Driving while disqualified

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Aim: *To describe trends in charges for driving while disqualified (DWD), to examine characteristics of DWD offenders and the penalties imposed on them, and to profile DWD offender subtypes: disqualified by the court (DWD-D), suspended or cancelled from driving under the Fines Act 1996 (DWD-F), and other licence sanctions (DWD-O).*

Method: *BOCSAR databases provided data on all finalised DWD charges in the NSW Local Court between 1 April 2004 and 31 March 2014, and all principal DWD appearances in the NSW Local Court between 1 April 2013 and 31 March 2014. Logistic regression was used to examine associations with DWD subtype.*

Results: *DWD charges trended downwards over the 10 years to April 2014. However, over the 2 years to April 2014, DWD charges trended upwards, as did DWD-F charges. There were 8,874 adults with a principal DWD offence (DWD-D 38.3%, DWD-F 22.9%, DWD-O 38.8%). Penalties were most severe for DWD-D and least severe for DWD-F. DWD-D was linked with more extensive criminal justice problems, including more prior court appearances, than other DWD; DWD-F and DWD-O were more similar in this regard.*

Conclusion: *The trends in and factors associated with DWD subtype are heterogeneous. The recent increase in the number of charges for DWD may have been driven by the increase in DWD-F charges. There were compelling differences between DWD-D and all other DWD offenders, consistent with the more serious nature of the offence of DWD-D. The differences between DWD-F and DWD-O offenders were less pronounced.*

Keywords: *driving, traffic offences, disqualification, fines, sentencing*

Introduction

In New South Wales (NSW), the offence category of 'Drive while licence disqualified or suspended', referred to hereafter as driving while disqualified (DWD), occurs when a person drives a motor vehicle on a public road after having received certain licence sanctions.[1] DWD is highly prevalent in NSW. More than 12,000 persons charged with DWD appear annually in the NSW Local Court and DWD was the third most common offence (N=12,748) in 2013, after 'Exceed the prescribed content of alcohol or other substance limit' (N=20,040) and 'Common assault' (N=15,543) (NSW Bureau of Crime Statistics and Research, 2014a). Prevalence estimates of DWD range up to 75 per cent (Ferrante, 2003), but the proportion of DWD that goes undetected is unknown.

Despite its high prevalence, DWD has not been the subject of extensive research. The available research is fragmented, but has consistently shown that DWD presents a threat to road safety. DWD offenders are more likely to be involved in and

responsible for fatalities (nearly three times those of licenced drivers in a US study by Brar, 2012). Crash risks may also differ by DWD subtype. NSW Police Traffic Research and Intelligence Unit data (29 Aug 2013) show that between 1 July 2011 and 30 June 2013, in 869 collisions involving disqualified or suspended drivers, most drivers (56.3%) had been disqualified, 10.6% had been suspended for fine-default, and 33.0% had received another licence sanction. By contrast, disqualifications represent less than a quarter of active licence sanctions in NSW (Roads and Maritime Services, 2014). This suggests that persons who drive following licence disqualification have a higher crash risk than other subtypes of DWD. Some research indicates that disqualified drivers may drive more safely while disqualified, but this does not negate their overall greater crash risk (Ferrante, 2003) nor the risk they carry as uninsured drivers (Victorian Sentencing Advisory Council of Victoria, 2008).

DWD is rarely an isolated offence. Studies from the UK have shown a higher prevalence of prior offending among DWD than non-DWD offenders and a strong association between

frequent DWD and frequent non-traffic offending (Broughton, 2007; Rose, 2000). Moffatt and Poynton (2007) also found that in NSW the prevalence and rate of prior traffic offending was much higher among DWD offenders than among other traffic offenders, and DWD offenders were more likely to have a concurrent offence than most other offenders.

Other data suggest substantial heterogeneity in offending by DWD subtype. For example, Carnegie and Eger (2009) found that in the US, DWD offenders sanctioned for traffic offending were significantly more likely to have a subsequent traffic offence or serious traffic accident than DWD offenders sanctioned for non-traffic offending. This was reported earlier by Gebers and DeYoung (2002), who also showed that offence and crash risks for some DWD (including persons suspended for medical reasons) were only marginally higher than for licenced drivers, and lower than for young drivers more broadly. Furthermore, a Victorian study found that disqualified drivers tended to be older and to have more prior driving offences than suspended drivers (Sentencing Advisory Council of Victoria, 2009). These findings are important because in NSW, DWD is not a homogenous offence: a person may lose their licence following licence disqualification by a court (DWD-D); Roads and Maritime Services (RMS) may also cancel or suspend a person's licence following failure to pay a fine (DWD-F) or as a result of some other offence that does not require an appearance in court (including speeding, excessive demerit points for traffic offences, medical reasons, and failing a driving test; DWD-O).

This study has three aims. Aim 1 is to describe the trend in DWD. Aim 2 is to examine the characteristics of DWD offenders and the penalties imposed on them. Aim 3 is to examine factors associated with different subtypes of DWD offending.

Relevant legislation

Licence disqualification is the most serious licence sanction and in NSW can only be applied by the court. A court may disqualify a licence for a range of offences; at 27 October 2014, licence disqualification was a mandatory penalty for traffic and vehicle regulatory offences, some serious violent offences (including reckless wounding, and driving causing death), and a range of licence deception offences; it may be optionally applied to

other offences. DWD-D is the only DWD subtype that directly contravenes a court order, and is thus considered more serious than other DWD (B. Thomas, in Legislative Assembly Committee on Law and Safety, 2013).

