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Trafficking in multiple commodities: Exposing Australia's poly-drug and poly-criminal networks

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Background

More than ten years ago, Australian law enforcement agencies spoke publicly of the 'convergence of criminal networks and, concomitant to this, poly-drug trafficking', highlighting the challenges this may bring to drug law enforcement and the broader community (Gordon 2001: 22). Poly-drug trafficking is defined as the production of and/or trade in more than one illicit drug and/or precursor, for example methamphetamine, ecstasy and cocaine. In contrast, mono-drug trafficking is defined as the production of or trade in one drug or precursor, for example cocaine alone. For a range of reasons both methodological and conceptual, the extent, nature and implications of poly-drug trafficking are as yet not well understood. This project provides the first detailed examination of poly-drug and poly-criminal trafficking in Australia, focusing on the actions of high-level traffickers (importers and wholesale distributors). It had four objectives:

- to estimate the proportion of high-level drug traffickers involved in the importation of more than one illicit drug at the Australian border and determine trends in the extent and nature of poly-drug importation;
- to generate and compare the profiles of Australian poly-drug traffickers and mono-drug traffickers involved in high-level illicit drug importation;
- to explore how product diversification is managed in high-level Australian multi-commodity drug-trafficking networks; and
- to build research and law enforcement knowledge of Australian poly-drug commodity traffickers, including specific insight into how to use existing police databases to identify poly-drug trafficking.

Context

International law enforcement and drug-monitoring agencies claim to have identified a rise in the tendency of drug traffickers (particularly high-level drug traffickers) to deal in multiple drugs (EMCDDA 2014; Europol 2011, 2013; National Drug Intelligence Center 2012; UNODC 2014). These agencies hypothesise that this may be a 'deliberate modus operandi' (Europol 2013: 19) and that the formation of 'portfolios of trades' (Malm, Bichler &

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Van De Walle 2010) may increase the profitability, dynamism and resilience of traffickers in the face of changes in drug supply and drug law enforcement (Europol 2013; Rubin, Pardal, McGee & Culley 2013). Such traffickers are conjectured to be more inclined to deal in multiple illicit commodities, whether drugs, money or firearms, and hence become not only poly-drug traffickers but also poly-criminals (Rubin et al. 2013). The question of whether and to what extent this applies in the Australian context is yet to be answered.

There are key challenges in answering this question. The evidence base on the extent and nature of poly-drug trafficking in the public domain is small, and there are no substantiated methods for examining the poly-drug trafficking. International law enforcement agencies (Europol 2013) have not published estimates of the extent of poly-drug trafficking. A small number of international academic estimates of poly-drug trafficking, derived from convenience samples of imprisoned drug traffickers, suggest up to 43 percent of mid- to high-level drug traffickers may be poly-drug traffickers (Desroches 2005; Malm & Bichler 2011; Matrix Knowledge Group 2007). However, none of these studies has examined trends over time to see whether poly-drug trafficking is becoming more prevalent, nor have the studies systematically compared poly-drug traffickers to mono-drug traffickers to see whether poly-drug traffickers have more harmful impacts on society. This project contends that existing drug law enforcement data offer potentially untapped insight into both issues and used those data to examine poly-drug trafficking in Australia, considering the extent and nature of, and trends in, poly-drug trafficking.

Methods

Three different methods were used to examine this issue: analysis of trends in border importation seizures over the period 1999–2012; analysis of the profiles of poly-drug and mono-drug traffickers; and social network analysis of three poly-commodity networks. These methods, outlined below, drew upon different sets of Australian Federal Police (AFP) data (seizures, cases and linked cases) supplemented by other criminal justice sources (court sentencing data) and social network analysis approaches.

Component 1: Analysis of trends in Australian commercial poly-drug and mono-drug importation seizures between 1999–2012

In the first component, AFP seizure data was extracted on all illicit drug, plant and precursor seizures involving heroin, amphetamine type stimulants (ATS), MDMA, cocaine, precursors, cannabis, hallucinogens or sedatives that occurred at the Australian border between 1999 and 2012. Exports were excluded, leaving only importation seizures. The Commonwealth Criminal Code Regulations 2002 (as of September 2014) were then used to categorise each seizure as either a commercial poly-drug seizure or a mono-drug seizure, based on the weight of the seized drugs and mix of drug types. The extracted data was first used to estimate the proportion of seized poly-drug importations. Next, the study examined the differences and similarities in the patterns of poly-drug and mono-drug importation seizures using the following characteristics: drug type, seizure weight, drug transport mode, method of concealment, state of importation and country of embarkation. Finally, the study identified trends in the extent (weight and number) and nature of poly-drug importation seizures (compared with mono-drug seizures) over three periods: 1999–2003, 2004–2008 and 2009–2012.

Component 2: Quantitative and qualitative analysis of profiles of poly-drug and mono-drug traffickers

Analysis of drug trafficking is often based on seizure data alone, which may underestimate the extent of poly-drug trafficking since it assumes all drugs are imported at the same or a similar time. For the second component, seizure data were supplemented with an examination of what the study termed drug cases and linked cases. A drug case was defined as an entire criminal investigation, including all persons of interest and all actions taken (drugs, assets and money seized and, where relevant, multiple drug seizure events). Linked cases were defined as the primary drug-trafficking case and all other criminal investigations connected to the primary case by known offenders or suspects, including criminal cases that involved drugs, economic crime or other crimes. This level of analysis was particularly significant for this project, as it incorporated all known criminal alliances of the people involved in the original case.

The AFP data thus afforded comparative analysis of poly-drug traffickers and their mono-drug counterparts at three levels:

- the level of poly-drug seizures—trafficking in two or more drugs at the same point in time;
- the level of poly-drug cases—trafficking in two or more drugs over an average of two to three months (an entire criminal investigation); and
- the level of poly-drug linked cases—trafficking in two or more drugs over an average of 12 years (a primary drug case and up to 60 additional criminal cases connected to this case).

