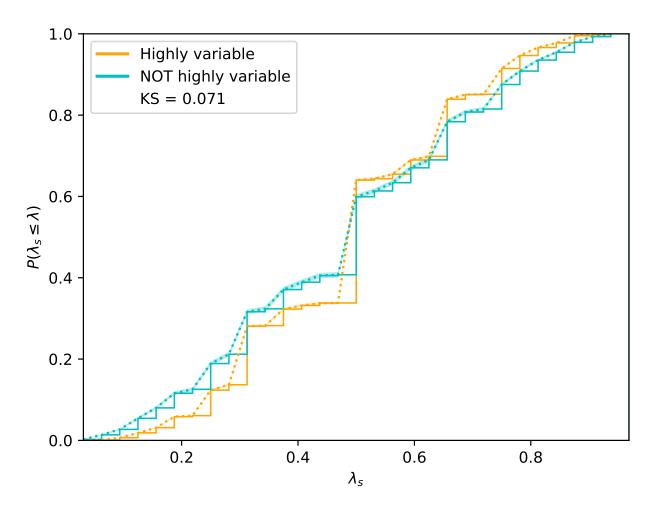


Figure 59: Chocolate food craving experienced.

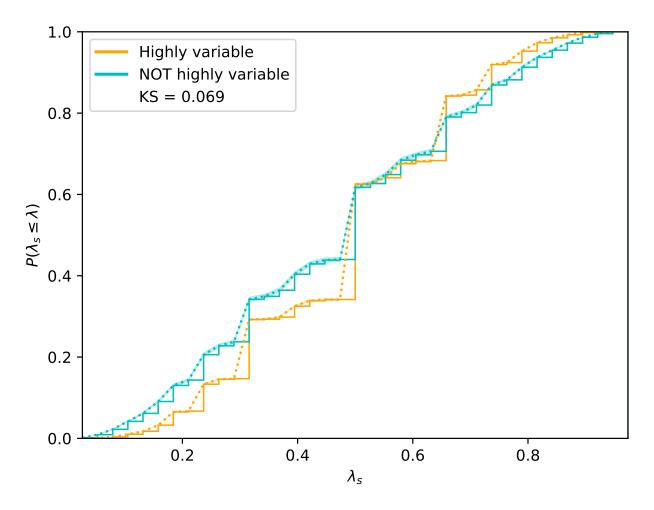


Figure 60: Focused mental state.

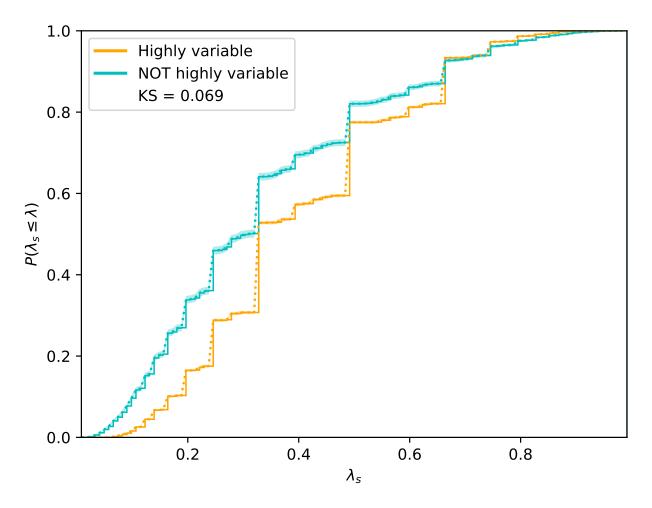


Figure 61: Atypical vaginal discharge type.

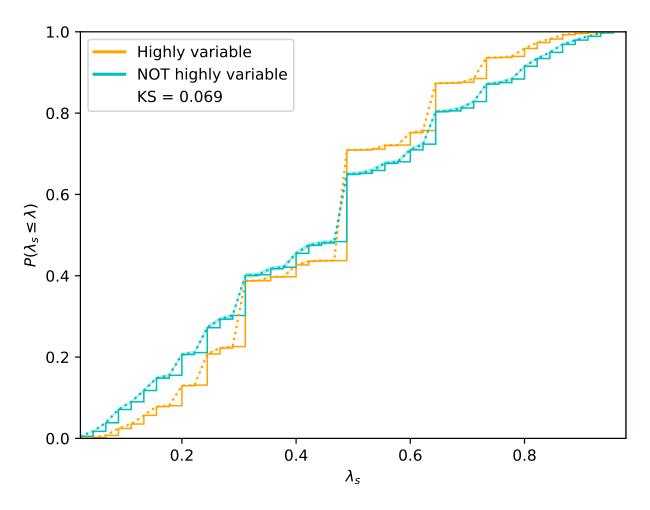


Figure 62: Protected sex reported.