Roads and Maritime Services (RMS) may suspend or cancel licences under the *Fines Act 1996* or under the *Road Transport (Safety and Traffic Management) Act 1999, Road Transport (Driver Licensing) Regulation 2008,* and *Road Transport Act 2013*. Persons may resume driving once a suspension is lifted, providing their licence has not expired, but a cancellation requires a person to re-apply for their licence and meet the attendant knowledge or skill requirements. RMS has the discretion to cancel rather than suspend a licence, and this is generally done on medical grounds or for more serious infractions (J. Hourigan, RMS Sanctions Unit, personal communication, 15 December 2014).

Licence sanctions for fine default have been enforced by RMS since at least 1990. However, DWD following fine default (DWD-F) was first distinguished in legislation on 9 March 2009, with the offences of 'drive whilst licence cancelled under s66 Fines Act' and 'drive whilst licence suspended under s66 Fines Act' being defined in road safety legislation. Since then, as instructed by the State Debt Recovery Office, RMS has applied suspensions as sanctions for fine default (section 54(5) of the Road Transport Act), unless the fine debt pertains to non-traffic offences committed prior to age 18. Licence suspension for fine default persists until the debt is cleared or fine mitigation arrangements are made. Suspension may progress to cancellation if the fine is not cleared (usually within a 6 month period). The statutory penalties for DWD are shown in Table 1.

Method

Data source

This study used NSW Local Court data from the NSW Bureau of Crime Statistics and Research (BOCSAR) Criminal Courts database and BOCSAR's Reoffending Database (ROD). ROD is a collection of linked data on finalised court appearances in NSW since 1994. Further details on ROD (including information on the accuracy of the linkage) can be found in Hua and Fitzgerald (2006). Principal DWD charges are very rare in the Children's and Higher Courts and were therefore not considered in this study.

Table 1. Statutory penalties for DWD, NSW

	First offence, DWD-F	First offence, other than DWD-F	Subsequent offence, any DWD[a]
Maximum court-imposed fine	$3,300	$3,300	$5,500
Maximum prison term	18 months	18 months	24 months
Minimum disqualification	3 months	12 months	24 months
Maximum disqualification	Unlimited	Unlimited	Unlimited
Disqualification (if no court order)	3 months	12 months	24 months

Note. Sources: http://www.rms.nsw.gov.au/roads/safety-rules/offences-penalties/unlicensed-driving-offences.html; http://www.rms.nsw.gov.au/roads/safety-rules/offences-penalties/

[a] The Habitual Offender Scheme provides more serious penalties, including an additional five year disqualification, for offenders with three convictions for serious driving-related offences (as defined in section 205 of the Road Transport Act) within five years.

Sample

Two samples were used in this study. The first (the 'charge sample') included all finalised charges for DWD in a NSW Local Court between 1 April 2004 and 31 March 2014 (N=159,164). This sample was used to examine trends in the incidence of each of the DWD subtype (Aim 1). Persons in this sample may have had multiple DWD charges during the study period, finalised charges are not necessarily proven, and DWD may not have been the principal offence at a given court appearance (i.e. the offence incurring the most serious penalty; see NSW Bureau of Crime Statistics and Research, 2014a, p. 163, for information on the BOCSAR's penalty hierarchy).

The second sample (the 'court sample') was used to examine the characteristics of DWD offenders and the factors that distinguish between different DWD subtypes (Aims 2 and 3). This sample included all persons appearing in a NSW Local Court between 1 April 2013 and 31 March 2014, where DWD was the principal proven offence. For each offender, the 'index appearance' (the first proven appearance during this period) was selected and subsequent DWD charges were not considered. The sample is limited to one record per offender because the analyses assume each record is independent of the others. Offenders aged less than 18 years (0.9%) were excluded, because the Fines Act sets out different penalties for fine default pertaining to fines incurred prior to the age of 18. Offenders with unknown Indigenous status were analysed as a distinct group due to their high prevalence (21.7%) in this sample. The final court dataset contained 8,874 offenders.

Variables

Dependent variables

The dependent variable was the DWD subtype finalised at the offender's index court appearance, as defined by the type of licence sanction and by the act under which the sanction was imposed. Law part codes were used to distinguish three subtypes of DWD:[2]

- DWD-D (DWD following licence disqualification);
- DWD-F (DWD following licence sanction under the *Fines Act*);
- DWD-O (DWD following licence sanction other than disqualification or under the *Fines Act*).

Independent variables

The following variables were used to examine relationships between the demographic and criminal history characteristics of DWD offenders and the DWD subtypes listed above:

- *Age.* Age of the offender at index appearance, grouped into categories based on the age distribution in the sample: 18 to 24 years (reference group), 25 to 29 years, 30 to 39 years, over 39 years;
- *Gender.* Gender of the offender: male (reference group) or female;
- *Indigenous status.* Offender identified as Aboriginal or Torres Strait Islander or both at any court appearance since 1994: no (reference group), yes or unknown;

- *Disadvantage.* The Socio-Economic Indexes for Areas (SEIFA; Australian Bureau of Statistics, 2011b) relative disadvantage index summarises aspects of socio-economic conditions of offenders' residential postcodes at their index appearance. The index was split into quintiles, with Quintile 1 (reference group) indicating the most disadvantage and Quintile 5 indicating the least disadvantage;
- *Remoteness.* The Area of Remoteness Index (ARIA; Australian Bureau of Statistics, 2005) for the offender's postcode: major cities (reference group), inner regional, outer regional, or remote.

