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# Recruitment discrimination of lifetime classic psychedelic users is unjustified: Evidence from employees' motivation-based workplace absenteeism

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## ABSTRACT

**Background and aims:** Although large-scale population studies have linked the use of classic psychedelics (lysergic acid diethylamide, psilocybin, or mescaline) to reduced odds of physical health problems, mental health problems, and criminal behavior, the roughly 35 million adults in the United States who have used classic psychedelics are nonetheless stigmatized in the American job market. Various federal organizations in the United States automatically reject applicants on the sole basis of prior psychedelic use, thereby practicing an open form of legal discrimination against these applicants. The present study investigates whether this discrimination can be justified based on associations between lifetime classic psychedelic use and motivationally-based workplace absenteeism. **Methods:** Using pooled cross-sectional data from the National Survey on Drug Use and Health (2013–2019) on 193,320 employed adults in the United States, this study tests whether lifetime classic psychedelic use predicts the number of workdays employees skipped in the last month (i.e., motivationally-based workplace absenteeism). **Results:** After adjusting for sociodemographics, physical health indicators, and other substance use, no significant association between lifetime classic psychedelic use and motivationally-based workplace absenteeism is found. **Conclusion:** This study builds on classic psychedelic research that is just beginning to take work-specific outcomes into account and offers empirical justification for the elimination of arbitrary drug-based recruitment policies in the workplace.

## KEYWORDS

psychedelics, workplace, recruitment, discrimination, workplace absenteeism

*“I was motivated to join and had passed each round of interviews, even receiving a conditional job offer. It was quickly rescinded though after I told them I’d taken LSD seven years earlier.”*

– D. Ellis, Scientist and former FBI applicant (D. Ellis 2022, personal communication, 8 September)

## INTRODUCTION

Classic psychedelics, including lysergic acid diethylamide (LSD), psilocybin (the psychoactive compound in magic mushrooms), and mescaline (the psychoactive compound in the peyote and San Pedro cacti), are serotonin receptor agonists that can alter individuals' perceptions, moods, and cognitive processes (Nichols, 2016). Each of these substances elicit comparable

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effects and they have been shown to demonstrate cross-tolerance (Bonson, 2020). For millennia, these substances have been used across cultures for ritual, recreational, and healing purposes (Strassman, 1995).

Research on classic psychedelics is said to currently be experiencing a renaissance (Sessa, 2018), with an ever-increasing number of empirical studies demonstrating their safety and therapeutic benefit (Aday, Mitzkovitz, Bloesch, Davoli, & Davis, 2020; Carhart-Harris & Goodwin, 2017; Chi & Gold, 2020; Elsey, 2017). More generally, recent large-scale population studies have associated lifetime classic psychedelic use, that is any prior use of a classic psychedelic (Krebs & Johansen, 2013), with lower odds of physical health problems (e.g., heart disease, diabetes, obesity; Simonsson, Osika, Carhart-Harris, & Hendricks, 2021; Simonsson, Sexton, & Hendricks, 2021), mental health problems (e.g., psychological distress, suicidality; Hendricks, Thorne, Clark, Coombs, & Johnson, 2015), or criminal behavior (e.g., theft, assault, intimate partner violence; Hendricks et al., 2018; Jones & Nock, 2022; Thiessen, Walsh, Bird, & Lafrance, 2018). It is therefore unsurprising that classic psychedelic use, including the consumption of doses low enough to not induce perceptual alterations (i.e., microdosing), has increased significantly in recent years (Killion et al., 2021; Polito & Stevenson, 2019; Walsh, Livne, Shmulewitz, Stohl, & Hasin, 2022). Despite the accumulation of positive research findings as well as increasing trends in their consumption, classic psychedelic use remains a form of criminal activity in that it - in the United States as well as most Western countries - is punishable by law. As such, its users have been assumed to be aberrant individuals who pose issues to society (Karlsson, 2010; Mugford, 1991). For this reason, classic psychedelic users fear that stigmas relating to the “lifestyles, values and professional standards of ‘drug users’ (lazy, immoral, dishonest)—may [...] undermine the rigor, validity, objectivity and integrity of their work” (Ross, Potter, Barratt, & Aldridge, 2020, p. 272). This fear is justified seeing as recent experimental work showed that the public’s evaluation of researchers’ scientific integrity (i.e., professionalism and honesty) was negatively affected when researchers were presented as users of classic psychedelics (Forstmann & Sagioglou, 2021). Furthermore, scientists in the field of classic psychedelic research have lamented classic psychedelic users being stereotyped as disorganized, delusional, or otherwise inferior (Adams, 2010; Marlan, 2019). Thus, for employees with lifetime classic psychedelic use, job loss or restricted career opportunities are a legitimate fear (Ross et al., 2020), and these individuals have even been considered a minority group based on their persecuted desire for the altered states of consciousness that classic psychedelics offer (Marlan, 2019).

