Characterizing Inter- and Intra-Individual Differences in Migraine-Related Cognitive Symptoms and Impairment Across the Migraine Cycle: An Analysis of the MiCOAS Qualitative Project James S. McGinley, PhD¹, Rikki Mangrum, MLS¹, Dawn C. Buse, PhD^{1,2}, Calvin J. Hall, PhD¹, Maya T. Gerstein, DrPH, MPH³,



Carrie R. Houts, PhD¹, Tracy K. Nishida, PhD¹, Kelly P. McCarrier, MPH³, R.J. Wirth, PhD¹, Richard B. Lipton, MD²

1. Vector Psychometric Group, LLC, Chapel Hill, NC, USA; 2. Albert Einstein College of Medicine, Bronx, NY; 3. Pharmerit-An-OPEN Health Company, Bethesda, MD *(at the time of the study)

Background and Objective

- Previous qualitative work from the Migraine Clinical Outcome Assessment System (MiCOAS) FDA-funded grant project has shown that people living with migraine experience a broad array of impacts
- Cognitive symptoms of migraine can impose disability and are an emerging focus of clinical care and research. However, little is known about how these cognitive symptoms unfold across the migraine cycle
- This poster focuses on evaluating within-person patterns of endorsement across migraine phases for 2 cognitive symptoms, memory problems and fogginess

Methods

- N=40 individuals with self-reported, medically diagnosed migraine were screened to confirm diagnosis before participating in semistructured interviews
- Interviews explicitly probed symptoms by headache phase using standardized open-ended questions where participants were asked to describe their "typical" experience during migraine phases (Table 1) • Within-person patterns of symptom endorsement were described across migraine phases for 2 cognitive symptoms (memory problems
- and fogginess)
- Responses were transcribed and coded using content and thematic analysis methods
- Data were summarized using descriptive statistics (n, %) and conditional branching pattern analyses with tree diagrams

| Phase | Description |
|---------------|--|
| Pre-Headache | "the period of time between when your attack begins up until the onset of your |
| Headache | "the period of time during your migrain you experience headache pain" |
| Post-Headache | "the period immediately after your hea subsides" |
| Interictal | "the time period in-between your migra |

