Full length article

# Older marijuana users: Life stressors and perceived social support

Namkee G. Choi*, Diana M. DiNitto, C.Nathan Marti

*University of Texas at Austin School of Social Work, 1925 San Jacinto Blvd, Austin, TX 78712, USA*

## ARTICLE INFO

## ABSTRACT

*Background:* Given increasing numbers of older-adult marijuana users, this study examined the association of marijuana use and marijuana use disorder with life stressors and perceived social support in the 50+ age group.
*Methods:* Data came from the 2012–2013 National Epidemiologic Survey on Alcohol and Related Conditions (N = 14,715 respondents aged 50+). Life stressors were measured with 12 items related to interpersonal, legal, and financial problems and being a crime victim. Perceived social support was measured with the 12-item Interpersonal Support Evaluation List. Using principal component analysis (PCA), we identified four components of life stressors. Linear regression analyses was used to test associations of past-year marijuana use and use disorder with PCA scores of each component and perceived social support.
*Results:* Of the 50+ age group, 3.89% were past-year marijuana users and 0.68% had marijuana use disorder. Marijuana users, especially those with marijuana use disorder (17.54% of past-year users), had high rates of mental and other substance use disorders. Controlling for other potential risk factors for stress, including health status and mental and other substance use disorders, marijuana use and use disorder were still significantly associated with more life stressors and lower perceived social support, possibly from low levels of social integration.
*Conclusions:* A substantial proportion of older-adult marijuana users need help with mental health and substance use problems. Further examination of older marijuana users' life stressors and social support networks may aid in developing more systematic intervention strategies to address needs and reduce marijuana use.

## 1. Introduction

After alcohol and tobacco, marijuana is the most widely used psychoactive substance in all age groups in the United States, and its use has been steadily increasing. The 2014 National Survey on Drug Use and Health (NSDUH) showed that 22.2 million Americans (8.4% of people aged 12+) used marijuana in the 30 days before the survey, up from 14.5 million (5.8% of people aged 12+) in 2007, and 4.2 million had a marijuana use disorder in the preceding year (Center for Behavioral Health Statistics and Quality, 2015; National Institute on Drug Abuse, 2015). The National Epidemiologic Surveys on Alcohol and Related Conditions (NESARC) also show that the past-year marijuana use rate among those aged 18+ more than doubled from 4.1% (SE = 0.15) in 2001/2002 to 9.5% (SE = 0.27) in 2012/2013 (Hasin et al., 2015).

While marijuana use rates remained lower among middle-aged and older adults than younger adults, the significant increases from 1.6% (SE = 0.15) to 5.9% (SE = 0.28) for the 45–64 age group and from 0.0% (SE = 0.02) to 1.3% (SE = 0.22) for the 65+ age group are particularly notable (Hasin et al., 2015). These increases reflect the aging of the baby boomers who have had more liberal attitudes toward psychoactive drug use and higher rates of use than preceding generations (Black and Joseph, 2014; Nielsen, 2010). Older adults' use rates are likely to continue to rise as the rest of the boomers pass the 65 year age mark and as cultural acceptance and legalization of marijuana use is on the rise. Presently, 25 states and the District of Columbia have laws legalizing marijuana use in some form. Those aged 50+ include a significant share (e.g., 50+% in some U.S. states) of medical marijuana users who employ marijuana as an alternative medicine to relieve symptoms and distress associated with medical illness and chronic pain (Fairman, 2016; Ryan-Ibarra et al., 2015).

Previous population-based studies have found that a majority of marijuana users aged 50+ did not perceive frequent (1–2 times a week) use to be risky (Black and Joseph, 2014; Choi et al., 2016a). However, a qualitative study found that baby-boomer marijuana users (most were long-term users) were keenly aware of marijuana's potential physical/mental health risks (e.g., respiratory problems from smoking, toxicity from high tetrahydrocannabinol

content, dependence/withdrawal, worsening depressive symptoms) and legal risks (e.g., for using without a medical marijuana card in most states), while they embrace using it for relaxation/pleasure, coping with stress/anxiety, social motives (more fun with friends), and enhancement or expansion motives (to heighten mental awareness, concentration, and creativity and to make mundane/taxing tasks more bearable; Lau et al., 2015; Murphy et al., 2015). They were also aware of the stigma associated with marijuana use and resulting social risks and often did not disclose their use in certain professional and social circles and even to their own family; thus, most used while alone or with their spouse/partner in the privacy of their own homes or only with like-minded friends to avoid social disapproval (Lau et al., 2015).

In the mainstream media, older marijuana users tend to be portrayed as easy-going, aging hippies (Huth, 2016; Krueger, 2013). In contrast, epidemiologic studies show high rates of psychological distress, mental disorders, marijuana use disorder, and other illicit drug use and disorders among older marijuana users, a majority of whom are long-term users who began using in their teenage or young adult years (Choi et al., 2016b; DiNitto and Choi, 2011). A study of primary care adult patients also found that medical marijuana users and recreational marijuana users were quite similar in terms of most medical, psychiatric, substance use, and service utilization characteristics, although medical users did report more medical problems, pain, and mobility problems (Roy-Byrne et al., 2015). Across age groups, other studies provide strong empirical support for the association of short-term and long-term/chronic marijuana use with physical, mental, and cognitive health risks (Gordon et al., 2013; Hall and Degenhardt, 2014; Hall et al., 2016; Hartman and Huestis, 2013; Mechoulam and Parker, 2013; Thomas et al., 2014; Volkow et al., 2014, 2016).

