

INTRODUCTION

- Given increased medicalization and legalization of marijuana (or cannabis) in the U.S. and throughout the world, there is increased pressure to quantify the risks associated with marijuana use
- Crude assessments of marijuana use may obscure our ability to detect dose-dependent associations between marijuana use and outcomes
- Marijuana use is typically either measured as user status (comparing users to non-users) or simple frequency (i.e., days used in past 30 days)

PURPOSE

- Using a more detailed grid measure that we call the Marijuana Use Grid (MUG), we sought to answer three related research questions:
- 1) How do indicators of marijuana frequency and marijuana quantity relate to consequences and symptoms of cannabis use disorder (CUD)?
- 2) Does the MUG predict consequences above and beyond the effects of a simple measure of marijuana use frequency?

METHOD

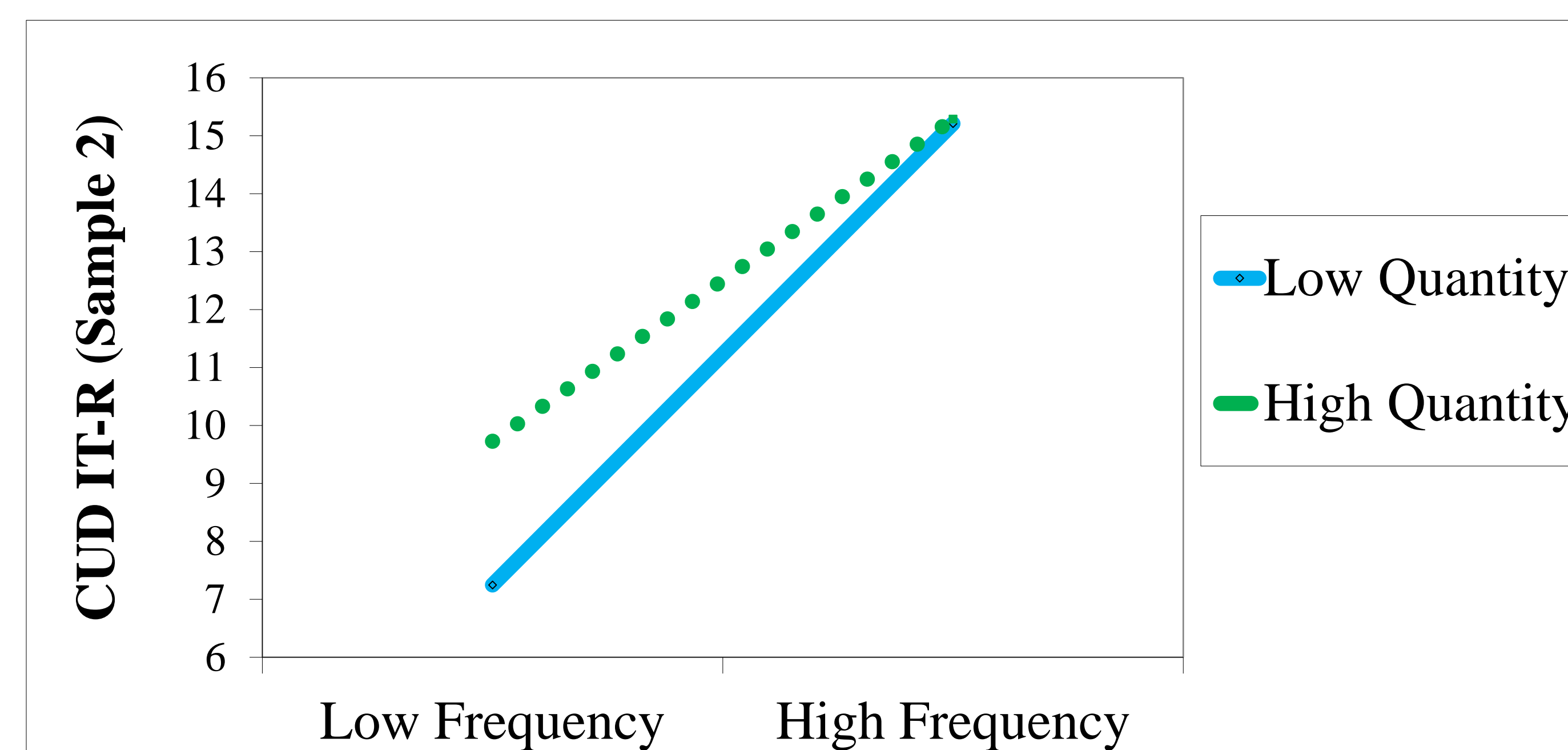
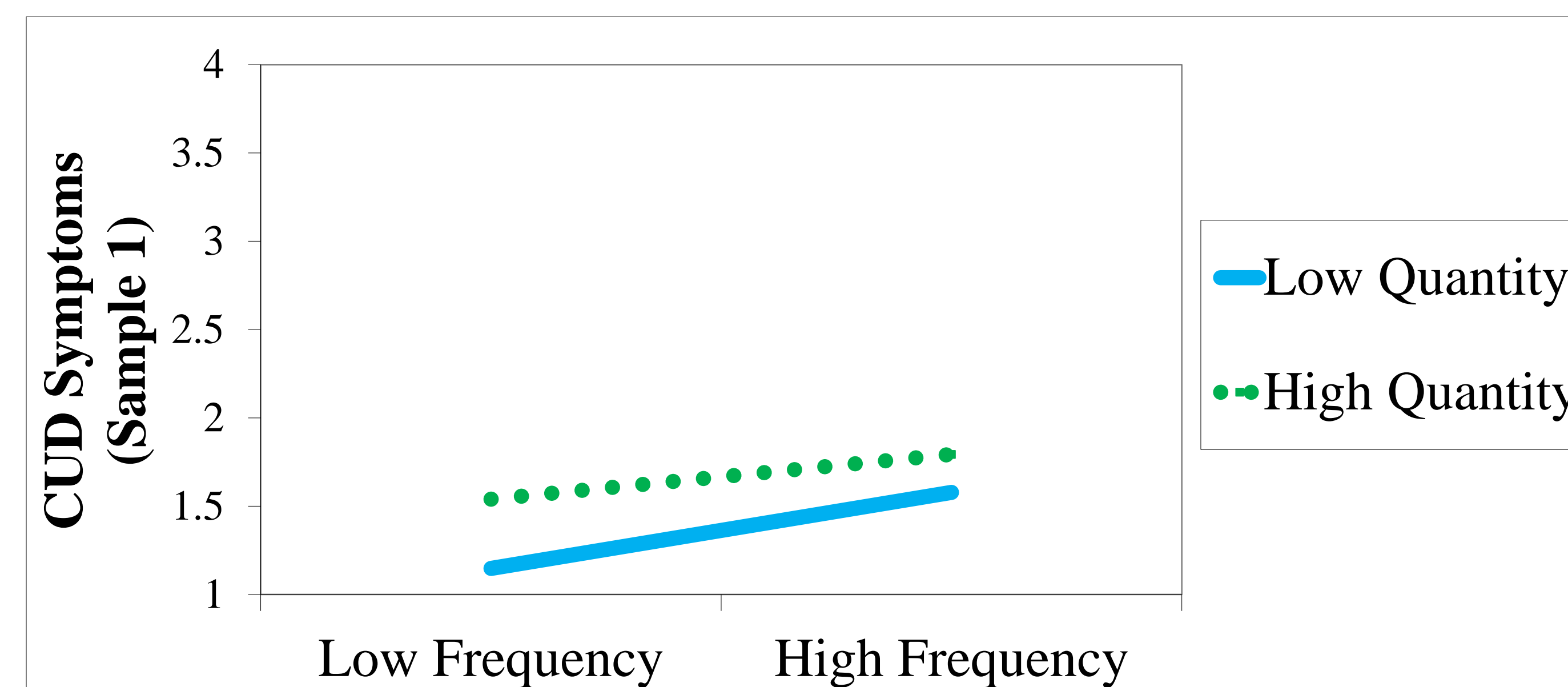
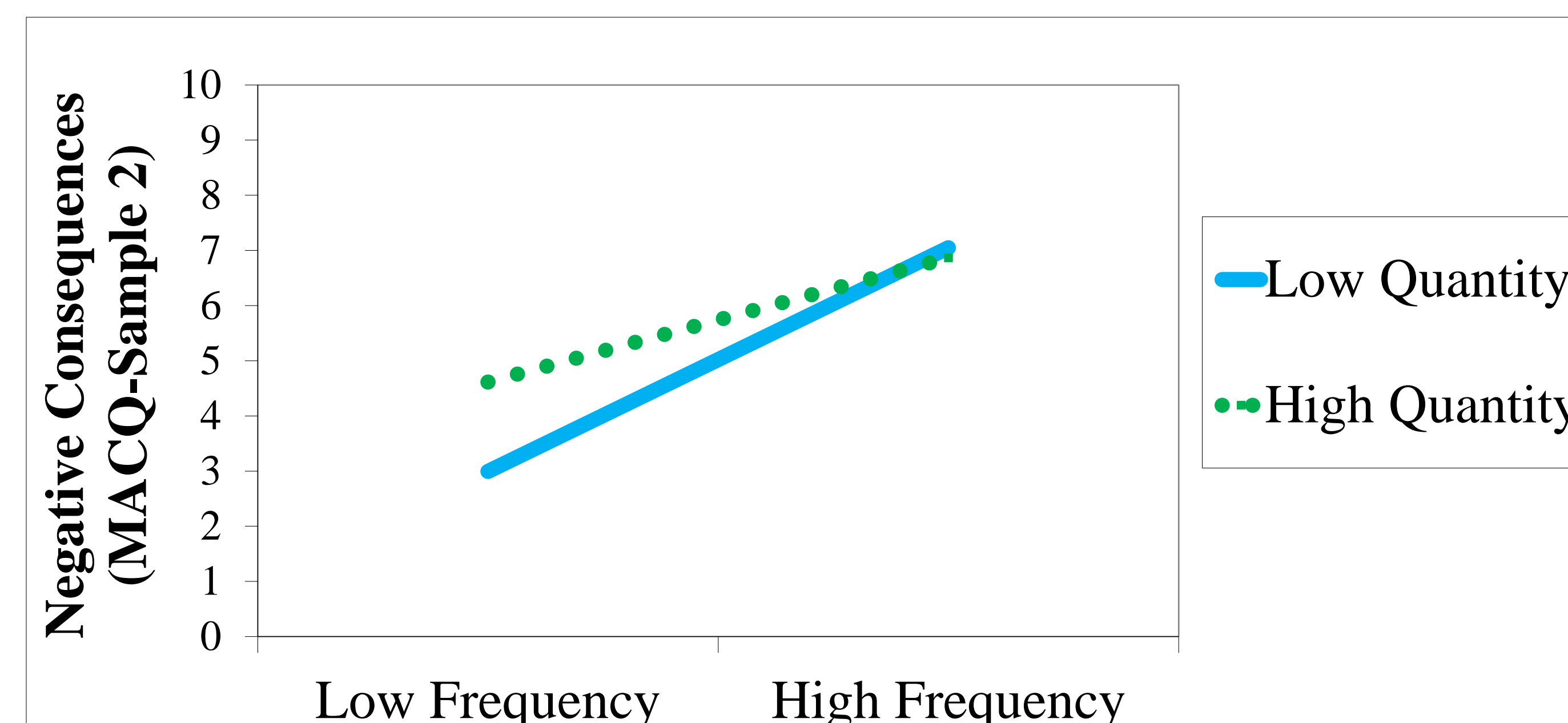
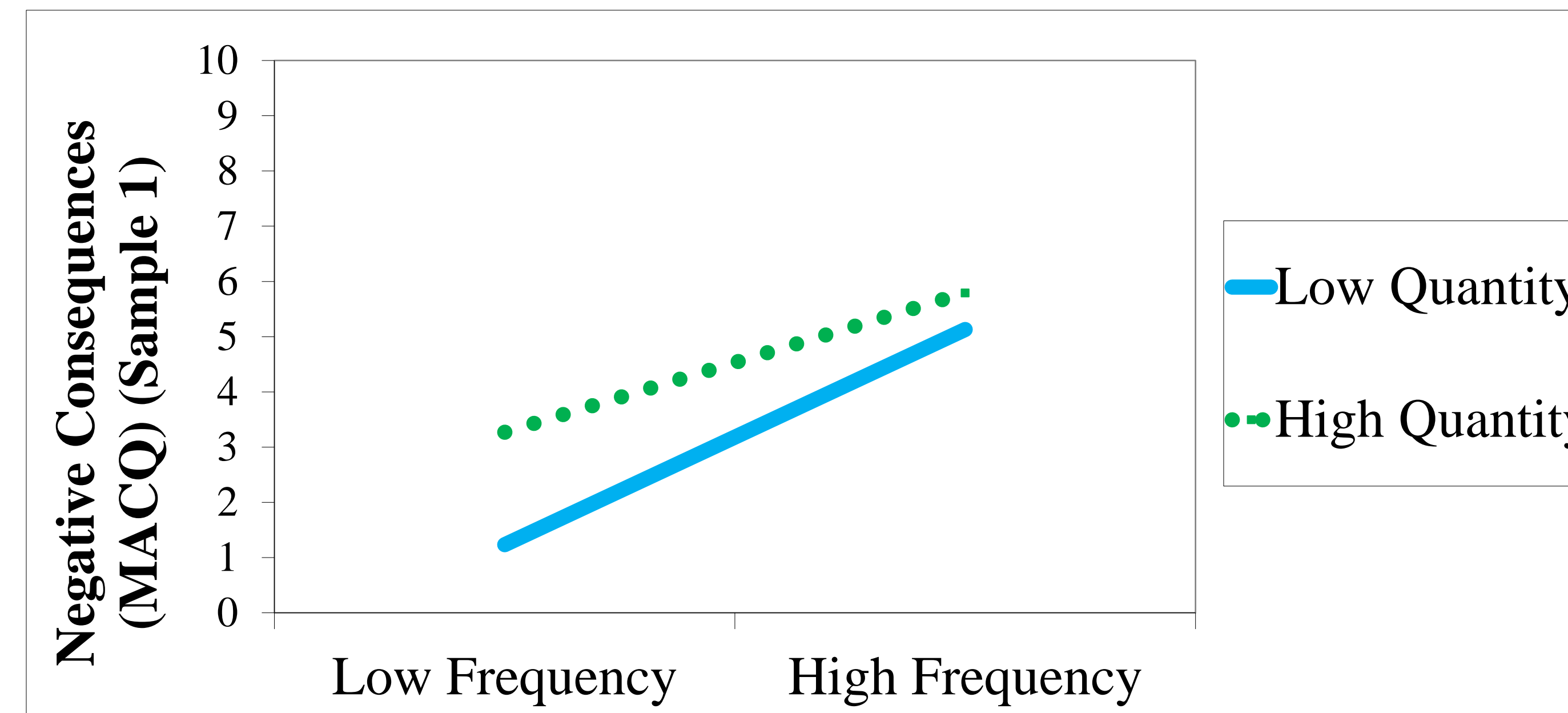
PARTICIPANTS AND PROCEDURES

