

Comparison of cannabis use patterns, motives, and expectancies among medicinal and recreational users



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Introduction

- Twenty-nine US states currently allow for medical cannabis programs.
- However, relatively little is known about which characteristics distinguish medicinal and recreational users.
- **Objective:** the present study aims to characterize individuals reporting cannabis use for medicinal and recreational purposes using data from an online crowdsourcing platform.

Methods

General Methodology

- Participants were recruited through Amazon's Mechanical Turk (MTurk), a United States-based crowdsourcing website.
- The study consisted of two stages of surveys (Figure 1). In stage one individuals completed a battery of self-report questionnaires. Cannabis users were invited to complete stage two.
- Stage two consisted of another survey on MTurk focusing on recreational and medicinal cannabis use, reasons for use, among other variables.

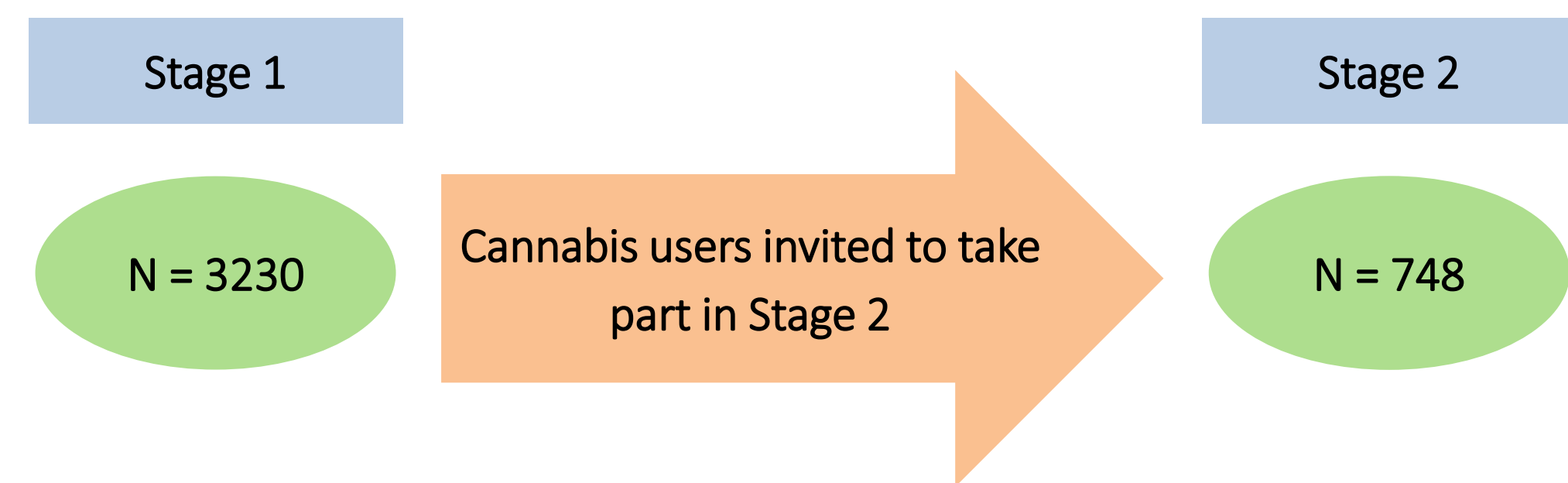


Figure 1. Participant selection.

Measures

Measure	Variable(s)
Demographics	Age, sex, race, income, education
Marijuana History Questionnaire (MHQ)	Cannabis use history, quantity/frequency of use, and medicinal use
Reasons for Using Medical Marijuana (RUMM)	E.g., to relieve pain, to relieve depression, to improve sleep, etc.
Cannabis Use Disorder Identification Test (CUDIT)	Severity of cannabis-related problems
Comprehensive Marijuana Motives Questionnaire (CMMQ)	E.g., for reasons of enjoyment, coping, celebration, relative low risk, etc.
Marijuana Effect Expectancy Questionnaire-Brief (MEEQ-B)	Positive and negative expectancies about the effects of cannabis use

Sample Characteristics

- Mean age = 33.76 (SD = 10.13); 51% female; 73% White.

Results

Overall Sample

- Of the 748 cannabis users recruited, 283 (38%) indicated they were currently using cannabis for medicinal purposes. 58% of medicinal cannabis users reported that they had been prescribed it by a doctor. 85% of medicinal cannabis users also reported using cannabis recreationally (Figure 2).
- Positive expectancies about the effects of cannabis were associated with greater cannabis use in the overall sample ($r = .23, p < .001$). Negative expectancies about the effects of cannabis were associated with less cannabis use in the overall sample ($r = .25, p < .001$).