Certain career paths are indeed closed to individuals solely on the basis of their past classic psychedelic use. Organizations that discriminate against classic psychedelic users include, but are not limited to, the Federal Bureau of Investigation (which has roughly 35,000 employees and denies applicants who have used classic psychedelics in the

past 10 years; <https://www.fbijobs.gov/eligibility>), U.S. Customs and Border Protection (which has roughly 60,000 employees and denies applicants who have used classic psychedelics in the past 3 years; <https://www.cbp.gov/careers/car>), and the Central Intelligence Agency (which has an undisclosed number of employees and denies applicants who have used classic psychedelics in the past year; <https://www.cia.gov/cia-requirements/>). The lack of a uniform drug policy, such as what length of time without use of classic psychedelics is deemed permissible, across these organizations suggests that the denial of applicants based on prior classic psychedelic use is arbitrary, thus unjustified and discriminatory. Furthermore, each of these aforementioned organizations are more lenient regarding applicants’ prior use of marijuana, a substance whose use is illegal under United States federal law and which has been rated by experts as more harmful than classic psychedelics such as LSD (Nutt, King, Saulsbury, & Blake-more, 2007). In line with the interpretation of these recruitment policies as discriminatory are the findings of a systematic review of studies on the long-term effects of classic psychedelics (Aday et al., 2020) which reported that most studies had a follow-up latency of just a few weeks and, of the long-term effects identified, the results were predominantly positive; these included decreased depression, neuroticism, and alcohol use as well as increased optimism, mindfulness, and well-being. Furthermore, recent evidence has shown that lifetime classic psychedelic use is associated with lower health-based workplace absenteeism (i.e., sick leave taken), suggesting that employees’ lifetime classic psychedelic use could actually be economically advantageous for organizations (Mellner, Dahlen, & Simonsson, 2022). Thus, according to the current scientific literature, there is no empirical justification for the denial of applicants based solely on their prior use of classic psychedelics.

Although organizations’ recruitment policies generally do not explain why past classic psychedelic use precludes employment, a likely assumption is that these organizations see applicants with lifetime classic psychedelic use through a lens warped by stigma and consider such applicants as being unmotivated or unreliable. If empirical findings could demonstrate that the employment of lifetime classic psychedelic users places a burden on the organizations where they work, such as through increased rates of motivation-based workplace absenteeism, recruitment policies disqualifying their prior use could be justified based on both financial and performance grounds.

However, recent evidence speaks against this. As already mentioned, lifetime classic psychedelic users are less inclined to engage in criminal behavior (when disregarding the use of classic psychedelics, itself currently considered a criminal act), suggesting that they may actually be less motivated to skip work (i.e., breach their work contract). Moreover, cross-cultural research has linked classic psychedelic use with higher self-reported measures of trait concern for others and trait empathy



(Lerner & Lyvers, 2006) and for this reason classic psychedelic users, relative to non-users, may be less motivated to skip work and potentially leave their coworkers in a difficult work situation. Indirect support for this idea comes from a recent study by Forstmann and Sagioglou (2017) linking lifetime classic psychedelic use to increased pro-environmental behavior such as recycling and responsible water use, suggesting that classic psychedelic users may be more aware of the negative effect that their actions (e.g., skipping work) can have on others compared to non-users. Taking these prior findings into consideration with the increasing trends in classic psychedelic use and career-limiting impacts of various organizations' current recruitment policies, it is worth testing whether lifetime classic psychedelic use is linked to employees' motivationally-based workplace absenteeism.

