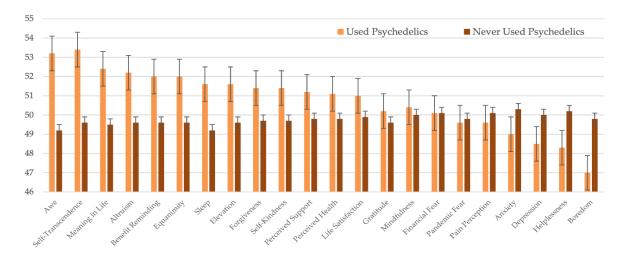
## Classical Psychedelics Increase Psychological Strengths in the General Population.

In a newly published Stockton University study, people who had used classical psychedelics displayed increased psychological strengths. Past psychedelic use was associated with a more adaptive pattern of psychological strengths and resilience to distress. In contrast, cannabis and alcohol use were associated with lower levels of several psychological strengths. Further, users with a 'growth' motivation for using psychedelics showed significantly more benefits than those who used them with a 'fun/recreation' motivation. The degree of self-transcendence they experienced fully mediated the relationship between psychedelic use and well-being, replicating previous research, which posits ego-dissolution is central to achieving maximal benefits from psychedelics.

<u>A newly published study</u> conducted at Stockton University, by researchers Trey Brasher, David Rosen, PhD, and Marcello Spinella, PhD, demonstrated classical psychedelics (namely psilocybin, DMT/ayahuasca, LSD, and mescaline) can positively affect the psychological strengths of people in the general population. While an abundance of studies have provided evidence for psychedelics' efficacy in randomized clinical trials, *The International Journal of Well Being* article presents one of the first and most robust examinations of how classical psychedelic use in a naturalistic setting impacts one's psychological profile.

Three studies were conducted via online survey with a collective 3,157 participants. Classical psychedelic users showed greater psychological strengths and lower levels of distress, after controlling for a variety of demographic, personality, and other factors, such as their use of other psychoactive substances. A wider array of strengths were displayed by psychedelic users than in past studies, including but not limited to: inclusive identity, equanimity, kindness, self-compassion, life satisfaction, meaning in life, altruism, awe, sleep, and forgiveness. The maladaptive traits included: anxiety, depression, helplessness, and boredom. By chance, the third study coincided with the quarantine at the beginning of the COVID-19 pandemic,



demonstrating that the benefits found in the first two studies carried over into an acute crisis.

Differences between psychedelic users and non-users on measures of psychological strengths and distress. N = 1142. All differences are statistically significant (p < .001), except Benefit Reminding and Perceived support. Error bars show standard error.

While the psychological profile associated with classical psychedelics was overwhelmingly adaptive, the same measures associated with cannabis and alcohol use showed greater ambiguity, with mixed patterns of adaptive and maladaptive traits. Cannabis users showed more maladaptive patterns in half of the measures, while regular alcohol users showed maladaptive patterns in roughly two-thirds of the measures.

		Psychedelic Use			Cannabis Use			Alcohol Use		
	Study:	1	2	3	1	2	3	1	2	3
Well-being/Strength Measures	Mindful focus		<b>†</b> ↑	<b>†</b> †		↓↓	$\downarrow\downarrow$		$\downarrow\downarrow$	$\downarrow\downarrow$
	Mindful awareness	-								
	Equanimity	$\uparrow\uparrow$	<b>†</b> ↑	††		$\downarrow\downarrow$	$\downarrow\downarrow$		$\downarrow\downarrow$	$\downarrow\downarrow$
	Gratitude		$\uparrow\uparrow$	<b>†</b> †		$\uparrow\uparrow$	$\uparrow\uparrow$		Ļ	î
	Forgiveness		<b>†</b> †	<b>†</b> †		$\downarrow\downarrow$	$\downarrow\downarrow$		$\uparrow\uparrow$	11
	Perceived Support		Ļ	î		$\downarrow\downarrow$	$\downarrow\downarrow$		$\uparrow\uparrow$	<b>1</b> 1
	Perceived Health		<b>†</b> †	$\uparrow\uparrow$		î	Ļ		$\uparrow\uparrow$	<b>1</b> 1
	Self-transcendence	$\uparrow\uparrow$	<b>†</b> ↑	$\uparrow\uparrow$		$\uparrow\uparrow$	$\uparrow\uparrow$		$\downarrow\downarrow$	$\downarrow\downarrow$
	Kindness	$\uparrow\uparrow$	$\uparrow\uparrow$	$\uparrow\uparrow$		$\downarrow$	↓		Ļ	î
	Sleep		-	1		-	↓		-	Î
	Humility		î			Î			Ļ	
	Sense of Connection	$\uparrow\uparrow$	$\uparrow\uparrow$			Î			1	
	Self-Kindness	$\uparrow\uparrow$		$\uparrow\uparrow$			↓			↓
	Positive Affect	Î								
	Awe			1			$\downarrow$			Ļ
	Elevation			1			$\downarrow$			1
	Benefit Reminding			1			↓			1
	Meaning in Life			1			↓			1
	Life Satisfaction	<u>†</u> †		$\uparrow\uparrow$			↓			<b>↑</b>
Distress/Dysfunction Measures	Anxiety			Ļ			î			Î
	Depression			Ļ			î			Î
	Helplessness			↓			î			î
	Boredom			Ļ			î			Î
	Pain Perception			$\downarrow$			î			↓
	Pandemic Fear			$\downarrow$			î			Ļ
	Financial Fear			1			$\downarrow$			1
	Negative Affect	↓								
	Greed		Ļ			Î			Î	
	Envy		$\downarrow$			$\downarrow$			1	
	Hate		↓			Î			Ť	

Comparison of psychedelics, cannabis, and alcohol across studies: Up ( $\uparrow$ ) and down ( $\downarrow$ ) arrows indicate whether users in each category of drug scored higher or lower than nonusers, respectively, while a dash (–) means no significant difference found. Absence of a symbol and color indicates that measure was not used in that study. Green/red coloring indicates whether the difference is adaptive (green) or maladaptive (red) for users. Double arrows ( $\uparrow\uparrow$ ,  $\downarrow\downarrow$ ) indicate consistent findings across the two datasets, while dashed ( $\uparrow,\downarrow$ ) arrows with a yellow background indicate conflicting results.

The study also reported that the intention of using psychedelics matters. Those users with a growth motive showed greater strengths and well being, and lower distress on 16 of 22 measures. This is the first study to report the effect of intention for personal growth compared to fun/recreation on psychedelic use in a naturalistic setting.

The researchers highlight evidence, through a statistical (mediation) analysis, that self-transcendence underlies the relationship between psychedelic use and the combined strength index, a composite score of all measured traits. This mediation effect supports a

growing body of evidence linking the 'self-transcendent' or 'ego dissolution' experience to positive clinical and naturalistic outcomes of psychedelic use.

First author, Trey Brasher, notes, "The most striking aspect of our analyses is that the diverse battery of psychological strengths we observed replicated across all three studies - psychedelic users consistently showed a pattern of benefit users of other substances did not."

Brasher, Rosen, and Spinella have spent their professional careers and personal lives investigating and exploring self-transcendence, ego dissolution, and altered states of consciousness via psychedelics, meditation, Eastern philosophy, yoga, graphic design, and music improvisation. Their research expertise includes chemistry, psychopharmacology, positive psychology, cognitive neuroscience, executive functions, mindfulness, and music cognition.

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