Extraction of the sample commenced with the identification of 10 poly-drug and 10 mono-drug commercial border importation seizures matched on seizure year and drug type. Data was then extracted at two levels, first for the entire drug case connected with the specific drug seizure ('case data'), and then for all other criminal investigations connected to the primary drug case whether involving drug or other crimes ('linked cases'). Key characteristics for comparison were also extracted at the case and linked-case level, including the total weight of each drug seized, the amount of money seized, whether or not there was evidence of weapons involvement, the number of identified offenders and suspects and, for linked cases, the number of criminal cases to which the original case was connected and the type(s) of crime (drug, economic or other). Estimates of the scale of poly-drug trafficking were then compared, using the three sources of AFP data—seizures, cases and linked cases. The similarities and differences between, firstly, poly-drug and mono-drug cases and, secondly, poly-drug and mono-drug linked cases were also examined.

Finally, social network analysis was used as an analytical tool to determine what proportion of the cases and linked cases (whether mono-drug or poly-drug) had offenders, suspects or drug seizures in common. Social network analysis is a proven technique for identifying and characterising relationships amongst actors, including the presence or absence of interconnections (Freeman, White & Romney 1992). Network maps of the connections were then constructed comparing the number and type of connections between poly-drug and mono-drug traffickers. The study specifically sought to explore whether traffickers involved in the poly-drug linked cases were more likely to form strategic alliances with other drug traffickers and other types of criminal offenders.

Component 3: Social network analysis of three Australian poly-drug and poly-criminal trafficking networks

The final component of the analysis was the social network analyses of three Australian poly-drug and poly-criminal trafficking syndicates, selected in consultation with our project reference group. Judges' sentencing comments were taken from the Australian Legal Information Institute (Austlii) and LexisNexis AU databases and used to identify all offenders involved in each network—their roles, their relationships (who knew who) and which specific drug or other criminal commodity each individual was involved with. Social network maps were then constructed for the entire network and its subnetworks for each drug and/or criminal activity; these explored the structure and functionality of each subnetwork, including whether the same people were involved across the various subnetworks, the subnetworks' management structures and the potential benefits and limitations for poly-drug traffickers of engaging in this form of criminal behaviour.

Results

Extent of high-level poly-drug trafficking at Australian borders

Over the 14-year period from 1999–2012, 5.3 percent of commercial seizures (by number) were poly-drug—that is, they involved two or more drugs imported at the same time. By weight, poly-drug seizures comprised 8.5 percent of the total weight of seizures. However, analysis of cases and linked cases suggested the scale of poly-drug trafficking may be far greater, with an additional 30 to 60 percent of commercial mono-drug seizures involving some form of poly-drug trafficking. It is therefore estimated that approximately 35 percent of commercial importation seizures at the Australian border may be connected to poly-drug trafficking.

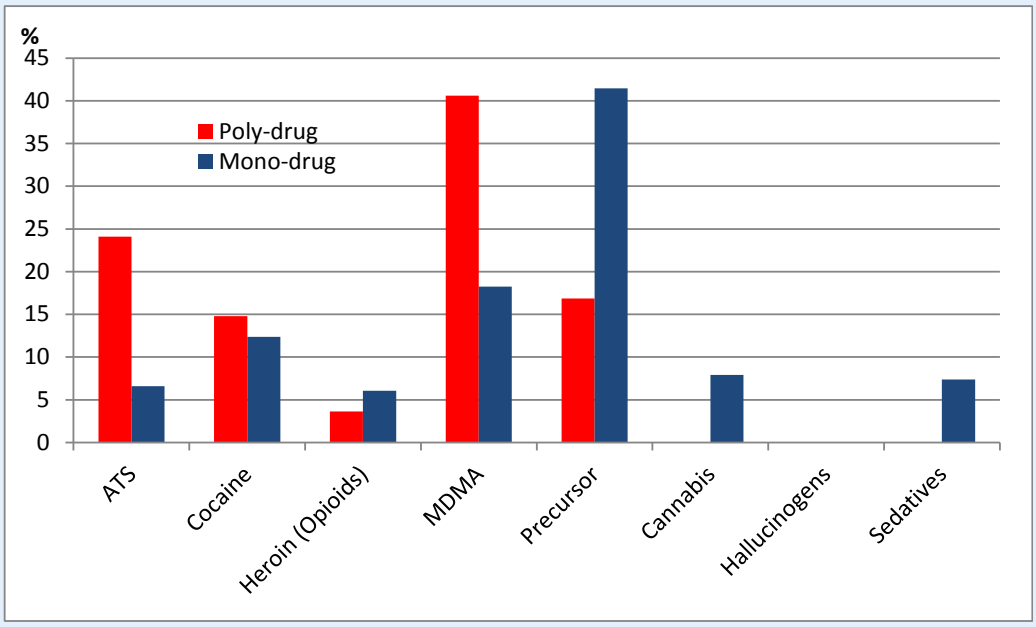
Nature of poly-drug trafficking

Most Australian poly-drug traffickers did not import their drugs in the same consignment but rather in multiple consignments. This conclusion is based on two findings.

- The magnitude of poly-drug commercial cases far outweighed poly-drug commercial seizures.
- Two of the three poly-drug syndicates examined used different supply chains to import different drug types, sourcing each drug from different suppliers.

