Journal of Psychoactive Drugs

ISSN: 0279-1072 (Print) 2159-9777 (Online) Journal homepage: www.tandfonline.com/journals/ujpd20

Racial Differences in Naturalistic Psychedelic Use — Motivations for Use, Communication with Health Care Providers, and Outcomes

Nicolas G. Glynos, Mallet R. Reid, Jacob S. Aday, Daniel J. Kruger, Kevin F. Boehnke, Stephanie Lake & Philippe Lucas

To cite this article: Nicolas G. Glynos, Mallet R. Reid, Jacob S. Aday, Daniel J. Kruger, Kevin F. Boehnke, Stephanie Lake & Philippe Lucas (22 Apr 2025): Racial Differences in Naturalistic Psychedelic Use — Motivations for Use, Communication with Health Care Providers, and Outcomes, Journal of Psychoactive Drugs, DOI: 10.1080/02791072.2025.2491381

To link to this article: https://doi.org/10.1080/02791072.2025.2491381

JOURNAL OF PSYCHOACTIVE DRUGS
https://doi.org/10.1080/02791072.2025.2491381

Racial Differences in Naturalistic Psychedelic Use — Motivations for Use, Communication with Health Care Providers, and Outcomes

Nicolas G. Glynos Ph.D.[a,b,c*], Mallet R. Reid Ph.D.[d*], Jacob S. Aday Ph.D.[a,b,c], Daniel J. Kruger Ph.D.[c,e], Kevin F. Boehnke Ph.D.[a,b,c], Stephanie Lake Ph.D.[f,g], and Philippe Lucas Ph.D.[c]

[a]Anesthesiology Department, University of Michigan Medical School, Ann Arbor, MI, USA; [b]Chronic Pain and Fatigue Research Center, University of Michigan Medical School, Ann Arbor, MI, USA; [c]Michigan Psychedelic Center, University of Michigan, Ann Arbor, MI, USA; [d]Department of Family Medicine, Michigan State University, East Lansing, MI, USA; [e]Jacobs School of Medicine and Biomedical Sciences, University at Buffalo, State University of New York, Buffalo, NY, USA; [f]UCLA Center for Cannabis and Cannabinoids, Jane and Terry Semel Institute for Neuroscience and Human Behavior, University of California, Los Angeles, CA, USA; [g]Department of Psychiatry and Biobehavioral Sciences, David Geffen School of Medicine, University of California, Los Angeles, CA, USA

ABSTRACT

People of Color have been under-included in psychedelic-assisted therapy (PAT) research. Researchers have argued that systemic issues resulting in harms to communities of color like the War on Drugs and recurrent exposure to discrimination in healthcare settings may reduce their willingness to engage in PAT research. However, there are no empirical data regarding People of Color's trust or willingness in using psychedelics with support of trained healthcare providers. Therefore, we analyzed data from a large-scale survey of people using psychedelics to explore interactions between People of Color and healthcare providers in North America. The sample included 3,547 White people, 448 People of Color, and 377 Multiracial people. A lower proportion of People of Color consumed psychedelics with the support of a trained provider but an equal proportion had disclosed psychedelic use to primary care providers. Further, People of Color were equally motivated to use psychedelics with a trained healthcare provider, used psychedelics to treat similar issues, and similarly reported psychedelics as effective with other groups. Our findings suggest that lack of trust may not fully explain the underrepresentation of People of Color in PAT research, and future studies should investigate other barriers to People of Color's inclusion in PAT research.

ARTICLE HISTORY
Received 18 September 2024
Revised 4 February 2025
Accepted 3 March 2025

KEYWORDS
Healthcare; psychedelics; people of color; race; survey

Introduction

Psychedelics, such as psilocybin or lysergic acid diethylamide (LSD), are substances that cause substantial alterations in mood, sensory experience, affective state, and cognition (Kelmendi et al. 2022). They have been used in conjunction with psychotherapy (i.e., psychedelic-assisted therapy; PAT) to treat behavioral health conditions, with promising preliminary results for conditions such as depression, anxiety, posttraumatic stress disorder (PTSD), substance use disorders, and end-of-life distress (Carhart-Harris and Goodwin 2017; Luoma et al. 2020). People who have undergone PAT have reported gaining insights (Davis et al. 2021), processing emotions (Roseman et al. 2019), and experiencing shifts in perspectives, engendering profound, durable therapeutic effects (Aday et al. 2020).

Despite promising preliminary findings, questions remain regarding the generalizability of PAT research (Aday, Carhart-Harris, and Woolley 2023). A recent review of PAT clinical trials found that over 82% of research participants were White, 4% were American Indian/Alaska Native, 2.5% were Black, 2% were Latine, and less than 2% were Asian (Michaels et al. 2018). A similar study conducted by Hughes and Garcia-Romeu (2024), which included an additional 23 studies from the Michaels study, found that 85% of all participants in PAT studies were White. The underrepresentation of People of Color in psychedelic research may limit the generalizability of PAT because People of Color's cultural settings differ from White people due to unique experiences with issues like structural racism (Viña and Stephens 2023). Indeed, the psychological

CONTACT Nicolas G. Glynos nglynos@umich.edu Anesthesiology Department, University of Michigan Medical School, 24 Frank Lloyd Wright Drive, Ann Arbor, MI 48106, USA

*These authors contributed equally to his work.

This article was originally published with errors, which have now been corrected in the online version. Please see Correction (http://dx.doi.org/10.1080/02791072.2025.2498792)

Supplemental data for this article can be accessed online at https://doi.org/10.1080/02791072.2025.2491381

and physiological effects of issues like racism (Bird et al. 2021) – both through personal experience and as epigenetic phenomena – may be a powerful influence on the mind-set of People of Color in clinical settings that may lead to different responses to PAT compared to White people. Additionally, the under-representation of People of Color in psychedelic research may limit clinician preparedness to identify and address the needs of People of Color undergoing PAT. Research has found that People of Color display mental illness symptoms differently from White people (Bailey, Mokonogho, and Kumar 2019) and that clinicians often misunderstand or misdiagnose People of Color as a result. Finally, there is preliminary evidence that psychedelics may be useful in addressing People of Color's unique challenges, such as racial trauma (Williams et al. 2021). Thus, prioritizing the inclusion of People of Color in psychedelic research is especially important.

However, systemic issues that erode the trust of People of Color may hinder their successful recruitment and involvement in psychedelic research (Thrul and Garcia-Romeu 2021). The War on Drugs significantly negatively affects People of Color who use substances (Cohen et al. 2022), and People of Color may be disproportionately concerned about exposure to repercussions stemming from psychedelic use. Consequently, People of Color may be concerned about voluntarily involving themselves in any kind of substance use research.

Additionally, research has shown that People of Color encounter discrimination and unintentional racial mistreatment (i.e., microaggressions) from psychotherapists and other practitioners in behavioral health settings (Sue and Spanierman 2020), which can have harmful effects on People of Color's mental health (Lee et al. 2018). Given the vulnerable and suggestive states elicited by psychedelics (Carhart-Harris et al. 2015), People of Color may be concerned about discrimination or coercion in clinical or research settings.