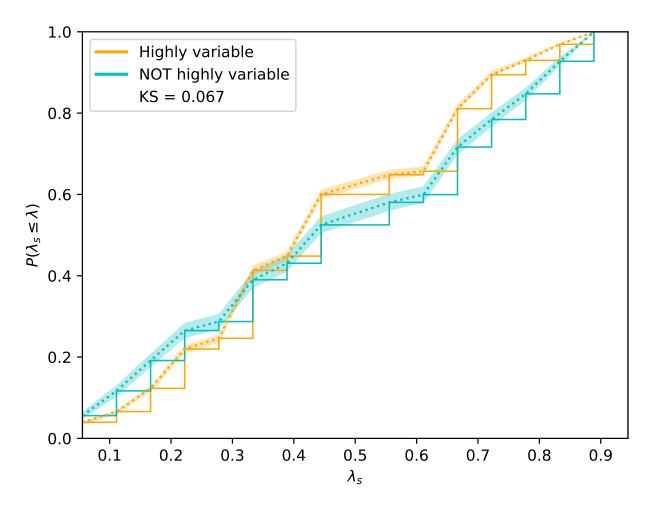


Figure 63: Menstrual cup method used for period collection.

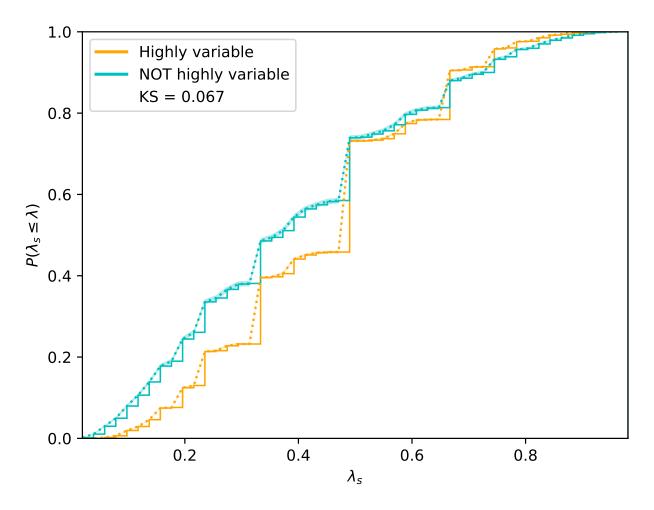


Figure 64: Dry skin health reported.

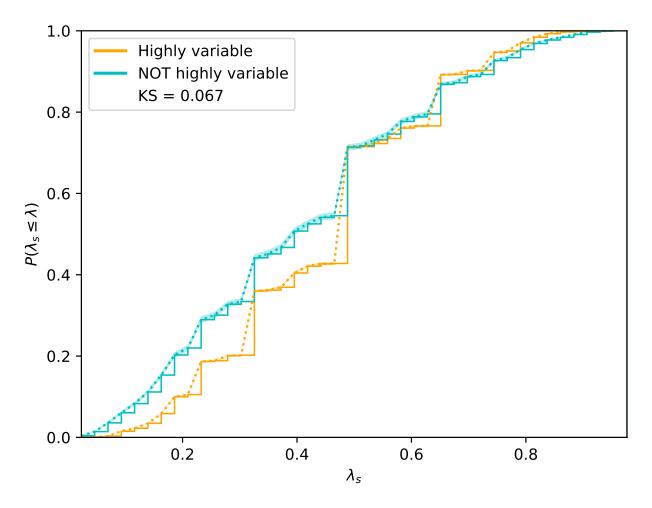


Figure 65: Dry hair reported.

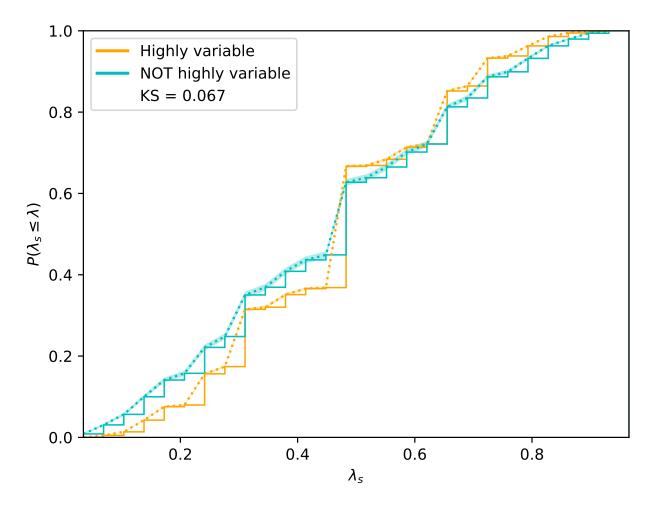


Figure 66: Oily hair reported.