## METHODS

### Data and measures

I used publicly available data from the National Survey on Drug Use and Health (NSDUH), an annual survey measuring substance use and mental health in the general United States civilian non-institutionalized population (U.S. Department of Health and Human Services, 2020). Respondents were randomly selected from across the country and compensated \$30 for their participation. Detailed information on the sampling and data collection methods are available at the NSDUH website (<https://nsduhweb.rti.org/>). The present research sample was limited to employed adults aged 18 or older who had participated in the survey in 2013, 2014, 2015, 2016, 2017, 2018, or 2019. Responses were available for 199,405 individuals, of whom 30,990 (16% unweighted) reported lifetime classic psychedelic use. The majority of respondents were White (63%), female (51%), with at least some college experience (65%), and working full time (76%).

### Independent variables

The independent variable was lifetime classic psychedelic use which was coded based on whether respondents indicated ever having used LSD (variable LSDFLAG; 0 = never used, 1 = ever used), psilocybin (variable PSILCY2; 0 = never used, 1 = ever used), mescaline (variable MESC2; 0 = never used, 1 = ever used), peyote (variable PEYOTE2; 0 = never used, 1 = ever used), or San Pedro (variables HALNEWA, HALNEWB, HALNEWC, HALNEWD, and HALNEWE for 2013–2014 and HALLUCOT1, HALLUCOT2, HALLUCOT3, HALLUCOT4, and HALLUCOT5 for 2015–2019; 6077 = ever used). Each of these substances were analyzed separately, though mescaline, peyote, and San Pedro were merged into one category as is commonly done in studies on classic psychedelic users (Mellner et al., 2022; Simonsson, Osika, et al., 2021) due to the fact that mescaline is the psychoactive substance in the peyote and San Pedro cacti (Nichols, 2016).

### Dependent variable

The dependent variable was motivation-based workplace absenteeism (i.e., the number of workdays missed because the respondent did not want to be at work in the last 30 days; variable WRKSKIPMO for 2013–2014 and WORKBLAH for 2015–2019). Motivation-based workplace absenteeism excluded planned vacation or days stayed home due to a sick family member and was measured using a single item ranging from 0 to 30 ( $M = 0.307$ ,  $SD = 1.391$ ).

### Covariates

The covariates were age in years (variable AGE2 recoded; 18–25, 26–34, 35–49, 50–64, 65 or older), sex (variable IRSEX; 1 = male, 2 = female), ethnoracial identity (variable NEWRACE2; 1 = non-Hispanic White, 2 = non-Hispanic African American, 3 = non-Hispanic Native American/Alaska Native, 4 = non-Hispanic Native Hawaiian/Pacific Islander, 5 = non-Hispanic Asian, 6 = non-Hispanic more than one race, 7 = Hispanic), educational attainment (variable EDUCCAT2 for 2013–2014 and EDUHIGHCAT for 2015–2019; 1 = less than high school, 2 = high school graduate, 3 = some college or Associate's degree, 4 = college graduate), marital status (variable IRMARIT for 2013–2014 and 2016–2019 and IRMARITSTAT for 2015; 1 = married, 2 = widowed, 3 = divorced or separated, 4 = never been married), employment type (variable EMPSTATY for 2013–2014 and IRWRKSTAT for 2015–2019; 1 = full-time, 2 = part-time), annual respondent income (variable IRPINC3; 1 = less than \$10,000, 2 = \$10,000–19,999, 3 = \$20,000–29,999, 4 = \$30,000–\$39,999, 5 = \$40,000–49,999, 6 = \$50,000–74,999, 7 = \$75,000 or more), overall health (variable HEALTH recoded; 1 = poor, 2 = fair, 3 = good, 4 = very good, 5 = excellent), body mass index (BMI) (variable BMI2), self-reported engagement in risky behavior (variable RKFQRSKY for 2013–2014 and RSKYFQTES for 2015–2019; 1 = never, 2 = seldom, 3 = sometimes, 4 = always), lifetime marijuana use (variable MRJFLAG; 0 = never used, 1 = ever used), lifetime cocaine use (variable COCFLAG; 0 = never used, 1 = ever used), lifetime other stimulant use (variable STMFLAG for 2013–2014 and STMANYFLAG for 2015–2019; 0 = never used, 1 = ever used), lifetime sedative use (variable SEDFLAG for 2013–2014 and SEDANYFLAG for 2015–2019; 0 = never used, 1 = ever used), lifetime tranquilizer use (variable TRQFLAG for 2013–2014 and TRQANYFLAG for 2015–2019; 0 = never used, 1 = ever used), lifetime heroin use (variable HERFLAG; 0 = never used, 1 = ever used), lifetime phencyclidine (PCP) use (variable PCPFLAG; 0 = never used, 1 = ever used), lifetime 3,4-methylenedioxymethamphetamine (MDMA/ecstasy) use (variable ECSFLAG for 2013–2014 and ECSTMOFLAG for 2015–2019; 0 = never used, 1 = ever used), and lifetime inhalant use (variable INHFLAG for 2013–2014 and INHALFLAG for 2015–2019; 0 = never used, 1 = ever used). All covariates were coded separately. The inclusion of these covariates broadly mirrors those used in prior investigations of lifetime classic psychedelic use in the