However, to our knowledge, there are no empirical data identifying psychedelic users of color's trust in using psychedelics with clinicians or the likelihood of using psychedelics with a trained health care provider (HCP). Identifying their level of trust would shed light on the degree to which limited trust may be a barrier for People of Color in participating in PAT research. Therefore, we analyzed data from an extensive global survey to understand interactions between People of Color and healthcare providers related to psychedelics, including their disclosure of psychedelic use to healthcare providers and their willingness to consume psychedelics under the guidance/support of a trained therapist. We hypothesized that People of Color would be less likely to disclose psychedelic use to their healthcare provider and to consume psychedelics under the guidance/support of a trained therapist.

Methods

We analyzed data from the self-report cross-sectional Global Psychedelic Survey (Glynos et al. 2024) which was distributed between May 19 and June 2, 2023. This survey gathered data on psychedelic use trends among English-speaking adults 21 years of age or older across the globe. The survey targeted 11 substances with psychedelic-like properties including the "classic" psychedelics ayahuasca, DMT/5-MeO-DMT (*N*, *N*-dimethyltryptamine/5-methoxy-*N*, *N*-dimethyltryptamine), LSD/acid, mescaline, and psilocybin, as well as several "atypical" psychedelics including 2C-B (4-Bromo-2,5-dimethoxyphenethylamine), iboga/ibogaine, ketamine, MDMA/MDA (3,4-methylenedioxymethamphetamine/3,4-methylenedioxyamphetamine), nitrous oxide, and *Salvia divinorum*. The study was reviewed by Advarra (protocol # Pro00071490) to help ensure that the rights and welfare of research participants were protected and that the research study was carried out in an ethical manner. However, the IRB only oversaw Canadian subjects, determining that this international study was otherwise exempt from IRB oversight in other jurisdictions under Department of Health and Human Services regulation 45 CFR 46.104(d)(2).

Sample

The analyzed sample was limited to North American English literate adults (≥21 years) who self-reported past or current use of one or more of the 11 psychedelics included in the survey. We limited our sample to North America because matters of race, including the form and effects of structural racism, differ by geography (Bird et al. 2021), and we intended to apply our findings to People of Color within the North American context. Informed consent to participate was gathered online as part of the survey, and all responses were collected anonymously. Upon survey completion, participants were allowed to provide their e-mail addresses to enter into a drawing for one of three $500 Amazon gift cards. All e-mail addresses were stored separately from the study data and were deleted before data analysis to ensure the confidentiality and anonymity of participants. Data was gathered via the Quantified Citizen website and app, which comply with the Personal Information Protection and Electronic Documents Act (PIPEDA) and Health Insurance Portability and Accountability Act (HIPAA).

Measures

A complete list of the questions in the survey is provided as supplementary material. In addition to addressing demographic characteristics such as gender, racial/ethnic background, age, education, income, and employment status, the survey also included questions about various aspects of psychedelic use, including lifetime psychedelic usage and past year frequency, and motivations for using psychedelics. We also assessed whether participants had used psychedelics under the care and guidance of a therapist or health care provider (HCP), along with measures of the importance of, or interest in using psychedelics with a therapist or HCP. In addition, we asked participants if they were aware of laboratory services or at-home test kits to confirm the identity of psychedelic substances and, if applicable, the frequency of substance testing and the type of testing services used.

Interactions with HCP

We asked participants if they regularly see a primary HCP, whether they discussed psychedelics with their HCP, their level of comfort in discussing these matters, and reasons for not discussing them, if applicable. Participants also indicated whether they currently pursue psychotherapy treatments for their mental health. We asked those who did whether they had informed their provider about their psychedelic use, along with reasons for not disclosing, if applicable.

Self-reported health outcomes

Participants selected whether they self-treated a mental and/or physical health condition with psychedelics. We asked those who self-treated about the reasons for trying psychedelics to treat their condition(s), along with the condition(s) they self-treated, whether psychedelics were effective, the duration of health benefits resulting from psychedelic use, and which psychedelic substance was most effective for their symptoms. Participants also provided an effectiveness rating for the substance rated as most effective (0–100; 0 = not at all effective, 100 = very effective). We assessed anxiety and depression symptoms via generalized anxiety disorder-7 (GAD-7) (Spitzer et al. 2006) and patient health questionnaire-8 (PHQ-8) (Kroenke et al. 2009), respectively. We scored responses continuously for both measures. For the GAD-7, scores ranged from 0 = 21, with 0–4 = minimal anxiety, 5–9 = mild anxiety, 10–14 = moderate anxiety, and 15–21 = severe anxiety (Spitzer et al. 2006). For the PHQ-8, scores ranged from 0 to 24, with 0–4 = no significant depressive symptoms, 5–9 = mild depressive symptoms, 10–14 = moderate, 15–19 = moderately severe, and 20–24 = severe depressive symptoms (Kroenke et al. 2009).

Statistical analysis

We subgrouped participants from the overall sample into one of three possible categories: White (Caucasian/European), People of Color (Black, Indigenous, Latine, and Asian), and Multiracial (more than one race/ethnicity). Participants who selected "Other" were excluded unless they provided a written response that allowed for accurate characterization into one of the three categories. We used descriptive statistics to characterize the populations from each of these sub-groups, using chi-square (X^2) tests to assess associations between racial/ethnic background and categorical variables and one-way analysis of variance (ANOVA) tests to evaluate associations between racial/ethnic background and continuous variables.

We repeated descriptive analyses with the four largest People of Color subgroups: Latine or Hispanic (Latine, Hispanic, Mexican, Central American, South American), African diaspora (African American, Black, and Afro-Caribbean), Indigenous (First Nations, Indigenous, Native American), and East Asian (Chinese, Japanese, Korean). We selected those participants who identified with one, but not multiple, of these subgroups. We did not run statistical comparisons to prevent Type 1 error, and because many of the cell sizes were small.

We employed binary logistic regression models to identify potential predictors of (1) discussing psychedelics with a primary healthcare provider and (2) awareness of the availability of substance testing services. Predictors in the models included: age, education level (scored continuously from: less than high school, high school degree or equivalent, technical or non-university degree, university degree [Bachelor's or equivalent], graduate degree [MA, MSc, etc.], doctorate or professional degree [JD, MD, PhD, etc.]), income (scored continuously from: very low income/well below average, low income/below average, middle income/about average, high income/above average, very high income/well above average), race/ethnicity (White/Caucasian, person of color, Multiracial; all yes vs. no), number of psychedelics used (up to 12), motivations for psychedelic use (medical, recreational; all yes vs. no). We conducted multivariate analyses using all predictors for each outcome measure, while univariate models included only one predictor. Odds ratios (Exp(B)) and 95% confidence intervals (CI) are shown. Significance was set at a = 0.05 (two-sided), and all analyses were conducted using SPSS version 29.

In post-hoc analyses, we created interaction terms for education level by person of color, education level by multiracial, income by person of color, income by multiracial, and entered these into the previously described logistic regressions.

Results

The final study sample consisted of $N = 4,372$ adults, including 3,547 White individuals (46.8% women), 448 People of Color (46.4% women), and 377 Multiracial individuals (55.2% women). Among People of Color, Latine/Hispanic was the most common racial/ethnic background (36.4%; $n = 163/448$), and among Multiracial individuals, most were White in addition to another race (83.6%; $n = 315/377$), followed by Latine/Hispanic and another race (37.4%; $n = 141/377$). The overall sample was highly educated, with a majority holding a Bachelor's degree or higher in all three subgroups, and greater than 75% from each group were employed (Table 1).