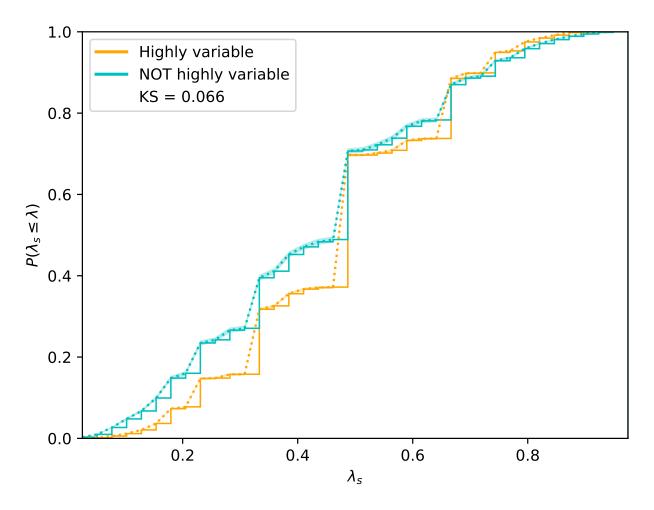


Figure 67: Sticky vaginal discharge type.

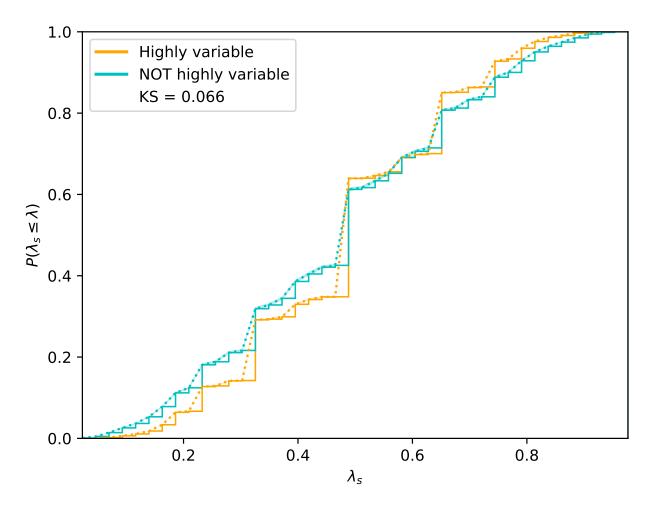


Figure 68: Exhausted energy level.

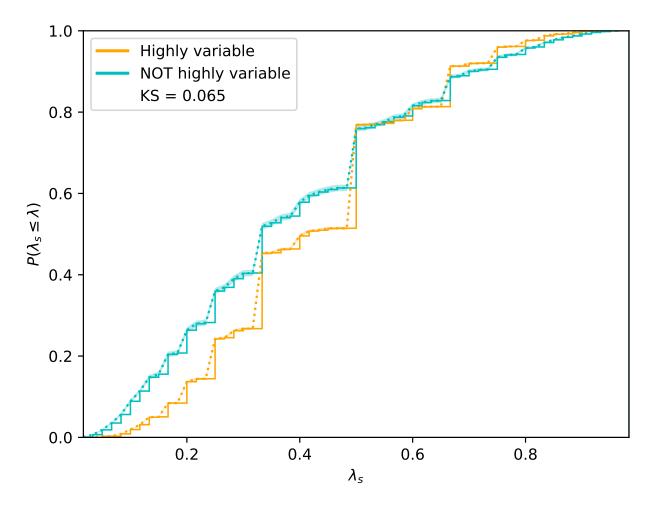


Figure 69: Great stool health.

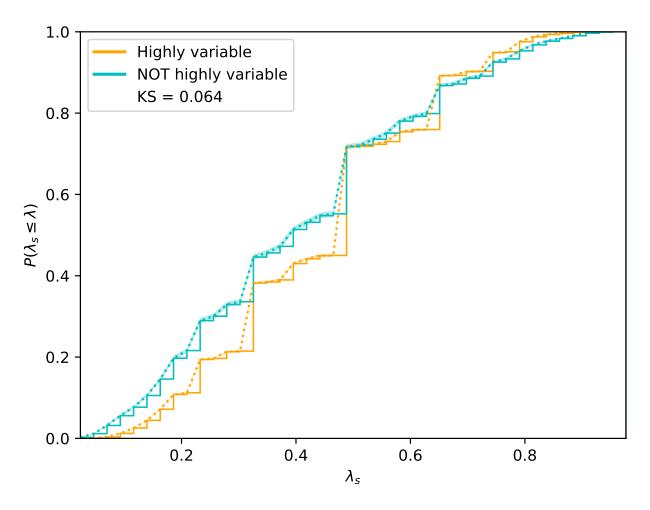


Figure 70: Nauseated digestive health.

