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Social media as a recruitment tool for drug use surveys

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KEY FINDINGS

- Social media is widely used among adolescents and young adults and provides an ideal platform from which to recruit young people for social and health research.
- Over the past five years the EDRS project has increasingly used social media and online platforms in its recruitment of participants.
- Participants recruited online were one year younger than those recruited offline.
- There were no other significant differences in demographics or patterns of drug use for participants recruited online or offline.

INTRODUCTION

Adolescents and young adults are increasingly using social media as a form of communication, information and collaboration with their social networks (Tapscott 2008, Montgomery 2009). Social media provides an ideal platform from which to recruit adolescents and young adults for social and health research (Ramo and Prochaska 2012, Amon, Campbell et al. 2014).

Social media also provides an easy to use 'share' and 'tag' function which allows interested parties to refer or recommend posts of interest to friends. This takes 'snowballing' into the digital landscape. 'Snowball' procedures of recruitment, or chain referral sampling is a method that utilises referrals of friends among each other (Biernacki and Waldorf 1981) and has been widely used in research in the social sciences. It is especially suited to research purposes when the focus of study is on a sensitive issue, and requires the specialised knowledge of 'insiders'. It is therefore suitable for examination of illicit drug use.

The Ecstasy and Related Drugs Reporting system (EDRS) is a national project that monitors ecstasy and related drug markets across Australia. The project includes an annual survey with people who regularly use psychostimulants to obtain information on the use, price, purity and availability of a range of drugs.

Adolescents and young adults are the primary target audience for the EDRS as the demographic has been described as young people, including students, generally well educated and often employed (Stafford and Breen 2017). As the EDRS targets users within a specified geographic location (i.e. the capital city of every state in Australia), it is important for researchers to target their recruitment by geographic location.

The EDRS initially recruited participants using a range of advertisement strategies including street press, media adverts, posters on university campuses, radio etc. Participants that complete the survey were then asked to recommend a friend or acquaintance (i.e. snowballing) (Bleeker, Silins et al. 2009).

In recent years the EDRS has incorporated online recruitment strategies (in particular Facebook) to reach target audiences for the user questionnaire component of the EDRS. Facebook allows researchers to target recruitment advertisements to a specified target audience, age range and geographic location.

The aim of this bulletin is to examine changes in recruitment sources over time and compare demographic characteristics and patterns of drug use among EDRS participants recruited online with other non-online methods (offline).

METHODS

The Ecstasy and Related Drugs Reporting System (EDRS) is an annual monitoring system that has been conducted in every capital city across Australia since 2003. It is a study that monitors trends and issues emerging from illicit drug markets in Australia. The data collected examines the price, purity, and availability of four primary illicit drug classes – ecstasy, methamphetamine, cocaine, and cannabis as well as niche market drugs such as GHB, LSD and new psycho-active substances (NPS). Participants are recruited through a variety of methods including online and non-online methods. Methodology is described in full elsewhere Stafford and Breen (2017).

Face-to-face interviews were conducted with current regular psychostimulant users (RPU), a non-probability sentinel sample of consumers who were selected on the basis of at least monthly use of ecstasy and related drugs (ERD) including methamphetamine, cocaine, ketamine, and new psychoactive substances (such as 2C-I, DMT, and mephedrone) in the six months prior to interview. The interview schedule covers such topics as demographic characteristics; lifetime and recent (past six-month) licit and illicit substance use; and a range of health related questions.

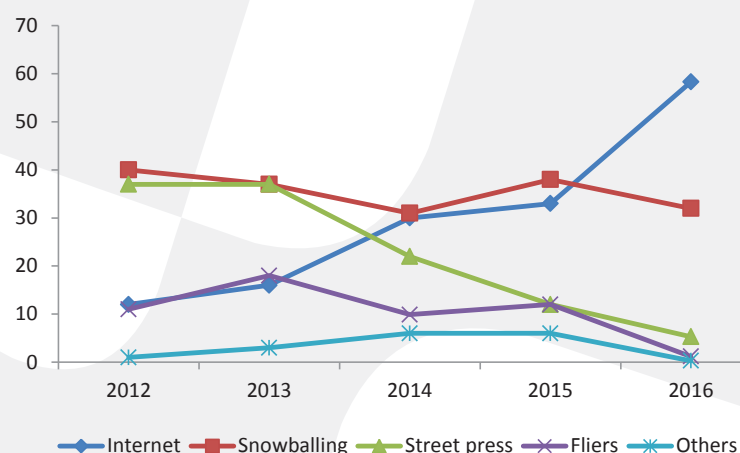
We collated data on the method of recruitment for the past five years to plot the proportion of participants recruited via online and offline methods. To determine if differences exist between participants recruited online or offline, statistical analyses were performed on the 2016 National EDRS database. Statistical analyses were conducted using SPSS for Windows version 24 (SPSS inc. 2016). Categorical variables were analysed using crosstabs running a chi-square test.

