

Subjective improvements in substance use problems following 5-MeO-DMT use in an international sample

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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 problems related to substance use. Further exploration of the potential psychotherapeutic benefit of 5-MeO-DMT could inform future clinical trials.

PRIMARY AIM

We examined self-reported substance use problems 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 either drug use problems and/or alcohol abuse/alcoholism were combined into a single "substance use problems" 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 substance use problems.

SAMPLE

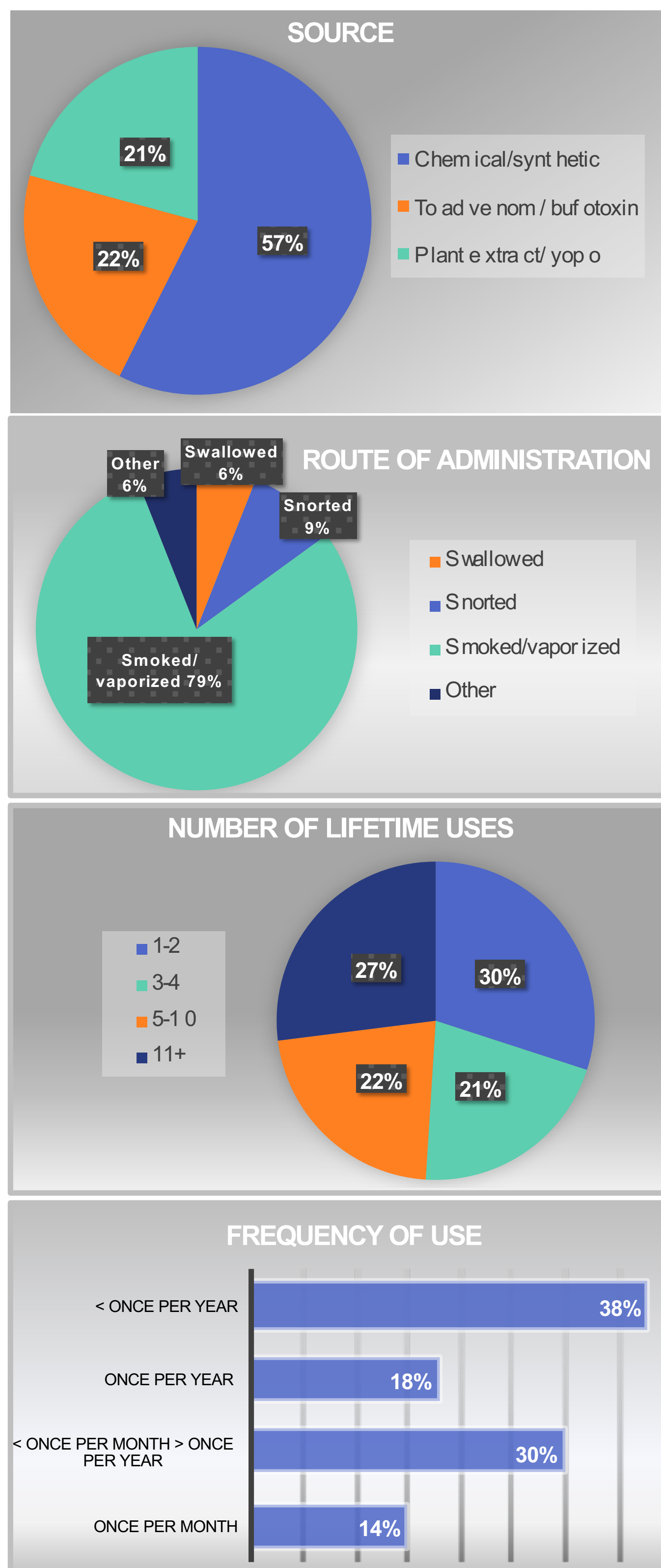
194 people with a history of substance use problems completed the online survey.