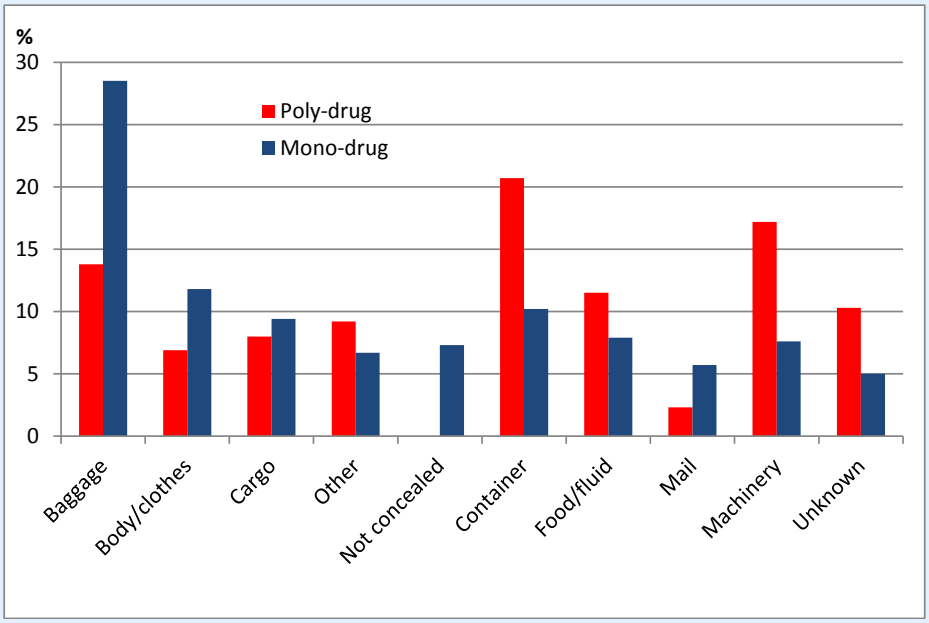
Poly-drug traffickers differed from their mono-drug counterparts in a number of ways. Two key differences were common to all three analyses (seizures, cases and linked cases). Poly-drug traffickers were associated with the seizure of larger quantities of drugs; for example, poly-drug cases involved larger consignments of drugs compared with mono-drug cases (an average of 122kg compared with 55kg) and poly-drug linked cases were up to 32 times larger by weight than mono-drug linked cases. Poly-drug traffickers were also more involved with ATS, MDMA and cocaine. For example, poly-drug seizures were more likely to involve ATS (by number of cases) or ATS and MDMA (by weight; see Figure 1). Mono-drug seizures, in contrast, were more likely to involve precursors, cannabis and sedatives. Analysis at the case and linked-case level showed that poly-drug traffickers were consistently involved with three drugs: ATS, MDMA and cocaine. For example, for individual poly-drug linked cases the three most common drugs trafficked were MDMA (100%), ATS (81%) and cocaine (75%). All these stimulants are in high demand on the Australian illicit drug market (Australian Institute of Health and Welfare 2014).

Figure 1: Types of drug seized by total weights, poly-drug versus mono-drug seizures



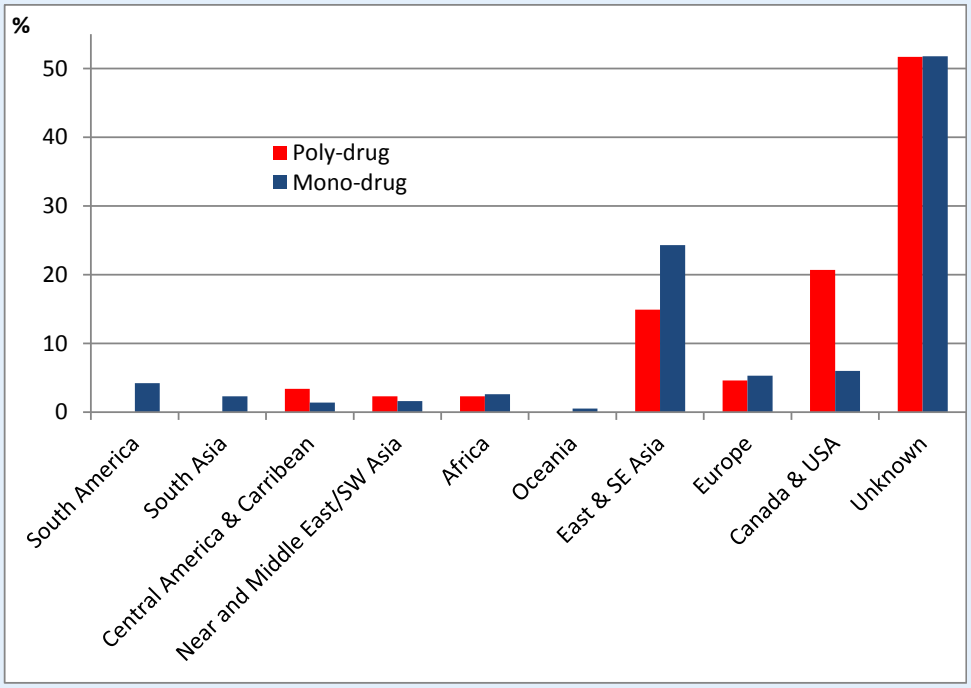
Two further differences emerged from the seizure-level analysis. One was that poly-drug traffickers appeared to be involved in more strategic forms of importation; drugs in poly-drug seizures were most frequently concealed in containers or machinery (see Figure 2). By contrast, mono-drug seizures were most frequently concealed in baggage, on the body or in clothes, in what may indicate a more opportunistic approach. Consistent with this difference, seized mono-drug shipments were almost twice as likely to arrive in Australia by plane, and poly-drug seizures by boat or ship—although for 60 percent of the seizures analysed the mode of transport method was not recorded.

Figure 2: Method of concealment, poly-drug versus mono-drug seizures



There was also some evidence that transit routes differed. For example, seized poly-drug shipments were most likely to come to Australia from Canada, whereas mono-drug shipments most often arrived from countries in East and South-East Asia (see Figure 3). It should be noted, however, that the source country of more than 50 percent of the seizures analysed was unknown.