For all three racial/ethnic categories, psilocybin was the most commonly used psychedelic substance, followed by LSD and MDMA. The most often cited reason for using psychedelics was personal growth/self-exploration for all three groups (White: 83.6%; $n = 2,965/3,547$; People of Color: 76.8%; $n = 344/448$; Multiracial: 93.6%; $n = 353/377$). Using psychedelics with the motivation to treat a mental or physical health condition was highest in the Multiracial group (53.3%; $n = 201/377$) and lowest in the People of Color group (33.7%; $n = 151/448$); (Table S1). White participants showed the highest proportion of using psychedelics under the care and guidance of a therapist or HCP (29.5%; $n = 420/1,425$), followed by Multiracial individuals (24.4%; $n = 47/193$), and People of Color (20.8%; $n = 32/154$). Among those who had used psychedelics with a therapist or HCP, more than half of participants from each racial/ethnic group indicated that the presence of the provider was either *Important* or *Very important* to the overall outcome of the psychedelic experience – among those who had not used psychedelics with a therapist or HCP, more than 80% of

Table 1. Demographics.

	White $n = 3,547$		People of Color $n = 448$		Multiracial $n = 377$		F or X^2	*p*
Age (mean, SD, range)	45.9, 14.4, 21–90		38.5, 11.1, 21–76		41.3, 13.1, 21–78		49.8	<.001
Gender							40.7	<.001
Women	1,660	46.8%	208	46.4%	208	55.2%		
Men	1,779	50.2%	223	49.8%	143	37.9%		
Non-Binary	79	2.2%	13	2.9%	17	4.5%		
Other	25	0.7%	1	0.2%	8	2.1%		
Prefer not to say	4	0.1%	3	0.7%	1	0.3%		
Racial/Ethnic background							N/A	N/A
White/Caucasian	3,547	100%	0	0.0%	315	83.6%		
Black	0	0.0%	111	24.8%	48	12.7%		
African	0	0.0%	3	0.7%	17	4.5%		
Latine/Hispanic	0	0.0%	163	36.4%	141	37.4%		
Indigenous	0	0.0%	32	7.1%	120	31.8%		
East Asian	0	0.0%	41	9.2%	44	11.7%		
South Asian	0	0.0%	36	8.0%	16	4.2%		
Southeast Asian	0	0.0%	26	5.8%	20	5.3%		
West Central Asian/Middle Eastern	0	0.0%	32	7.1%	40	10.6%		
Oceanian	0	0.0%	1	0.2%	11	2.9%		
Other	0	0.0%	4	0.9%	50	13.3%		
Education							26.1	<.01
Less than high school	45	1.3%	12	2.7%	6	1.6%		
High school or equivalent	465	13.1%	74	16.5%	53	14.1%		
Technical degree	433	12.2%	74	16.5%	60	15.9%		
Bachelors degree or equivalent	1,181	33.3%	143	31.9%	125	33.2%		
Graduate degree	940	26.5%	95	21.2%	93	24.7%		
Doctoral/professional degree	483	13.6%	50	11.2%	40	10.6%		
Employment status							51.6	<.001
Disabled	97	2.7%	10	2.2%	19	5.0%		
Employed	2,792	78.7%	377	84.2%	291	77.2%		
Unemployed	286	8.1%	51	11.4%	44	11.7%		
Retired	372	10.5%	10	2.2%	23	6.1%		
Income							29.9	<.001
Very low	166	4.7%	16	3.6%	28	7.4%		
Low	515	14.5%	63	14.1%	74	19.6%		
Middle	1,532	43.2%	219	48.9%	168	44.6%		
High	1,037	29.2%	109	24.3%	91	24.1%		
Very high	297	8.4%	41	9.2%	16	4.2%		

participants from each racial/ethnic group indicated that they would be *Likely* or *Very likely* to consume psychedelics with the support of a trained provider if those services were legal and available (Table 2).

A majority of participants from each of the three racial/ethnic categories indicated that they regularly see a primary HCP, with People of Color showing the lowest proportions (Multiracial: 75.1%, $n = 235/313$, White: 71.0%, $n = 2{,}135/3{,}006$; People of Color: 57.3%, $n = 219/382$); ($p < .001$). Similarly, among those regularly seeing a primary HCP, People of Color showed the lowest proportions of discussing psychedelics with their primary HCP, although this difference was not statistically significant. Among those who did not discuss psychedelics with their primary HCPs, *concerns about stigma, legal concerns, keeping use private, and inability of provider to integrate psychedelics into treatment* were lowest in the White sub-group and highest in the Multiracial sub-group, while *not having any reasons to discuss psychedelics* and *lack of trust in treatment provider* were highest for the White sub-group. Generally, ratings of primary HCP's knowledge about psychedelics were perceived to be very low. Less than 10% of participants from all racial/ethnic sub-groups indicated *Very good* or *Excellent* knowledge, although approximately half reported that they did not know about their HCP's knowledge about psychedelics.

In contrast, the likelihood of discussing psychedelics with a mental healthcare provider was higher than with a primary HCP in all groups (White: 71.0%, $n = 880/1{,}239$; People of Color: 66.4%, $n = 81/122$; Multiracial: 68.0%, $n = 119/175$). The leading reason for not disclosing this information to a mental healthcare provider was *Concerns about stigma associated with psychedelic use*, which was reported by a majority of participants from all three groups (Table 2).

Over half of participants were aware of laboratory services or at-home substance testing kits to confirm the identity of the psychedelic substances they used, but People of Color reported the lowest awareness (White: 58.1%, $n = 1{,}773/3{,}054$; People of Color: 50.5%, $n = 196/388$; Multiracial: 63.9%, $n = 205/321$); ($p = .001$). Approximately half of all participants indicated that they had never tested psychedelic substances before consuming. Among those aware of testing services, the frequency of testing substances before consuming was similar across the three groups, with approximately one-third of each group indicating that they *sometimes, often*, or *always* test substances (Table 2).

In multivariate regressions, factors positively associated with discussing psychedelics with a primary HCP included using psychedelics with a motivation to treat a mental or physical health condition ($p < .001$) and number of psychedelics used ($p < .001$), whereas recreational use motivation ($p < .001$) and education level ($p < .01$) were negatively associated with this outcome. Factors positively associated with awareness of substance testing services included the number of psychedelics used ($p < .001$) and recreational use motivation ($p < .001$). Age was negatively associated ($p < .001$) with substance testing awareness (Table 3). None of the interaction terms entered in post-hoc analyses (education level by person of color, education level by multiracial, income by person of color, income by multiracial) made significant unique predictions.

Self-treatment of either a mental or physical health condition with psychedelics was common among all groups, although more common for mental health than physical health conditions. Among all three groups, the leading reasons for trying psychedelics to self-treat a health condition were: *I didn't like the idea of traditional treatments* and *Traditional treatments were ineffective*. Chronic pain was the leading physical health condition that was treated with psychedelics for White (38.1%, $n = 297/779$) and Multiracial (66.7%, $n = 44/66$) participants. In contrast, headache/migraine showed the highest proportions for the People of Color group (37.9%, $n = 44/116$). The majority of participants reported psychedelics to be effective in treating their physical health condition(s), with all three groups indicating that psilocybin was the most effective psychedelic substance in treating their physical health condition(s). Effectiveness ratings (0–100) of psilocybin for physical health were similar across groups (Figure 1). Around half of participants across groups indicated that the physical health benefits of psychedelics last for several months or more (Table 4).