These research findings suggest that compared to their non-using age peers, older marijuana users may have higher levels of life stressors (e.g., interpersonal conflicts, legal difficulties) and lower levels of social support (e.g., limited social circles) that could be directly related to their marijuana (and other substance) use and co-occurring physical and mental health problems. However, there is little population-based research on older marijuana users' life stressors and social support and on relationships that might exist between marijuana use and these life stressors and social support. Using 2012–2013 NESARC data and focusing on those aged 50+, this study examined whether marijuana use and marijuana use disorder are associated with number of life stressors and perceived social support. Study hypotheses were: Controlling for sociodemographic characteristics, health status, and mental and other substance use disorders, past-year marijuana users (H1a) and those with marijuana use disorder (H1b) will have significantly more life stressors than nonusers and those without the disorder, respectively; and marijuana users (H2a) and those with marijuana use disorder (H2b) will have significantly lower perceived social support than nonusers and those without the disorder, respectively.

## 2. Material and methods

### 2.1. Data and sample

Data came from the 2012–2013 NESARC (NESARC-III), a national probability sample survey of the U.S. civilian noninstitutionalized population aged 18+ years (N = 36,309), sponsored by the National Institute on Alcohol Abuse and Alcoholism (NIAAA). Using computer-assisted personal interviewing, data were collected on alcohol and other substance use, substance use disorders, and related physical and mental disabilities. The semi-structured diagnostic interview used to collect information was the NIAAA Alcohol Use Disorder and Associated Disabilities Interview Sched-

ule (AUDADIS-5). In NESARC-III's multistage probability sampling, primary sampling units were individual counties or, in some small rural counties, combined contiguous counties; secondary sampling units were groups of Census-defined blocks; tertiary sampling units were households within sampled secondary sampling units, from which eligible adult respondents were randomly selected, with Hispanics, Blacks, and Asians oversampled (Grant et al., 2015). In this study, we focused on the 14,715 respondents aged 50+, after excluding 23 respondents due to missing marijuana use data.

### 2.2. Measures

#### 2.2.1. Life stressors.
From a number of questions respondents were asked about their life situations and problems in the preceding 12 months, we selected the following 12 items as representing life stressors (yes = 1, no = 0 for each; range 0–12): separated/divorced or broke off steady relationship; trouble with police or the law; family members'/friends' trouble with police or the law; physical assault of any family member/close friend; so much debt and no idea how to repay; homeless at any time; problems with neighbor, friend, or relative; theft victim; self or family was victim of property destruction; fired/laid off from job; trouble with boss or coworkers; and any family member's/close friend's death.

#### 2.2.2. Perceived social support.
This was measured with the 12-item Interpersonal Support Evaluation List (ISEL-12) that assesses perceived availability of resources that other people can provide to buffer the negative effects of stress (Cohen et al., 1985). The ISEL-12 includes three subscales, each consisting of four items: appraisal (advice or guidance); belonging (empathy, acceptance, concern); and tangible (help or assistance such as material or financial aid; Cohen et al., 1985; Merz et al., 2014). Examples of items are: "Feel that there is no one to share worries and fears with"; "Could easily find someone to go to movie on spur of the moment"; "Would be able to find someone to help with chores if sick" (definitely false = 1; probably false = 2; probably true = 3; and definitely true = 4). Negatively worded items are reverse coded. Higher scores represent higher perceived social support. Cronbach's alpha for the study sample was 0.84. The three subscales were highly correlated in the study sample: appraisal and belonging (r = 0.570); appraisal and tangible support (r = 0.624); and belonging and tangible support (r = 0.627).

#### 2.2.3. Marijuana and other substance use and disorders.
We focused on the following past-year substance use and DSM-5 substance use disorders: marijuana, other drugs (sedatives/tranquilizers, painkillers, cocaine/crack, stimulants, club drugs, hallucinogens/psychedelics, inhalants/solvents, heroin, and other drugs/medicines, including antidepressants, antipsychotic drugs, steroids, and any other medicines or drugs), alcohol, and nicotine. For marijuana users, we also include information on their initiation and peak use ages, duration of peak use period, number of joints usually smoked in a day during the peak use period and in the last 12 months, frequency of use, and medical marijuana use.

#### 2.2.4. Mental disorders.
We included the following past-year mental disorders: major depressive disorder (MDD); any anxiety disorder (specific phobia, social phobia, panic disorder, agoraphobia, or generalized anxiety disorder); post-traumatic stress disorder (PTSD); and bipolar 1 disorder and/or manic or hypomanic episode.

#### 2.2.5. Sociodemographic characteristics.
These were age, gender, race/ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic, non-Hispanic Asian/Pacific Islander [Asian American hereafter], and American Indian/Alaska Native [American Indian hereafter]),