

Supplemental Materials

Supplemental Methods: Thresholding Exercise

Each participant was presented with two scenarios (treatment A, treatment B), each with a description of the features (likelihood of experiencing a migraine after the first day of treatment, number of days with a migraine in the first month of treatment) and asked to state which they prefer. Based on their response, the probability of experiencing a migraine and number of days was varied.

Exercise 1 varied the amount of reduction in the likelihood of migraine on day one with treatment B.

- If they preferred treatment A, the likelihood of migraine after day one with treatment B will be reduced in the next scenario.
- If they preferred treatment B, the likelihood of migraine after day one with treatment B will be increased in the next scenario.

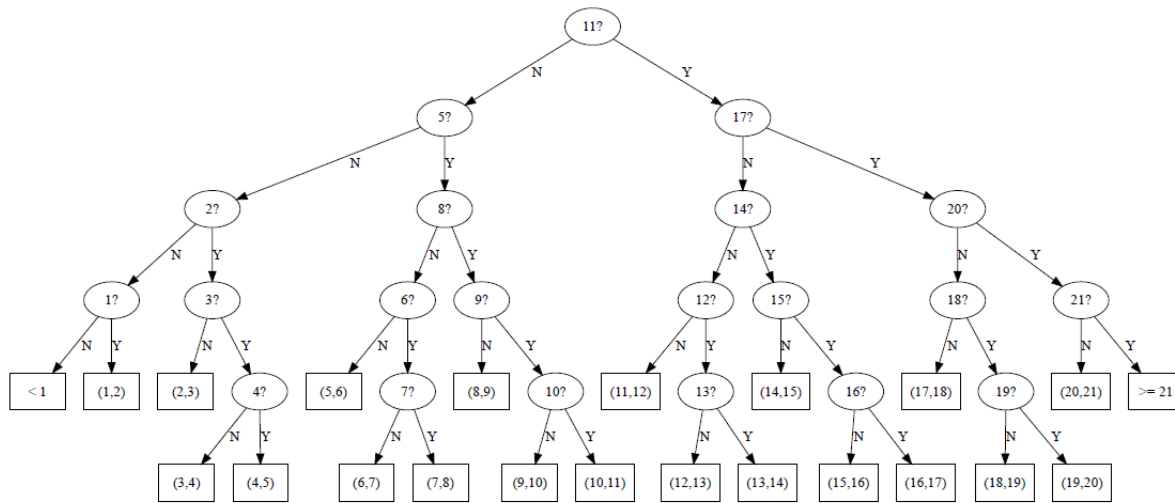
Exercise 2 varied the amount of reduction in the migraine days per month with treatment B.

- If they preferred treatment A, the number of migraine days per month with treatment B will be reduced in the next scenario.
- If they preferred treatment B, the number of migraine days per month with treatment B will be increased in the next scenario.

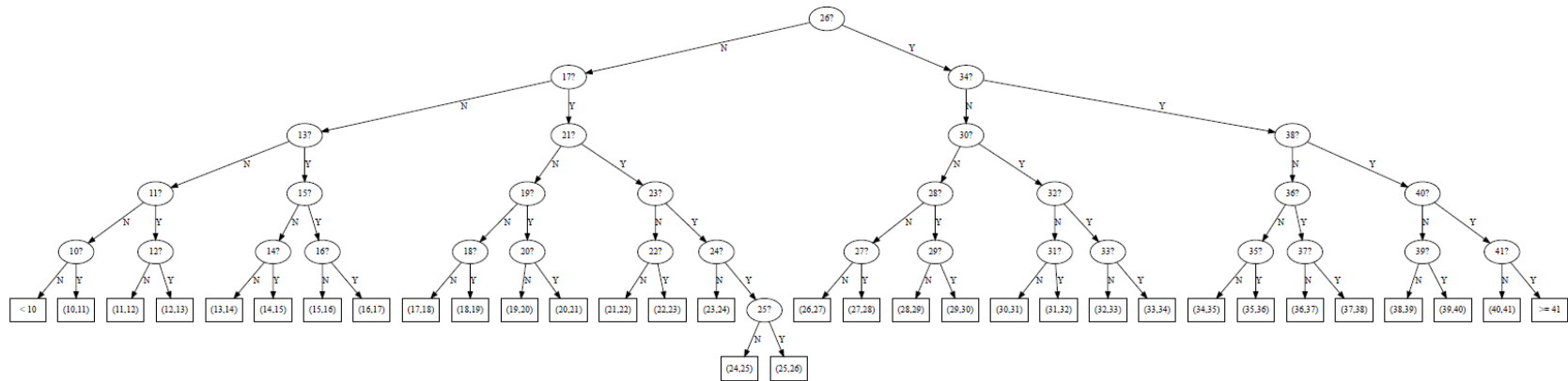
The figures below summarize how the levels for each attribute changed depending on the participant's responses, where

Y indicates a preference for treatment A

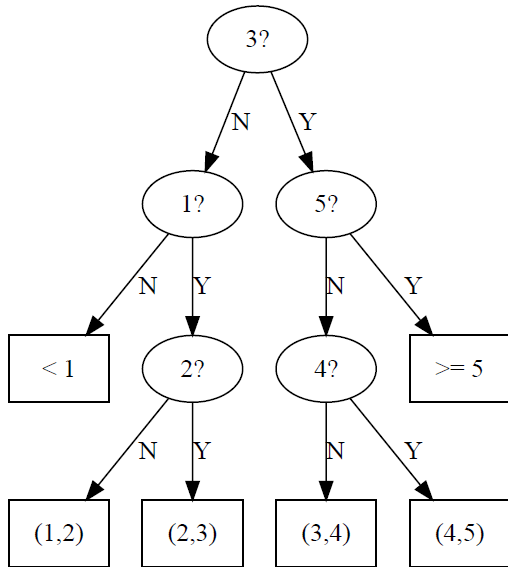
N indicates a preference for treatment B