Figure 3: Country of embarkation of shipments, poly-drug versus mono-drug seizures



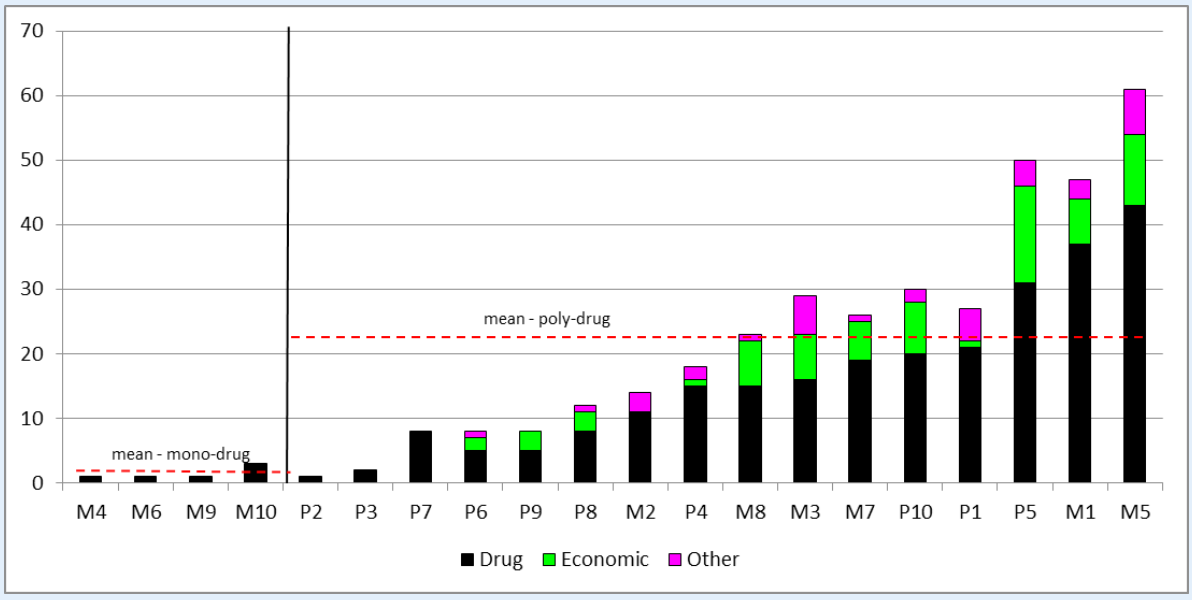
Analysis of cases and linked cases revealed that poly-drug traffickers were associated with larger networks, longer periods of operation, larger amounts of money seized and a higher incidence of weapons involvement (see Table 1). For example, 69 percent of poly-drug linked cases involved weapons, but only 25 percent of mono-drug linked cases did.

Table 1 Similarities and differences between poly-drug and mono-drug linked cases		
	Poly-drug	Mono-drug
Weight of drug seized, kg, mean	1,109.7kg (69.3–5,462.0)	11.4kg (4.3–25.4)
Drug Harm Index, $, mean	$342.3m (18.2–1,503.4)	$8.5m (1.1–25.6)
Money seized, $, mean	$46,191,401 (0–168,747,042)	$14,186 (0–37,450)
No. of criminal cases, mean	23 (1–61)	1.5 (1–3)
Type of criminal cases:		
drug	70.7%	100%
economic	19.4%	0%
other	9.8%	0%
Years in operation, mean	13	4
Weapons involvement, %	69%	25%

Notably, poly-drug traffickers were more involved in other criminal activities. For example, as shown in Figure 4, traffickers associated with poly-drug linked cases were involved in an average of 23 criminal cases, compared with 1.5 criminal cases for their mono-drug counterparts. Moreover, while all of the criminal cases associated with mono-drug linked cases were drug offences, 19.4 percent of the criminal cases associated with poly-drug linked cases were economic and 9.8 percent were other crime. This suggests that, as hypothesised by international law enforcement and drug monitoring agencies (EMCDDA 2014; Europol 2011, 2013; National Drug Intelligence Center 2012; UNODC 2014), poly-drug traffickers may be more likely to be involved in other forms of crime.

One unexpected finding was the heterogeneity of poly-drug traffickers. For example, some poly-drug linked cases involved a relatively low weight of drugs seized, little weapons involvement, low levels of involvement in other criminal cases and no involvement in economic or other crime. For example, the two poly-drug linked cases, P2 and P3, were more similar to mono-drug linked cases than to other poly-drug linked cases, in terms of the numbers of criminal cases (Figure 4).

Figure 4: Type of criminal case (drug, economic or other), by individual poly-drug and mono-drug linked case



