

# 5-MeO-DMT is associated with subjective improvements in post traumatic stress disorder

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## INTRODUCTION

5-Methoxy-N,N-Dimethyltryptamine (5-MeO-DMT) is a psychoactive indolealkylamine substance found in several plants, in high concentrations in Bufo alvarius toad venom (bufotoxin), and is synthetically produced.

5-MeO-DMT is a potent, fast-acting, psychedelic. Human self-experiments describe the subjective effects of synthetic 5-MeO-DMT as similar to other classic hallucinogens, including a distortion in time perception, and auditory and visionary distortions, with peak effects between 35-40 minutes after insufflation. Inhalation (e.g., smoking or vaporizing) is also a common means of consumption with initial onset of effects within 60 seconds and peak total duration of effect between 5 and 20 minutes.

A recent epidemiological survey suggested that 5-MeO-DMT use was associated with a decrease in symptoms of post traumatic stress disorder. Further exploration of the potential psychotherapeutic benefit of 5-MeO-DMT could inform future clinical trials.

## PRIMARY AIM

We examined self-reported post traumatic stress disorder among an international sample of people who have used 5-MeO-DMT. Next, we examined differences in demographic characteristics, acute subjective mystical and challenging effects, beliefs about the 5-MeO-DMT experience, and number of lifetime uses of 5-MeO-DMT, between those who reported that their substance use problems were better (versus no change in problems) following 5-MeO-DMT use.

## METHOD & DATA ANALYSES

Using internet-based advertisements we recruited English-speaking adults to complete an anonymous web-based survey. People who reported a past or present diagnosis of post traumatic stress disorder were combined into a single post traumatic stress disorder group.

We conducted frequency counts and descriptive analyses of all study variables. Next, using a series of chi-square analyses and t-tests, we compared mean ratings of subjective effects of 5-MeO-DMT as a function of improvement or lack of improvement in post traumatic stress disorder symptoms.

## SAMPLE

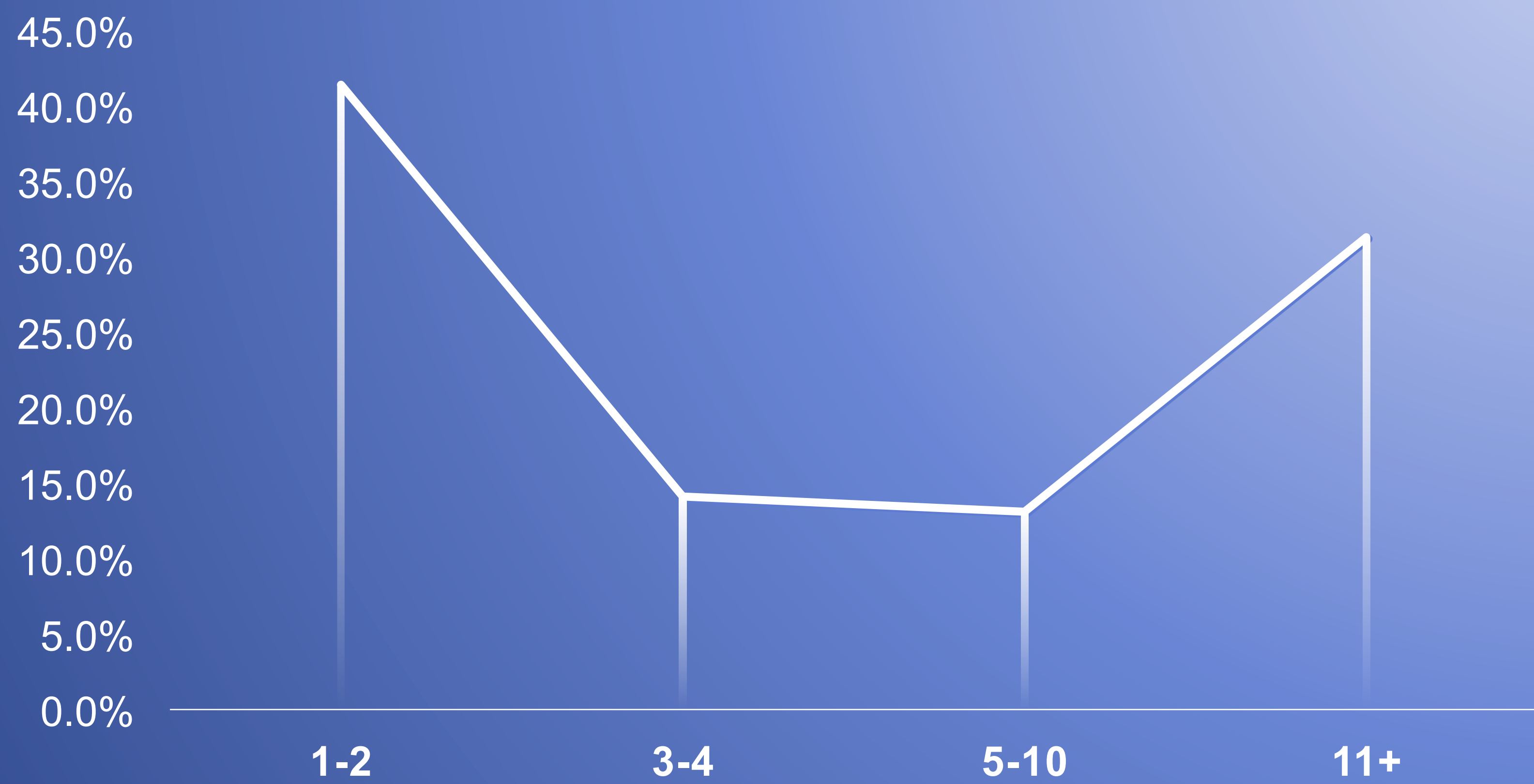
99 people with post traumatic stress disorder completed the online survey.

