

ANXIETY SENSITIVITY IS ASSOCIATED WITH INTENTIONAL AVOIDANCE OF PHYSICAL ACTIVITY IN WOMEN WITH MIGRAINE



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BACKGROUND

- Physical activity (PA) is recommended for migraine prevention and management; however, many individuals with migraine avoid PA for reasons that remain largely unknown.
- Intentional avoidance of PA is a common migraine management strategy, likely due to beliefs that PA will trigger migraine onset or worsen existing pain.
- Anxiety sensitivity (fear of anxiety and bodily sensations) amplifies the subjective experience of pain and contributes to fear and avoidance of activities that produce bodily distress.
- Anxiety sensitivity is a potential correlate of intentional PA avoidance and may strengthen fearful beliefs about PA's detrimental effect on migraine.

APPROACH

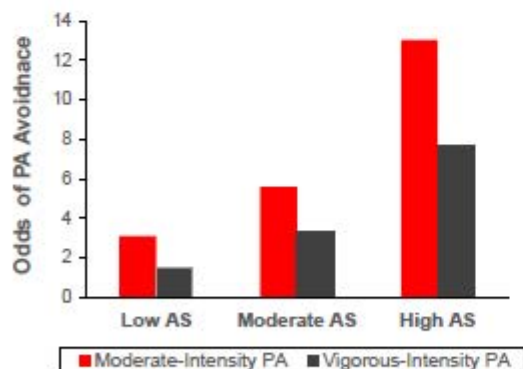
Women ($n = 100$) with migraine determined by the ID Migraine completed an online survey posted through the Association of Migraine Disorders webpage

- Anxiety Sensitivity** (Anxiety Sensitivity Index-3)
- PA Avoidance** (adapted *Global Physical Activity Questionnaire*; avoidance of PA "to manage migraine headaches")
 - Presence (past 30-day)
 - Frequency (days/week)
 - Intensity (moderate, vigorous)
- PA-Migraine Beliefs**
 - Likelihood PA will trigger migraine (moderate/vigorous PA intensity, 0-100%)
 - Likelihood PA will worsen pain (moderate/vigorous PA intensity, 0-100%)
 - Fear of pain: "I fear that if I exercise, I will experience head pain."
 - Avoidance: "Avoiding exercise will reduce how often I get migraine."
 - Barrier: "If I did not have migraine I would exercise more."

DESCRIPTIVES

Variable	Summary
Age	37.8 ± 9.6
# Migraine Attacks (past month)	10.3 ± 8.8
Anxiety Sensitivity (ASI-3)	24.0 ± 15.2
PA Avoidance Moderate-Intensity	73%
Days/Week	2.9 ± 2.5
PA Avoidance Vigorous-Intensity	74%
Days/Week	3.1 ± 2.6
PA as a Triggering Factor	
Moderate-Intensity	50.2 ± 30.2
Vigorous-Intensity	61.8 ± 32.2
PA as a Worsening Factor	
Moderate-Intensity	75.6 ± 24.4
Vigorous-Intensity	84.2 ± 19.9
Fear exercise will cause head pain	1.9 ± 1.5
Belief exercise will reduce migraine	1.3 ± 1.4
Migraine as a barrier to exercise	2.7 ± 1.4

LIKELIHOOD OF PA AVOIDANCE



REGRESSION RESULTS

Sr ² from Multiple Regression:	PA Intensity	
	Moderate	Vigorous
Frequency of PA Avoidance	5.8%*	4.7%*
Likelihood PA will trigger migraine	3.40%	6.0%*
Likelihood PA will worsen migraine	< 1%	5.1%*
Fear exercise will cause head pain	10.3%**	
Belief exercise will reduce migraine	8.1%*	
Migraine as a barrier to exercise	17.5%**	

DISCUSSION

- Anxiety sensitivity was associated with:
 - Greater likelihood of avoiding PA and more frequent PA avoidance at both moderate and vigorous intensities
 - Higher expected likelihood that PA will trigger and worsen migraine, particularly PA of vigorous intensity
 - Stronger fear-based beliefs about migraine and exercise
- Anxiety sensitivity may be a promising therapeutic target to promote PA in migraine via reduction in fear-based beliefs and avoidance behavior