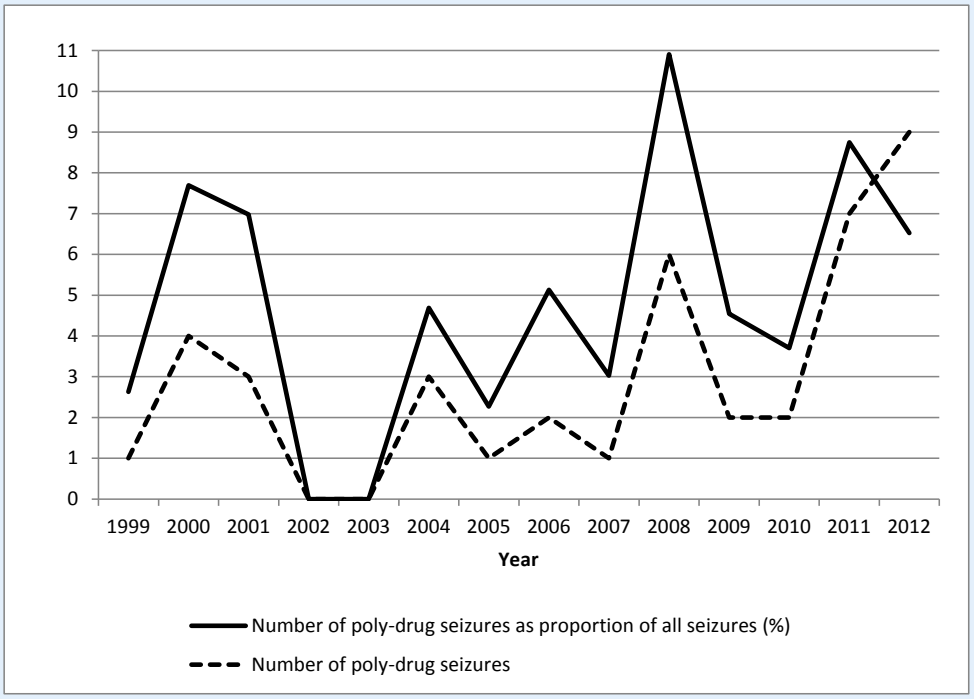
In summary, on average poly-drug traffickers tended to be involved in more serious and potentially more harmful behaviour. This was apparent across multiple indices and analysis at the seizure, case and linked-case level. However, it was also clear that not all poly-drug traffickers were the same.

Trends in poly-drug trafficking at Australian borders, 1999–2012

Trends could only be analysed through importation seizure data across time. Poly-drug trafficking does not appear to be a new phenomenon in Australia; there were poly-drug seizures in the first year analysed (1999)

and almost every year thereafter. However, there was some evidence to suggest that it was an increasing and/or somewhat more complex phenomenon. For example, there were eight poly-drug seizures from 1999-2001, and none in 2002 and 2003, but thereafter the number and proportion of poly-drug seizures per annum increased (see Figure 5). Moreover, while poly-drug seizures predominantly involved just two drug classes, poly-drug seizures involving three drug classes began to occur from 2008.

Figure 5: Annual number of poly-drug commercial importation seizures, 1999–2012



Between 1999 and 2012 there were a number of other shifts in the nature of poly-drug seizures, with key shifts in the types of drug trafficked and methods of concealment. For example, in relation to the share of each drug of the total weight seized, there was a shift in dominance from end-product ATS and MDMA (1999–2003) to MDMA and precursors (2004-2008) and then to end-product ATS and cocaine (2009–2012; see Figure 6). For mono-drug seizures, there was a shift away from cannabis and cocaine (1999–2003) to MDMA (2004-2008) and precursors (2009–2012; see Figure 7).

Figure 6: Total weights of poly-drug seizures, by drug type and time of seizure

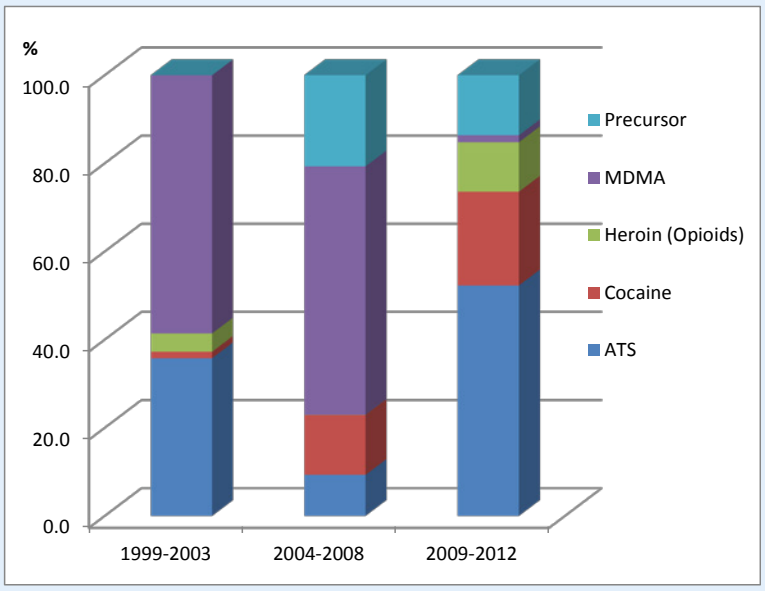
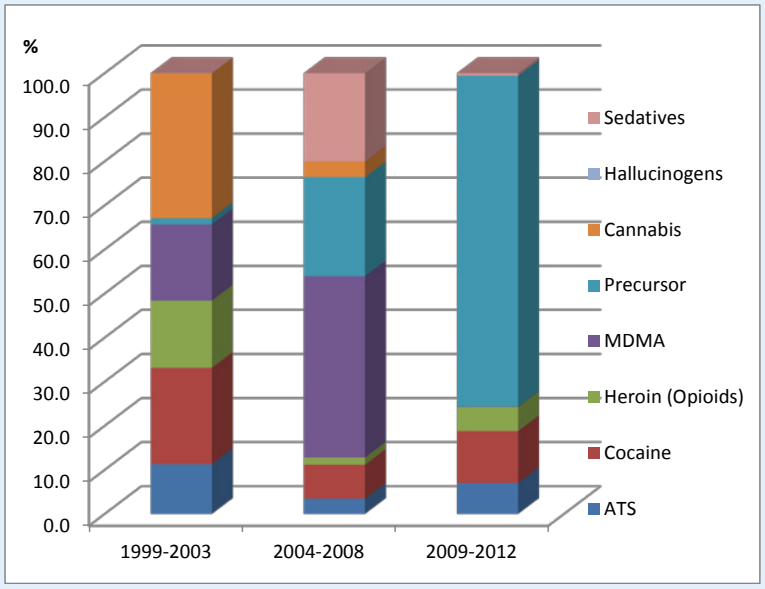


