

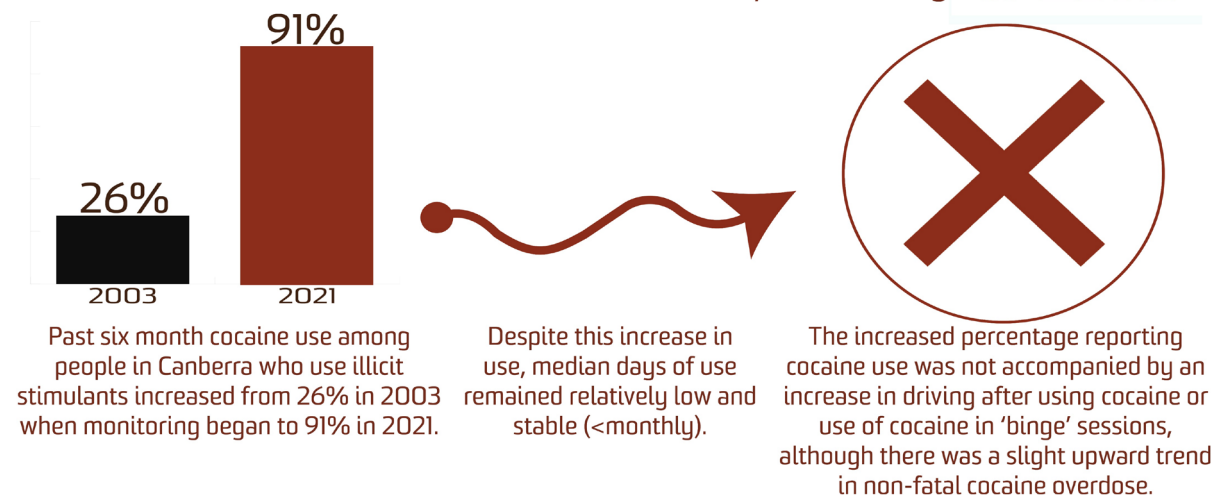
Cocaine use and related harms among a sample of people who regularly consume illicit stimulant drugs in Canberra, ACT

Authors: Julia Uporova¹ and Rachel Sutherland¹

¹ National Drug and Alcohol Research Centre, UNSW Sydney, Sydney, Australia

Key Findings

Australian Capital Territory 



Background

Australian general population data shows that, among Australians aged 14 years and older, past year cocaine use has increased from 2.5% in 2016 to 4.2% in 2019 (1). Studies suggest that this increase in use has been accompanied by an increase in harms. Specifically, cocaine-related hospitalisations have increased from 5.1 per 100,000 people in 2011-12 to 15.6 per 100,000 people in 2017-18 (2), and despite absolute numbers remaining low, cocaine-induced deaths have increased fivefold since 2014 (0.07 deaths to 0.35 deaths per 100,000 people in 2020) (3). Treatment episodes for cocaine have also increased, from 3.2 per 100,000 people in 2016-17 to 5.9 per 100,000 people in 2017-18 (2).

Data from the Ecstasy and Related Drugs Reporting System (EDRS), which surveys people who regularly use illicit stimulants, has also shown an increase in past six-month cocaine use nationally, from 23% in 2003 (when monitoring began) to a record high of 80% in 2021 (68% in 2020) (4). This trend has been observed across most jurisdictions, including ACT, however, it is unclear whether this increase in use has been accompanied by an increase in cocaine-related harms and/or behaviours, particularly given the relatively low frequency of cocaine consumption amongst this group.

Thus, this bulletin aims to investigate past six-month cocaine consumption and associated behaviours (i.e., overdose, bingeing, driving after using cocaine) amongst EDRS participants in Canberra, ACT, from 2003-2021.

Method

Data were obtained from the ACT EDRS interviews collected between 2003-2021 via face-to-face or telephone surveys (due to COVID-19 restrictions). To be eligible, participants had to have used illicit stimulants on a monthly or more frequent basis in the six months leading up to interview, be a minimum of 18 years old (17 in 2018 and prior years) and have lived in Canberra for at least 10 out of 12 months preceding interview. Around 100 participants were interviewed per year and were recruited via social media and word-of-mouth.