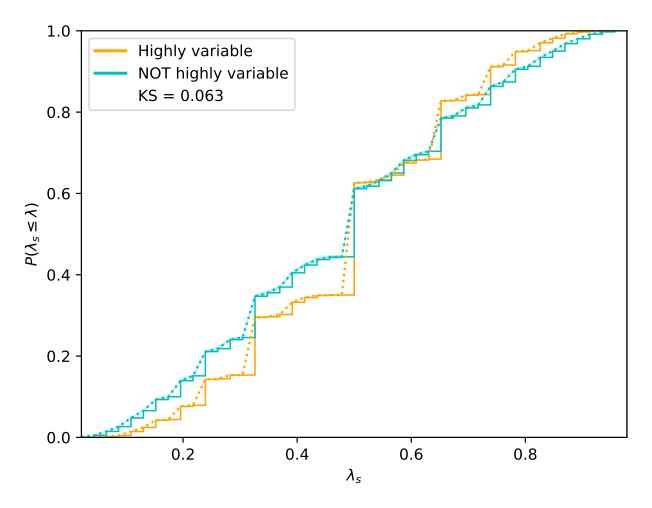


Figure 71: High energy level.

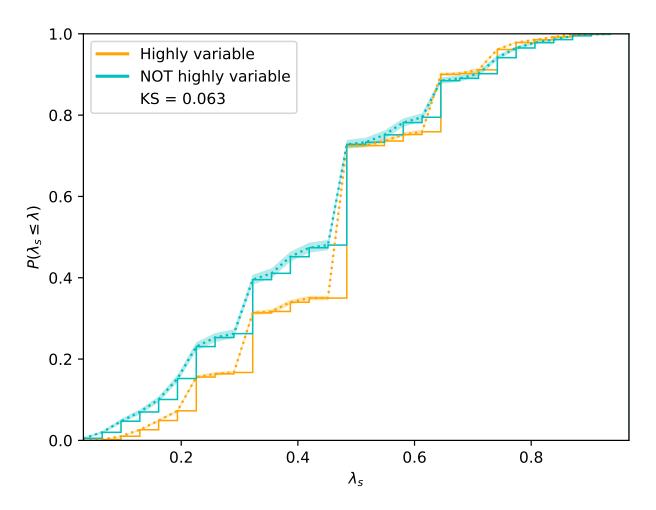


Figure 72: Party-related experience: big night party.

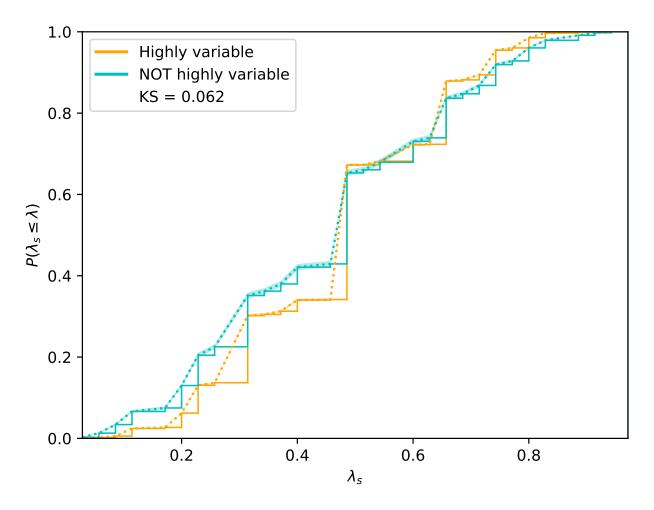


Figure 73: Conflict social behavior.

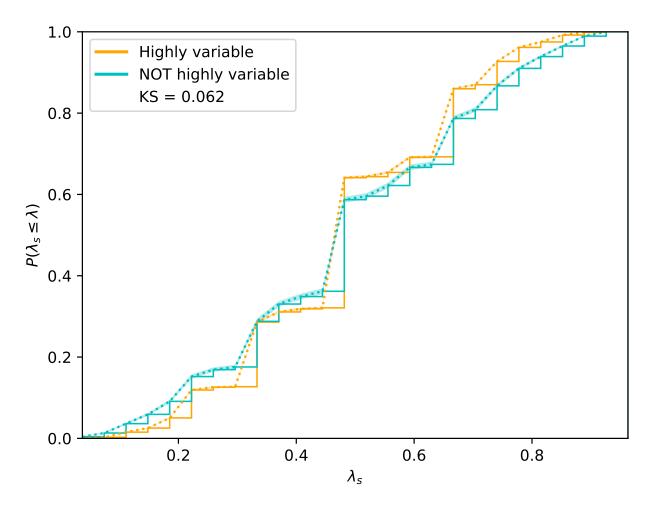


Figure 74: Egg white vaginal discharge type.

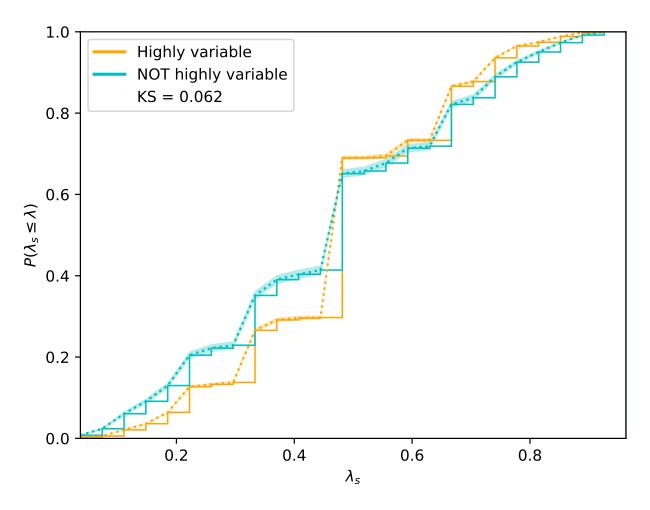


Figure 75: Physical exercise: yoga.