Figure 7: Total weights of mono-drug seizures, by drug type and time of seizure



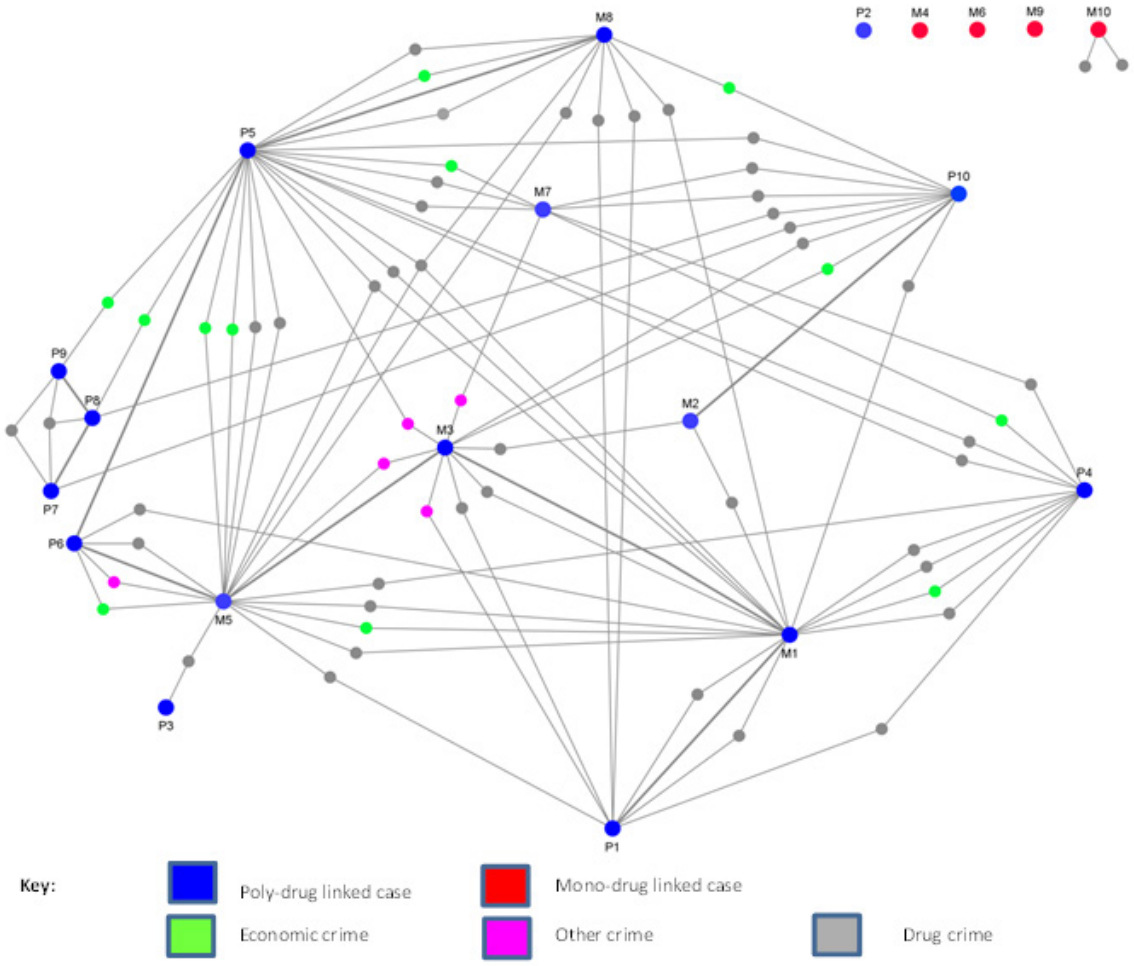
The dominant method of concealing poly-drug shipments also changed from in baggage and on the body or in clothes (1999–2003) to in containers and cargo (2004-2008), and then to in machinery (2009–2012). In contrast, baggage has remained the primary or secondary method of concealment for seized mono-drug shipments throughout the period analysed.

This study hypothesises that shifts in poly-drug trafficking reflect a range of factors including demand, supply, globalisation and responses to law enforcement. For example, changes in the method of concealment suggest poly-drug traffickers have increasingly adopted more sophisticated methods of importation. Moreover, changes in the dominant drug types (by weight) trafficked by poly-drug traffickers coincided with a number of key changes in the Australian illicit drug market, including a drop in the purity of MDMA in Australia and a corresponding reduction in MDMA use (Scott & Burns 2011), a rise in the domestic production and use of methamphetamine (Ritter, Bright & Gong 2012), an increase in Australian cocaine supply and use (Hughes, Chalmers, Bright et al. 2012) and the re-emergence of high-purity ATS importation and use (Roxburgh et al. 2013). This offers tentative evidence that poly-drug traffickers may be more adaptable to changes in the Australian illicit drug market.