As part of the interview, participants were asked about past six-month cocaine use (including frequency and quantity of use), as well as whether they had driven within three hours of consuming illicit or non-prescribed drugs or “used any stimulants or related drugs for 48 hours or more continuously without sleep” (i.e., ‘binged’). Questions regarding overdose have changed over time, and this should be taken in account when examining trends in non-fatal stimulant overdose (i.e., Figure 1). From 2019, stimulant overdose was defined as “the experience of symptoms (e.g., nausea, vomiting, chest pain, tremors, increased body temperature, increased heart rate, seizure, extreme paranoia, extreme anxiety, extreme agitation, panic, hallucinations, excited delirium) that are outside the participant’s normal drug experience or where the participant felt professional assistance would have been helpful.”

Descriptive statistics were calculated, with no significance testing performed.

Results

Past 6-month use, frequency of use and quantity of use

As can be seen in Figure 1, past six-month cocaine use remained relatively stable from 2005-2017, before a prominent increase was observed in 2018. Cocaine use has since remained elevated, with 91% of participants reporting use in 2021, the largest percentage since monitoring began.

However, frequency of use has remained infrequent throughout the monitoring period, ranging between one to six days (Figure 1). Among those who had used cocaine, few have historically reported using cocaine on a weekly or more frequent basis; however, from 2018 onwards, about one-in-ten reported using cocaine weekly or more (Figure 2).

The average and maximum amount of cocaine used in a session has remained relatively stable throughout the monitoring period, with a median of 0.50 grams in a ‘typical’ session and a median of approximately 1 gram in a ‘heavy’ session reported in most years (Figure 3).

Results cont.

Figure 1. Past six-month use and frequency of use of cocaine, ACT, EDRS, 2003-2021