Profile of Medicinal Users

- Compared with recreational users, medicinal users were more likely to be female ($p < .001$) and have lower education ($p = .013$).
- Medicinal cannabis was most frequently reported as being used for the following medical conditions:
 - Psychiatric Disorders (most commonly anxiety and depression) – 52% of sample endorsing
 - Sleep – 50% of sample endorsing
 - Chronic Pain – 48% of sample endorsing

Medicinal versus Recreational Users

- Medicinal users used cannabis more often than recreational users ($p < .001$) with 62% of medicinal users reporting use four or more times per week compared to 24% of recreational users.
- Medicinal users ($M = 17.61, SD = 5.75$) were also more likely to report a higher severity of cannabis-related problems compared with recreational users ($M = 14.51, SD = 5.29$), $p < .001$.
- Motives for use were significantly different between groups (Figure 3).

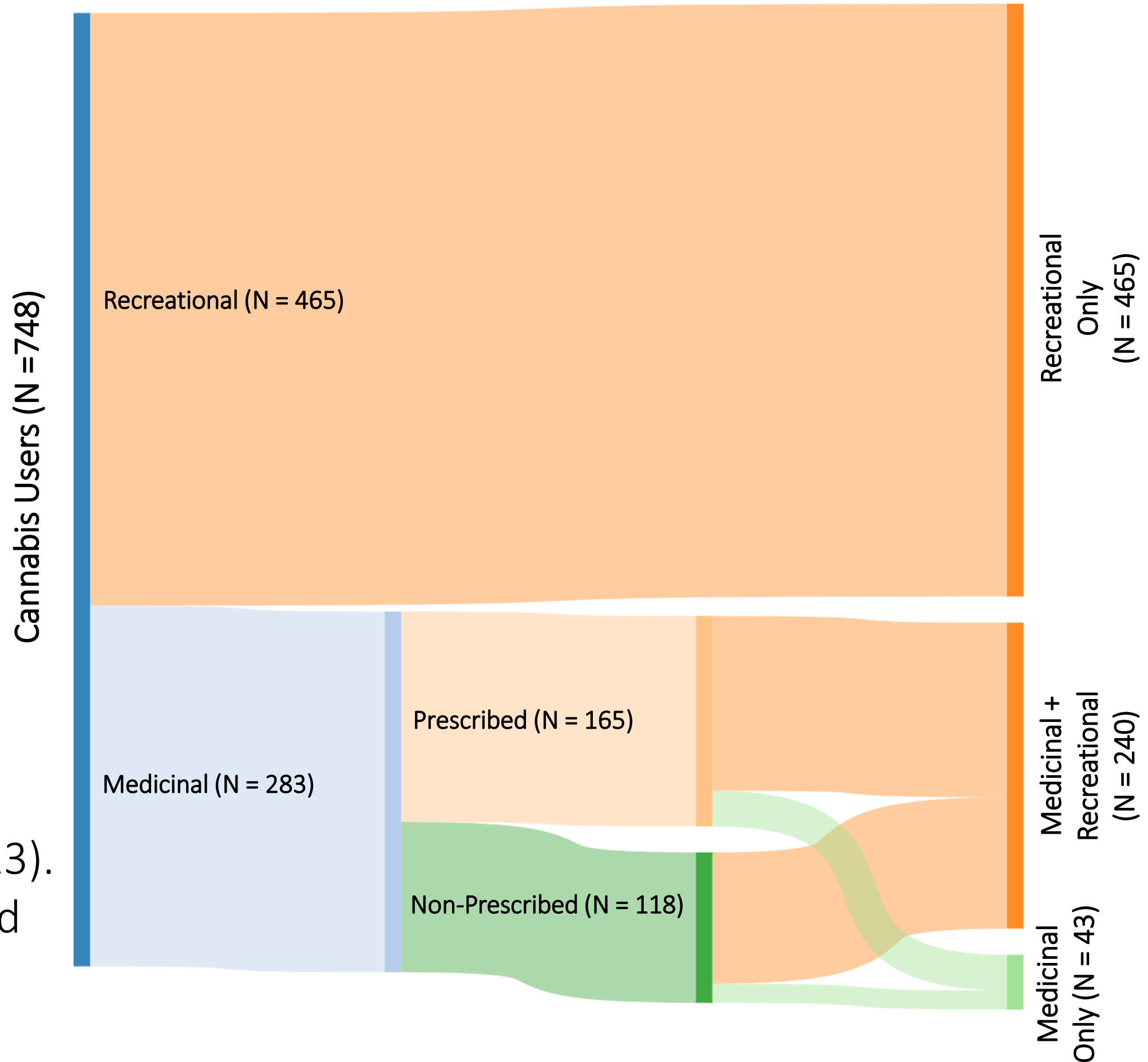


Figure 2. Medicinal and recreational use frequency distribution.