The following characteristics of each offender's index appearance were also examined:

- *Concurrent charges.* The number of proven concurrent charges at the index appearance, not including the principal offence: 0 (reference group) or 1 or more;
- *Legal representation.* Offender was legally represented at the index appearance: no (reference group), or yes;
- *Bail dispensed with.* At the index appearance, bail was dispensed with (reference group) or not (i.e. granted, refused, or in custody for a prior offence).

Offenders' criminal histories were examined using the following data from ROD, with offence types coded according to the Australian and New Zealand Standard Offence Classification (ANZSOC; Australian Bureau of Statistics, 2011a):

- *Age at first court appearance with a proven offence.* Under 18 (reference group) or 18 years and above;
- *Prior finalisations.* The number of court appearances in the 5 years prior to the index appearance where one or more offences were proven;
- *Prior prison.* Any finalised court appearance that resulted in a full-time prison sentence or juvenile detention order in the 5 years prior to the index appearance: no (reference group), or yes;
- *Prior DWD.* The number of court appearances in the 5 years prior to the index appearance with one or more proven charges for DWD (ANZSOC 1411): 0 (reference group), 1, or more;
- *Other prior offences.* Separate variables indicating if the offender had one or more proven charges in the 5 years prior to the index appearance for:
  ◊ Serious traffic offences (ANZSOC 0132, driving causing death; ANZSOC 0411, drive under influence of alcohol or other substance; ANZSOC 0412, dangerous or negligent operation of a vehicle): no (reference group) or yes;
  ◊ Other traffic offences (ANZSOC division 14, excluding ANZSOC 1411), including licence offences other than DWD, and regulatory, registration, roadworthiness and offences: no (reference group) or yes;
  ◊ Exceed the prescribed content of alcohol (PCA) or other substance limit offences (ANZSOC 1431): no (reference group) or yes;

◊ Violent offences (ANZSOC divisions 1 to 6, excluding serious traffic offences): no (reference group) or yes;

◊ Property offences (ANZSOC divisions 7, break and enter; 8, theft and related; 9, fraud): no (reference group) or yes;

◊ Illicit drug offences (ANZSOC division 10): no (reference group) or yes;

◊ Offences against justice procedures (ANZSOC division 15): no (reference group) or yes.

The following variables were used to examine the penalties issued to DWD offenders:

• *Penalty*. The most serious penalty issued for the DWD offence. Dismissals under s10(1)(a), s10(1)(b), s10A of the *Crimes (Sentencing Procedure) Act 1999* and nominal sentences were grouped together as 'dismissal orders' (per Taussig and Jones, 2012);

• *Penalty values*. Value in dollars, hours or months for the principal penalty.

Statistical analysis

Kendall's test was used to assess the trend in DWD charges, overall and for different DWD subtypes (Aim 1). This test is sensitive to a generally increasing or decreasing trend over the time period of interest but is not sensitive to seasonality (for more information on this test see Conover, 1980).

The description of DWD offenders (Aim 2) did not involve statistical analysis. Factors associated with DWD subtypes were analysed (Aim 3) in two stages. The first stage involved a series of bivariate tests to identify which independent variables were associated with DWD subtypes.

In the next stage, two multivariate models were built using the significant bivariate associations identified in stage one, to identify significant independent associations (i.e., those variables that remained significantly associated with DWD

subtype after adjusting for the effects of other variables). Logistic regression was used to examine differences between DWD-D offenders and all other DWD offenders, and multinomial logistic regression was used to examine differences between DWD-F and DWD-O, and between DWD-F and DWD-D.[3] Associations are quantified as odds ratios in the logistic model, and as relative risk ratios in the multinomial model; these measures are described in more detail in the results. The models are cross-sectional and therefore do not allow causal relationships to be inferred.

Index penalty was excluded from the multivariate models because it is closely related to criminal history, and because the Road Transport Act provides differential sentencing guidelines for DWD-F to other DWD. Prior offence types were excluded from the multivariate models because they are not independent from prior penalty type. For example, prior traffic offending strongly suggests a prior licence disqualification, which is a pre-condition for DWD-D but not for other DWD subtypes.

Results

Trends in DWD charges

In total, 159,164 DWD charges were proven in a NSW Local Court between 1 April 2004 and 31 March 2014. Nearly half (n=77,792; 48.9%) were for DWD following licence disqualification (DWD-D), one in 15 (n=10,623; 6.7%) were for DWD following licence sanctions under the Fines Act (DWD-F), and the remainder (n=70,749; 44.5%) were for DWD following other licence sanctions (DWD-O). Figure 1 presents the trend in the number of charges for DWD and for DWD subtypes in each 12 month period from April 2004 to March 2014. Table 2 presents the results of Kendall's trend tests based on charge counts for these periods. Taken together, these show a significant downward trend over the past decade for DWD overall (with an average annual percentage change of -0.3%),
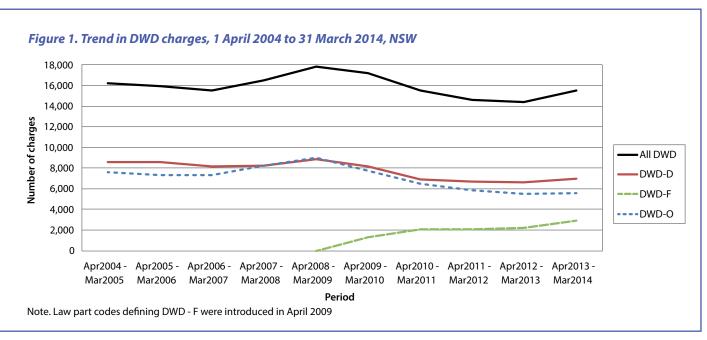