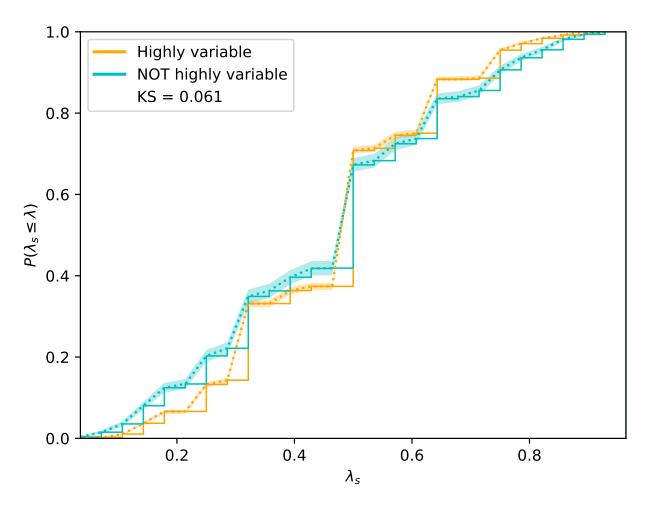


Figure 76: Physical maladies: allergy.

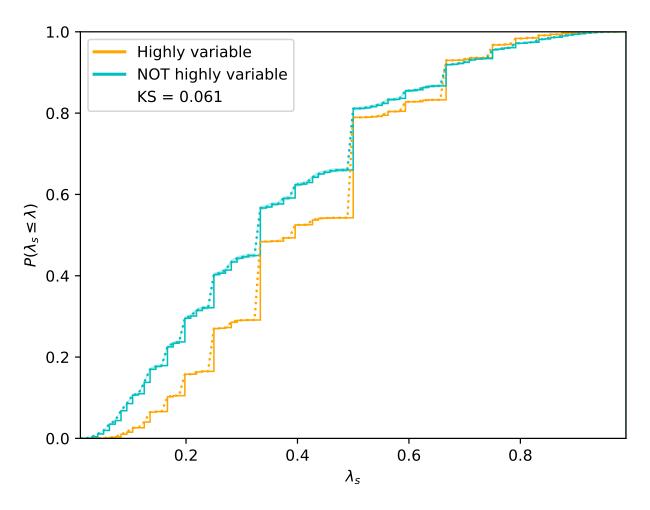


Figure 77: >9 hours of sleep.

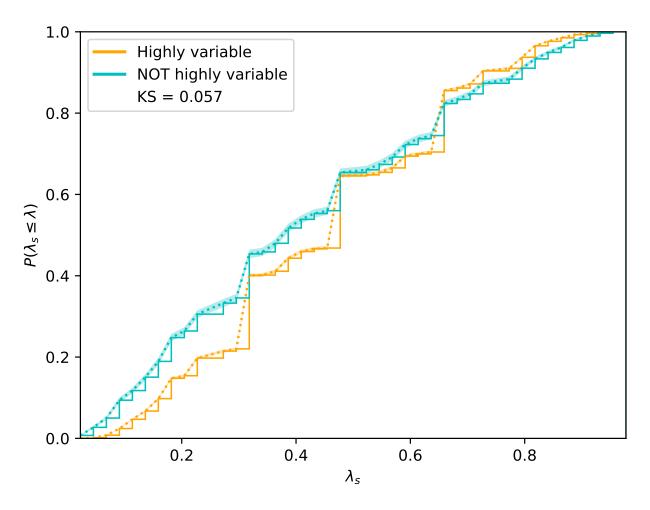


Figure 78: Panty liner method used for period collection.

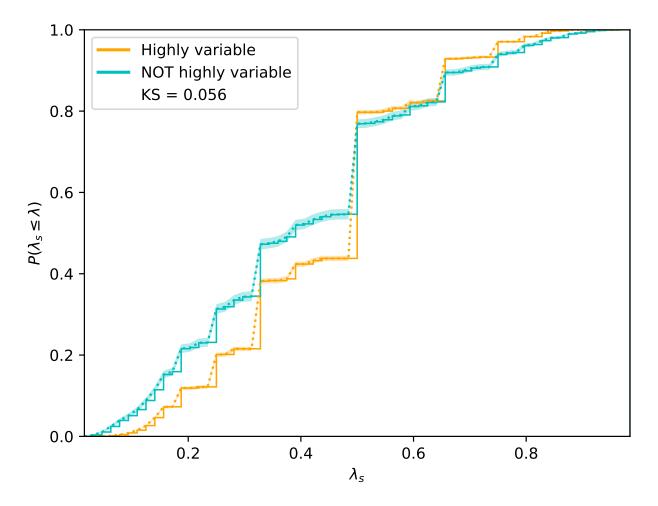


Figure 79: Physical exercise: biking.

