3,4-Methylenedioxymethamphetamine use in Aotearoa: A quantitative survey exploration

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Background

➢ 3,4-Methylenedioxymethamphetamine (MDMA) is a drug that is used widely in party scenes across the world, and is also being trialled as an adjunct for the treatment of mental health disorders

➢ In Aotearoa, approximately 4.3% of adults used in the last year (New Zealand Health Survey, 2022)

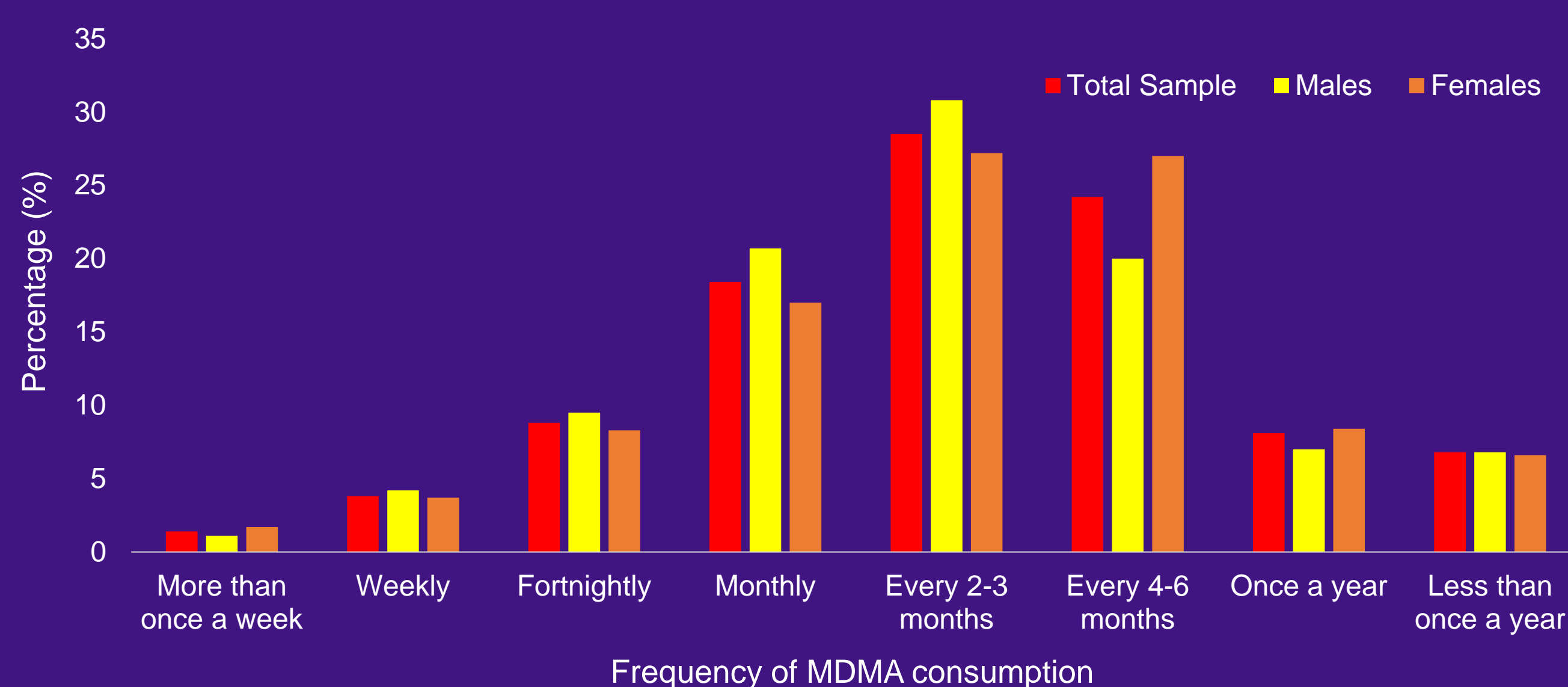➢ Despite high prevalence, little is known about how and why people use MDMA, or many other variables

Method

➢ An online survey exploring MDMA use and users (Active December '21 – July '22), included those who had used MDMA within past 5 years

• Use parameters, settings, other drug use

• Motivations (with comparison to alcohol)

• Reflections about personal use

• Harm, disordered alcohol and drug use

Results

Demographics

1180-784 Participants

• 59.2% female, 38.6% male 2.2% other

• Aged 18-65 (*Median = 23.5*)

• 88% Pākehā, 15% Māori

• 46.6% student

Motivations

SUMM Factor Scores for MDMA + Comparison with Alcohol (n = 915)

Factor	MDMA Mean (SD)	Alcohol Mean (SD)	MDMA – Alcohol, Wilcoxon signed-rank test Z, p
Enhancement	4.14 (0.80)	3.21 (0.96)	21.17, <.001
Social	3.45 (0.88)	3.99 (0.85)	17.06, <.001
Conformity	1.66 (0.82)	2.09 (1.02)	14.53, <.001
Anxiety-Coping	2.35 (1.02)	2.88 (1.09)	13.86, <.001
Depression-Coping	1.82 (1.01)	2.08 (1.10)	7.90, <.001
Boredom-Coping	1.94 (0.95)	2.48 (1.18)	14.72, <.001
Self-Expansion	2.52 (1.06)	1.85 (0.84)	16.56, <.001
Performance	2.13 (0.68)	1.69 (0.69)	15.78, <.001

MDMA Consumption

▪ Most common consumption; oral = 48.4%, nasal = 44.7%

▪ 86.2% consumed in past year, ~50% used on 21+ occasions

▪ Used primarily at house parties, clubs and festivals

▪ 18.2% "don't know" what they consider a single dose

▪ Re-dosing behaviour reported by 88.4%, with 2/3 redosing on half the occasions or more

Average consumption of MDMA per session (mg)

Harm and Dependence

➢ Potential alcohol and other drug problems were screened for using the AUDIT and DUDIT

➢ Mean AUDIT = 11.2, Mean DUDIT = 8, which indicated hazardous drinking, and potential "drug problems"

➢ Mean MDMA dependence score (SDS) was 0.82, 6.9% of the sample scored ≥4, indicating potential dependence

➢ MDMA harm reported by 14.4%

  ➢ Primarily psychological and physical (but also social and spiritual)

➢ Non-MDMA harm i.e., consumption of initially *assumed* MDMA but subsequently *presumed* to be another drug, was reported by 28.7% – thought to be mainly synthetic cathinones (78%)

➢ Those who reported MDMA harm were more likely to also report non-MDMA harm (X^2 (1, *n* = 915) = 83.20, *p* < 0.001)

Reflections about Use

➢ Agreement with positive sentiment items related to MDMA use was moderate to high (deepened my emotional experiences, gave me amazing memories), whilst agreement with negative items was low

➢ Some reported negative changes of concern;

  ➢ Gave me problems with my concentration and memory (19% net agreement)

  ➢ Made me more paranoid (9.8% net agreement)

Conclusion

The findings highlight diverse consumption frequency and dose per session but suggest most MDMA users perceive their use to be positive and beneficial. However, some consumers reported use behaviour that reflects greater risk, experiences of MDMA (or other drug) harm, and potential MDMA dependence. Monitoring of MDMA use should continue to ensure tailored harm reduction education and interventions can be implemented when necessary.