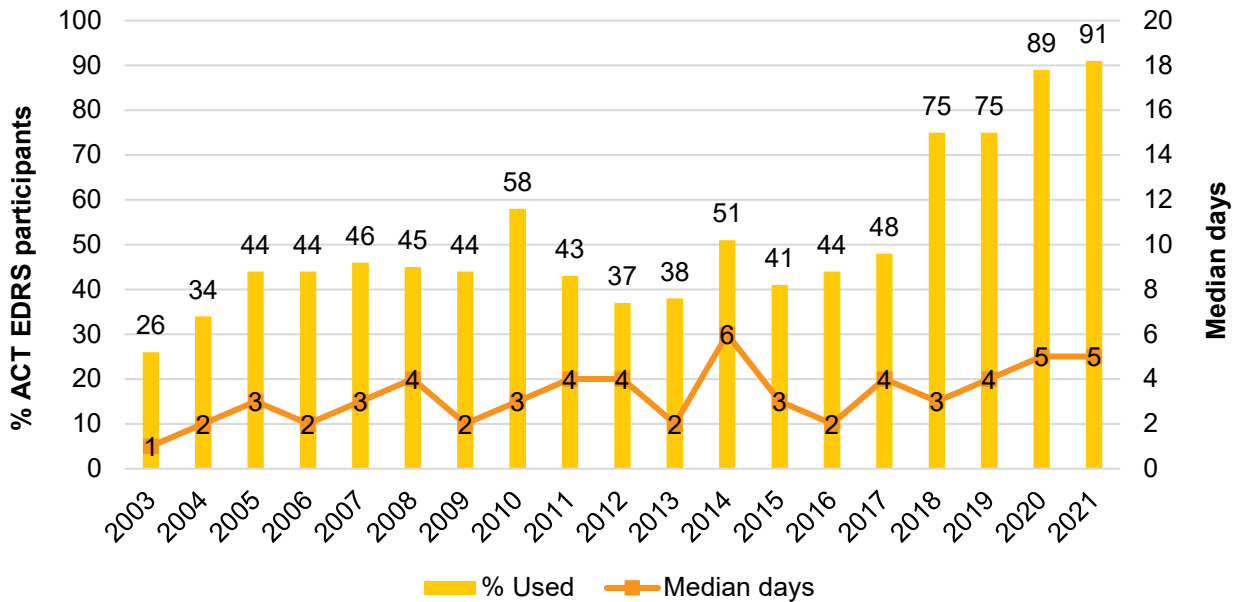
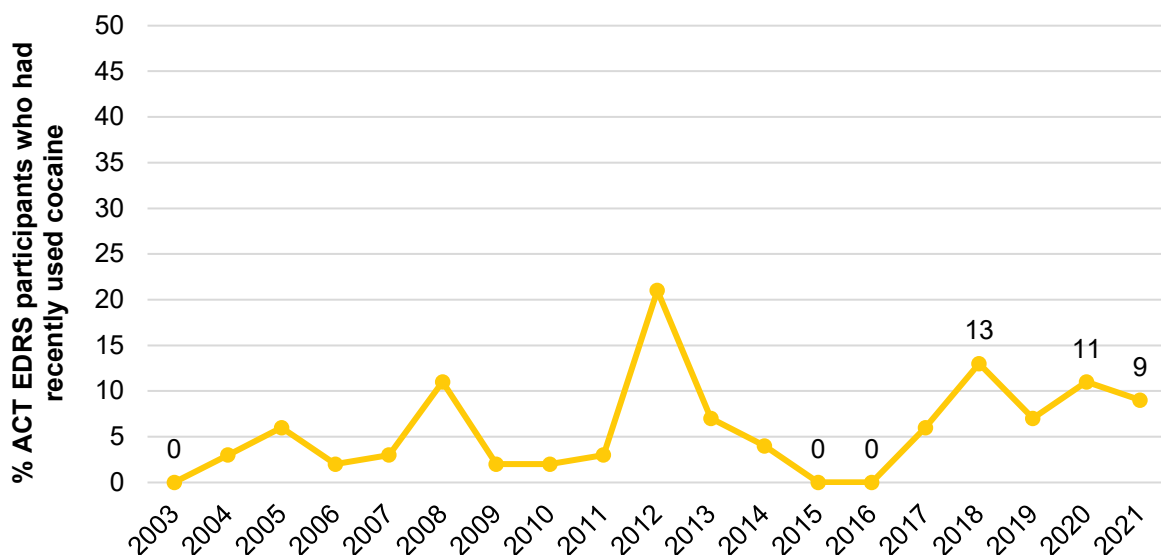
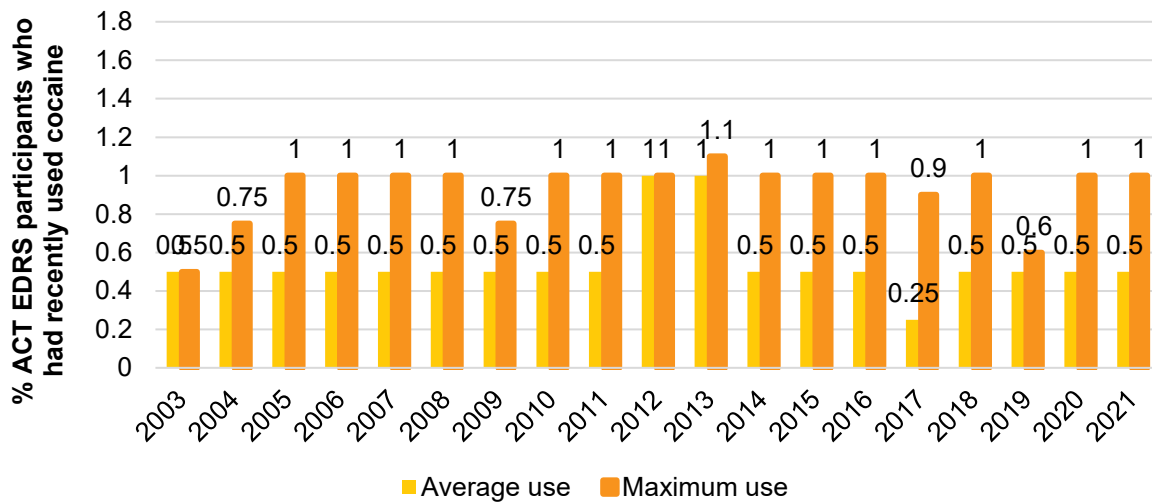


Figure 2. Weekly or more frequent use amongst those that recently used cocaine, ACT, EDRS, 2003-2021



Note. Y-axis reduced to 50% to improve visibility of trends. No data labels provided with small cell size (i.e., $n \leq 5$).

Figure 3. Average and maximum amount of cocaine use (grams) in a session, ACT, EDRS, 2003-2021



Note: Among those that reported past six-month use.

