

Appendix Table 1. NCS-R: Predictive effects of interactions between frequent-severe headaches and comorbid physical and mental disorders on workplace outcomes among employed or self-employed Part II NCS-R respondents

Interactions/Outcomes	(n)	Migraines		Other Headaches	
		Est ^{1*}	(95% CI)	Est ^{1*}	(95% CI)
I. Physical disorders					
Disabled	(4329)	1.0	(0.6,1.6)	0.8	(0.5,1.3)
Sickness absence	(3669)	0.5	(-1.0,2.0)	-0.6	(-1.2,-0.1)
Job performance	(3669)	-0.03	(-0.2,0.2)	-0.05	(-0.3,0.2)
II. Mental disorders					
Disabled	(4329)	1.0	(0.7,1.4)	0.8	(0.5,1.2)
Sickness absence	(3669)	0.8	(-0.7,2.4)	0.5	(-0.9,1.9)
Job performance	(3669)	-0.1	(-0.5,0.2)	0.05	(-0.2,0.3)
III. Physical and mental disorders					
Disabled	(4329)	1.1	(0.7,1.7)	0.8	(0.6,1.2)
Sickness absence	(3669)	0.6	(-0.3,1.6)	-0.1	(-0.8,0.5)
Job performance	(3669)	-0.04	(-0.2,0.1)	-0.01	(-0.2,0.1)

* None of the coefficients is significant at the .05 level, two-sided test

¹The results in which disability is the outcome are based on logistic regression equations in which dummy variables for migraines and other headaches were used to predict disability (coded 1) versus others in the labor force (coded 0, included the employed, the self-employed, laid off, and the unemployed looking for work) controlling for socio-demographics. The estimates (Est) presented are odds-ratios and their 95% confidence intervals (CIs). The results in which sickness absence and job performance are the outcomes are based on linear regression equations in which dummy variables for migraines and other headaches were used to predict disability (coded 1) versus others in the labor force (coded 0, included the employed, the self-employed, and the unemployed looking for work) controlling for socio-demographics and hours expected to work. The estimates (Est) presented are linear regression coefficients and their 95% confidence intervals (CIs).

Appendix Table 2. NCS-R: Comparisons of order of age-of-onset between frequent-severe headaches and comorbid Physical disorders among employed or self-employed Part II NCS-R respondents separately by disorder

Medical Condition	Migraines							Other headaches						
	(n) ¹	Age of Onset						(n) ²	Age of Onset					
		Earlier % ³ (se)	Equal % ³ (se)	Later % ³ (se)	Earlier % ³ (se)	Equal % ³ (se)	Later % ³ (se)							
Musculoskeletal														
Arthritis	(149)	71.5 (4.2)	5.6 (1.9)	22.9 (4.1)			(152)	59.1 (5.1)	12.8 (3.3)	28.0 (5.2)				
Back or Neck	(193)	51.6 (3.9)	22.0 (4.6)	26.4 (3.8)			(206)	45.7 (6.0)	20.8 (4.4)	33.5 (4.3)				
Any musculoskeletal	(246)	50.9 (3.4)	16.4 (3.0)	32.7 (3.6)			(266)	45.5 (3.9)	17.4 (3.2)	37.2 (3.4)				
Other pain														
Other pain	(77)	72.0 (9.1)	10.0 (3.6)	18.0 (7.7)			(81)	52.4 (5.7)	23.7 (4.6)	23.9 (4.4)				
Cardiovascular														
Heart disease	(14)	⁴ -	-	-	-	-	(23)	⁴ -	-	-	-	-	-	-
High blood pressure	(71)	77.0 (7.6)	11.7 (7.2)	11.3 (3.2)			(89)	70.8 (6.3)	7.9 (2.8)	21.4 (5.7)				
Heart attack	(9)	⁴ -	-	-	-	-	(14)	⁴ -	-	-	-	-	-	-
Stroke	(4)	⁴ -	-	-	-	-	(18)	⁴ -	-	-	-	-	-	-
Any cardiovascular	(86)	72.1 (6.6)	10.8 (6.1)	17.1 (3.4)			(111)	61.6 (6.4)	9.4 (2.9)	29.0 (5.9)				
Respiratory														
Asthma	(66)	48.8 (8.9)	2.7 (2.0)	48.5 (8.7)			(90)	30.1 (5.3)	5.3 (2.2)	64.6 (5.2)				
Seasonal allergies	(198)	33.0 (3.6)	11.7 (3.3)	55.3 (4.9)			(198)	38.0 (4.4)	11.2 (2.8)	50.8 (4.1)				
Other lung disease	(13)	⁴ -	-	-	-	-	(17)	⁴ -	-	-	-	-	-	-
Any respiratory	(229)	34.5 (3.8)	10.0 (2.9)	55.4 (4.4)			(242)	33.1 (3.7)	9.8 (2.1)	57.1 (3.6)				
Digestive														
Ulcer	(31)	89.9 (5.3)	2.2 (2.3)	7.9 (4.8)			(31)	66.4 (11.5)	9.0 (4.7)	24.7 (9.8)				
Irritable bowel	(14)	⁴ -	-	-	-	-	(11)	⁴ -	-	-	-	-	-	-
Any digestive	(43)	77.8 (6.1)	3.8 (2.8)	18.4 (5.8)			(39)	61.6 (10.0)	7.8 (4.0)	30.6 (8.8)				
Cancer	(6)	⁴ -	-	-	-	-	(4)	⁴ -	-	-	-	-	-	-
Diabetes	(16)	⁴ -	-	-	-	-	(30)	75.8 (8.1)	12.1 (5.7)	12.0 (5.8)				
Epilepsy	(13)	⁴ -	-	-	-	-	(19)	⁴ -	-	-	-	-	-	-