United States population (Johansen & Krebs, 2015; Krebs & Johansen, 2013; Simonsson, Sexton, & Hendricks, 2021) with the exception of employment type, annual respondent income, overall health, and BMI. These additional covariates were included as they were expected or have previously been shown to predict workplace absenteeism (DeVaro, 2015; Frone, 2008; Merrill et al., 2013; Schmier, Jones, & Schmier, 2006; Yun, Sim, Park, Park, & Noh, 2016).

Variables with the prefix 'IR' were imputation revised for missing values by the NSDUH. The NSDUH uses numerous constraints when imputing missing values to ensure their consistency with non-missing values for use in multivariate analyses. Further information on the NSDUH imputation procedure is available in the 'Statistical Imputation' section in the introduction of each annual NSDUH codebook.

## Statistical analyses

The NSDUH is a nationally representative cross-sectional survey and, for this reason, outliers in the data were not identified or removed. Respondents with missing data were excluded from the analyses, as commonly done when investigating lifetime classic psychedelic use with NSDUH datasets (Johansen & Krebs, 2015; Simonsson, Sexton, & Hendricks, 2021). Due to missing data, analysis of motivation-based workplace absenteeism was limited to 193,320 respondents, of whom 30,586 had lifetime classic psychedelic use (16% unweighted). Importantly, the variance inflation factors were under 2.5 for all predictor variables, indicating that multicollinearity was not an issue. Stata/SE 16.1 was used to run all analyses (StataCorp, 2019) and the Stata code used for this study's analyses are openly available here [https://osf.io/dgnqt/?view\\_only=f7b8dad49594328a2052e3f252c0e6e](https://osf.io/dgnqt/?view_only=f7b8dad49594328a2052e3f252c0e6e).

Motivation-based workplace absenteeism is a right-skewed count variable that does not follow a normal distribution and the Shapiro–Wilk test for normality of motivation-based workplace absenteeism was significant ( $W = 0.56$ ,  $V = 21,000$ ,  $P < 0.001$ ). To account for this non-normality in the data, a negative binomial regression was implemented in the following analyses because a negative binomial model (AIC = 213,905, BIC = 214,200) fit the data better than a Poisson model (AIC = 340,864, BIC = 341,149), a possible alternative.

## RESULTS

### Lifetime classic psychedelic use

Before accounting for covariates, lifetime classic psychedelic users reported higher rates of motivation-based workplace absenteeism ( $B = 0.379$ ,  $IRR = 1.461$ ,  $SE = 0.024$ ,  $P < 0.001$ ). However, after taking into account important covariates such as risk-taking behavior and other lifetime substance use (see Table 1: Model 1), as well as relevant demographic and health-related variables (see Table 1: Model 2), the association between lifetime classic psychedelic use and motivation-based workplace absenteeism was no longer positive and statistically significant.

### Specific classic psychedelic use

Before accounting for covariates, LSD ( $B = 0.267$ ,  $IRR = 1.306$ ,  $SE = 0.035$ ,  $P < 0.001$ ) and psilocybin ( $B = 0.207$ ,  $IRR = 1.230$ ,  $SE = 0.034$ ,  $P < 0.001$ ) were both significantly correlated with motivation-based workplace absenteeism while mescaline/peyote/San Pedro was not ( $B = 0.04$ ,  $IRR = 1.004$ ,  $SE = 0.055$ ,  $P = 0.945$ ). These positive associations linking motivation-based workplace absenteeism to LSD and psilocybin were, however, not robust to the inclusion of important covariates such as risk-taking behavior and other lifetime substance use (see Table 2: Model 1) or relevant demographic and health-related variables (see Table 2: Model 2). In fact, all associations between motivation-based workplace absenteeism and the individual classic psychedelic variables investigated in this study were non-significant when taking all study covariates into account simultaneously.