For all three racial/ethnic groups, the leading mental health conditions self-treated with psychedelics were depression, anxiety, PTSD, substance use disorder, and ADHD. Nearly all participants (>95%) from each group indicated that psychedelics were effective in treating mental health condition(s), and psilocybin was indicated as the most effective psychedelic for treating mental health conditions by a majority of all participants. Effectiveness ratings (0–100) of psilocybin for mental health were similar between groups. (Figure 1). The duration of mental health benefits following psychedelic use was reported to be longest in the People of Color group, with 67.1% ($n = 102/152$) indicating benefits that last longer than several months, compared to White (61.6%, $n = 853/1{,}384$) and Multiracial (55.1%, $n = 103/187$) participants ($p < .05$). Finally, of the three groups, People of Color scored highest on generalized anxiety ($p < .05$) and depression ($p < .05$) scales, and showed the

Table 2. HCP interactions and substance testing.

	White		People of Color		Multiracial		X^2	*p*
Do you regularly see a primary health care provider?	*n* = 3,006		*n* = 382		*n* = 313		34.5	<.001
Yes	2,135	71.0%	219	57.3%	235	75.1%		
No	871	29.0%	163	42.7%	78	24.9%		
Have you discussed psychedelics with your primary health care provider?	*n* = 2,133	*n* = 219		*n* = 235			3.3	0.196
Yes	777	36.4%	67	30.6%	80	34.0%		
No	1,356	63.6%	152	69.4%	155	66.0%		
Why haven't you disclosed this information to your primary health care provider?	*n* = 1,355	*n* = 152		*n* = 155			N/A	N/A
Concerns about stigma associated with psychedelic use	671	49.5%	79	52.0%	88	56.8%		
Legal concerns	480	35.4%	68	44.7%	75	48.4%		
I prefer to keep my psychedelic use private	553	40.8%	65	42.8%	76	49.0%		
My provider is not adequately knowledgeable about psychedelics	614	45.3%	66	43.4%	81	52.3%		
My provider would not be able to integrate psychedelics into my treatment	591	43.6%	73	48.0%	85	54.8%		
There is no reason to discuss psychedelics with my provider	710	52.4%	72	47.4%	76	49.0%		
I do not trust my provider	202	14.9%	21	13.8%	21	13.5%		
To avoid contradicting my provider's advice	162	12.0%	19	12.5%	17	11.0%		
None of the above	58	4.3%	4	2.6%	4	2.6%		
How comfortable are you sharing details about the consequences of your psychedelic use with your primary health care provider?	*n* = 2,132	*n* = 219		*n* = 234			7.4	0.498
Very uncomfortable	309	14.5%	39	17.8%	32	13.7%		
Somewhat uncomfortable	453	21.2%	41	18.7%	40	17.1%		
Neither comfortable nor uncomfortable	377	17.7%	42	19.2%	40	17.1%		
Somewhat comfortable	420	19.7%	41	18.7%	45	19.2%		
Very comfortable	573	26.9%	56	25.6%	77	32.9%		
How would you rate your primary health care provider's knowledge of psychedelics?	*n* = 2,131	*n* = 219		*n* = 234			4.6	0.917
Poor	488	22.9%	47	21.5%	51	21.8%		
Fair	257	12.1%	28	12.8%	28	12.0%		
Good	158	7.4%	14	6.4%	17	7.3%		
Very good	102	4.8%	10	4.6%	7	3.0%		
Excellent	67	3.1%	11	5.0%	8	3.4%		
I don't know	1,059	49.7%	109	49.8%	123	52.6%		
Have you informed your mental health care provider that you are using psychedelics?	*n* = 1,239	*n* = 122		*n* = 175			1.6	0.439
Yes	880	71.0%	81	66.4%	119	68.0%		
No	359	29.0%	41	33.6%	56	32.0%		
Why haven't you disclosed this information to your primary mental health care provider?	*n* = 359	*n* = 41		*n* = 56			N/A	N/A
Concerns about stigma associated with psychedelic use	182	50.7%	21	51.2%	30	53.6%		
Legal concerns	128	35.7%	15	36.6%	19	33.9%		
I prefer to keep my psychedelic use private	124	34.5%	12	29.3%	23	41.1%		
My provider is not adequately knowledgeable about psychedelics	99	27.6%	11	26.8%	19	33.9%		
My provider would not be able to integrate psychedelics into my treatment	104	29.0%	9	22.0%	14	25.0%		
There is no reason to discuss psychedelics with my provider	82	22.8%	5	12.2%	7	12.5%		
I do not trust my provider	32	8.9%	2	4.9%	8	14.3%		
To avoid contradicting my provider's advice	43	12.0%	1	2.4%	7	12.5%		
None of the above	83	23.1%	7	17.1%	15	26.8%		
Have you ever used psychedelics under the care and guidance of a therapist or HCP?	*n* = 2,133	*n* = 219		*n* = 235			3.3	0.196
Yes	420	29.5%	32	20.8%	47	24.4%		
No	1,005	70.5%	122	79.2%	146	75.6%		
How important was the presence of the provider to the overall outcome of your psychedelic experience?	*n* = 418	*n* = 32		*n* = 47			12.4	0.135
Not important	46	11.0%	3	9.4%	4	8.5%		
A little important	41	9.8%	1	3.1%	8	17.0%		
Moderately important	49	11.7%	3	9.4%	10	21.3%		
Important	88	21.1%	4	12.5%	7	14.9%		
Very important	194	46.4%	21	65.6%	18	38.3%		
How likely is it that you would consume psychedelics under the guidance or support of a trained therapist or HCP if these services were legal and available to you?	*n* = 1,005	*n* = 122		*n* = 146			6.1	0.631
Very unlikely	37	3.7%	5	4.1%	5	3.4%		
Unlikely	45	4.5%	4	3.3%	4	2.7%		
Neutral	71	7.1%	9	7.4%	18	12.3%		
Likely	164	16.3%	21	17.2%	22	15.1%		
Very likely	688	68.5%	83	68.0%	97	66.4%		

(*Continued*)

Table 2. (Continued).

	White		People of Color		Multiracial		X^2	*p*
Are you aware of laboratory services or at home test kits to confirm the identity of psychedelic substances?	*n* = 3,054		*n* = 388		*n* = 321		13.4	<.01
Yes	1,773	58.1%	196	50.5%	205	63.9%		
No	1,281	41.9%	192	49.5%	116	36.1%		
How often do you test psychedelics substances before consuming?	*n* = 1,773		*n* = 196		*n* = 205		9.8	0.280
Never	882	49.7%	87	44.4%	107	52.2%		
Rarely	281	15.8%	35	17.9%	36	17.6%		
Sometimes	261	14.7%	31	15.8%	26	12.7%		
Often	164	9.2%	28	14.3%	20	9.8%		
Always	185	10.4%	15	7.7%	16	7.8%		
What kind of testing services do you use?	*n* = 891		*n* = 109		*n* = 98		N/A	N/A
Home test kit	600	67.3%	62	56.4%	80	81.6%		
Service at event	169	19.0%	30	27.3%	21	21.4%		
My dealer, therapist or shaman tests for me	268	30.1%	34	30.9%	31	31.6%		
Lab-based testing service	141	15.8%	22	20.0%	15	15.3%		
Other	20	2.2%	0	0.0%	3	3.1%		

Table 3. Predictors of factors associated with discussing psychedelics with a primary HCP and awareness of substance testing services.