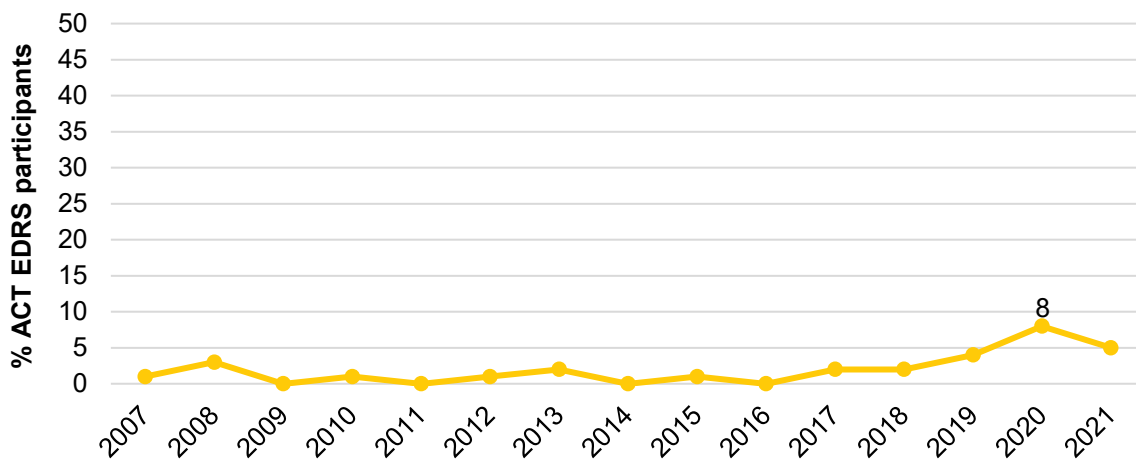
Cocaine-related harms and behaviours

Few participants reported experiencing past year non-fatal cocaine overdose throughout the monitoring period (n≤5 in 2021) (Figure 4). Despite small numbers, a small upward trend has been observed in recent years, peaking at 8% in 2020

Among those who reported ‘bingeing’ in the past six months, stable numbers reported using cocaine in the last binge occasion between 2008-2014. An increase was observed from 2015-2018 (ranging between 46%-68%), before subsequently declining and stabilising (36% in 2019 and 2021) (Figure 5).

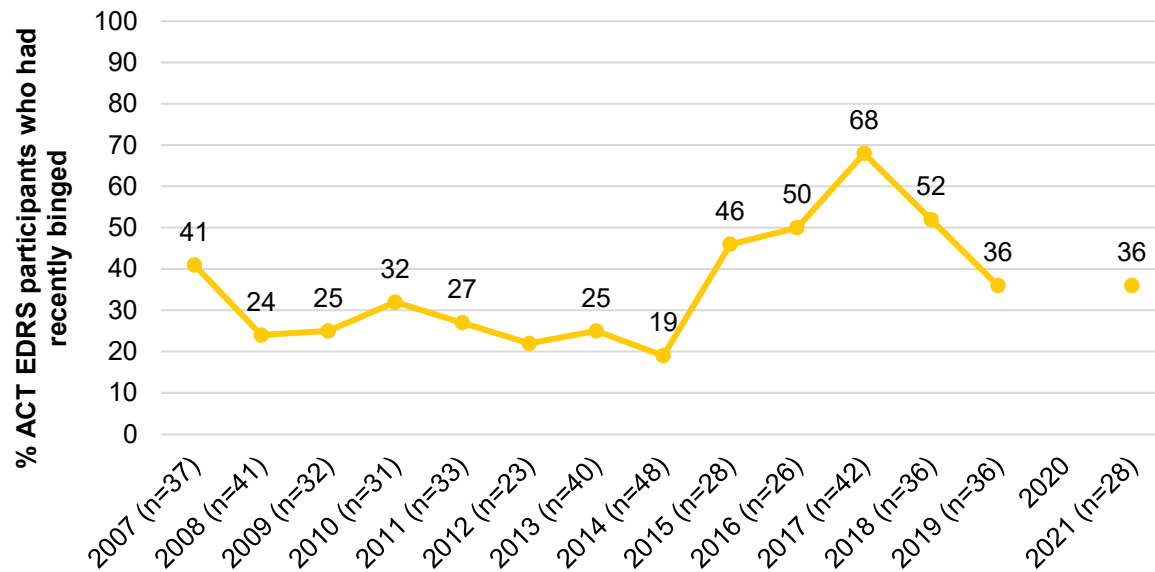
Amongst those that reported driving a vehicle in the past six months, the per cent who reported driving within 3 hours of cocaine consumption was stable throughout the monitoring period, with 10% reporting this behaviour in 2021 (Figure 6).