## DISCUSSION

The findings of this study suggest that lifetime classic psychedelic use is not significantly associated with motivation-based workplace absenteeism as measured by the number of workdays employees skipped. Motivation-based workplace absenteeism was, however, found to be reliably predicted by lifetime use of other illicit substances including marijuana, sedatives, and tranquilizers.

Although lifetime classic psychedelic use was not found to be reliably associated with motivation-based workplace absenteeism, the null findings nonetheless speak against the implementation of arbitrary (and likely stigma-driven) drug-based recruitment policies. Instead of punishing outright the 35 million adults in the United States who have used classic psychedelics, organizations could benefit by understanding *why* applicants used these substances. In a recent study of an online forum for psychedelic users, roughly 17% of users indicated the stimulation of artistic creativity/performance as a motive for their psychedelic use (Pestana, Beccaria, & Petrilli, 2020). In another study, 17% of psychedelic users reported using psychedelics to help them work or study (Kettner, Mason, & Kuypers, 2019). Similarly, research focusing specifically on the microdosing of psychedelics, of which LSD and psilocybin are the substances most frequently discussed online (r/microdosing, 2022), found that users were motivated to microdose for cognitive, creative, and performance enhancement purposes (Hutten, Mason, Dolder, & Kuypers, 2019; Lea, Amada, & Jungaberle, 2020). Together, these studies indicate that the use of classic psychedelics is motivated in many cases by users' desires to increase their performance. Thus, organizations that prohibit the recruitment of lifetime classic psychedelic users may inadvertently exclude performance-motivated applicants who are willing to take novel approaches to achieve a goal. Furthermore, arbitrarily forbidding the recruitment of these individuals notably reduces the applicant base from which these organizations can recruit. Exacerbating this



Table 1. Predicting motivation-based workplace absenteeism with lifetime psychedelic use

Predictors	Model 1			Model 2		
	B (IRR)	SE	P value	B (IRR)	SE	P value
Age				−0.166 (0.847)	0.011	<0.001
Sex				0.037 (1.038)	0.019	0.045
Ethnoracial identity						
African American				0.703 (2.021)	0.028	<0.001
Native American/Alaska Native				0.663 (1.940)	0.076	<0.001
Native Hawaiian/Pacific Islander				0.568 (1.765)	0.120	<0.001
Asian				0.483 (1.621)	0.044	<0.001
More than one race				0.218 (1.244)	0.049	<0.001
Hispanic				0.262 (1.299)	0.025	<0.001
Educational attainment				−0.104 (0.901)	0.011	<0.001
Marital status						
Widowed				0.257 (1.293)	0.078	0.001
Divorced or separated				0.319 (1.378)	0.031	<0.001
Never been married				0.156 (1.169)	0.023	<0.001
Employment type				0.188 (1.207)	0.021	<0.001
Annual respondent income				−0.027 (0.973)	0.006	<0.001
Overall health				−0.211 (0.810)	0.010	<0.001
BMI				0.007 (1.007)	0.001	<0.001
Risky behavior	0.156 (1.169)	0.011	<0.001	0.166 (1.181)	0.012	<0.001
Classic psychedelic use	−0.116 (0.890)	0.032	<0.001	0.040 (1.041)	0.031	0.203
Marijuana	0.272 (1.321)	0.020	<0.001	0.218 (1.243)	0.020	<0.001
Cocaine	−0.016 (0.984)	0.031	0.593	0.047 (1.408)	0.030	0.123
Other stimulants	0.215 (1.239)	0.027	<0.001	0.219 (1.245)	0.026	<0.001
Sedatives	0.277 (1.319)	0.031	<0.001	0.374 (1.454)	0.031	<0.001
Tranquilizers	0.186 (1.205)	0.025	<0.001	0.247 (1.280)	0.024	<0.001
Heroin	0.309 (1.362)	0.066	<0.001	0.132 (1.411)	0.064	0.039
PCP	−0.079 (0.924)	0.069	0.253	−0.118 (0.888)	0.068	0.081
MDMA/Ecstasy	0.181 (1.120)	0.034	<0.001	0.059 (1.061)	0.033	0.075
Inhalants	0.131 (1.141)	0.030	<0.001	0.149 (1.161)	0.030	<0.001
Constant	−1.777 (0.169)	0.023	<0.001	−1.054 (0.349)	0.084	<0.001