Have you ever discussed psychedelics with your primary healthcare provider?						
	Univariate predictions			Multivariate predictions		
Predictor	Exp(B)	95% CI	*p*	Exp (B)	95% CI	*p*
Medical motivation	2.15	1.83–2.53	<.001	2.19	1.84–2.58	<.001
Number of psychedelics used	1.10	1.07–1.14	<.001	1.13	1.09–1.17	<.001
Recreational motivation	0.67	0.57–0.79	<.001	0.61	0.51–0.72	<.001
Education	0.92	0.86–0.98	<.01	0.90	0.84–0.97	<.01
Income	0.99	0.91–1.09	0.936	1.06	0.96–1.16	0.219
Person of Color	0.78	0.56–1.05	0.095	0.76	0.35–1.59	0.463
Multiracial	0.92	0.69–1.22	0.559	0.79	0.37–1.65	0.532
White	1.16	0.95–1.43	0.15	0.92	0.46–1.82	0.810
Age	1.00	0.99–1.01	0.909	1.00	0.99–1.00	0.823
Are you aware of the availability of substance testing services?						
Number of psychedelics used	1.26	1.23–1.30	<.001	1.24	1.20–1.27	<.001
Age	0.98	0.97–0.98	<.001	0.98	0.97–0.98	<.001
Recreational motivation	2.12	1.86–2.42	<.001	1.66	1.44–1.91	<.001
Person of Color	0.72	0.58–0.89	<.01	0.60	0.31–1.14	0.123
Education	0.96	0.92–1.01	0.154	1.04	0.98–1.09	0.201
Medical motivation	1.04	0.91–1.18	0.592	1.07	0.92–1.22	0.350
White	1.05	0.89–1.23	0.570	0.84	0.45–1.53	0.564
Income	0.97	0.91–1.04	0.335	1.02	0.94–1.09	0.686
Multiracial	1.32	1.04–1.67	0.022	0.96	0.49–1.83	0.896

worst symptom severity ($p < .01$ for anxiety, $p < .001$ for depression); (Table 4).

Those in the African diaspora group appeared more likely to treat physical health conditions than mental health conditions with psychedelics, which is the opposite pattern from the other subgroups. Those in the African diaspora group appeared to treat a broader range of physical conditions and reported a broader range of psychedelics as being most effective for treating physical conditions. Yet, they also appeared to find psychedelics less effective for treating physical conditions overall than the other subgroups. Those in the African diaspora group were less likely to treat mental health conditions than those in the other subgroups, though the patterns were similar for those who did (Table S3).

Discussion

Contrary to our hypotheses, similar proportions of all racial/ethnic subgroups reported that they would very likely consume psychedelics under the guidance or support of a trained therapist or HCP. These findings parallel broader research findings that Black people favor PAT (Carter et al. 2023) and that People of Color and White people are equally interested in participating in therapeutic research (Bibbins-Domingo,

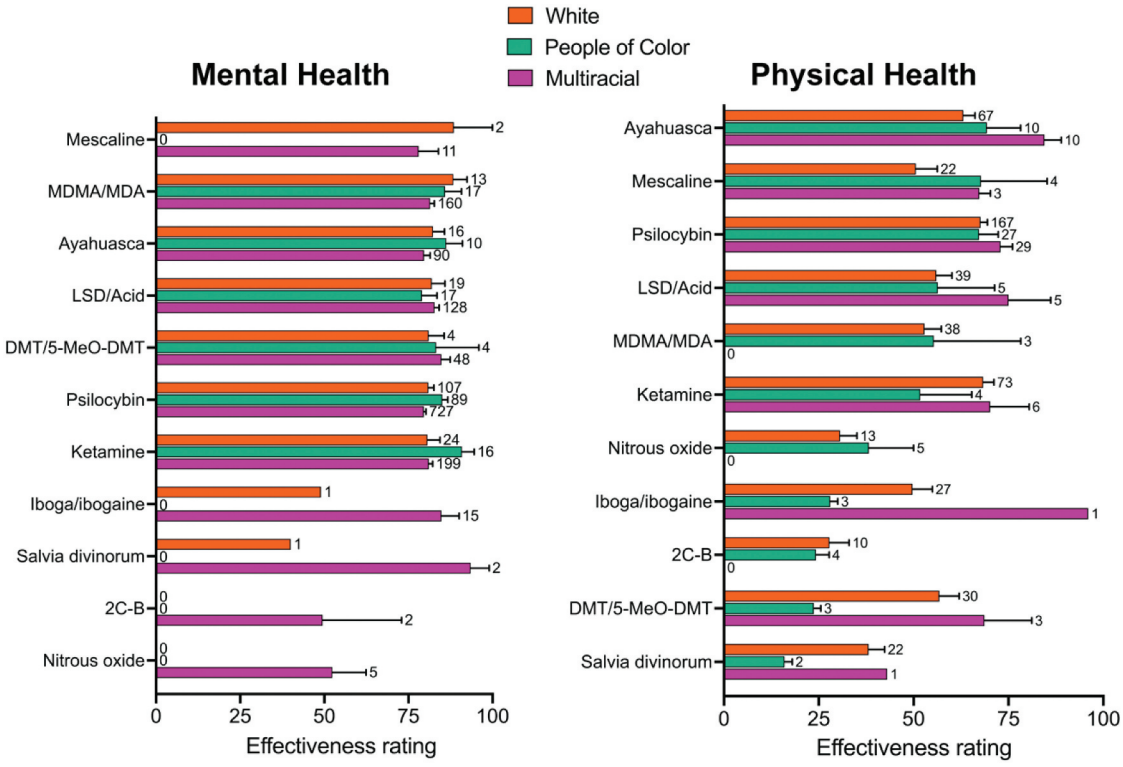

Figure 1. Perceived effectiveness (on a scale of 0-100) of each psychedelic substance for relieving mental (left) and physical (right) health symptoms. The number of participants who endorsed each substance as most effective is indicated to the right of each respective bar. Mean values shown with error bars indicating ± standard error of mean.

Helman, and Dzau 2022). Although only ~7% of People of Color used psychedelics under the guidance of a therapist or HCP, most believed that having done so was *very important* to the overall outcome of their psychedelic experience, in contrast to less than half of White and Multiracial people reporting such effects. This suggests that the therapeutic component of PAT might be particularly valued among People of Color who have undergone PAT. This hypothesis will require further exploration in prospective studies and supports increasing inclusion of People of Color in PAT research (Smith et al. 2022).

A majority of participants from all three racial/ethnic categories regularly saw a HCP; There were no significant differences in disclosure among groups, however, People of Color disclosed psychedelic use to their HCPs at lower proportions than White and Multiracial people, and also shared about psychedelic use with mental healthcare practitioners at lower proportions than White and Multiracial people. Although People of Color's reasoning for not sharing was not significantly different or unique from other groups' reasons, their lower propensity to share about psychedelic use may partially explain why they are less frequently included in psychedelic research. Also of note, as education level increased, all participants were less likely to disclose recreational psychedelic use with a provider. This may suggest that those with higher education have greater confidence in self-assessing health risks and may feel they can evaluate their drug use without the input of a healthcare provider. This finding warrants further investigation.

