



# Prescription Opioid Medication Use Among People with Migraine: National Survey Results



Clinical Health Psychology  
COLLEGE OF LIBERAL ARTS AND SCIENCES  
UNIVERSITY OF COLORADO DENVER

Christopher Malone<sup>1</sup>, Amrita Bhowmick<sup>2</sup>, Amy Wachholtz<sup>1,3</sup>

<sup>1</sup>University of Massachusetts Medical School Worcester, MA  
<sup>2</sup>Health Union LLC  
<sup>3</sup>University of Colorado Denver

## Introduction

- Abuse of prescribed and illicit opioid substances has increased among US residents in recent years. (Rudd R, Aleshire N, Zibbell J, Gladden R. (2016). Increases in Drug and Opioid Overdose Deaths – United States, 2000-2014.)
- Evidence suggests that the increase in abuse of opioid medication is driven by an increase in the use of opioid medication to treat pain (Rudd, Aleshire, Zibbell, Gladden, 2016).
- Understanding the contributing factors to the use of prescription opioid medication among a chronically ill population may inform and improve the use of opioid medication to treat chronic pain while limiting the risk of inappropriate prescribing

## Methods

**Recruitment:** Participants were recruited from a well known online migraine headache resource (N=3967).

**Inclusion Criteria:** Adults aged 18 years or older and who currently live in the United States and diagnosed with chronic migraine by a medical provider.

**Data Collection:** May-June 2015.

Table 2. 15 Most Common Comorbidities

Comorbidity	% Endorsing Yes
Allergies	56.01
Anxiety	48.56
Depression	47
Overweight/Obesity	36.67
IBS	24.7
Chronic Pain	23.99
Sleep Disorders	23.88
TMJ	23.39
High Cholesterol	20.44
Hypertension	20.2
Arthritis	19.97
DX Asthma	19.53
GERD	18.59
Thyroid Disease	17.67
DX fibromyalgia	15.55

Table 1. Demographics

Variable	Never prescribed Opioid Medication(n=1222)	Used Opioid medication in the past but no longer (n=1781)	Currently use opioid medication(n=964)
Age	M = 46.10 (SD: 10.591)	M = 45.41 (SD=9.916)	M = 45.47 (SD=9.736)
Gender	Female: 96.2%	Female: 96.1%	Female: 95.6%
Negative Live Events Score (NLE)	M = 29.70 (SD: 9.987)	M = 34.02 (SD=10.274)	M = 36.27 (SD=10.440)