Figure 4. Past year non-fatal cocaine overdose, ACT, EDRS, 2007-2021



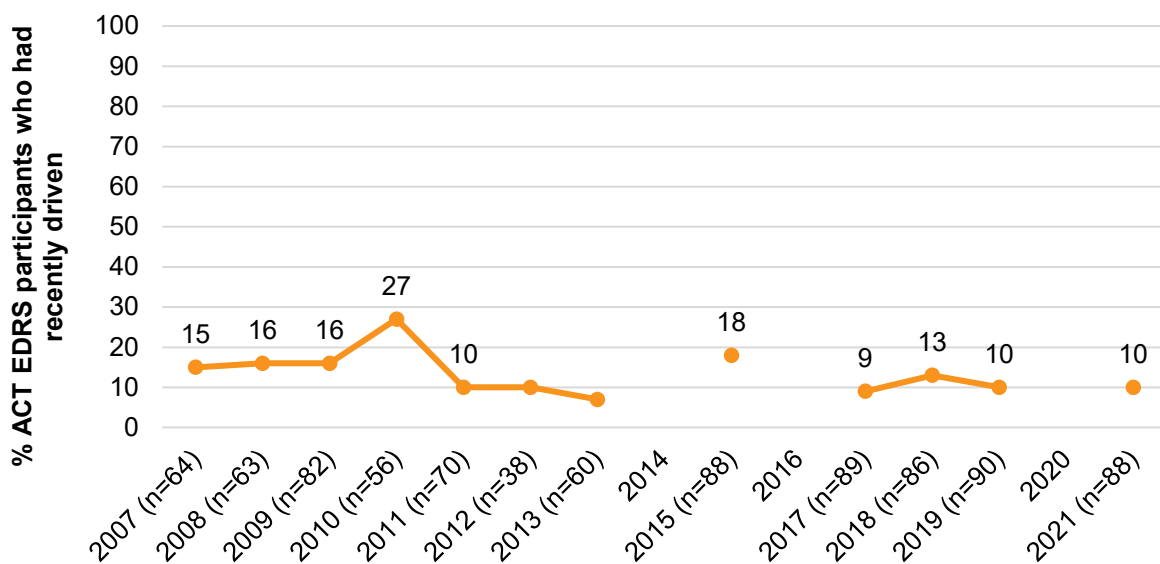
Note. Y-axis reduced to 50% to improve visibility of trends. Past year cocaine overdose was first asked in 2007. No data labels provided with small cell size (i.e., n≤5).

Figure 5. Cocaine used during most recent binge session (amongst those who had binged in the past six months), ACT, EDRS, 2007-2021



Note. Among those that reported to have binged in the past six months. Question was first asked in 2007 and not asked in 2020. No data labels provided with small cell size (i.e., $n \leq 5$).

Figure 6. Driving within three hours of consuming cocaine (amongst those who had driven in the past six-months), ACT, EDRS, 2007-2021



Note: Among those that self-reported to have driven a vehicle in the past six months. Question first asked in 2007. Questions on driving not asked in 2014 and 2020, and question of drug type not asked in 2016. No data labels provided with small cell size (i.e., $n \leq 5$).

Discussion

Previous research has shown an increase in cocaine use and harms in Australia (2). We found that there has also been an increase in cocaine use among our sample of people who regularly use ecstasy and/or other illicit stimulant drugs in Canberra, with use remaining elevated since 2018, and 9 in 10 reporting past 6 month use in 2021. Despite this increase, median days of use remained relatively low and stable throughout the monitoring period. Similarly, the quantity of cocaine used in a session has also remained stable since monitoring began in 2003. This stability is somewhat surprising given that participants have reported that cocaine has become easier to obtain over time, although it could reflect that the price of cocaine remains high at \$300 for 1 gram (5).