RESULTS

Over the past five years the method of recruitment for the EDRS has undergone some changes (Figure 1). 'Snowballing' as a method has remained fairly stable, street press has declined in popularity and online recruitment has increased. In 2012, 11% of the sample was recruited online and by 2016 the majority (58%) were recruited this way. Conversely, street press

recruitment has declined from 37% of participants in 2012 to 5% in 2016.

Figure 1: Recruitment sources, 2012–2016



Note: Other includes primarily radio or cross-study recruitment

To examine whether the sample characteristics are different by recruitment method, variables of interest were compared between EDRS participants in 2016 recruited through online methods and those who were recruited through offline methods (including snowballing, street press, fliers, other) (Table 1).

Participants recruited online were significantly younger than those who were not recruited online, although the age difference was only one year (i.e. mean age of 22 years for those recruited online and 23 years offline). Across all other demographic characteristics there were no significant differences between the two groups.

Table 1: Sample characteristics

	Online n=462	Offline n=331	p-value
Mean age	22.28	23.22	0.02
Male	62	61	0.78
Born in Australia	84	83	0.71
English speaking	97	95	0.06
Heterosexual	88	88	0.81
ATSI	4.5	3.3	0.39
Unemployed	12	11	0.82

Table 2: Drug use and patterns of use

	Online n=462	Offline n=331	p-value
Drug of choice			
- Cannabis	21	22	0.99
- Cocaine	8	6	0.28
- Methamphetamine (any)	5	5	0.99
- Ecstasy	36	35	0.79
- LSD	8	5	0.17
- NPS	1	<1	0.40
Drug used most last month			
- Cannabis	31	35	0.26
- Cocaine	2	1	0.66
- Methamphetamine (any)	5	5	0.85
- Ecstasy	22	18	0.12
- LSD	3	1	0.10
- NPS	0	0	-
Recently used (past six months)			
- Cannabis	85	86	0.84
- Cocaine	47	46	0.88
- Methamphetamine (any)	39	37	0.61
- Ecstasy	99	98	0.14
- LSD	45	46	0.85
- NPS (any)	34	33	0.86
Daily cannabis smokers	25	23	0.60
SDS (three or more)	27	24	0.45
AUDIT (8 or more)	73	73	0.97

There were no differences in drug use, patterns of use or harm between participants recruited on or offline. Participants recruited online reported drug of choice; drug used most often in the last month; and drug used recently in similar proportions to those recruited offline. Similar proportions were also found for self-reported daily cannabis smokers, scored as dependent ecstasy users on the Severity of Dependence Scale (SDS), and where drinking was identified as being at hazardous levels by the Alcohol Use Disorders Identification Test (AUDIT).

CONCLUSION

In the past five years there has been an increase in the proportion of participants recruited to the annual EDRS survey by online methods with a corresponding decrease in those recruited via street press. Participants recruited via snowballing methods has remained relatively stable over the past five years.

One of the major strengths of the EDRS is its ability to identify and describe trends in patterns of consumption and harms among regular drug users. Sentinel groups are chosen precisely because they engage in the target behaviour (i.e. illicit drug use) and have specialised knowledge about market characteristics. Key to identifying changes in the market is to repeatedly access the same population who make up the sentinel group. Central to this aim is the need to keep methodological components consistent across years, including its methods of recruitment while ensuring the methods take advantage of technological innovations. It is not always possible to keep methodology exactly the same due to changes in external factors including how people interact and the use of new technologies. In recent years a higher proportion of the EDRS sample have been recruited through online methods. This analysis shows that despite these changes there are no significant differences in participants recruited online or offline, thereby preserving the continuity

or offline, thereby preserving the continuity required for trend analysis.

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