We found a statistically significant difference in the duration of benefit from psychedelic use suggesting that People of Color may experience longer-lasting benefits compared to White participants. Prior research shows that People of Color tend to endure more chronic, debilitating, and severe cases of depression (Bailey, Mokonogho, and Kumar 2019), anxiety (MacIntyre, Zare, and Williams 2023), substance use disorder (Windsor, Jemal, and Alessi 2015), and PTSD (Jones et al. 2022). Consistent with this, our sample of People of Color reported significantly worse symptom severity for depression and anxiety at baseline. This heightened severity may explain their prolonged benefit, as the more substantial symptom reduction they experienced might take longer to diminish compared to White participants, who had less severe symptoms at baseline and may have returned to their previous levels more quickly. These findings warrant further investigation for two reasons. First, they indicate that People of Color with severe symptoms

Table 4. Self-reported health outcomes.

	White		People of Color		Multiracial		F or X^2	*p*
Have you self-treated with psychedelics?	*n* = 3,001		*n* = 381		*n* = 312		N/A	N/A
Yes, to treat a mental health condition	1,442	48.1%	156	40.9%	196	62.8%		
Yes, to treat a physical health condition	779	26.0%	116	30.4%	66	21.2%		
No, never to treat a condition	1,080	36.0%	139	36.5%	108	34.6%		
What led you to trying psychedelics for a physical or mental health condition?	*n* = 1,921		*n* = 242		*n* = 204		N/A	N/A
I didn't like the idea of traditional treatments	1,340	69.8%	156	64.7%	148	72.5%		
Traditional treatments were ineffective	1,026	53.4%	106	44.0%	113	55.4%		
They fit with my beliefs or cultural practices	717	37.3%	90	37.3%	107	52.5%		
I saw positive media coverage about psychedelics	539	28.1%	74	30.7%	56	27.5%		
It was recommended by friends	562	29.3%	69	28.6%	67	32.8%		
Other reason	1,026	53.4%	106	44.0%	113	55.4%		
None of the above	75	3.9%	17	7.1%	5	2.5%		
Missing	0	0.0%	1	0.0%	0	0.0%		
Which physical health condition have you self-treated with psychedelics?	*n* = 779		*n* = 116		*n* = 66		N/A	N/A
Chronic pain	297	38.1%	43	37.1%	44	66.7%		
Headache/migraine	226	29.0%	44	37.9%	28	42.4%		
Sleeping disorder	213	27.3%	41	35.3%	19	28.8%		
Autism	152	19.5%	22	19.0%	11	16.7%		
Neurological disorder	154	19.8%	23	19.8%	12	18.2%		
Gastrointestinal disorder	150	19.3%	28	24.1%	11	16.7%		
Traumatic brain injury	149	19.1%	30	25.9%	13	19.7%		
Cancer	132	16.9%	27	23.3%	7	10.6%		
Covid-19	138	17.7%	21	18.1%	3	4.5%		
Cardiovascular condition	129	16.6%	31	26.7%	3	4.5%		
Diabetes	125	16.0%	28	24.1%	2	3.0%		
Other	143	18.4%	13	11.2%	12	18.2%		
Have you found the use of psychedelics to be effective in treating your physical health condition(s)?	*n* = 779		*n* = 116		*n* = 66		17.8	<.001
Yes	550	70.6%	74	63.8%	61	92.4%		
No	229	29.4%	42	36.2%	5	7.6%		
Which psychedelic has been the most effective in treating your physical health condition(s)?	*n* = 550		*n* = 74		*n* = 61		32.1	0.075
Psilocybin	169	30.7%	27	36.5%	30	49.2%		
Ayahuasca	67	12.2%	10	13.5%	10	16.4%		
LSD/Acid	38	6.9%	5	6.8%	5	8.2%		
Nitrous oxide	13	2.4%	5	6.8%	0	0.0%		
2C-B	10	1.8%	4	5.4%	0	0.0%		
Ketamine	73	13.3%	4	5.4%	6	9.8%		
Mescaline	22	4.0%	4	5.4%	3	4.9%		
DMT/5-MeO-DMT	30	5.5%	3	4.1%	3	4.9%		
Iboga/Ibogaine	27	4.9%	3	4.1%	1	1.6%		
MDMA/MDA	38	6.9%	3	4.1%	0	0.0%		
Salvia divinorum	22	4.0%	2	2.7%	1	1.6%		
None of these	41	7.5%	4	5.4%	2	3.3%		
How long do the physical health benefits last?	*n* = 507		*n* = 70		*n* = 58		4.7	0.586
One week or less	135	26.6%	15	21.4%	19	32.8%		
From one week to one month	115	22.7%	19	27.1%	16	27.6%		
Several months	115	22.7%	19	27.1%	10	17.2%		
A year or more	142	28.0%	17	24.3%	13	22.4%		
Which mental health condition have you self-treated with psychedelics?	*n* = 1,442		*n* = 156		*n* = 196		N/A	N/A
Depression	1157	80.2%	134	85.9%	159	81.1%		
Anxiety	1021	70.8%	115	73.7%	138	70.4%		
PTSD	648	44.9%	67	42.9%	108	55.1%		
Substance use disorder	326	22.6%	33	21.2%	47	24.0%		
ADHD	270	18.7%	34	21.8%	41	20.9%		
OCD	117	8.1%	19	12.2%	22	11.2%		
Eating disorder	105	7.3%	13	8.3%	16	8.2%		
Personality disorder	74	5.1%	9	5.8%	18	9.2%		
Bipolar disorder	92	6.4%	20	12.8%	18	9.2%		
Psychotic disorder	17	1.2%	6	3.8%	5	2.6%		
Other	79	5.5%	11	7.1%	11	5.6%		

(*Continued*)

Table 4. (Continued).