B: beta coefficient; IRR: incident rate ratio; SE: standard error; classic psychedelic use refers to lifetime use of LSD, psilocybin, or mescaline/peyote/San Pedro; the comparison group for ethnoracial identity is White; the comparison group for marital status is married.

limitation for organizations is the fact that classic psychedelic users tend to be younger, more educated, and less absent from the workplace due to illness (Krebs & Johansen, 2013; Mellner et al., 2022), a particularly valuable subgroup of the working population. Moreover, use of LSD in the United States increased 213% between 2002 and 2018 (Killion et al., 2021) and the prevalence of lifetime psilocybin use increased from 7.6% to 9.2% during this period as well (Walsh et al., 2022). These trends indicate that for organizations who maintain a blanket ban based on applicants' prior classic psychedelic use, the proportion of applicants deemed admissible will decrease with time. This is bound to be the case as psychedelic-based therapies become more common (Phelps, Shah, & Lieberman, 2022) and decriminalization (e.g., in the U.S. cities of Denver, Colorado and Oakland, California), as well as legalization (e.g., in the U.S. state of Oregon), become more widespread. Based on the findings of this previous work as well as those of this study, organizations only stand to lose when implementing arbitrary drug-based recruitment policies. As Marlan wrote, "those who are drawn to psychedelics and the psychedelic experience can be seen to represent a natural and valuable

form of human diversity and creative potential that should not be thwarted" (2019, p.856).

It is also important to note that this study is one of if not the first to explore whether classic psychedelic use can predict employees' work motivation. Despite the number of studies that have looked at what motivates classic psychedelic use (Basedow & Kuitunen-Paul, 2022), little is known regarding how this use affects users' motivational drive; however, LSD has been recently hypothesized to increase users' motivational insights which might lead to lasting behavior change (Johnson, Garcia-Romeu, Johnson, & Griffiths, 2017). Although the results of the current study suggest that lifetime classic psychedelic use is not associated with motivation-based workplace absenteeism, other yet unexplored indicators of motivation inside and outside of the workplace should nonetheless be studied given the rising trends in classic psychedelic use and, in some areas, their recent legalization.

In sum, the contributions of this study are three-fold. First, this study explores whether the rejection of job applicants based solely on their lifetime classic psychedelic use is justifiable given the results of this study as well as prior

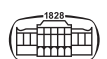


Table 2. Predicting motivation-based workplace absenteeism with specific types of lifetime psychedelic use

Predictors	Model 1			Model 2		
	B (IRR)	SE	P value	B (IRR)	SE	P value
Age				−0.167 (0.846)	0.011	<0.001
Sex				0.038 (1.038)	0.019	0.044
Ethnoracial identity						
African American				0.703 (2.019)	0.028	<0.001
Native American/Alaska Native				0.663 (1.940)	0.076	<0.001
Native Hawaiian/Pacific Islander				0.570 (1.768)	0.120	<0.001
Asian				0.483 (1.621)	0.044	<0.001
More than one race				0.219 (1.245)	0.049	<0.001
Hispanic				0.262 (1.299)	0.025	<0.001
Educational attainment				−0.104 (0.902)	0.011	<0.001
Marital status						
Widowed				0.258 (1.294)	0.078	0.001
Divorced or separated				0.318 (1.375)	0.031	<0.001
Never been married				0.156 (1.169)	0.023	<0.001
Employment type				0.188 (1.206)	0.021	<0.001
Annual respondent income				−0.027 (0.973)	0.006	<0.001
Overall health				−0.211 (0.810)	0.010	<0.001
BMI				0.007 (1.007)	0.001	<0.001
Risky behavior	0.157 (1.170)	0.011	<0.001	0.167 (1.181)	0.012	<0.001
LSD	−0.028 (0.972)	0.038	0.457	0.049 (1.051)	0.037	0.184
Psilocybin	−0.140 (0.870)	0.037	<0.001	−0.015 (0.985)	0.037	0.682
Mescaline/Peyote/San Pedro	−0.075 (0.928)	0.056	0.183	0.053 (1.055)	0.056	0.337
Marijuana	0.270 (1.311)	0.020	<0.001	0.219 (1.245)	0.020	<0.001
Cocaine	−0.008 (0.992)	0.031	0.802	0.047 (1.048)	0.030	0.119
Other stimulants	0.218 (1.243)	0.027	<0.001	0.219 (1.245)	0.027	<0.001
Sedatives	0.279 (1.321)	0.031	<0.001	0.373 (1.451)	0.031	<0.001
Tranquilizers	0.185 (1.203)	0.025	<0.001	0.247 (1.281)	0.024	<0.001
Heroin	0.325 (1.383)	0.066	<0.001	0.125 (1.134)	0.064	0.051
PCP	−0.057 (0.945)	0.071	0.424	−0.136 (0.872)	0.069	0.049
MDMA/Ecstasy	0.194 (1.214)	0.034	<0.001	0.062 (1.064)	0.034	0.065
Inhalants	0.141 (1.151)	0.030	<0.001	0.149 (1.160)	0.030	<0.001
Constant	−1.779 (0.169)	0.023	<0.001	−1.052 (0.349)	0.084	<0.001