Despite a substantial increase in cocaine use, self-reported cocaine overdose remains relatively low, notwithstanding a slight upward trend in recent years. This is perhaps not surprising given that the frequency and quantity of cocaine use remained relatively low and stable over time. It is, however, important to note that that we do not capture all harms that may result from cocaine use, such as cardiovascular problems like chest pain (6) or microvascular disease (7). We also found no change in driving within three hours of consuming cocaine, and although the use of cocaine in a binge session did increase sharply from 2015-2017, this occurred before the increase in use was observed and declined again shortly thereafter. Regardless, the use of cocaine in a binge session reinforces the importance of promoting harm reduction strategies, such as sleep hygiene and being able to identify signs of psychosis, to reduce the risks associated with acute intoxication.

Suggested Citation

Uporova, J., & Sutherland, R. (2022). Cocaine use and related harms among a sample of people who regularly consume illicit stimulant drugs in Canberra, ACT. *Drug Trends Bulletin Series*. Sydney: National Drug and Alcohol Research Centre, UNSW Sydney.

Acknowledgements

- ❖ The participants who were interviewed for the EDRS in the present and in previous years;
- ❖ The agencies that assisted with recruitment and interviewing;
- ❖ The EDRS is funded by the Australian Government under the Drug and Alcohol Program.

References

1. AIHW (2020). National Drug Strategy Household Survey 2019. Drug statistics series no. 32. Cat. no. PHE 270. Canberra: AIHW.
2. Man, N., Chrzanowska, A., Price, O., Bruno, R., Dietze, P., Sisson, S., Degenhardt, L., Salom, C., Morris, L., Farrell, M. & Peacock, A. (2021). Trends in cocaine use, markets and harms in Australia, 2003-2019. *Drug Alcohol Rev.*, 40: 946-956. <https://doi.org/10.1111/dar.13252>
3. Chrzanowska, A., Man, N., Sutherland, R., Degenhardt, L. & Peacock, A. (2022). Trends in overdose and other drug-induced deaths in Australia, 1997-2020. Sydney: National Drug and Alcohol Research Centre, UNSW Sydney
4. Sutherland, R., Karlsson, A., Price, O., Uporova, J., Chandrasena, U., Swanton, R., Gibbs, D., Bruno, R., Dietze, P., Lenton, S., Salom, C., Grigg, J., Wilson, Y., Eddy, S., Hall, C., Daly, C., Thomas, N., Juckel, J., Degenhardt, L., Farrell, M. & Peacock, A. (2021). Australian Drug Trends 2021: Key Findings from the National Ecstasy and Related Drugs Reporting System (EDRS) Interviews. Sydney: National Drug and Alcohol Research Centre, UNSW Sydney. doi: 10.26190/t6sh-g213
5. Uporova, J., Peacock, A. & Sutherland, R. (2021). Australian Capital Territory Drug Trends 2021: Key Findings from the Ecstasy and Related Drugs Reporting System (EDRS) Interviews. Sydney: National Drug and Alcohol Research Centre, UNSW Sydney.
6. Schwartz, G., Rezkalla, S. & Kloner, R. (2010). Cardiovascular Effects of Cocaine. *Circulation.*, 122: 2558-2569.
7. Kelly, R., Sompalli, V., Sattar, P. & Khankari, K. (2003). Increased TIMI frame counts in cocaine users: a case for increased microvascular resistance in the absence of epicardial coronary disease or spasm. *Clin Cardiol.*, 26: 319– 22.

Participating Researchers and Research Centres

- ❖ Dr Rachel Sutherland, Antonia Karlsson, Julia Uporova, Daisy Gibbs, Rosie Swanton, Olivia Price, Udesha Chandrasena, Professor Louisa Degenhardt, Professor Michael Farrell and Associate Professor Amy Peacock, National Drug and Alcohol Research Centre, University of New South Wales, New South Wales;
- ❖ Cristal Hall, Sarah Eddy, Dr Campbell Aitken and Professor Paul Dietze, Burnet Institute Victoria;
- ❖ Yalei Wilson and Associate Professor Raimondo Bruno, School of Psychology, University of Tasmania, Tasmania;
- ❖ Dr Jodie Grigg and Professor Simon Lenton, National Drug Research Institute and EnAble Institute, Curtin University, Western Australia;
- ❖ Catherine Daly, Dr Jennifer Juckel, Dr Natalie Thomas and Associate Professor Caroline Salom, Institute for Social Science Research, The University of Queensland, Queensland.