¹Unweighted number of respondents who had both migraines and the physical disorder in the row.

²Unweighted number of respondents who had both other headaches and the physical disorder in the row.

³Percentages are based on the respondents with 12-month comorbidity of the condition in the row and either migraines or other headache.

⁴Percentage estimates are not displayed for comorbidities that involve fewer than 30 respondents.

Appendix Table 3. NCS-R: Comparison of Age of Onset Among All Part II Respondents Between 18 and 64 Years Old

Mental Disorder	Migraines						Other Headache					
	(n) ¹	Age of Onset		Age of Onset		Age of Onset		(n) ²	Age of Onset		Age of Onset	
		Earlier % ³ (se)	Equal % ³ (se)	Equal % ³ (se)	Later % ³ (se)	Later % ³ (se)		Earlier % ³ (se)	Equal % ³ (se)	Equal % ³ (se)	Later % ³ (se)	Later % ³ (se)
Anxiety												
Generalized anxiety disorder												
Panic disorder or agoraphobia	(44)	36.3 (6.8)	12.4 (5.3)	51.3 (6.3)			(49)	36.1 (7.8)	6.5 (3.7)	57.4 (8.0)		
Social phobia	(81)	14.2 (4.6)	16.5 (4.6)	69.2 (5.2)			(64)	12.2 (3.9)	4.6 (3.0)	83.2 (5.0)		
Specific phobia	(103)	2.4 (1.5)	2.0 (0.8)	95.5 (1.6)			(95)	3.0 (1.8)	2.2 (1.5)	94.8 (2.3)		
Posttraumatic stress disorder	(72)	30.2 (8.2)	12.9 (5.5)	57.0 (6.0)			(54)	33.0 (6.0)	17.1 (6.6)	50.0 (6.7)		
Any anxiety	(207)	17.1 (2.2)	8.6 (2.5)	74.3 (2.5)			(196)	13.1 (2.7)	3.7 (1.4)	83.2 (3.1)		
Mood												
Depression or dysthymia	(113)	50.1 (4.1)	9.0 (2.5)	41.0 (4.3)			(120)	44.7 (4.4)	13.3 (3.9)	41.9 (5.4)		
Bipolar I, II, or sub	(38)	58.3 (9.8)	5.0 (3.4)	36.7 (9.3)			(38)	54.5 (11.1)	12.8 (6.8)	32.6 (7.7)		
Any mood	(137)	50.0 (4.5)	8.6 (2.1)	41.4 (4.6)			(145)	45.6 (4.4)	12.4 (2.8)	42.0 (5.8)		
Impulse												
Intermittent explosive disorder	(46)	20.9 (5.2)	9.4 (4.3)	69.6 (6.2)			(60)	16.4 (4.8)	12.2 (5.0)	71.4 (5.7)		
Other impulse disorder	(18)	⁴ -	-	-	-	-	(20)	⁴ -	-	-	-	-
Any impulse disorder	(55)	19.0 (4.0)	6.8 (3.7)	74.2 (4.8)			(73)	15.4 (4.7)	12.4 (4.6)	72.2 (5.8)		
Substance												
Alcohol abuse	(17)	⁴ -	-	-	-	-	(25)	⁴ -	-	-	-	-
Alcohol dependence	(5)	⁴ -	-	-	-	-	(15)	⁴ -	-	-	-	-
Drug abuse	(10)	⁴ -	-	-	-	-	(12)	⁴ -	-	-	-	-
Drug dependence	(5)	⁴ -	-	-	-	-	(5)	⁴ -	-	-	-	-
Any substance	(24)	⁴ -	-	-	-	-	(29)	⁴ -	-	-	-	-
Composite												
Any disorder	(267)	21.2 (2.3)	8.6 (2.0)	70.2 (2.7)			(274)	20.5 (2.2)	5.8 (1.6)	73.6 (2.7)		

¹Unweighted number of respondents who had both migraines and the mental disorder in the row.

²Unweighted number of respondents who had both other headaches and the mental disorder in the row.

³Percentages are based on the respondents with 12-month comorbidity of the condition in the row and either migraines or other headache.

⁴Percentage estimates are not displayed for comorbidities that involve fewer than 30 respondents.