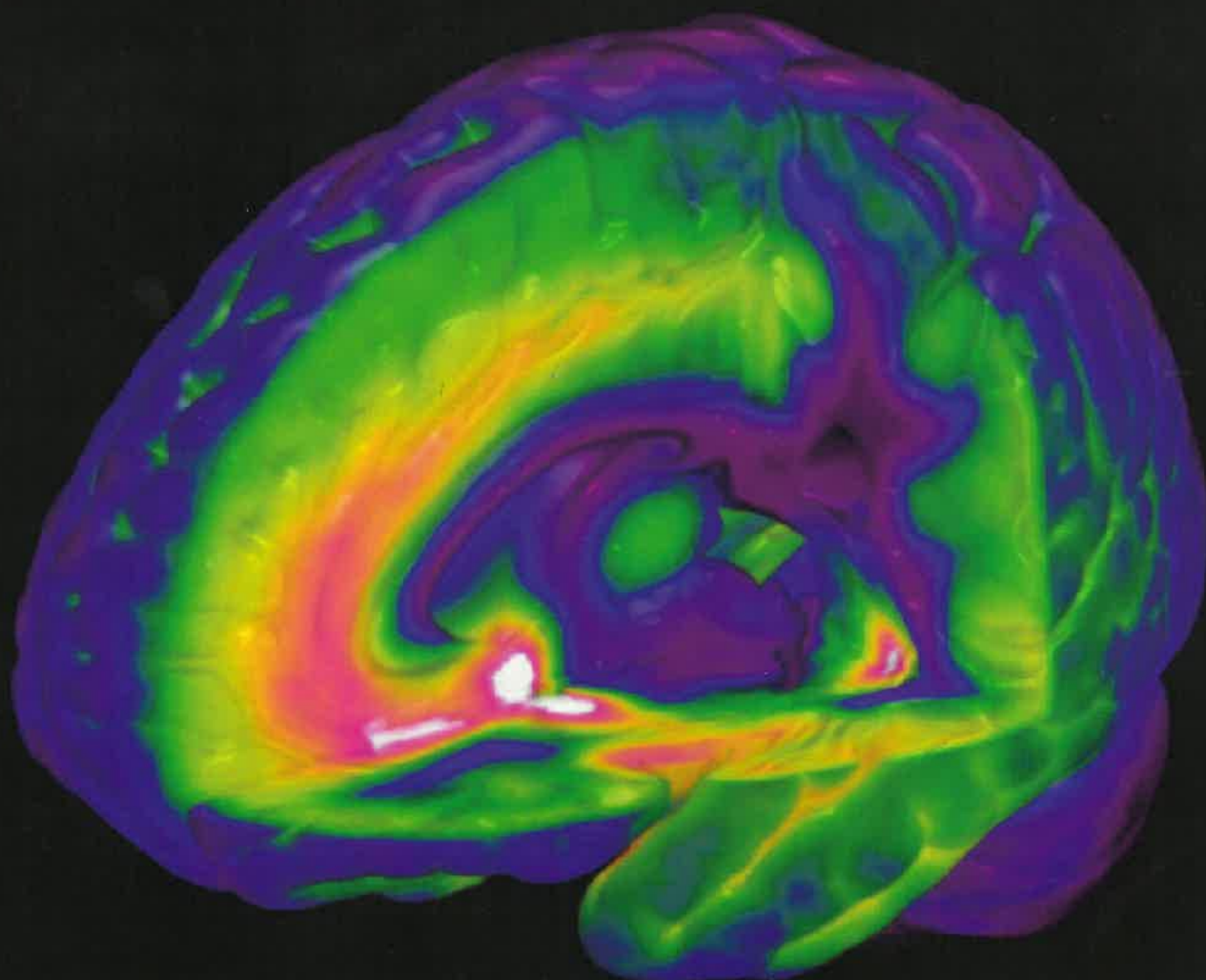


Abstract Supplement to
Issue 33 • Number 8 • August 2019

ISSN 0269-8811

Journal of Psychopharmacology

Editors: David J Nutt and Pierre Blier



journals.sagepub.com/home/jop

BAP
British Association for
Psychopharmacology



the 'afterglow' period and suggests it is worthy of further exploration as another possible psychological mechanism. Given psychological gains to mindfulness and cognitive flexibility occurred regardless of prior ayahuasca use suggests ayahuasca offers potentially therapeutic effects for both psychedelic naïve and experienced ayahuasca drinkers.

Funding: None

F06

COGNITIVE FUNCTIONS ASSOCIATED WITH CONSUMPTION OF TRADITIONAL VOLUMES OF KAVA (PIPER METHYSTICUM): A FEASIBILITY STUDY

Aporosa AS, Te Huataki Waiora (School of Health, Sport and Human Performance), University of Waikato, Private Bag 3105, Hamilton 3240 I, New Zealand apo.aporosa@waikato.ac.nz

Introduction: Kava (*Piper methysticum*) is a traditional and culturally significant Pacific Island beverage, which contains active compounds called kavalactones that produce soporific relaxant effects similar to Benzodiazepine (Sarris et al, 2012, *Human Psychopharmacology Clinical and Experimental*, 27:262-9). Traditional kava drinkers frequently exceed the pharmacologically recommended amount of ≤ 300 mg of kavalactones/day by 30 times (Aporosa & Tomlinson, 2014, *Anthropologica*, 56:163-75). Little is known about cognitive function at this high consumption rate. With Pacific peoples in New Zealand over represented in motor vehicle accidents, Police suspect traditional kava use may be a contributing factor. Previous research (Aporosa, 2017, *Journal of Psychopharmacology*, 31[8], A84) used an industry standard measure of drug driving to examine cognitive functions of kava users in a naturalistic setting. The industry standard measure revealed no statistical differences in cognitive functioning between kava users and control participants, despite observation of slowed movement and slurred speech by the kava users. Consequently, with full study utility as a goal, the feasibility of using a new psychometric measure of cognitive functioning – the Brain Gauge (BG) – was examined in a naturalistic setting.

Methods: Drawing on Eldridge et al's (2016, *PLoS One*, 11[3]: p.15) definition of a feasibility study, experienced kava consumers (n=2 [males], mean age = 46.5) attended a 6 hour traditionally influenced kava session, each drinking 3.6 litres of kava equating to 5,220mg of kavalactones. At baseline, the participants completed BG (www.corticalmetrics.com [CM]) somato-sensory psychometric testing to measure six strategic, tactical and operational cognitive faculties including fine-motor-skills and fatigue. Each of the six domains are scored and compared against norms, which also informs a composite CM score. Re-testing was conducted following 3 and 6 hours of kava consumption.

Results: Consistent with subjective observations of the behavior of the participants, obvious negative changes over time were evident for reaction time, attention focus, time perception and temporal order judgement for one participant (CM composite score: 85 at baseline, 80 at 3 hours, 55 at 6 hours) but positive changes were evident for the second participant (CM composite score: 73 at baseline, 73 at 3 hours, 92 at 6 hours).

Conclusions: Unlike the industry standard measure of drug driving used in the previous study, use of the BG is feasible in a naturalistic setting. A full controlled study, aimed at understanding kava's effects on driving following high consumption, is about to commence.

Funding: Sponsorship: This study is funded by the New Zealand Health Research Council (19/002).