The sample was comprised as follows:

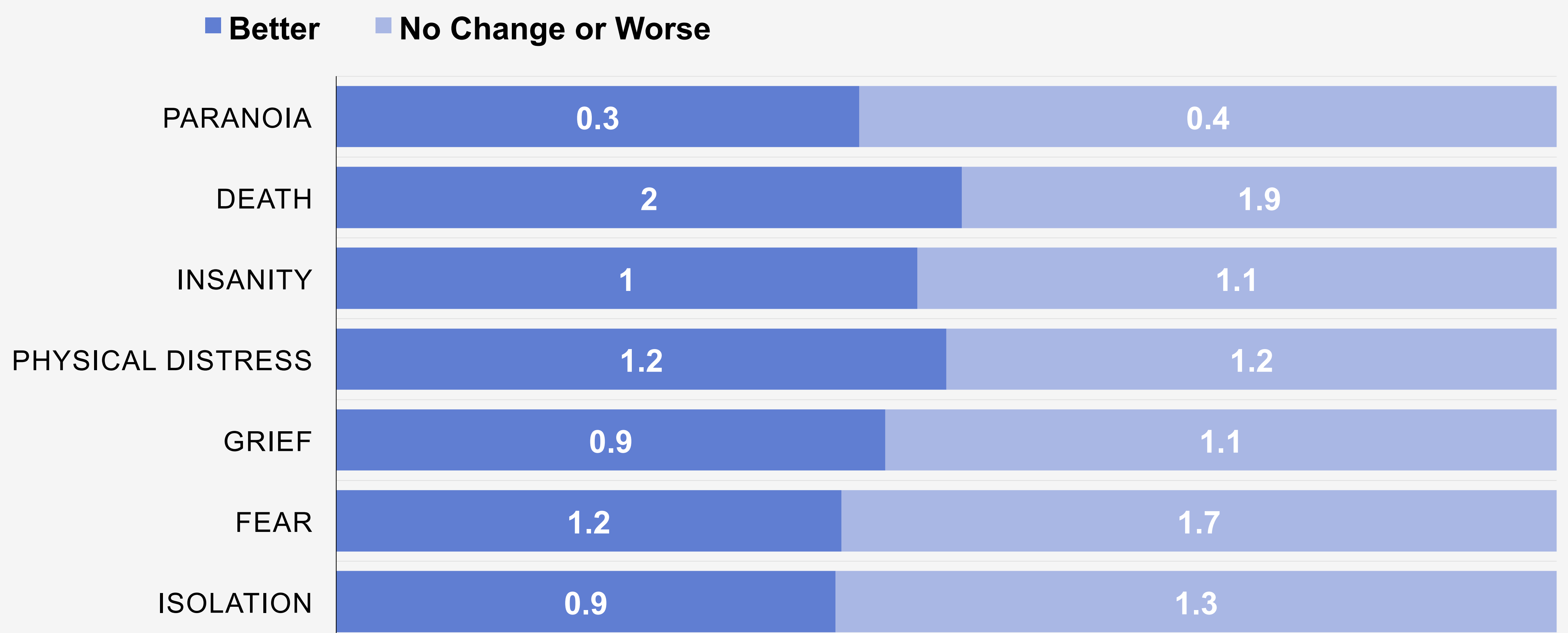
- Mean age = 37.4 (SD=12)
- Male (74%)
- White/Caucasian (84%)
- Heterosexual (81%)
- Residing in the United States (58%)
- Bachelor's degree or higher (34%)
- Employed full-time (41%)