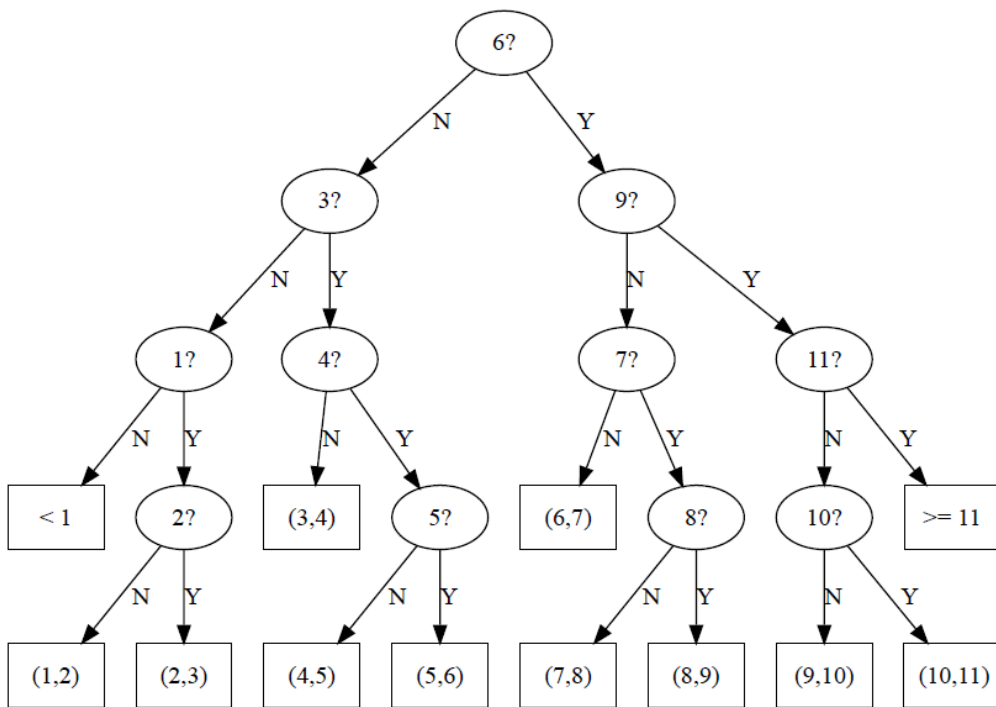
Choice Frame 1: Patients with Episodic Migraine



Choice Frame 1: Patients with Chronic Migraine



Choice Frame 2: Patients with Episodic Migraine



Choice Frame 2: Patients with Chronic Migraine

Supplemental Table 1. Internal Validity and Consistency

Criterion	n (%)		
	Overall sample (N = 101)	Chronic migraine (N = 55)	Episodic migraine (N = 46)
Passed dominance test	94 (93)	52 (95)	42 (91)
Passed stability test	81 (80)	46 (84)	35 (76)
Not straightliner †	100 (99)	55 (100)	45 (98)
Time taken to complete choice tasks >1 min	88 (87)	50 (91)	38 (83)
No lexicographic preference	47 (47)	33 (60)	14 (30)
Lexicographic preference on choice frame 1	33 (33)	12 (22)	21 (46)
Lexicographic preference on choice frame 2	46 (46)	18 (33)	28 (61)
Passed warm-up task 1	94 (93)	51 (93)	43 (94)
Passed warm-up task 2	97 (96)	54 (98)	43 (94)

† Straightliners were participants who always chose the same treatment regardless of performance

Supplemental Table 2. Validity Test Performance According to Presence of Lexicographic Preferences

Validity assessment	n (%)			
	Chronic migraine		Episodic migraine	
	No lexicographic preference (N = 33)	Lexicographic preference (N = 22)	No lexicographic preference (N = 14)	Lexicographic preference (N = 32)
Dominance test				
Fail	2 (6)	1 (5)	0 (0)	4 (13)
Pass	31 (94)	21 (95)	14 (100)	28 (88)
Stability test				
Fail	8 (24)	1 (5)	1 (7)	10 (31)
Pass	25 (76)	21 (95)	13 (93)	22 (69)
Straightliner				
Not straightlining	33 (100)	22 (100)	14 (100)	31 (97)
Always choosing treatment A in both choice frames	0 (0)	0 (0)	0 (0)	1 (3)
Time taken to complete choice tasks				
≥ 1 min	30 (91)	20 (91)	14 (100)	24 (75)
< 1 min	3 (9)	2 (9)	0 (0)	8 (25)
Passed warm-up question 1				
No	3 (9)	1 (5)	0 (0)	3 (9)
Yes	30 (91)	21 (95)	14 (100)	29 (91)
Passed warm-up question 2				
No	1 (3)	0 (0)	0 (0)	3 (9)
Yes	32 (97)	22 (100)	14 (100)	29 (91)

Supplemental Table 3. Marginal Rate of Substitution

Sample	Mean marginal rate of substitution (standard deviation)		P-value ^a
	Choice frame 1	Choice frame 2	
Chronic migraine			
Overall sample (N = 55)	6.81 (5.62)	7.63 (9.42)	0.343
Excluding participants completing the choice tasks in < 1 min (N = 50)	6.63 (5.45)	7.55 (9.33)	0.302
Episodic migraine			
Overall sample (N = 46)	9.76 (8.05)	7.11 (6.38)	0.003
Excluding participants completing the choice tasks in < 1 min and those failing multiple other validity tests (N = 35)	9.59 (7.93)	7.20 (6.18)	0.007

^aPaired t-test