Figure 1. Trend in DWD charges, 1 April 2004 to 31 March 2014, NSW

Note. Law part codes defining DWD - F were introduced in April 2009

	April 2004 to March 2014		April 2010 to March 2014		April 2012 to March 2014	
	Trend test result	**% change**	**Trend test result**	**% change**	**Trend test result**	**% change**
DWD overall	Down	-0.3	Stable	–	Up	3.3
DWD-D	Down	-2.1	Stable	–	Stable	–
DWD-O	Down	-2.9	Down	-7.5	Stable	–
DWD-F [a]	n/a		Up	24.1	Up	20.2

Note. Trend tests significant at p<.05. % change = average annual percentage change.

[a] Not calculated for DWD-F for 2004-2014 (insufficient data prior to 2010).

DWD-D (-2.1% change) and DWD-O (-2.9% change). There has also been some variation in recent years:

- A significant upward trend in DWD overall in the past 2 years (3.3% change);

- No significant trend in DWD-D in the past 4 years or the past 2 years;

- A significant downward trend in DWD-O in the past 4 years (-7.5% change), but no significant trend in the past 2 years;

- A significant upward trend in DWD-F in the past four years (24.1% change) and the past 2 years (20.2% change).

Although not shown in Figure 1 it is worth noting that in the past 4 years the proportion of Indigenous offenders increased overall (from 11.2% to 14.0%) and in each DWD subtype, particularly DWD-F (from 5.0% to 8.7%). However the proportion with unknown Indigenous status is large and has also varied (e.g., declining from 30.6% to 26.4% for DWD-F).

Characteristics of and penalties imposed upon offenders with a principal proven DWD offence

Characteristics of DWD offenders

Table 3 describes the 8,874 offenders with DWD as their principal offence between 1 April 2013 and 31 March 2014, of whom 3,400 (38.3%) had a proven DWD-D offence 2,035 (22.9%) had a proven DWD-F offence, and 3,439 (38.8%) had a proven DWD-O offence. The overall picture, as indicated by the data in column 2, is that DWD offenders tend to be male, non-Indigenous, aged under 30 years, reside in a major city, be relatively disadvantaged, have no concurrent charges, have first appeared in court as an adult, and, in the past 5 years, to have

Table 3. Demographic, index appearance, and criminal history characteristics of offenders with a principal proven charge for DWD between 1 April 2013 and 31 March 2014, NSW (continues overleaf)

	All DWD (n=8,874)		DWD-D (n=3,400)	DWD-O (n=3,349)	DWD-F (n=2,035)
	%	N	%[a]	%[a]	%[a]
Demographic characteristics					
Sex					
Female	20.9	1,851	17.1	22.9	23.7
Male	79.1	7,023	82.9	77.1	76.3
Indigenous status					
Non-Indigenous	67.0	5,948	73.7	62.5	63.6
Indigenous	11.3	1,001	17.8	7.4	6.9
Unknown	21.7	1,925	8.5	30.1	29.4
Age at court finalisation (years)[b]					
18-19	7.6	673	4.2	12.6	4.9
20-24	26.0	2,309	20.1	32.2	25.3
25-29	19.5	1,730	18.8	18.8	21.8
30-34	15.2	1,349	18.0	11.9	16.0
35-39	10.5	936	12.0	8.6	11.4
40-44	9.0	796	11.9	6.3	8.7
45 and over	12.2	1,081	14.9	9.6	11.9
Remoteness					
Major cities	61.6	5,463	56.5	66.2	62.1
Inner regional	15.6	1,386	16.6	14.3	16.3
Outer regional	16.1	1,433	17.2	14.2	17.7
Remote or very remote	2.2	197	2.6	1.9	2.1
Missing	4.5	395	7.1	3.4	1.8

Table 3. Demographic, index appearance, and criminal history characteristics of offenders with a principal proven charge for DWD between 1 April 2013 and 31 March 2014, NSW (continued)