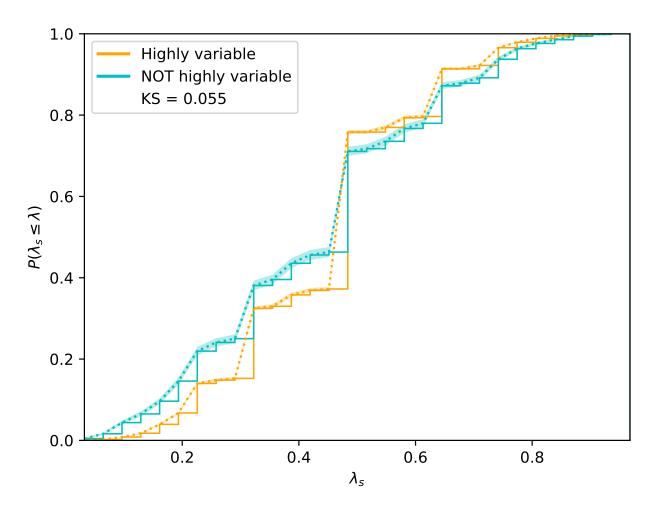


Figure 80: Party-related experience: hangover.

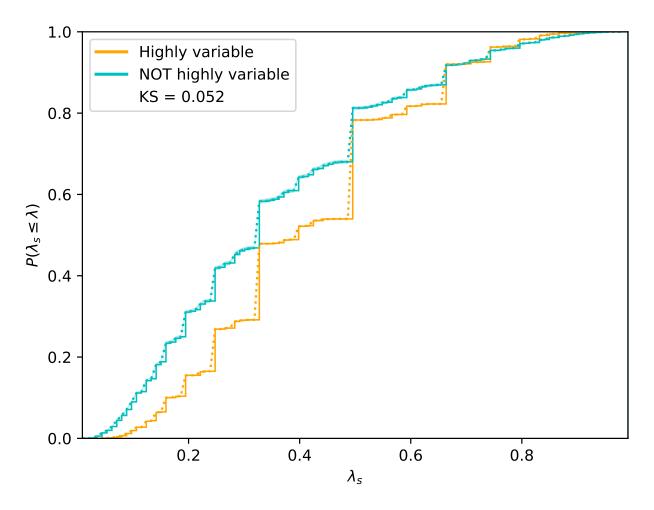


Figure 81: Energized energy level.

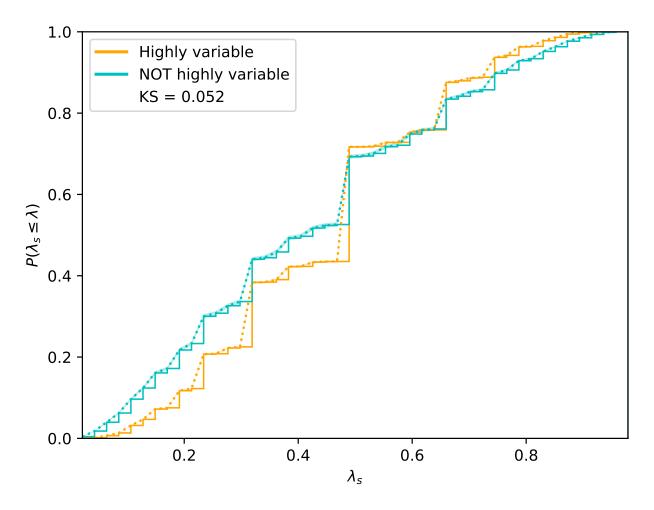


Figure 82: High sex drive reported.

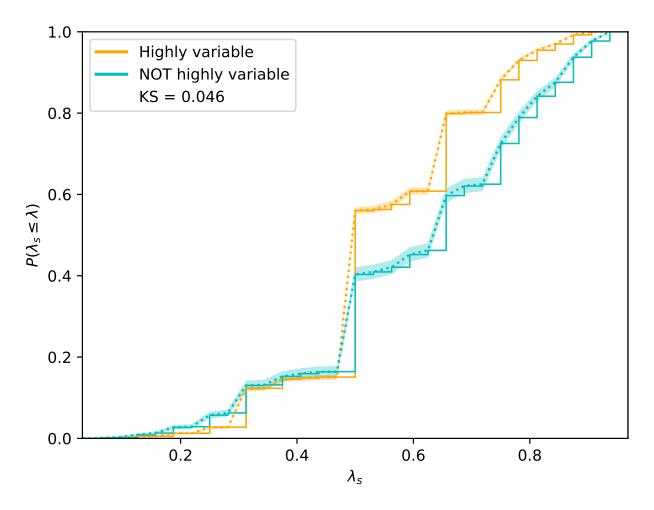


Figure 83: Pain medication taken.