Figure 1. Negative Live Events Attributed to Migraine

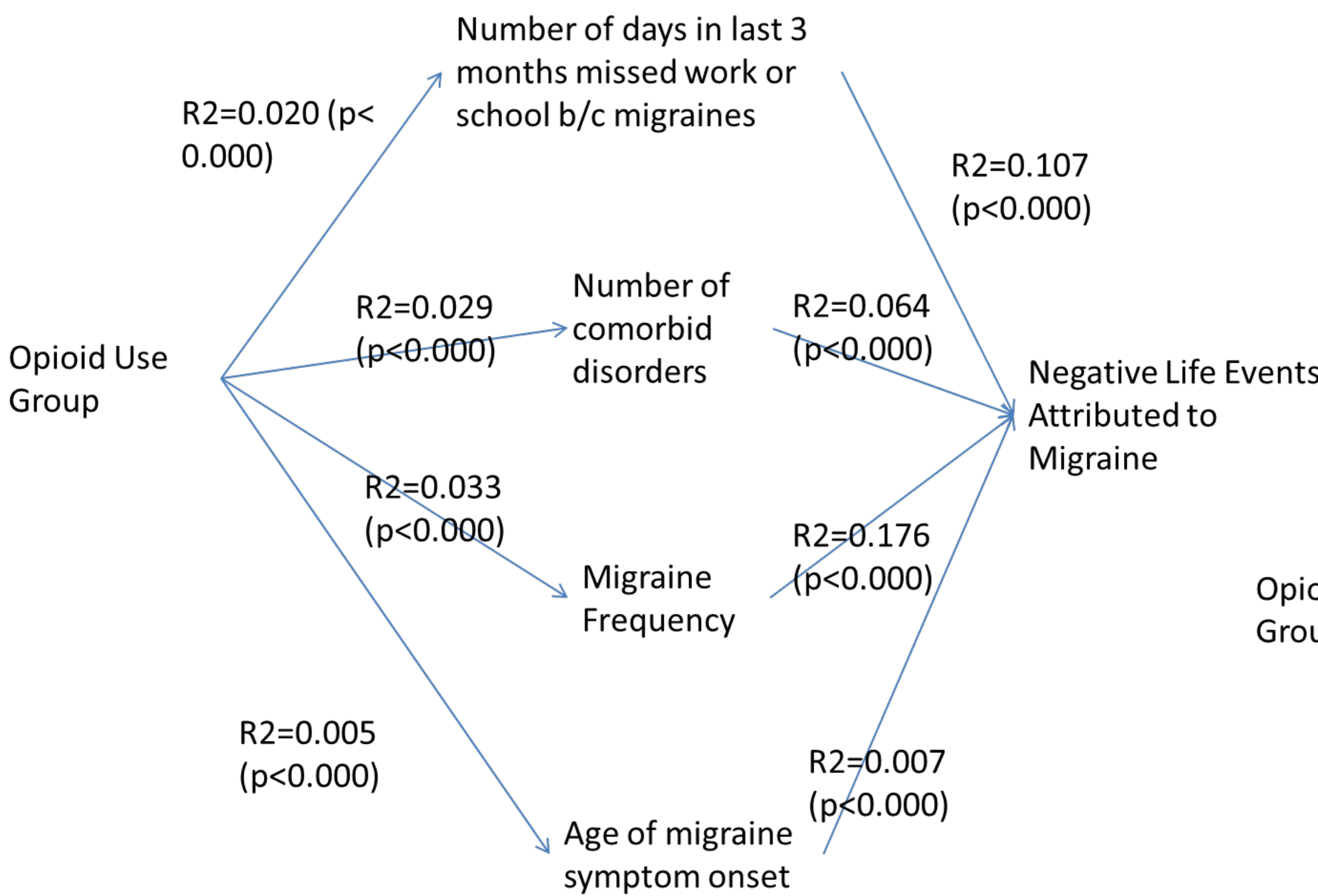
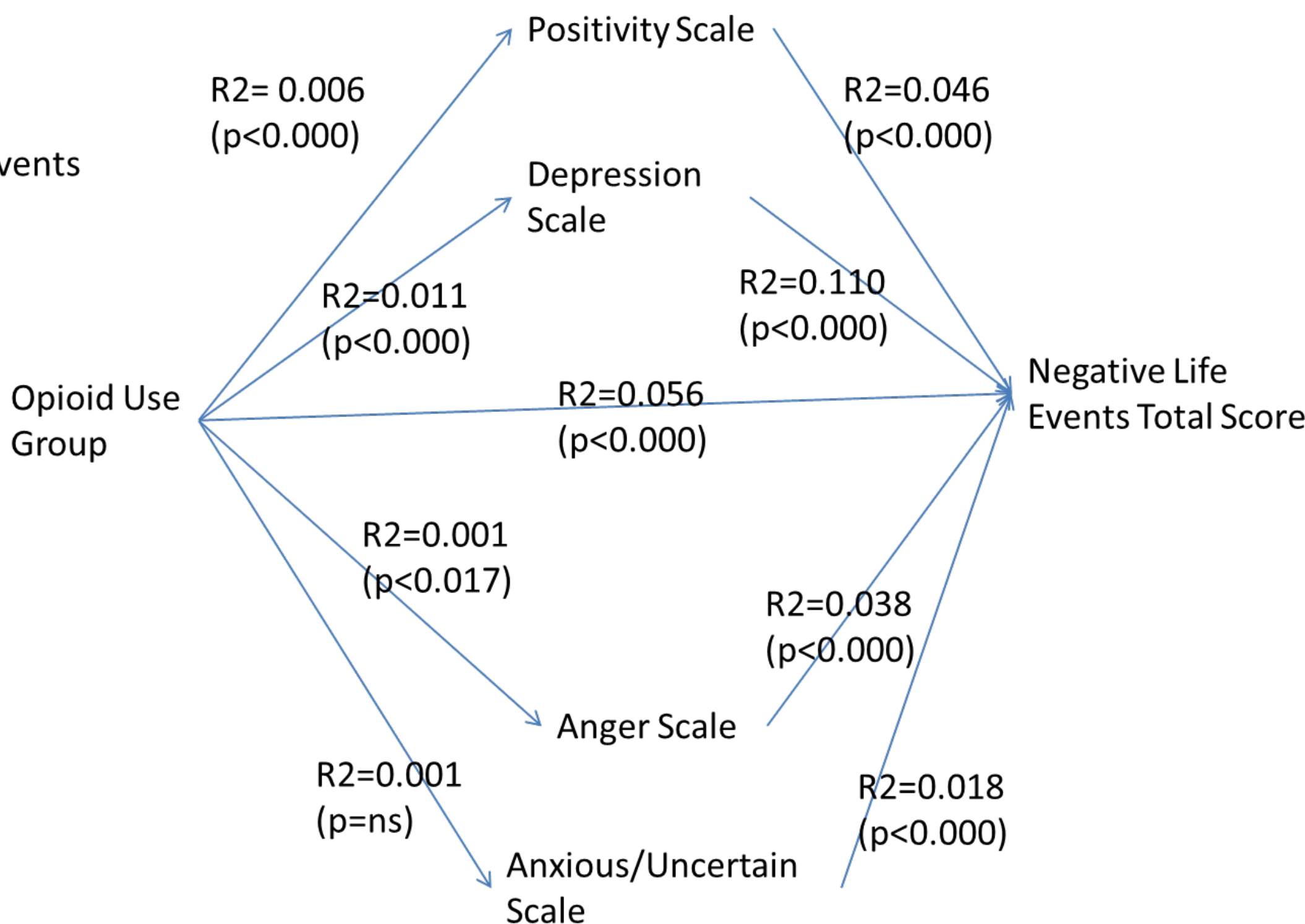


Figure 2. Relationships Between NLE Score and Psychological Domains



## Measures

A 45 minute survey using adaptive survey methodology.

All data analysis was performed using SPSS 22.0.

A composite measure of the number of negative social and professional impacts due to migraine was created and termed the Negative Life Events Score (NLES)

Analyses: Demographic data was examined using One Way ANOVAs. Comorbidity data was examined using frequency counts. Path analyses were conducted using a series of linear regressions.

## Conclusion

- The results of the present study enhance understanding of the use of opioid medication prescribing for chronic migraine sufferers
- Number of medical comorbidities (including non-pain related comorbidities) had almost as much predictive power of being prescribed an opioid as the frequency of migraine headaches and the level of NLE's attributed to migraines.
- There may be an underdiagnosed level of psychological distress among chronic migraine sufferers that may be inappropriately addressed with prescription opioids

## Acknowledgements

This study was partially supported by an NIH-NIDA grant (#K23-DA030397) to AW