	All DWD (n=8,874)		DWD-D (n=3,400)	DWD-O (n=3,349)	DWD-F (n=2,035)
	%	N	%[a]	%[a]	%[a]
Disadvantage					
Quintile 1 (most disadvantaged)	27.3	2,423	27.3	28.4	25.5
Quintile 2	19.6	1,740	20.6	18.7	19.4
Quintile 3	22.7	2,012	21.4	23.3	23.8
Quintile 4	15.9	1,414	15.5	14.8	18.5
Quintile 5 (least disadvantaged)	10.0	886	7.9	11.4	11.1
Missing	4.5	399	7.2	3.4	1.8
Index appearance					
Charges/concurrent offences					
0	67.4	5,982	53.1	76.6	75.7
1	16.8	1,488	20.4	14.1	15.2
2+	15.8	1,404	26.5	9.3	9.0
Legally represented[b]					
No	46.4	4,121	70.2	37.8	21.3
Yes	52.9	4,692	29.1	61.2	78.5
Bail status					
Bail dispensed with	84.3	7,482	65.6	94.9	97.7
Bail granted	10.1	896	21.8	3.5	1.6
Bail refused/in custody for prior offence	5.6	496	12.6	1.6	0.7
Criminal history					
Age at first court appearance for a proven offence[b][c]					
Under 18 years	18.4	1,632	25.1	15.7	11.8
Aged 18 or more	81.6	7,241	74.9	84.3	88.2
Given a prison sentence in the 5 years prior to index appearance					
No	90.2	8,007	81.0	95.2	97.2
Yes	9.8	867	19.0	4.8	2.8
Court appearances with a proven offence in the 5 years prior to index appearance					
0	35.3	3,135	7.7	51.8	53.6
1	23.4	2,079	23.0	22.9	24.9
2	15.6	1,383	22.1	11.5	11.6
3	10.5	929	17.9	6.4	4.9
4+	15.2	1,348	29.3	7.3	5.0
DWD offences (ANZSOC 1411) in the 5 years prior to the index appearance					
0	70.2	6,228	43.1	85.5	89.5
1	19.1	1,696	31.6	12.6	9.2
2 +	10.7	950	25.2	1.9	1.3
In the 5 years prior to the index appearance, one or more:[d]					
Serious traffic offences (ANZSOC 0132, 0411, 0412)	6.9	613	13.0	3.3	2.8
Other traffic (ANZSOC division 14, excluding DWD, including Exceed PCA)	36.7	3,256	62.9	21.8	18.1
Exceeding the prescribed concentration of alcohol (Exceed PCA; ANZSOC 1431)	18.0	1,598	30.9	11.1	8.2
Violent (ANZSOC divisions 01-06 excluding serious traffic offences as defined above)	18.2	1,619	25.2	14.4	13.2
Property offences (ANZSOC divisions 07-09)	15.8	1,406	23.4	12.3	9.1
Offences against justice procedures (ANZSOC division 15)	21.0	1,863	34.7	13.3	11.2
Illicit drug offences (ANZSOC division 10)	13.3	1,183	19.3	9.4	9.9

Note. DWD-D = DWD following disqualification; DWD-F = DWD following licence sanctions under the Fines Act; DWD-O = DWD following other licence sanctions.

[a]   % of DWD subtype

[b]   Variable contained one or more values excluded from the analyses: aged under 18 (n=84); legal representation unknown (n=61); age at first offence unknown (n=1).

[c]   ROD is incomplete for offenders born before 1984.

[d]   As these specific offence type variables are separate dichotomous variables, their column totals do not sum to 100.

had no prison sentences, proven court appearances, or DWD offences. At their index appearance, nearly half the sample had no legal representation.

The pattern differs somewhat by DWD subtype. The proportion of male offenders is slightly higher among DWD-D (82.9%) than DWD-O (77.1%) or DWD-F (76.3%). The proportion of Indigenous offenders among DWD-D (17.8%) is more than double that of DWD-O and DWD-F, but the high proportion with unknown Indigenous status in these subtypes (nearly one in three) requires that this result be treated with caution.[4] There were marked age differences between DWD subtypes: offenders aged under 25 comprised nearly 1 in 4 DWD-D, 1 in 3 DWD-F, and 1 in 2 DWD-O offenders. The proportion of urban offenders was lower among DWD-D than other DWD subtypes; socio-economic disadvantage did not appear to vary substantially by DWD subtype.

Index appearance and criminal history differences between DWD subtypes were expected, given that DWD-D (unlike DWD-O and DWD-F) must have previously received a court penalty. A higher proportion of DWD-D offenders had a concurrent offence than other DWD-D subtypes. Most DWD-D offenders were not legally represented whereas the reverse was true for other DWD subtypes; the proportion with legal representation was also much higher for DWD-F than DWD-O. Unlike DWD-D, nearly all DWD-O and DWD-F offenders had bail dispensed with at their index appearance. Compared with other DWD subtypes, a much higher proportion of DWD-D offenders were aged under 18 at their first court appearance for a proven offence, given a prison sentence in the past 5 years, or had more than 3 court appearances with a proven offence in the past 5 years. A higher proportion of DWD-D offenders had prior offences for all offence types (especially so for traffic offences) than other DWD subtypes; only small differences in prior offending were observed between DWD-O and DWD-F.

As the court sample (N=8,874) excludes DWD offenders who had a more serious offence proven at their index appearance, it was also of interest to examine all proven DWD charges among persons aged 18 or above during the same period (1 April 2013 to 31 March 2014; N=15,398). Compared with offenders in the court sample, a higher proportion of charges during this period were for DWD-D (45.1% vs. 38.3%) and there were lower proportions of charges for both DWD-O and DWD-F.

Penalties imposed on DWD offenders

Table 4 shows the type and quantum of the principal penalty issued where DWD was the principal offence, disaggregated by DWD subtype. Overall, the most common principal penalty for DWD was a fine (43.2%). The mean fine issued for DWD was $571 (SD $329, maximum $3,000). The second most common principal penalty was a good behaviour bond without conviction (19.1%), with a mean length of 12.8 months (SD 5.8; maximum 24). A further 6.8 per cent offenders had their matters dismissed unconditionally (i.e. 6.0% had no conviction recorded and 0.8% received a nominal sentence). A small proportion of offenders received custodial sentences for DWD (n=505; 5.7%). Prison sentences were almost exclusively issued to DWD-D offenders and none were issued for DWD-F.