B: beta coefficient; IRR: incident rate ratio; SE: standard error; the comparison group for ethnoracial identity is White; the comparison group for marital status is married.

findings reported in the literature, concluding that automatic rejection of lifetime classic psychedelic users is empirically unjustified. Second, this work highlights the likely economic and performance costs to organizations when implementing recruitment strategies automatically barring lifetime classic psychedelic users with the hope of convincing organizational leaders that such strategies are detrimental from a business standpoint. Finally, this study evaluates the association of lifetime classic psychedelic use with motivationally-based workplace absenteeism, an important outcome becoming increasingly relevant to organizations given the positive trends in classic psychedelic use. By doing so, it introduces work motivation as a valuable variable worthy of study in the field of classic psychedelic research.

### Limitations and future research

Despite the strengths of this study, such as its large sample size and detailed investigation of the distinct links between lifetime use of different classic psychedelics and motivation-

based workplace absenteeism, the current methodological design has several limitations which have also been previously noted (Hendricks et al., 2015, 2018). First, information on respondents' frequency of classic psychedelic use, the dose used, or the context of use were not available in the dataset so it was not possible to determine whether, or how, these factors relate to motivation-based workplace absenteeism. Furthermore, the data rely on self-reported substance use and motivation-based workplace absenteeism which could be affected by memory errors or social desirability bias. Future studies could provide greater internal validity to this study's findings, as well as the recent findings linking lifetime classic psychedelic use to health-based workplace absenteeism (Mellner et al., 2022), by combining survey data on lifetime classic psychedelic use with objective HR absenteeism data. Furthermore, alternative indicators of work motivation such as the number of days employees worked despite being ill or the number of hours of overtime employees worked may provide a more nuanced view of whether, and how, lifetime classic psychedelic use is related to work motivation.



## Acknowledging risks associated with classic psychedelic use

This paper argues for the elimination of discriminatory drug-based recruitment policies in the workplace. This pertains specifically to arbitrary cutoff points regarding the amount of time since applicants' last classic psychedelic use that is considered permissible by hiring organizations. According to the available literature, as well as this study's findings, there is currently no empirical justification for the rejection of job applicants on the condition of their lifetime classic psychedelic use. That being said, this paper should not be confused with a call for the elimination of organizational policies regarding classic psychedelic use by current employees (e.g., drug testing directly before or during work) as the use of classic psychedelics can come with short-term risks. Confusion or emotional turmoil may arise immediately following their use and, in rare cases, these adverse effects may last for several days (McWilliams & Tuttle, 1973). As it relates to long-term adverse effects, however, no long-term adverse effects have been reported for the approximately 2,000 participants taking part in psychedelic trials between the early 1990's and 2016 (Ross et al., 2016).

## CONCLUSION

Research on classic psychedelics has focused predominantly on the topics of physical health, mental health, and criminal behavior but little is known regarding how lifetime classic psychedelic use is linked to motivation in the workplace. A better understanding of the impact of classic psychedelic use on work motivation is important considering the use of classic psychedelics has risen significantly in recent years. This study, the first to investigate the relationship between lifetime classic psychedelic use and motivation-based workplace absenteeism, fails to find a relationship between these variables. These findings, therefore, provide empirical justification for the elimination of arbitrary recruitment policies based solely on applicants' prior use of classic psychedelics.

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