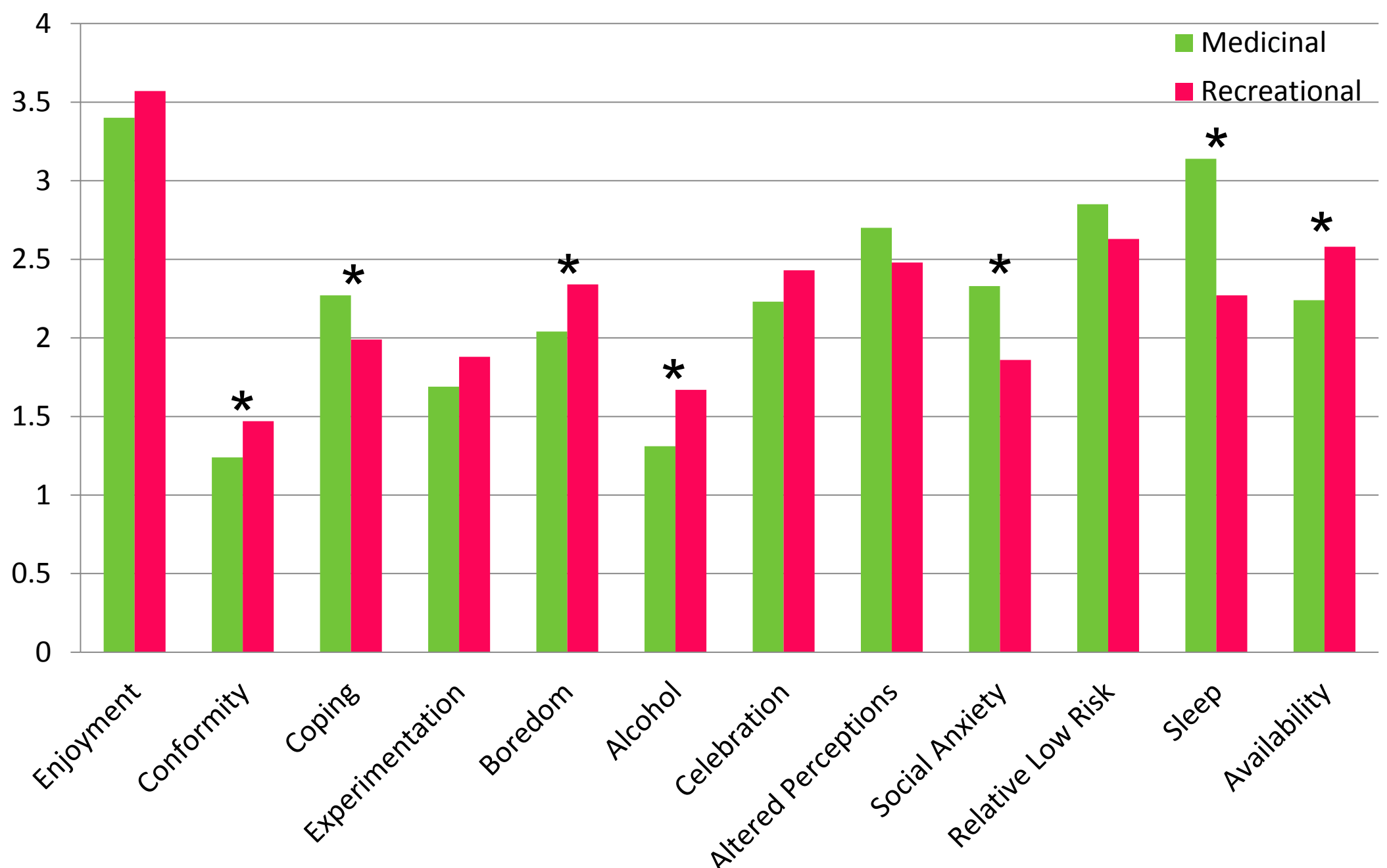


Figure 3. Cannabis use motives. * indicates $p < .001$.

Discussion

- Medicinal users tended to report using cannabis to relieve anxiety, depression, and chronic pain, and to improve relaxation and sleep. They also tended to use cannabis more often and have more severe cannabis-related problems relative to recreational users.
- In terms of motives for cannabis use, medicinal users more frequently used cannabis for sleep, social anxiety, and coping compared with recreational users. Compared with medicinal users, recreational users more frequently endorsed using cannabis for reasons of alcohol, availability, conformity, and boredom.
- This study provides a profile of medicinal cannabis users and elucidates the differences between medicinal and recreational cannabis users using a large, geographically diverse sample.
- Profiles of medicinal cannabis users may provide useful information for screening and providing care to these individuals.

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