Table 3 also shows the total prevalence and quantum of licence disqualifications and fines received by DWD offenders for all proven offences at the index appearance. Nearly three in four (71.9%) DWD offenders received a disqualification (mean 12 months' duration) and nearly half (47.7%) received a court fine (mean $279), with wide variation in the size of these penalties. Disqualifications were much more common for DWD-D than other DWD subtypes and were also longer (20 months mean duration versus 9 months for DWD-O and 3 months for DWD-F). Disqualifications were also less common for DWD-F than DWD-O. Penalties for DWD that result in a conviction would be

Table 4. Penalties received by DWD offenders at their index appearance, 1 April 2013 to 31 March 2014, NSW

	Any DWD (N=8,874)			DWD-D (N=3,400)			DWD-O (N=3,439)			DWD-F (N=2,035)		
	N	%	Mean (SD)	N	%	Mean (SD)	N	%	Mean (SD)	N	%	Mean (SD)
Principal penalty												
Imprisonment	505	5.7	6.1 (3.3)	492	14.5	6.2 (3.3)	13	0.4	4.2 (2.8)	0	0.0	nc
Home detention/ICO	197	2.2	10.5 (3.9)	195	5.7	10.6 (3.9)	2	0.1	5.0 (2.8)	0	0.0	nc
Suspended sentence	500	5.6	10.1 (3.7)	466	13.7	10.1 (3.8)	33	1.0	9.7 (3.1)	1	0.1	9.0 (nc)
CSO (hours)	503	5.7	131.8 (69.6)	459	13.5	134.1 (70.5)	38	1.1	110.8 (50.4)	6	0.3	82.5 (71.1)
Bond	1,037	11.7	16.3 (6.1)	725	21.3	17.4 (6.2)	277	8.1	13.6 (4.8)	35	1.7	12.4 (6.3)
Fine (dollars)	3,835	43.2	571.1 (329.2)	771	22.7	778.3 (436.7)	1,926	56.0	559.3 (284.4)	1,138	55.9	450.5 (235.4)
Bond, no conviction	1,696	19.1	12.8 (5.8)	236	6.9	17.4 (6.3)	913	26.6	13.2 (5.4)	547	26.9	10.1 (4.6)
Dismissal orders[a]	601	6.8	-	56	1.7	-	237	6.9	-	308	15.1	-
Additional penalties												
Licence disqualification	6,384	71.9	11.8 (10.4)	2,994	88.1	19.9 (9.0)	2,224	65.3	9.2 (7.9)	1,146	56.3	2.6 (4.6)
Fine (dollars)	4,231	47.7	278.5 (372.6)	1,088	32.0	244.5 (428.9)	2,000	58.2	327.2 (352.9)	892	56.2	253.2 (285.1)

Note. Penalty quantum in months unless otherwise specified. CSO = community service order; SD = standard deviation; nc = not calculated; ICO = Intensive correction order.

    [a] Nominal sentence/no conviction; penalty duration not applicable.

expected to also incur a driver licence disqualification, given the statutory penalties (see Table 1). Fines were much less likely for DWD-D (32.0%) than for DWD-F or DWD-O, but were larger on average for DWD-O (mean $327) than for DWD-F or DWD-D.

Independent associations with DWD subtype

The bivariate relationships shown in Table 3 do not reveal the extent to which a given characteristic is independently associated with DWD subtype. Table 5 shows the results of a logistic regression model that estimates the likelihood of the index DWD matter emanating from a licence disqualification (DWD-D) rather than another licence sanction (i.e. either DWD-F or DWD-O). The magnitude of the association between independent variables and DWD-D (vs. all other DWD) is expressed as an odds ratio.

An adjusted odds ratio (OR) greater than one indicates that DWD-D offenders' have significantly higher odds than other DWD offenders of being in a particular group versus its reference group (e.g. male vs. female), after adjusting for other variables in the model. An OR less than one indicates that DWD-D offenders' odds are significantly lower than other DWD offenders' odds. For example, Table 5 shows that DWD-D offenders' odds of having a concurrent offence (versus not having one) were higher (by 26%; OR 1.26) than for other

Table 5. Logistic regression model comparing DWD-D with all other DWD (n=8,813), NSW

	Adjusted OR (95% CI)[a]	
Demographic characteristics		
Age at court finalisation (years)[b]		
25-29 vs. 18-24	1.44	(1.22, 1.69)
30-39 vs. 18-24	1.90	(1.64, 2.20)
40 plus vs. 18-24	2.93	(2.50, 3.42)
Index appearance		
Any concurrent offences vs. none	1.26	(1.11, 1.42)
Legally represented vs. not	0.31	(0.28, 0.35)
Bail dispensed with vs. not	0.21	(0.17, 0.25)
Criminal history (past 5 years)		
Court appearances with a proven offence[b]		
1 vs. 0	6.32	(5.35, 7.45)
2 vs. 0	10.77	(8.99, 12.90)
3 vs. 0	16.16	(13.18, 19.80)
4 or 0	22.65	(18.63, 27.52)

Note. OR = odds ratio; CI = confidence interval.

[a] p < .001 for all likelihood ratio chi² tests.

[b] p < .001 for overall Wald chi² test.