## RESULTS

### LIFETIME USES



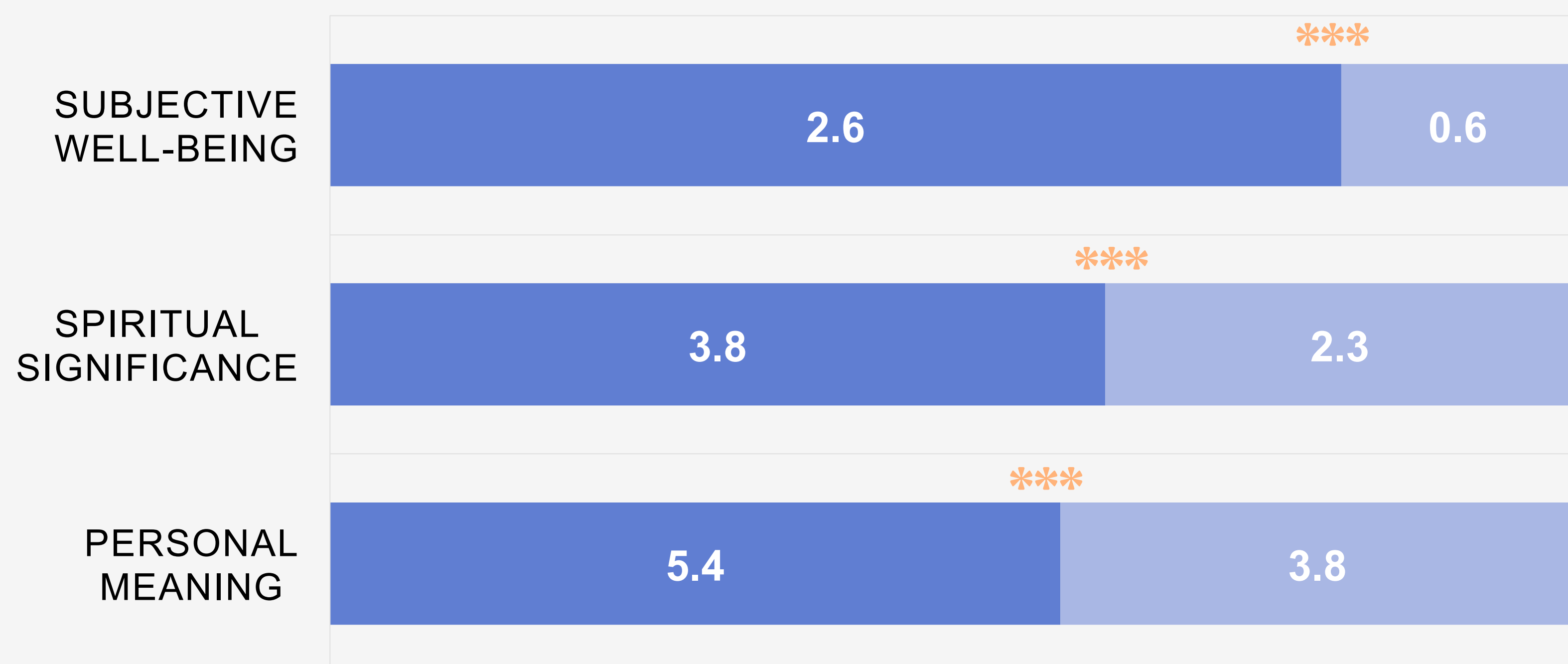
### INTENSITY OF ACUTE CHALLENGING EXPERIENCES (0 = NONE TO 5 = EXTREME)