- Sample 1 included college student marijuana users (n = 2077) recruited from psychology department participant pools from 9 universities in 9 states through the United States
- Sample 2 included college student marijuana users (n = 2222) recruited from 10 universities in 10 states throughout the United States

MEASURES

- The Marijuana Use Grid (MUG) was used to assess marijuana use for participants who reported using marijuana in the past 30 days
- The MUG measures the times, days, and approximate numbers of grams an individual uses in each of 6 4-hour period in a typical week (Monday – Sunday)
- Marijuana use consequences were measured via the Marijuana Consequences Questionnaire (MACQ) in both studies
- Sample 1 used a continuous measure of CUD symptoms created for this project called the Self-Reported Symptoms of Cannabis Use Disorder (SRSCUD, see Sotelo et al. poster)
- Sample 2 used Cannabis Use Disorders Identification Test-Revised (CUDIT-R) to assess CUD symptoms

Marijuana Use Grid (MUG): A Brief, Comprehensive Measure of Marijuana Use



RESULTS

- On average, our samples self-reported using 9-10 days per month, 5-6 time periods during a typical use week, and about 6-7 grams of marijuana per week
- Frequency and quantity measures from the MUG was moderately associated with negative consequences and CUD symptoms in both samples, and predicted outcomes when controlling for past month frequency, supporting that the MUG indicators account for outcomes above and beyond typical crude frequency measures
- Across all models predicting MUG measures and CUD symptoms the highest scores of CUD symptoms were seen with higher frequency of marijuana usage
- As shown in the figures, typical frequency and quantity of marijuana use interacted to predict consequences and CUD symptoms
- Although high frequency and high quantity of use was associated with high levels of consequences/CUD symptoms, the effect of quantity on consequences was greater for less frequent users

SUMMARY/CONCLUSION

- MUG-derived measures of marijuana frequency and quantity uniquely predicted marijuana related harms above and beyond typical marijuana frequency measures
- In addition, MUG obtains detailed information about patterns of use (i.e., specific times and days of use) that could be useful in other contexts (e.g., ecological momentary interventions)
- Despite having a large sample size across 2 studies, they were convenience samples, which could limit the generalizability of our findings
- Our MUG indicators predicted consequences/CUD symptoms beyond a simple frequency measure, the simple frequency measure was most robustly associated with outcomes
- Although the MUG provides more detailed information, additional work is needed to test its validity (i.e., more detailed does not necessarily mean more accurate)
- Comparison between the MUG and other measures of marijuana use is needed to determine whether they provide redundant or complimentary information
- Researchers need to carefully attend to improving the assessment of marijuana to estimate dose-response relationships between marijuana use and important health outcomes