Table 6. Multinomial logistic regression model comparing DWD-F with DWD-D and DWD-O (n=8,413), NSW

	DWD-F vs. DWD-D			DWD-F vs. DWD-O		
	Adjusted RRR (95% CI)		p-value	Adjusted RRR (95% CI)		p-value
Demographic characteristics						
Age at court finalisation (years)[a]						
25-29 vs. 18-24	1.10	(0.90, 1.35)	.341	1.81	(1.54, 2.12)	<.001
30-39 vs. 18-24	0.90	(0.75, 1.08)	.258	2.10	(1.81, 2.45)	<.001
40 plus vs. 18-24	0.57	(0.47, 0.69)	<.001	2.11	(1.79, 2.49)	<.001
Remoteness[a]						
Inner regional vs. major cities	1.23	(1.02, 1.49)	.033	1.38	(1.18, 1.62)	<.001
Outer regional/remote vs. major cities	1.55	(1.29, 1.87)	<.001	1.64	(1.40, 1.91)	<.001
Disadvantage quintile (1 = most, 5 = least)	1.07	(1.02, 1.13)	.009	1.05	(1.01, 1.10)	.025
Index appearance						
Any concurrent offences vs. none	0.90	(0.77, 1.05)	.173	1.18	(1.03, 1.35)	.021
Legally represented vs. not	5.99	(5.14, 6.98)	<.001	2.45	(2.14, 2.80)	<.001
Bail dispensed with vs. not	8.34	(5.89, 11.81)	<.001	1.92	(1.33, 2.78)	<.001
Criminal history (past 5 years)						
Prison sentence vs. none	0.66	(0.47, 0.92)	.014	0.64	(0.45, 0.91)	.013
Court appearances with a proven offence[a]						
1 vs. 0	0.13	(0.10, 0.16)	<.001	1.00	(0.87, 1.15)	.963
2 vs. 0	0.07	(0.06, 0.09)	<.001	0.93	(0.77, 1.13)	.479
3 vs. 0	0.04	(0.03, 0.06)	<.001	0.78	(0.60, 1.01)	.057
4 or more vs. 0	0.03	(0.02, 0.04)	<.001	0.80	(0.61, 1.05)	.109

Note. RRR = relative risk ratio; CI = confidence interval.

[a] p<.001 for overall Wald chi² tests.

Table 7. Summary of the multivariate regression models comparing DWD subtype

Variable	DWD-D vs. other	DWD-F vs. DWD-D	DWD-F vs. DWD-O
Age at the index appearance	+	-[a]	+
Regional residence at the index appearance	ns	+	+
SEIFA disadvantage quintile at the index appearance	ns	+	+
Concurrent offence(s) at the index appearance	+	ns	+
Bail dispended with at the index appearance	-	+	+
Legal representation at the index appearance	-	+	+
Prison sentence (in 5 years prior to the index appearance)	ns	-	-
Appearances with proven offence (in 5 years prior to the index appearance)	+	-	ns

Note. + / - = significantly more (+) or less likely (-) among this subgroup than the reference group (p<.05); ns = not significant;
  [a] Non-monotonic relationship: DWD-F offenders were less likely to be aged 40 and above compared to all other age categories.

DWD offenders, after accounting for the other independent variables. Variables with an OR not significantly different from one (p<.001) have been dropped from the model.

After adjusting for other factors in the model, DWD-D remained significantly associated with age, concurrent offences, legal representation, bail status and prior offending. DWD-D offenders were more likely to be older, to have one or more concurrent offences, to be unrepresented, to not have their bail dispensed with, and to have had more court appearances in the past 5 years, compared with all other DWD offenders. Regression diagnostics indicate that the model provided a modest fit to the data and the model was not unduly affected by multi-collinearity.[5]

Table 6 shows the results of a multinomial logistic regression model comparing DWD-F offenders with DWD-D offenders, and DWD-F offenders with DWD-O offenders. Relative risk ratios (RRR) have a similar interpretation to odds ratios. For example, the relative risk for DWD-F offenders of having had a prison sentence in the past 5 years (versus not having had any) was 34% lower (RRR 0.66) than for DWD-D offenders, and 36% lower (RRR 0.64) than for DWD-O offenders, holding other variables in the model constant. Variables not significantly associated (p<.001) with DWD subtype have been dropped from the model.

In this model, DWD-F was independently associated with age, area of residence, concurrent offences, legal representation, bail status, prior prison and prior court appearances. Variables not significantly associated (p<.001) with DWD subtype have been dropped from the model. Compared with other DWD subtypes, DWD-F offenders were more likely to live in non-urban and socio-economically disadvantaged areas, have legal representation and bail dispensed with at the index appearance, and have no prior prison episodes. With regard to age, DWD-F offenders were generally younger than DWD-D offenders but older than DWD-O offenders. DWD-F offenders were also slightly more likely to have a concurrent offence compared with DWD-O offenders. DWD-F offenders were less likely to have prior court appearances compared with DWD-D offenders, but not with DWD-O offenders.

Regression diagnostics indicate that the model was not unduly affected by multicollinearity and provided an acceptable but relatively poor fit to the data. Model fit was far better for the DWD-F vs. DWD-D logit component of the multinomial model, than for the DWD-F vs. DWD-O component.[6]

Table 7 summarises the results of the multivariate regression analyses. Signs indicate whether the presence or increasing levels of a given independent variable had a significant positive (+), negative (-), or non-significant (ns) association with the outcome. Relationships are monotonic (i.e., consistently increasing or decreasing in magnitude with increasing levels of the independent variable) unless otherwise specified.

Discussion

The aims of this study of driving while disqualified (DWD) were to describe trends in DWD charges and characteristics of DWD offenders, disaggregated by three licence sanction-defined subtypes: disqualified (DWD-D), sanctioned for fine default (DWD-F), and other (DWD-D). DWD offenders comprise a substantial proportion of offenders appearing before the NSW Local Court, representing approximately 1 in 8 persons charged in 2013 (NSW Bureau of Crime Statistics and Research, 2014a).