### RATINGS OF PERSISTING BELIEFS

\*\*p<.01, \*\*\*p<.001

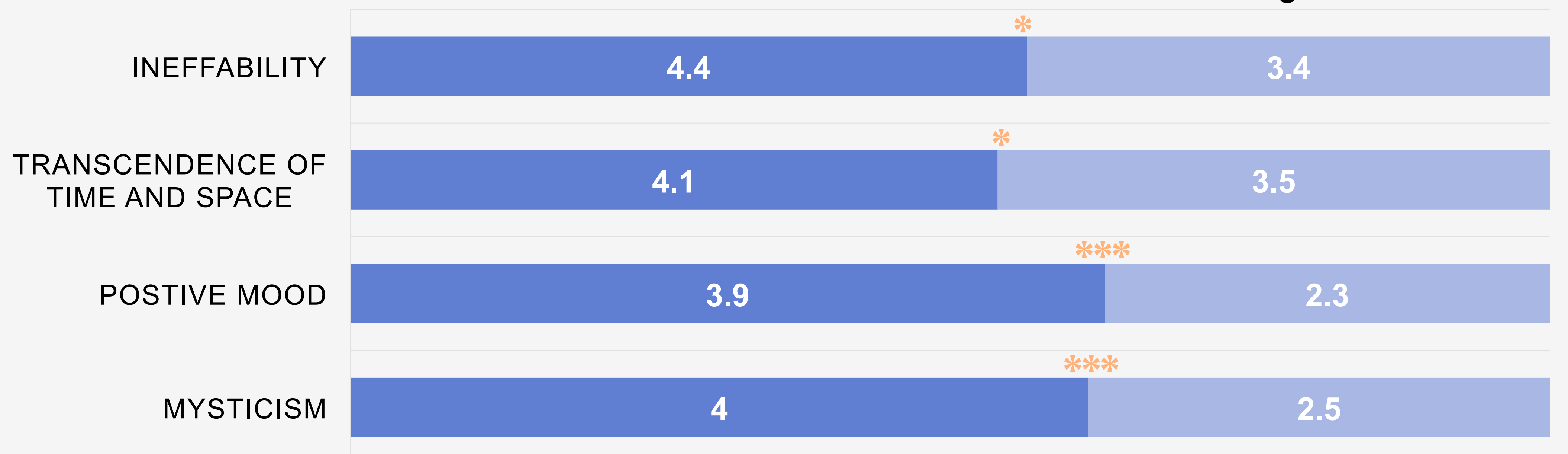
■ Better ■ No Change or Worse



### INTENSITY OF ACUTE MYSTICAL EXPERIENCES (0= NONE TO 5= EXTREME)

\*p<.05, \*\*\*p<.001

■ Better ■ No Change or Worse



## CONCLUSIONS

Findings highlight the infrequent pattern of use and the moderate-to-strong subjective mystical and very slight challenging effects of 5-MeO-DMT consumption. Those who reported an improvement in post traumatic stress disorder symptoms (79% n=78) also reported significantly greater intensity of acute mystical experiences and had stronger ratings of positive beliefs about the spiritual/personal significance of their first 5-MeO-DMT session, compared to those whose symptoms did not change (18% n=18) or worsened (3% n=3). Furthermore, in terms of challenging experiences, there were no differences in the intensity of acute challenging physical/psychological experiences between respondents. The acute 5-MeO-DMT experience appears to be associated with improvements in post traumatic stress disorder. We recommend future research to examine the safety of 5-MeO-DMT administration in humans using rigorous experimental designs.

## ACKNOWLEDGEMENTS

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## DISCLOSURE

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