The sample was comprised as follows:

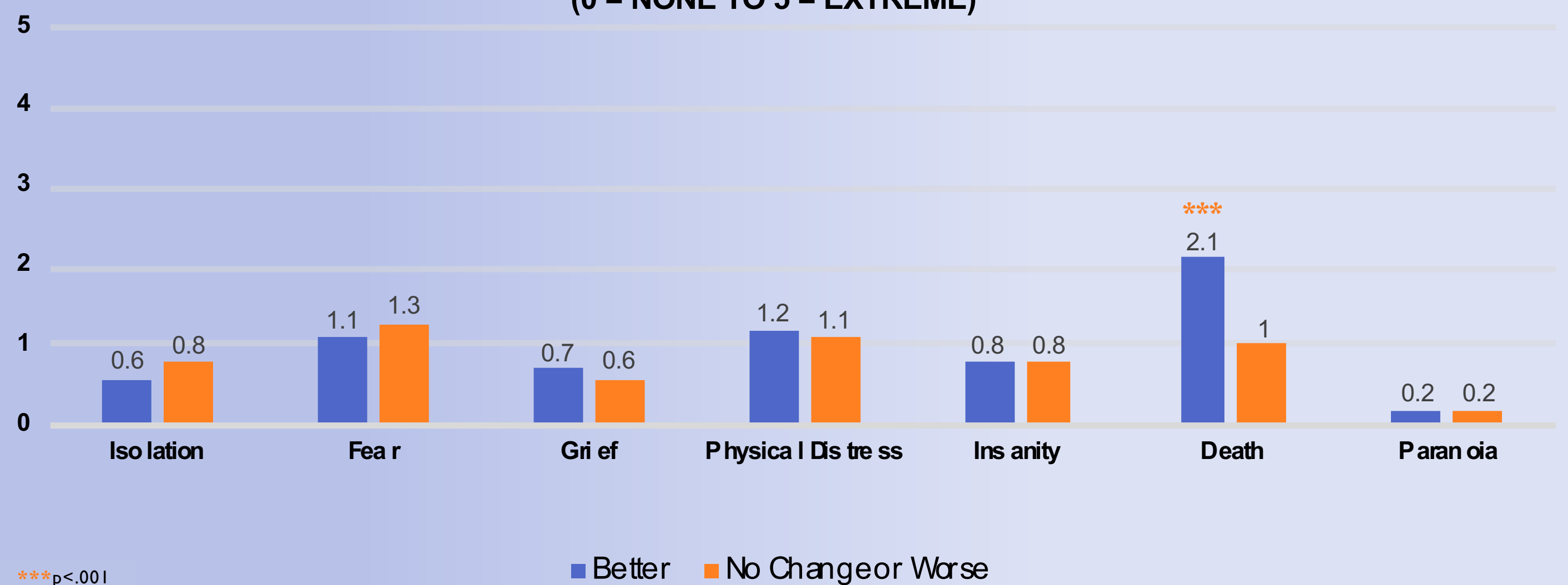
- Mean age = 34.6 (SD=11.0)
- Male (85%)
- White/Caucasian (85%)
- Heterosexual (83%)
- Residing in the United States (49%)
- Bachelor's degree or higher (37%)
- Employed full-time (41%)