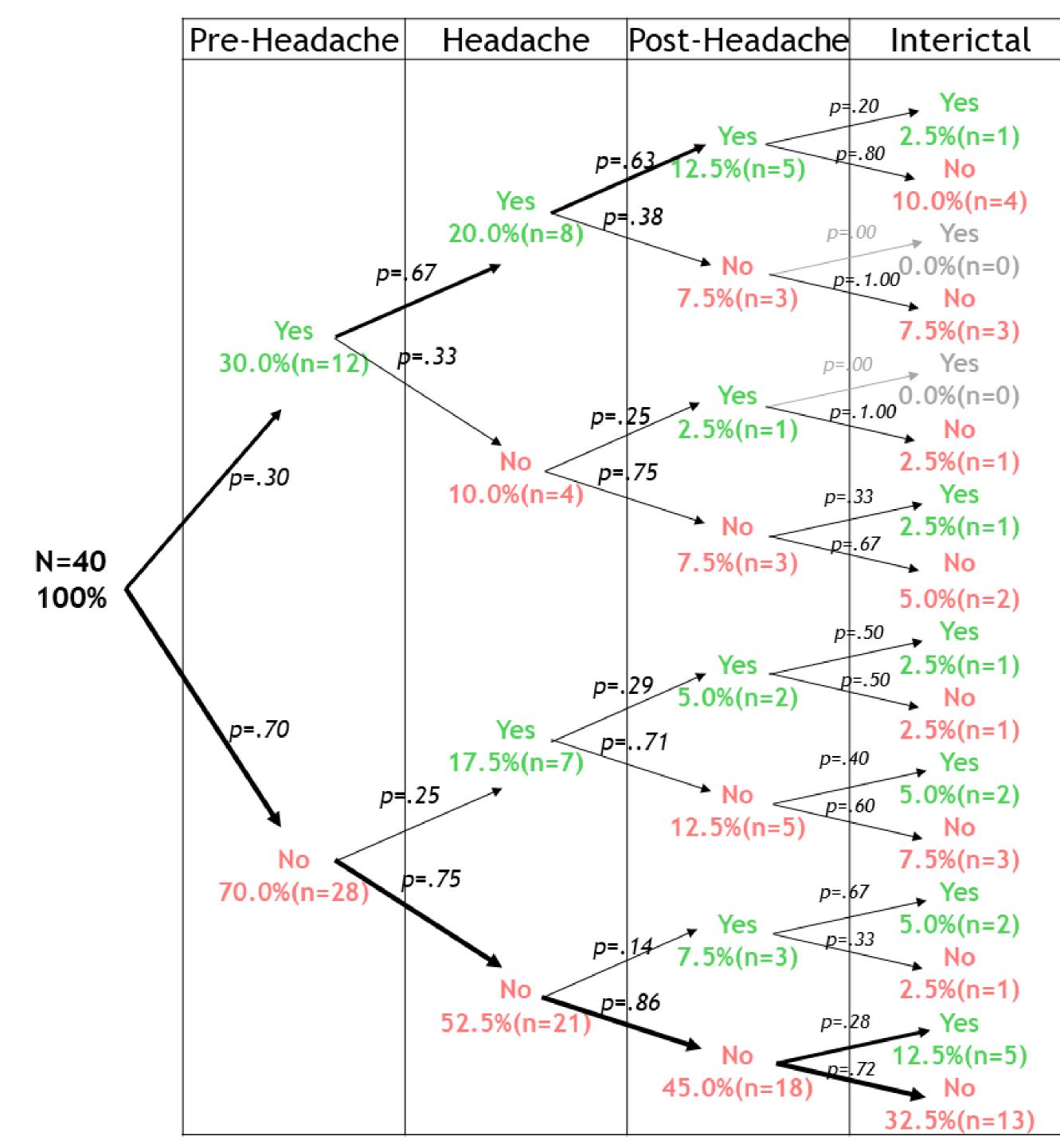
Table 1. Description of migraine phases

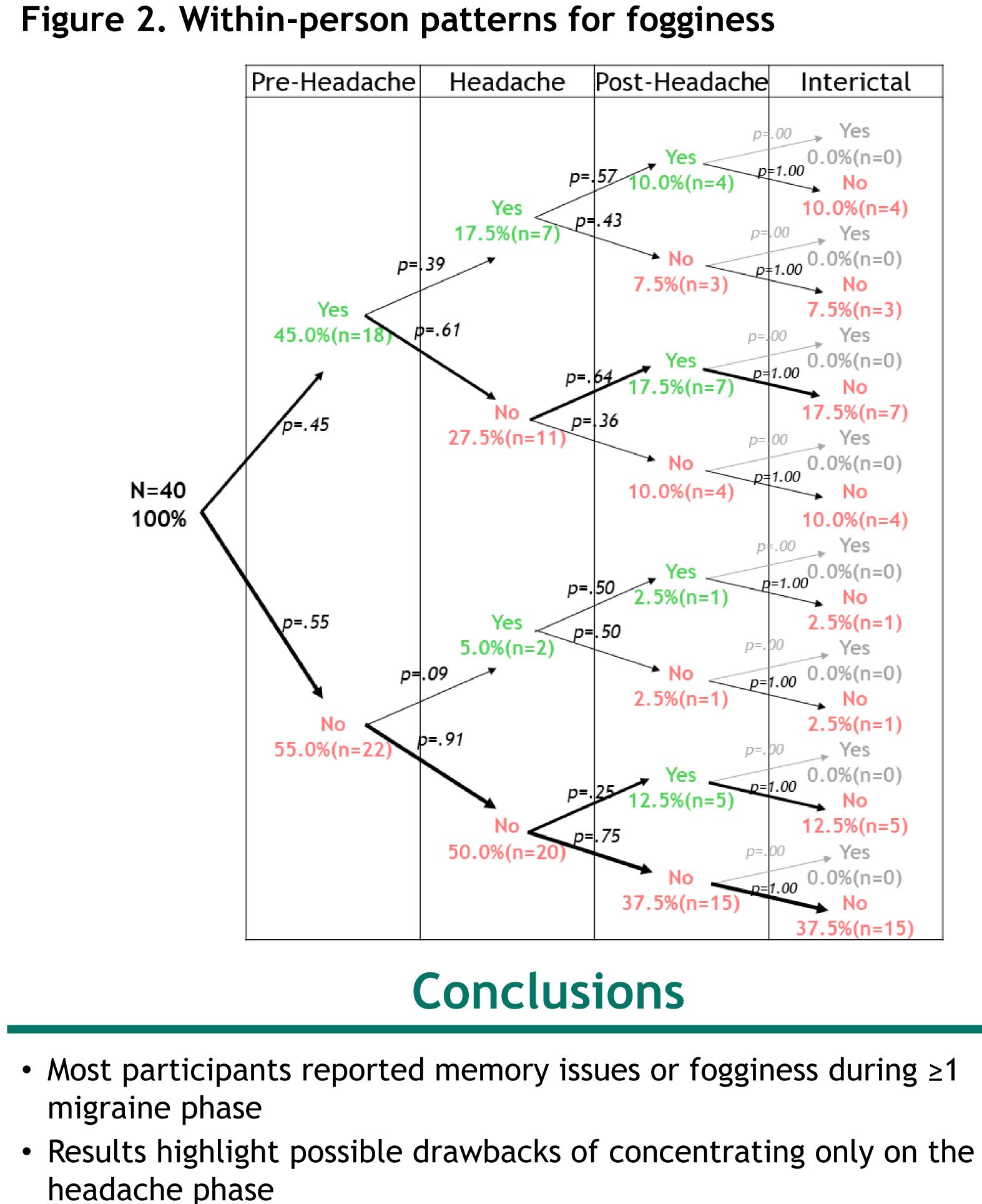
Results

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- Participants ranged from 21-70 years old, 77.5% were female, 67.5% were White, and 50% had chronic migraine
- Approximately two-thirds of participants reported memory problems and issues (n=27, 67.5%) (Figure 1)
- Of those reported memory problems, the majority (88.9%, 24/27) had memory issues for >1 phase outside of the headache phase and few were impacted only during headache (11.1%, 3/27)
- Just under two-thirds of subjects reported fogginess (n=25, 62.5%) in 1 or more migraine phase (Figure 2)
 - Of those reporting fogginess, only 1 individual reported the symptom solely in the headache phase (4.0%, 1/25), but 64% (16/25) had this symptom exclusively outside the headache phase

Figure 1. Within-person patterns for memory problems





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• Future research should consider other cognition areas and how heterogeneity should be handled in clinical practice and trials