The trend in overall DWD charge numbers has fluctuated and has increased in recent years, and trends have differed by DWD subtype. In the past 4 years, there were significant changes in the average annual number of charges for DWD-F (24.1% increase) and DWD-O (7.5% decrease); this may reflect the introduction in 2009 of laws that distinguish DWD-F from DWD-O. However, over the past 2 years, DWD-O has remained stable (as has DWD-D) while DWD-F increased significantly (20.2%). This increase in DWD-F may therefore have driven the small but significant increase (3.3%) in DWD overall during this time; this should be monitored and investigated further.

Fines were the most common principal penalty for DWD offending, although most DWD offenders were also disqualified for 12 months. Penalties were generally larger and more serious for DWD-D than for other subtypes of DWD. Prison penalties were rare, especially for DWD-F offenders. In terms of all

penalties issued at the index appearance, DWD-D offenders were much more likely to receive a licence disqualification and much less likely to receive a fine than other DWD offenders.

As one might expect, given the penalties, the profile of DWD-D offenders tends to be more serious than that of other DWD offenders. For example, DWD-D offenders are more likely to have concurrent offences, to not have bail dispensed with, and to have multiple court appearances for proven offences in the past 5 years, compared with other DWD offenders. Compared with DWD-D offenders, DWD-F offenders are more likely to be young, to live in regional NSW, to be in the highest quintile of disadvantage, to be legally represented, to have their bail dispensed with at the index appearance and to have had multiple court appearances for proven offences in the past 5 years. DWD-D also comprised a lower proportion of all persons with a principal proven DWD charge between 1 April 2013 and 31 March 2014 (i.e. the court sample) than of proven DWD charges during that period (38.3% vs. 45.1%), while the reverse was true for DWD-F (22.9% of persons vs. 6.7% of charges). DWD-D charges may be more likely than DWD-F charges to be accompanied by more serious offences, which become the principal offence.

The contrast between DWD-F offenders and DWD-O offenders was less pronounced, and notably, there were no significant differences between these two groups with regard to prior court appearances. However, one should interpret comparisons with the DWD-O group with care, because as found by Gebers and DeYoung (2002), offence risks can differ widely by the underlying reason for the licence sanction (e.g., medical reasons versus serious traffic offending).

One limitation of this study is that interpretation of the role of Indigenous status was limited by the high proportion of missing values on that variable for some DWD subtypes. The study also looked only at an offender's first DWD offence during the study period, and did not consider the total prevalence or co-occurrence of DWD subtypes (e.g. having proven charges for both DWD-D and DWD-F). Lack of access to relevant data also precluded any examination of the role of employment, homelessness, intellectual disability, penalty notices (fines not issued by the court), and perhaps most importantly, reasons for suspension and fine default.

Several important research issues remain to be explored, including the relationship between trends in licence sanctions and trends in DWD, the differential deterrent impact of licence sanctions for fine-default versus other reasons, comparisons of DWD-F who had defaulted on traffic fines versus other fines, rates and predictors of repeat DWD, and independent associations with DWD versus non-DWD (i.e., abiding by licence sanctions). Linking driver record data, accident data, and fine/penalty notice data to court data would facilitate these important analyses and more detailed monitoring of DWD. Such analyses may also inform discussions about the merits of differential sanctions for DWD-F and DWD-O offenders, particularly in light of their apparent similarities observed in this study.

Acknowledgements

Notes

1. These offences comprise group 1411 in the Australian and New Zealand Standard Offence Classification (ANZSOC, Australian Bureau of Statistics, 2011a).

2. At least one proven charge was heard in the NSW Local Court between 1 April 2004 and 31 March 2014 for law part codes: 2984, 29452, 30072, 35018, 79009, or 79010 (for DWD-D); 68367, 68368, 68371, 68372, 79033, 79034, 79039, or 79040 (for DWD-F); and, 2985, 2986, 2987, 35021, 35024, 35027, 53715, 53717, 79015, 79016, 79021, 79022, 79023, or 79024 (for DWD-O).

3. Multinomial logistic regressions typically report RRRs for different outcome groups versus the same base subtype (e.g., DWD-D vs. DWD-F; DWD-O vs. DWD-F). This study reports RRRs for one outcome group versus different base subtypes, so that associations with DWD-F vs. DWD-D can be compared directly against associations with DWD-F vs. DWD-O.

4. The likelihood of Indigenous status being missing is inversely related to the number of prior court appearances. In the court sample in this study, Indigenous status was missing for 60.0 per cent of offenders with no prior court appearance for a proven offence, but only 0.4 per cent of offenders with more than three prior court appearances for a proven offence.

5. LR chi^2 = 4016.1 (df 10), p<.001; Pseudo r^2 = .342; Hosmer-Lemeshow chi^2 = 7.12 (df 3), p = .068; Area under curve (AUC) (500 bootstrapped replications) = .865 (95% CI = .858-.872); Maximum variance inflation factor (VIF) ≤2.

6. LR chi^2 = 4312.9 (df 28), p<.001; Pseudo r^2 = .238. Maximum VIF ≤2.0. Logit fit statistics for DWD-F vs. DWD-D: N = 5,127, LR chi^2 = 2880.0 (df 14), p<.001; Pseudo r^2 = .420; Hosmer-Lemeshow chi^2 = 4.85 (df 3); AUC = .898 (95% CI = .889-.908). Logit fit statistics for DWD-F vs. DWD-O: N = 5282, LR chi^2 = 378.2 (df 14), p<.001; Pseudo r^2 = .054; Hosmer-Lemeshow chi^2 = 3.10 (df 3); AUC = .654 (95% CI = .639-.668).

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