RESULTS

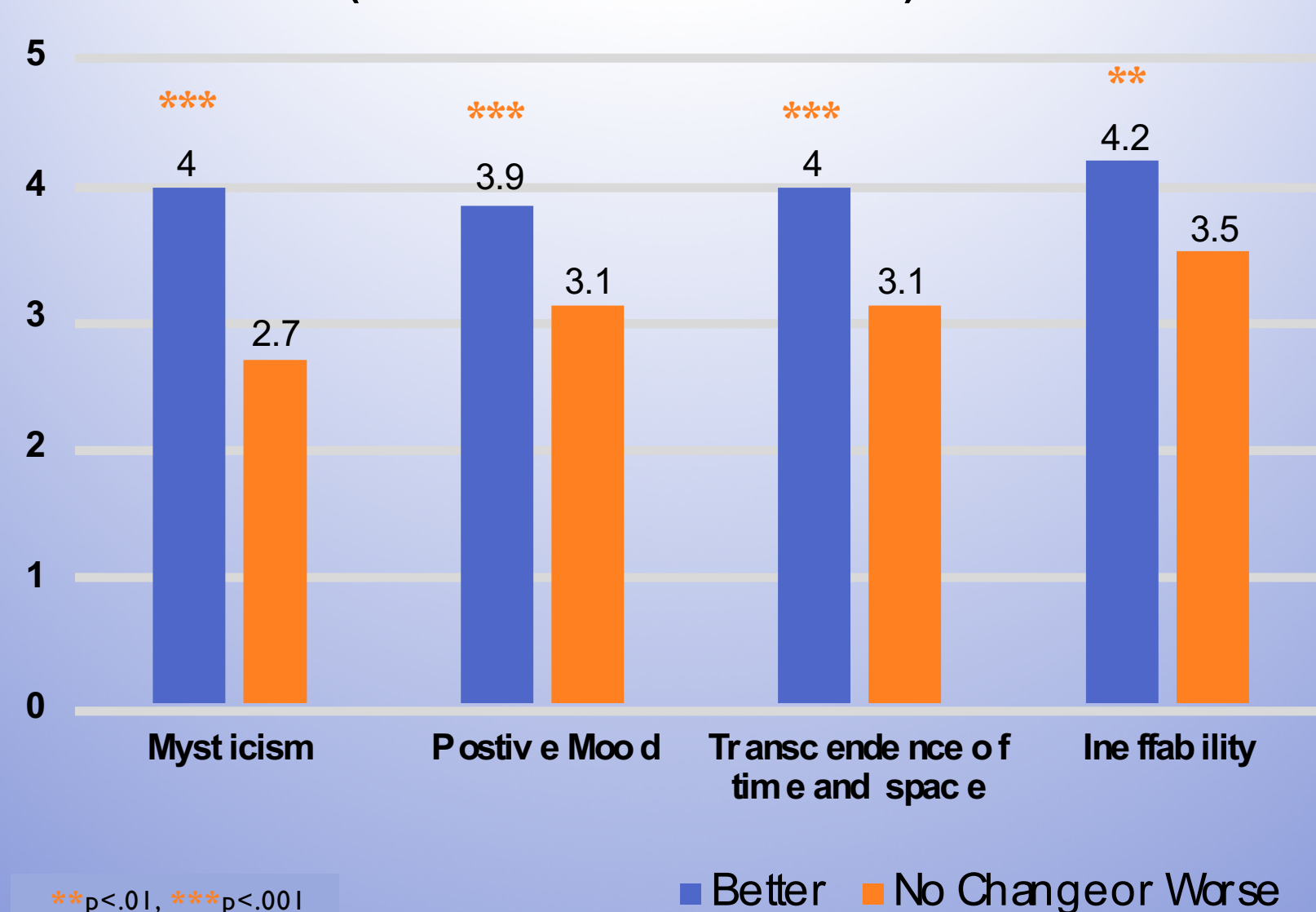
SOURCE OF 5-MeO-DMT USED AND OVERALL PATTERNS OF CONSUMPTION IN THE SAMPLE