Interconnectedness of poly-drug traffickers

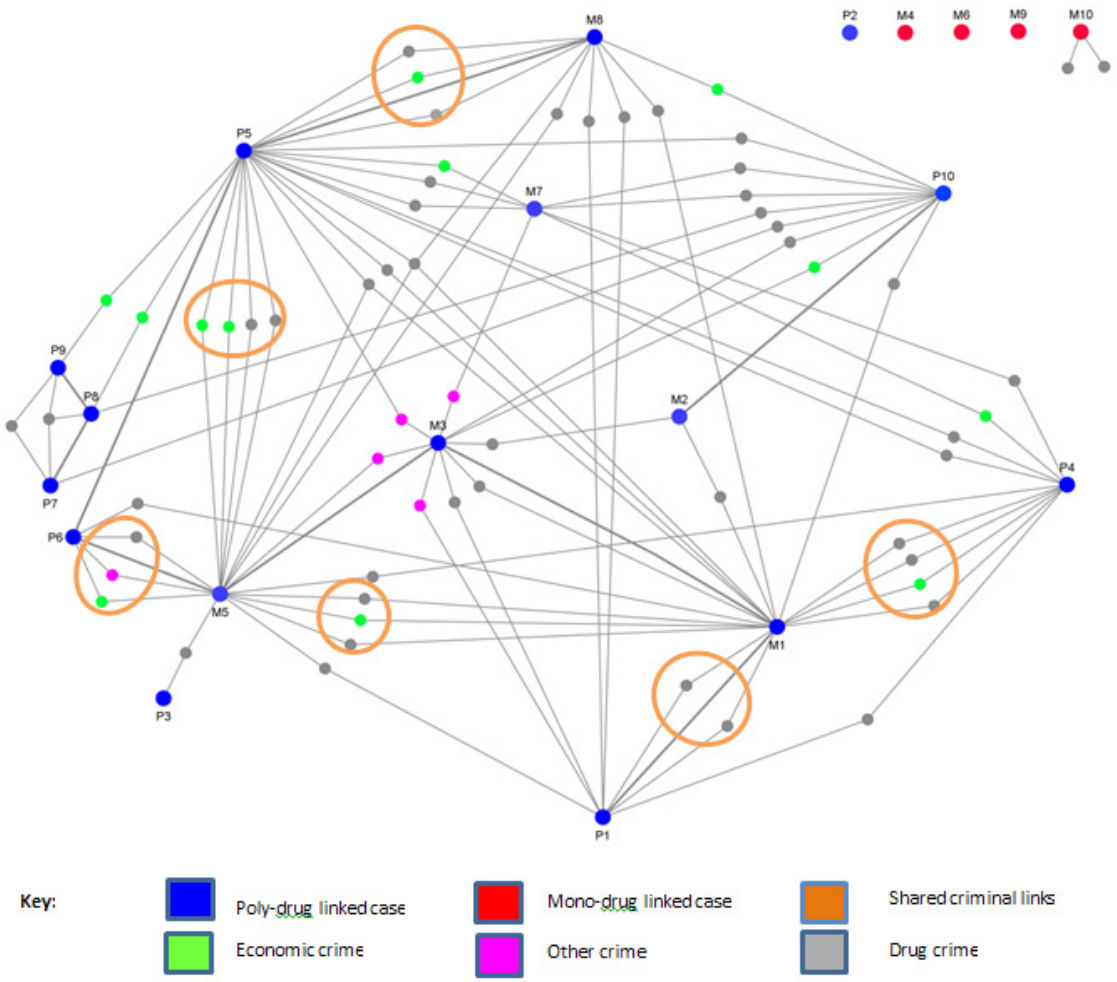
Analysis of connections across and between the sample of 20 individual drug-trafficking cases and their linked cases showed many shared a common connection. For example, the drug-trafficking cases M8 and P10 both had at least one offender, suspect or associate (not necessarily the same person) in common with a third case. Moreover, poly-drug traffickers were more frequently connected to other criminal cases than their mono-drug counterparts. Figure 8 shows the large number of connections between the poly-drug linked cases (in blue) and almost no connections to or between the mono-drug linked cases (in red). As hypothesised, connections and alliances may be core to the modus operandi of poly-drug traffickers (Europol 2013; UNODC 2014; UNODC 2013).

Figure 8: Connections between poly-drug and mono-drug cases and linked cases



Equally importantly, the study found evidence that links were not random. For example, many of the poly-drug linked cases shared multiple links, rather than only one. This is illustrated in Figure 9 (shared links are shown by orange circles). Cases M1 and P4 shared four links. This suggests a strategic, as opposed to opportunistic, relationship—the end result of growing a business or expanding a trade route (Basu 2013).

Figure 9: Connections between poly-drug and mono-drug linked cases, showing shared links



Finally, some evidence that a high level of interconnectedness appeared to aid poly-drug traffickers was found. For example, the most interconnected poly-drug traffickers tended to be associated with a higher total quantity of drugs seized, a larger amount of assets and/or money seized and greater involvement in economic or other types of crime—that is, they were both poly-drug and poly-criminal.

The how and why of product diversification for Australian drug traffickers

The analysis of three different Australian poly-drug and poly-criminal syndicates indicates many potential ways product diversification can occur: in-house production of multiple products (Syndicate 1); collaboration between two syndicates (eg a money laundering syndicate and drug trafficking syndicate) with each syndicate managing independent products (Syndicate 2); or forming alliances by outsourcing and cooperating with other syndicates, or creating new ones (Syndicate 3). The emergence of these three quite different organisational approaches was unexpected and suggests there is not a single, simple method of product diversification.

In spite of these differences the three poly-drug syndicates showed a number of commonalities. Many of the syndicate members had legal jobs. Many also had prior experience in management positions in legitimate businesses. This suggests that business skills may be important for this type of trafficking, contrary to the extant literature which emphasises the ease of entry into the drug trade (Caulkins, Burnett & Leslie 2009; Matrix Knowledge Group 2007; Reuter & Haaga 1989). The organisational structure involved one or two different levels of delegated decision-makers for the network—that is, a hierarchical management structure. This is contrary to much of the existing literature on network structure (Caulkins, Burnett & Leslie 2009; Decker & Chapman 2008; Morselli 2009; Natarajan 2006; Williams 2001), which has challenged the existence of

hierarchies in criminal networks. This indicates that some form of centralised management may be essential for product diversification.

Analysis of the three poly-drug and poly-criminal syndicates suggests that involvement in poly-drug and poly-criminal trafficking offers a number of benefits for criminal offenders including:

- increased flexibility and adaptability to changes in supply (such as a drop in purity);
- the ability to reinvest revenue across drug and/or crime businesses;
- cross-pollination of ideas;
- risk-sharing; and
- increased resilience to law enforcement.