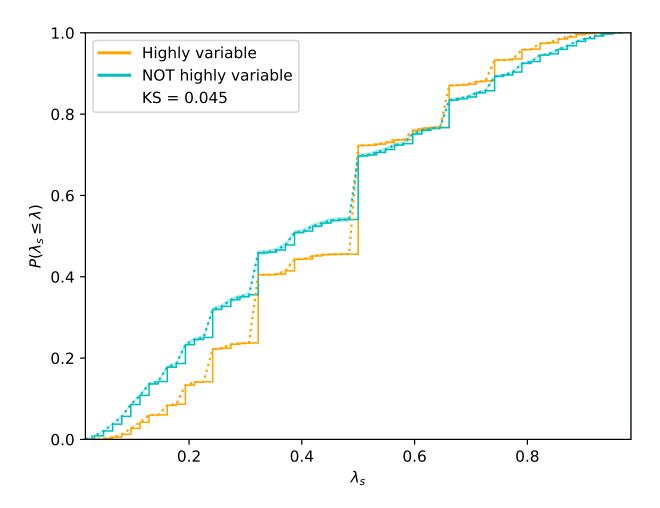


Figure 84: Withdrawal sex reported.

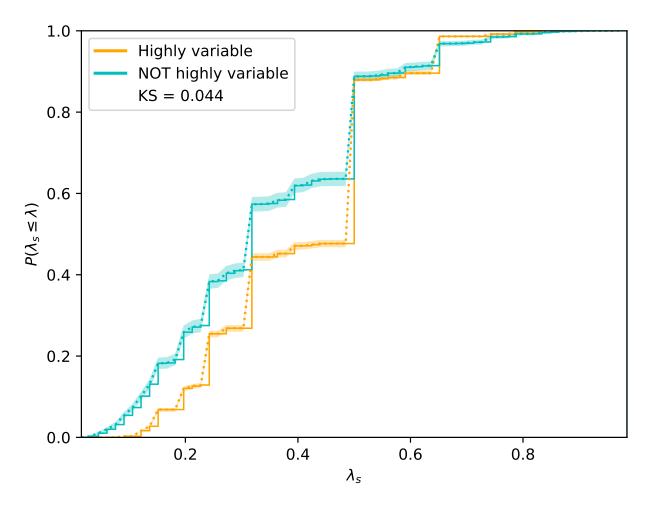


Figure 85: Physical maladies: fever.

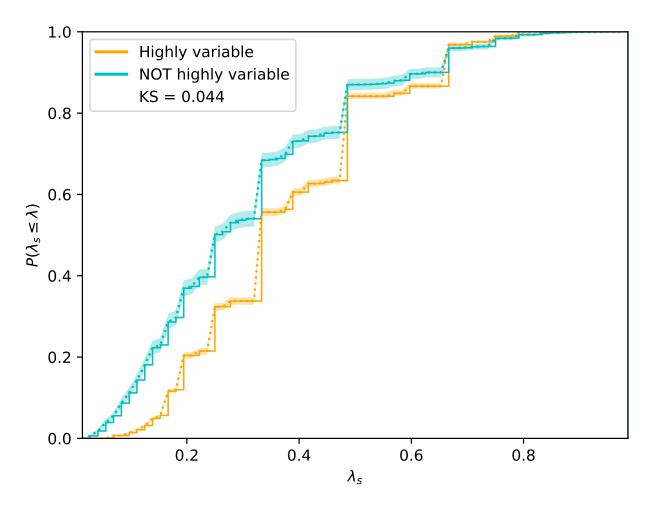


Figure 86: Antibiotic medication taken.

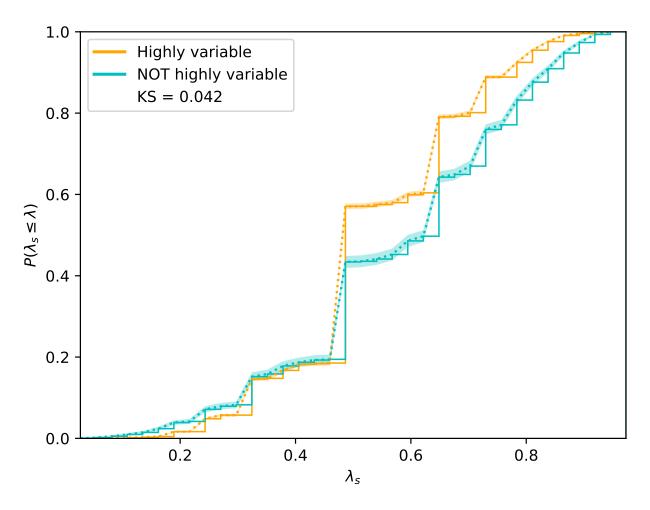


Figure 87: Party-related experience: drinks party.