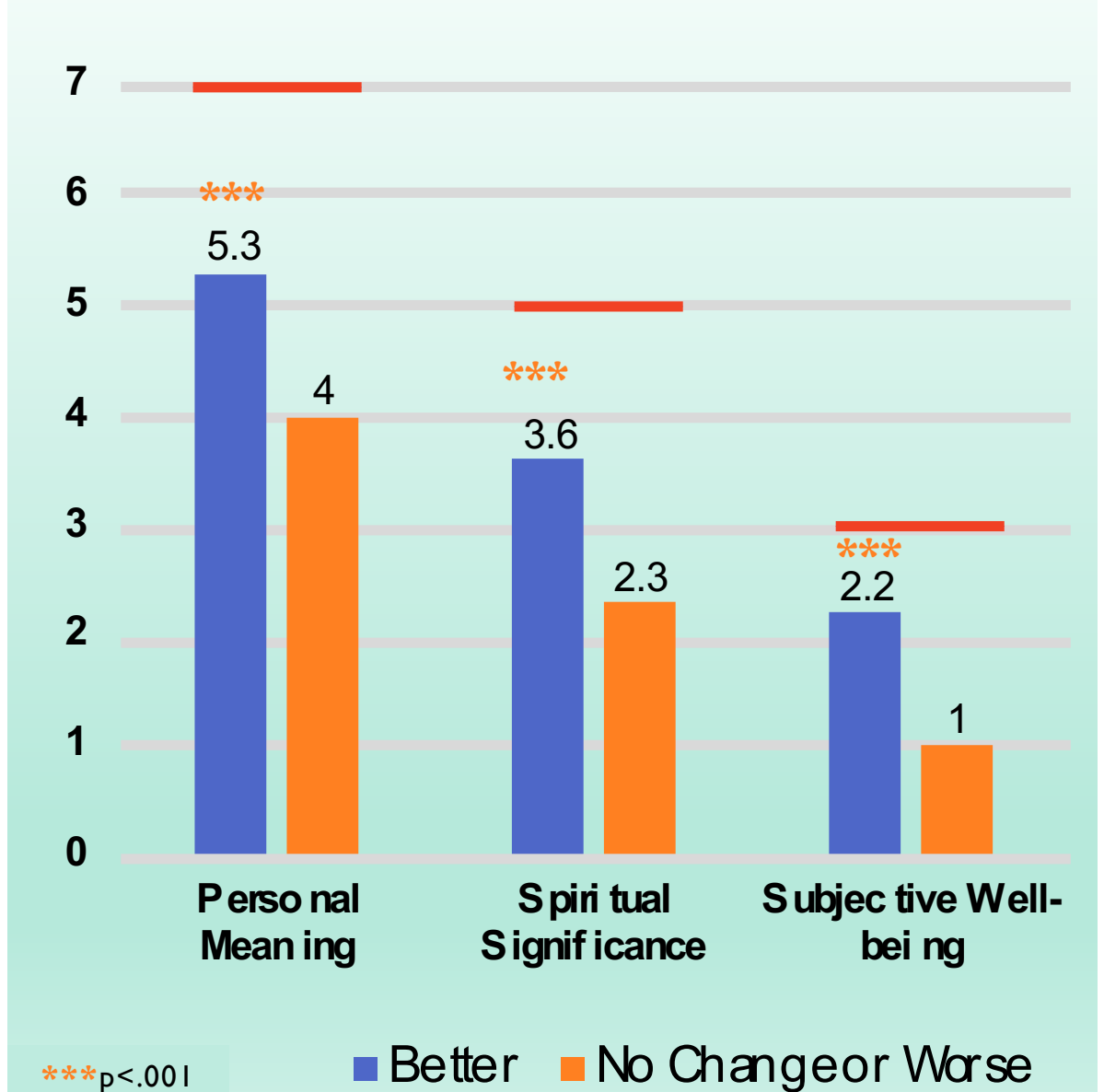
INTENSITY OF ACUTE CHALLENGING EXPERIENCES (0 = NONE TO 5 = EXTREME)



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



RATINGS OF PERSISTING BELIEFS



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 substance use problems 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 improve. Furthermore, in terms of challenging experiences, respondents who experienced improvement in substance use problems reported significantly higher ratings of experiencing their own death, compared to respondents who reported no change in their substance use problems. The acute 5-MeO-DMT experience appears to be associated with substance use problem improvement. We recommend future research to examine the safety of 5-MeO-DMT administration in humans using rigorous experimental designs.

DISCLOSURE

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