	White		People of Color		Multiracial		F or X^2	*p*
Have you found the use of psychedelics to be effective in treating your mental health condition(s)?	*n* = 1,438		*n* = 156		*n* = 194		1.2	0.539
Yes	1402	97.5%	154	98.7%	188	96.9%		
No	36	2.5%	2	1.3%	6	3.1%		
Which psychedelic has been the most effective in treating your mental health condition(s)?	*n* = 1,402		*n* = 154		*n* = 189		16.5	0.792
Psilocybin	728	51.9%	89	57.8%	107	56.9%		
LSD/Acid	129	9.2%	17	11.0%	19	10.1%		
MDMA/MDA	160	11.4%	17	11.0%	13	6.9%		
Ketamine	199	14.2%	16	10.4%	24	12.8%		
Ayahuasca	90	6.4%	10	6.5%	16	8.5%		
DMT/5-MeO-DMT	49	3.5%	4	2.6%	4	2.1%		
2C-B	2	0.1%	0	0.0%	0	0.0%		
Iboga/ibogaine	15	1.1%	0	0.0%	1	0.5%		
Mescaline	11	0.8%	0	0.0%	2	1.1%		
Nitrous oxide	5	0.4%	0	0.0%	0	0.0%		
Salvia divinorum	2	0.1%	0	0.0%	1	0.5%		
None of these	12	0.9%	1	0.6%	1	0.5%		
How long do the mental health benefits last?	*n* = 1,384		*n* = 152		*n* = 187		13.1	0.042
One week or less	172	12.4%	16	10.5%	34	18.2%		
From one week to one month	359	25.9%	34	22.4%	50	26.7%		
Several months	447	32.3%	60	39.5%	44	23.5%		
A year or more	406	29.3%	42	27.6%	59	31.6%		
GAD-7 diagnosis	*n* = 2,976		*n* = 379		*n* = 307		19.8	0.003
Minimal anxiety symptoms	1644	55.2%	188	49.6%	178	58.0%		
Mild symptoms	751	25.2%	94	24.8%	79	25.7%		
Moderate symptoms	416	14.0%	70	18.5%	25	8.1%		
Severe symptoms	165	5.5%	27	7.1%	25	8.1%		
GAD-7 score (Mean, SD)	5.1, 4.9		5.9, 5.3		5.0, 5.2		4.1	0.017
PHQ-8 diagnosis	*n* = 2,974		*n* = 379		*n* = 307		36.6	<.001
No significant depression symptoms	1607	54.0%	186	49.1%	189	61.6%		
Mild symptoms	674	22.7%	76	20.1%	67	21.8%		
Moderate symptoms	470	15.8%	87	23.0%	24	7.8%		
Moderately severe symptoms	181	6.1%	28	7.4%	19	6.2%		
Severe symptoms	42	1.4%	2	0.5%	8	2.6%		
PHQ-8 score (Mean, SD)	5.6, 5.3		6.2, 5.4		5.0, 5.4		4.5	0.011

may find benefit from psychedelic interventions and inclusion in psychedelic research. Second, they contrast with other research suggesting less pronounced and enduring mental health improvements among People of Color using psychedelics (Jones and Nock 2022; Jones et al. 2024; Viña and Stephens 2023).

Implications

Overall, People of Color are highly motivated to use psychedelics under the guidance of a HCP or therapist, use psychedelics to treat similar issues as White and Multiracial people and for similar reasons, report psychedelics as effective, and are using psychedelics at substantially higher rates than previously estimated (Davis et al. 2022). Therefore, it is plausible that structural-level characteristics of psychedelic research conduct, rather than People of Color's motivation to participate, may explain the under-representation of People of Color in psychedelic research. This demonstrates the importance of focusing efforts to enhance the recruitment of People of Color in PAT studies. We join other psychedelic scholars who are highlighting structural barriers inhibiting the inclusion of People of Color in clinical research and that are making calls to structure research in ways that enhance diversity and center racial equity (Buchanan 2021; Reid and Buchanan 2024; Smith et al. 2022). This could be achieved by leveraging community-engaged research approaches that attend to issues of power, mistrust, and structural racism in study development, design-

ing studies with childcare provided to participants in need, or involving more researchers of color.

Limitations and strengths

This study had several limitations. First, we drew our results from a cross-sectional sample and cannot make any causal inferences related to our findings. Additionally, potential biases may include: a temporal bias in symptom reporting, which may bias conclusions about the prevalence, severity, and patterns of symptoms; and a response bias in which individuals who have had positive experiences may have been more likely to report their experiences, engage with the survey, and possibly interact with HCPs or seek PAT services. We were also unable to test the substances participants reported using, nor were we able to test the dosages ingested, which limits our ability to conclude which and how much of a substance contributed to the reported outcomes. Finally, this was a convenience sampling design and the sample may not be nationally or globally representative.

Several strengths offset these limitations. We had a very large sample size enriched for people currently using psychedelics, and we asked more detailed questions about psychedelic use than the NSDUH and other nationally representative surveys assessing substance use. Additionally, this survey is among the first to assess psychedelic use parameters and outcomes by racial group, which is important since most psychedelic research over the past two decades has been disproportionately focused on effects on White people.

Conclusion

People of Color are less likely to use psychedelics under the guidance of a therapist or HCP, but those who did reported that having guidance was *very important* to the overall outcome of their psychedelic experience. Moreover, People of Color, White people, and Multiracial people each have similar motivations for using psychedelics and disclose their use to healthcare professionals at similar rates. Moreover, each group reported that psychedelics positively impacted the mental and physical health issues for which they self-treated with psychedelics. These findings are encouraging signs of the potential effectiveness of PAT among People of Color and highlight the importance of more skillful engagement of People of Color in future psychedelic research efforts.

Disclosure statement

KFB has received grant funding from Tryp Therapeutics for a clinical trial of psilocybin-assisted therapy and sits on a data safety and monitoring board for an ongoing clinical trial with Vireo Health (unpaid). He has received grant funding from the National Institute on Drug Abuse and the National Institutes of Arthritis, Musculoskeletal, and Skin Diseases of the National Institutes of Health. He has also received granting funding from the State of Michigan Veteran Marijuana Research Program. The content is solely the responsibility of the authors and does not necessarily represent the official views of the State of Michigan or National Institutes of Health. PL is President of SABI Mind, one of the co-sponsors of the study.

Funding

The author(s) reported there is no funding associated with the work featured in this article.

ORCID

Nicolas G. Glynos Ph.D. http://orcid.org/0000-0002-6952-131X

Data availability statement

The survey questions, along with the dataset that supports these results will be made available upon request by the corresponding author (NGG).

References

Aday, J. S., R. L. Carhart-Harris, and J. D. Woolley. 2023. Emerging challenges for psychedelic therapy. *JAMA Psychiatry* 80 (6):533–34. doi: 10.1001/jamapsychiatry.2023.0549.

Aday, J. S., C. M. Mitzkovitz, E. K. Bloesch, C. C. Davoli, and A. K. Davis. 2020. Long-term effects of psychedelic drugs: A systematic review. *Neuroscience & Biobehavioral Reviews* 113:179–89. doi: 10.1016/j.neubiorev.2020.03.017.

Bailey, R. K., J. Mokonogho, and A. Kumar. 2019. Racial and ethnic differences in depression: Current perspectives. *Neuropsychiatric Disease and Treatment* 15 (null):603–09. doi: 10.2147/NDT.S128584.

Bibbins-Domingo, K., A. Helman, and V. J. Dzau. 2022. The imperative for diversity and inclusion in clinical trials and health research participation. *JAMA* 327 (23):2283–84. doi: 10.1001/jama.2022.9083.

Bird, C. M., E. K. Webb, A. T. Schramm, L. Torres, C. Larson, and T. A. deRoon-Cassini. 2021. Racial discrimination is associated with acute posttraumatic stress symptoms and predicts future posttraumatic stress disorder symptom severity in trauma-exposed Black adults in the United States. *Journal of Traumatic Stress* 34 (5):995–1004. doi: 10.1002/jts.22670.

Buchanan, N. T. 2021. Ensuring the psychedelic renaissance and radical healing reach the Black community: Commentary on Culture and Psychedelic Psychotherapy.

Journal of Psychedelic Studies 4 (3):142–45. doi: 10.1556/2054.2020.00145.

Carhart-Harris, R. L., and G. M. Goodwin. 2017. The therapeutic potential of psychedelic drugs: Past, present, and future. *Neuropsychopharmacology Reviews* 42 (11):2105–13. doi: 10.1038/npp.2017.84.