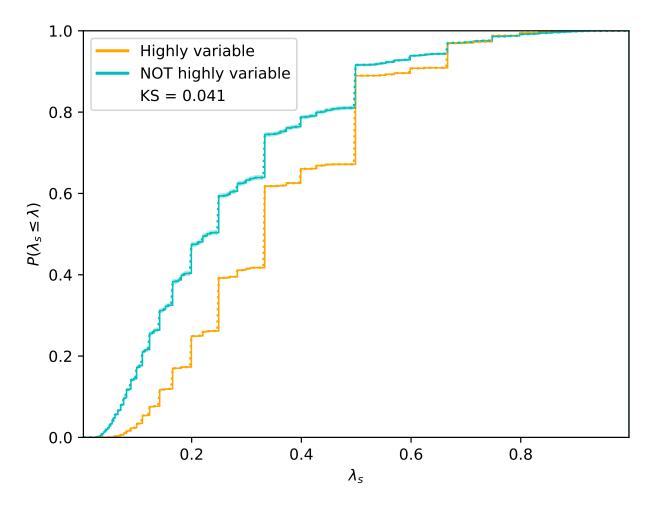


Figure 88: 0-3 hours of sleep.

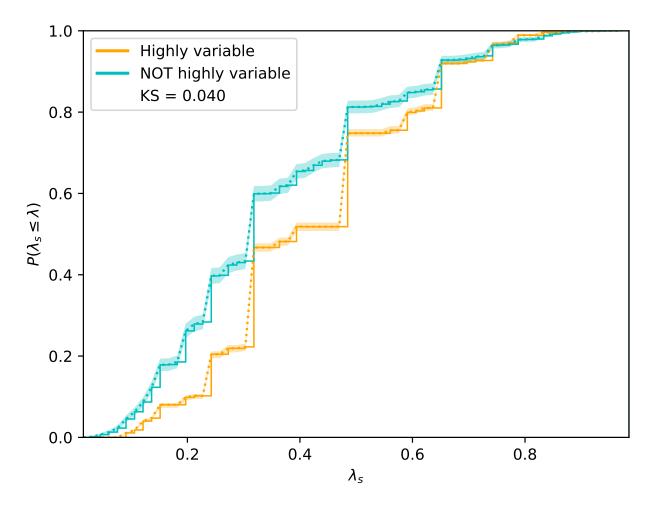


Figure 89: Physical maladies: injury.

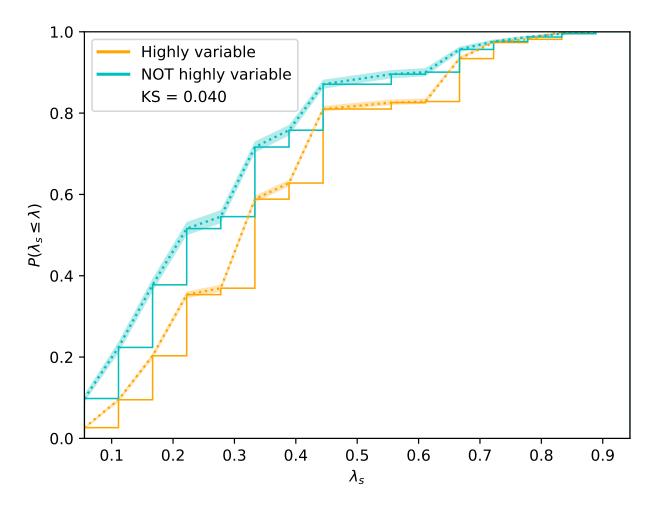


Figure 90: Physical exercise: swimming.

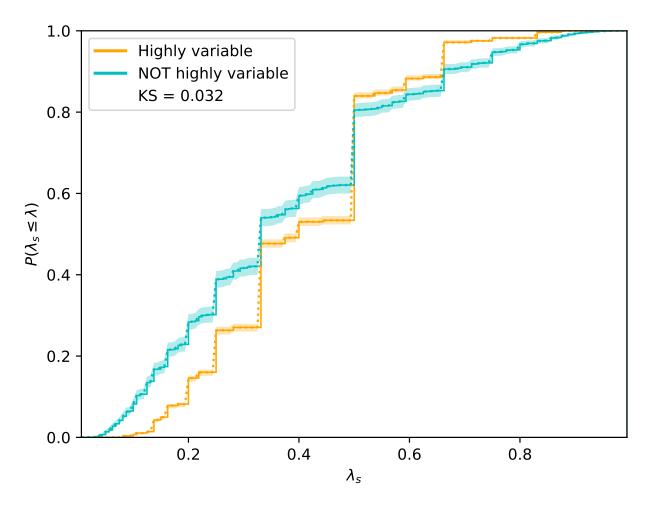


Figure 91: Antihistamine medication taken.