The most important benefit appeared to be a reduction in the risk of loss of supply. For example, one network was involved in MDMA, methamphetamine and cannabis. Initially, MDMA was the principal drug trafficked; however, the network increasingly expanded into methamphetamine trafficking, and switched from importing end-product methamphetamine to manufacturing methamphetamine in Australia. Evidence suggested this was deliberate—to counter a decline in the availability of high-purity MDMA—and enabled the network to maintain and expand their supplies in the context of a significant change in the Australian and international illicit drug market.

However, there were also some indications that product diversification may be less fruitful for traffickers if entry into, or expansion of, poly-drug trafficking is not well planned or is too rapid—eg going from importing one drug to four drug types simultaneously. This reinforces the study's findings, outlined above, that product diversification may not benefit all drug traffickers and that successful product diversification may require particular business skills and/or management approaches.

Policy implications

This study provides the first comprehensive evidence that a significant amount of poly-drug trafficking occurs at the Australian border. It was estimated that approximately 35 percent of commercial importation seizures were connected to traffickers attempting to import more than one drug.

Consistent with predictions (EMCDDA 2014; Europol 2011, 2013; National Drug Intelligence Center 2012; UNODC 2014) poly-drug traffickers do appear, on average, to be engaged in more potentially harmful behaviour than mono-drug traffickers. This was evident across multiple indices, including quantities of drugs and money seized, level of involvement with guns and the size of networks. The noted exception is that—at least in the Australian context—poly-drug traffickers are involved with stimulants rather than heroin, the illicit drug most harmful to the Australian community (Moore 2007).

However, this study suggests some of the fears of international law enforcement agencies (EMCDDA 2014; Europol 2011, 2013; National Drug Intelligence Center 2012; UNODC 2014) may not have been realised. For example, poly-drug trafficking is not necessarily on the rise, although it may be becoming more complex. There is also clear heterogeneity among poly-drug traffickers. Poly-drug trafficking appears to require specific skills, including business skills not every drug trafficker will have. Furthermore, processes for forming alliances between poly-drug traffickers—something core to their modus operandi—appear to be strategic rather than ad hoc. This is good news for drug law enforcement, as it implies poly-drug traffickers may not be as dynamic as previously thought, and that there may be barriers to their expansion.

This was an exploratory project and there remain unanswered questions; these are those considered most pertinent for informing Australian policymakers and law enforcement.

- What pathways do people take into poly-drug trafficking?
- What skills are required to be a poly-drug trafficker (eg business skills or particular styles of management)? Are any skills, as conjectured here, specific to poly-drug trafficking as opposed to mono-drug trafficking? If so, will the number of poly-drug traffickers at the Australian border be self-limiting or subject to a natural cap?
- Regardless of the skills of the individual drug trafficker, is there something about poly-drug trafficking that enhances a trafficker's resilience and ability to adapt to market or law enforcement change?

- How much collaboration is there between poly-drug traffickers, and to what extent does this collaboration take the form of short-term opportunistic links, versus long-term strategic links?
- What other illicit commodities are trafficked by drug trafficking groups? Once the skills involved in importing an illicit product are honed, how transferable are these skills?
- What is enabling the international rise in poly-drug trafficking? This rise is limited in Australia, but to what extent is it driven by factors within Australia's control as opposed to factors seemingly outside Australia's control, such as international changes in illicit drug-supply routes or broader shifts in globalisation and the expansion of licit trade routes?
- Is the view of poly-drug trafficking obtained by drawing upon criminal justice system data a blinkered one? To what extent do the insights garnered here—particularly about the rationales for, and methods of operation of, poly-drug trafficking—marry with the views of poly-drug traffickers? Qualitative research or interviews with current and former poly-drug traffickers would be needed to explore this.

The limitations of this study were that it did not assess all harms of interest in comparing poly-drug and mono-drug traffickers, such as the extent to which poly-drug traffickers not only possess guns but use them. It also did not have access to specific data on links of drug traffickers to particular types of crime, such as terrorism versus gun trafficking. Nevertheless, all the findings above indicate that poly-drug and poly-criminal traffickers warrant increased attention from police, policymakers and researchers into the future.

Policymakers must understand the importance of improving the monitoring and reporting of trends in Australian poly-drug trafficking, and of shifting beyond monitoring or reporting segregated by drug type, eg ecstasy versus cocaine. Importantly, through its systematic application and comparison of three different types of AFP data (drug seizures, cases and linked cases) this project demonstrates how existing police data can be used to capture the extent, trends and harms of Australian poly-drug trafficking.

It also shows that each dataset has strengths and limitations. Police seizure data can be particularly useful for monitoring trends in poly-drug trafficking; however, police seizure data underestimates the scale of poly-drug trafficking in Australia and may miss or obscure many harms. It is therefore recommended that, for future analyses of poly-drug trafficking, Australian drug law enforcement agencies supplement analysis of police seizure data with analyses of case and linked case data. More generally, while this project deliberately utilised three different ways of exploring the issue of poly-drug trafficking, it is hoped it will prompt a much more detailed discussion about how poly-drug trafficking ought best be examined, monitored and publicly reported in the future, both within Australia as well as internationally.

As a general conclusion, this project demonstrates trafficking in multiple commodities is a reality of the Australian illicit drug market. As a consequence, during times of changes in supply of a particular drug, policymakers, police and the research community need to be aware of the potential for poly-drug traffickers to expand or morph their businesses to either capitalise on new opportunities or make up for potential losses. Equally, this means regulatory responses or law enforcement aimed at one drug may increase the problems associated with another drug. Most importantly, this research highlights the need to reconsider the best policy response to drug traffickers in an interconnected marketplace.

Acknowledgements

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