Carhart-Harris, R. L., M. Kaelen, M. G. Whalley, M. Bolstridge, A. Feilding, and D. J. Nutt. 2015. LSD enhances suggestibility in healthy volunteers. *Psychopharmacology* 232 (4):785–94. doi: 10.1007/s00213-014-3714-z.

Carter, S., G. Packard, C. Coghlan, J. R. George, A. J. Brown, T. H. W. Ching, J. Julian, and J. L. Maples-Keller. 2023. Perceptions of psychedelic-assisted therapy among Black Americans. *Journal of Mood & Anxiety Disorders* 4:100023. doi: 10.1016/j.xjmad.2023.100023.

Cohen, A., S. P. Vakharia, J. Netherland, and K. Frederique. 2022. How the war on drugs impacts social determinants of health beyond the criminal legal system. *Annals of Medicine* 54 (1):2024–38. doi: 10.1080/07853890.2022.2100926.

Davis, A. K., B. J. Arterberry, Y. Xin, G. Agin-Liebes, C. Schwarting, and M. T. Williams. 2022. Race, ethnic, and sex differences in prevalence of and trends in hallucinogen consumption among lifetime users in the United States between 2015 and 2019. *Frontiers in Epidemiology* 2:876706. doi: 10.3389/fepid.2022.876706.

Davis, A. K., F. S. Barrett, S. So, N. Gukasyan, T. C. Swift, and R. R. Griffiths. 2021. Development of the Psychological Insight Questionnaire among a sample of people who have consumed psilocybin or LSD. *Journal of Psychopharmacology* 35 (4):437–46. doi: 10.1177/0269881120967878.

Glynos, N. G., J. S. Aday, D. Kruger, K. F. Boehnke, S. Lake, and P. Lucas. 2024. Psychedelic substitution: Altered substance use patterns following psychedelic use in a global survey. *Frontiers in Psychiatry* 15. doi: 10.3389/fpsyt.2024.1349565.

Hughes, M. E., and A. Garcia-Romeu. 2024. Ethnoracial inclusion in clinical trials of psychedelics: A systematic review. *EClinicalMedicine* 74:74. doi: 10.1016/j.eclinm.2024.102711.

Jones, A. L., J. Rafferty, S. D. Cochran, J. Abelson, M. R. Hanna, and V. M. Mays. 2022. Prevalence, severity and burden of post-traumatic stress disorder in black men and women across the adult life span. *Journal of Aging & Health* 34 (3):401–12. doi: 10.1177/08982643221086071.

Jones, G., M. X. Lowe, S. Nayak, N. Sepeda, H. Kettner, R. Carhart-Harris, and A. Garcia-Romeu, A. Garcia-Romeu. 2024. Examining differences in the effects and contexts of naturalistic psilocybin use for White participants vs. participants of Color: A longitudinal online survey study. *Journal of Affective Disorders* 370:54–61. doi: 10.1016/j.jad.2024.10.058.

Jones, G. M., and M. K. Nock. 2022. Race and ethnicity moderate the associations between lifetime psychedelic use (MDMA and psilocybin) and psychological distress and suicidality. *Scientific Reports* 12 (1):16976. doi: 10.1038/s41598-022-18645-3.

Kelmendi, B., A. P. Kaye, C. Pittenger, and A. C. Kwan. 2022. Psychedelics. *Current Biology* 32 (2):R63–67. doi: 10.1016/j.cub.2021.12.009.

Kroenke, K., T. W. Strine, R. L. Spitzer, J. B. Williams, J. T. Berry, and A. H. Mokdad. 2009. The PHQ-8 as a measure of current depression in the general population. *Journal of Affective Disorders* 114 (1–3):163–73. doi: 10.1016/j.jad.2008.06.026.

Lee, E., A. K. T. Tsang, M. Bogo, M. Johnstone, and J. Herschman. 2018. Enactments of racial microaggression in everyday therapeutic encounters. *Smith College Studies in Social Work* 88 (3):211–36. doi: 10.1080/00377317.2018.1476646.

Luoma, J. B., C. Chwyl, G. J. Bathje, A. K. Davis, and R. Lancelotta. 2020. A meta-analysis of placebo-controlled trials of psychedelic-assisted therapy. *Journal of Psychoactive Drugs* 52 (4):289–99. doi: 10.1080/02791072.2020.1769878.

MacIntyre, M. M., M. Zare, and M. T. Williams. 2023. Anxiety-related disorders in the context of racism. *Current Psychiatry Reports* 25 (2):31–43. doi: 10.1007/s11920-022-01408-2.

Michaels, T. I., J. Purdon, A. Collins, and M. T. Williams. 2018. Inclusion of people of color in psychedelic-assisted psychotherapy: A review of the literature. *BMC Psychiatry* 18 (1):245. doi: 10.1186/s12888-018-1824-6.

Reid, M. R., and N. T. Buchanan. 2024. Systemic biases promoting the under-inclusion of marginalized groups in randomized controlled trials for co-occurring alcohol use and posttraumatic stress disorder: An intersectional analysis. *Journal of Ethnicity in Substance Abuse* 1–26. doi: 10.1080/15332640.2024.2367240.

Roseman, L., E. Haijen, K. Idialu-Ikato, M. Kaelen, R. Watts, and R. Carhart-Harris. 2019. Emotional breakthrough and psychedelics: Validation of the emotional breakthrough inventory. *Journal of Psychopharmacology* 33 (9):1076–87. doi: 10.1177/0269881119855974.

Smith, D. T., S. C. Faber, N. T. Buchanan, D. Foster, and L. Green. 2022. The need for psychedelic-assisted therapy in the black community and the burdens of its provision. *Frontiers in Psychiatry* 12:774736. doi: 10.3389/fpsyt.2021.774736.

Spitzer, R. L., K. Kroenke, J. B. Williams, and B. Löwe. 2006. A brief measure for assessing generalized anxiety disorder: The GAD-7. *Archives of Internal Medicine* 166 (10):1092–97. doi: 10.1001/archinte.166.10.1092.

Sue, D. W., and L. Spanierman. 2020. *Microaggressions in everyday life*. John Wiley & Sons.

Thrul, J., and A. Garcia-Romeu. 2021. Whitewashing psychedelics: Racial equity in the emerging field of psychedelic-assisted mental health research and treatment. *Drugs: Education, Prevention & Policy* 28 (3):211–14. doi: 10.1080/09687637.2021.1897331.

Viña, S. M., and A. L. Stephens. 2023. Minorities' diminished psychedelic returns. *Drug Science, Policy and Law* 9:20503245231184638. doi: 10.1177/20503245231184638.

Williams, M. T., A. K. Davis, Y. Xin, N. D. Sepeda, P. C. Grigas, S. Sinnott, and A. M. Haeny. 2021. People of Color in North America report improvements in racial trauma and mental health symptoms following psychedelic experiences. *Drugs: Education, Prevention & Policy* 28 (3):215–26. doi: 10.1080/09687637.2020.1854688.

Windsor, L. C., A. Jemal, and E. J. Alessi. 2015. Cognitive behavioral therapy: A meta-analysis of race and substance use outcomes. *Cultural Diversity & Ethnic Minority Psychology* 21 (2):300–13. doi: 10.1037/a0037929.