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# One For The Road - An Outcome Evaluation of a Drink Driver Rehabilitation Programme



Researching Impaired Driving in New Zealand

Gerald Waters. 2018

Researching Impaired Driving in New Zealand

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Researching Impaired Driving in New Zealand is a Registered Charitable Trust that provides research and information on the causes of harm on New Zealand's road and possible solutions to inherently risky driving behaviours. The Research Director Gerald Waters has 7 years' experience working in these and associated fields and is an international award winning researcher. For further information contact the Author Gerald Waters:

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# Executive Summary

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Drink driving is a serious problem in New Zealand. This study evaluates the effectiveness of the One For The Road Programme (OFTR), a Drink Driver Rehabilitation programme for repeat and high level first time detected drink drivers run by Harmony Trust in NZ. The therapy processes used in OFTR are drawn from Motivational Interviewing, Cognitive Behaviour Therapy (CBT), group therapy process, Gestalt, Transactional Analysis, role play and relapse prevention techniques. Referrals come from the Courts, lawyers and the New Zealand Transport Agency (NZTA), and as such the programme may be delivered in combination with Court imposed sanctions; to those awaiting sentencing, or as a requirement for licence reinstatement. The programme was initially delivered in a 10 hour format; this was replaced and increased to a 20 hour (6 week) format in 2013. The current model (from 2018) is a 22 hour format run over 8 weeks.

This study involves the comparison of reoffending for drink driving offences over a three year period for OFTR participants and a closely matched control group of convicted drink drivers who did not attend OFTR. The groups are matched by demographics and previous offending history not limited to drink driving offences. Also provided are demographics and previous offending data for all drink drivers in New Zealand from 2009-2015. Included in this study is information on referral pathways and scores from screens and questionnaires used by the OFTR programme providers, Harmony Trust.

Whilst the number of OFTR 20 hour participants involved in this study were low, the findings suggest that the 20hr programme appears to be an effective intervention for repeat and high level first time detected drink drivers. Participants who completed the OFTR 20 hour programme displayed 20.2 per cent less detected reoffending when compared to a matched comparison control group. Due to the low numbers involved in this study, ongoing evaluation with larger participant numbers is needed to substantiate this.

Included are recommendations for the OFTR programme providers and also government ministries including the Ministry of Justice and the Ministry of Health.

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# Acknowledgments

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# Glossary and Abbreviations

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<i>AIL</i> .....	<i>Alcohol Interlock Licence</i>
<i>AODTC</i> .....	<i>Alcohol and Other Drug Treatment Court</i>
<i>BAC</i> .....	<i>Blood/Breath Alcohol Content</i>
<i>CADS</i> .....	<i>Community Alcohol and Drug Services</i>
<i>CMS</i> .....	<i>Case Management System</i>
<i>CBT</i> .....	<i>Cognitive Behaviour Therapy</i>
<i>DD</i> .....	<i>Drink Driving</i>
<i>DDR</i> .....	<i>Drink Driver Rehabilitation</i>
<i>ITT</i> .....	<i>Intention To Treat</i>
<i>RODD</i> .....	<i>Risk Of Drink Driving Questionnaire</i>
<i>RCQ</i> .....	<i>Readiness to Change Questionnaire</i>
<i>LDQ</i> .....	<i>Leeds Dependence Questionnaire</i>
<i>MoH</i> .....	<i>Ministry of Health</i>
<i>MoJ</i> .....	<i>Ministry of Justice</i>
<i>NZTA</i> .....	<i>New Zealand Transport Agency</i>
<i>OFTR</i> .....	<i>One For The Road</i>
<i>RIDNZ</i> .....	<i>Researching Impaired Driving in New Zealand</i>

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# Introduction

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Drink driving is a serious problem in New Zealand. Between the years 2014–2016, alcohol/drugs were a factor in 29 per cent of fatal crashes ([Ministry of Transport, 2017](#)). From 2009–2012, 47 percent of detected drink drivers were repeat or recidivist offenders who had at least one previous historical drink driving conviction ([Waters, 2013](#)). New Zealand has introduced several measures to tackle the problem of repeat drink driving, these include Alcohol Ignition interlocks<sup>1</sup>, Alcohol and Other Drug Treatment Courts (AODTCs) and further funding for drink driver rehabilitation programmes.

Drink driving rehabilitation (DDR) refers to a wide range of initiatives for offenders that attempt to reduce repeat drink driving ([Ferguson, Sheehan, Davey & Watson, 1999](#)). DDR programmes can make use of psychotherapy/counseling to treat alcohol problems or education on the hazards of drink driving - or a combination of both. DDR programmes also provide offenders with knowledge on the harm of excessive alcohol consumption and attempt to reduce the offenders drinking levels ([Wells-Parker, 1994](#)). Programmes that use a combination of education and psychotherapy/counseling along with some method of follow-up contact have been found to be the most effective in reducing repeat drink driving ([Sheehan, Watson, Schonfeld, Wallace & Partridge, 2005](#)).

The main objective of these programmes is to separate drinking from driving by providing the offenders with skills and strategies to stop their drink driving behaviour ([Popkin, 1994](#); [Wells-Parker, 1994](#)). Earlier research suggested the use of DDR programmes could reduce repeat offending by 7-9 per cent ([Wells-Parker, 1994](#)). More recent data indicates a reduction in re-offending from 43 per cent ([Mills, Hodge, Johansson & Conigrave, 2008](#)) to 45.5 per cent ([Boets, Meesmann, Klipp, Bukasa, Braun, Panosch, Wenninger, Rösner, Kraus & Assailly, 2008](#)) can be achieved.

However, consideration of the strength and methodology of these evaluations should take into account that:

*‘While these programmes have shown promising results, many of the evaluations have significant methodological weaknesses, including the comparison of non-equivalent groups (i.e. unmatched controls) or lack of a control group’* ([Mills et al, 2008, p66](#)).

To address the above concerns, this study has attempted to apply (as closely as could be achieved), matched comparisons including variables of previous offending data as well as demographic information. This study aims to gauge the impact of a developing rehabilitation programme on drink driving offending rates over a 3 year period.

As has been previously reported ([Mills et al, 2008](#)) evaluations based on detected drink drive offending have limitations and can only be utilised as a surrogate for actual behaviour, however, all previous evaluation of drink driver rehabilitation programmes throughout the world have at least involved the analysis of reoffending rates of participants as a measure of achieving the desired outcome of stopping repeat offending ([Fitts, Wilson, & Schramm, 2012](#)).

As the programme is addressing a specific target group so too should the instruments/tools/screens used by the providers reflect this. Levels of alcohol dependence, motivation to change, as well as indicators from a risk of drink driving questionnaire (RODD) are gathered by the providers of the programme in question and information on these is included.

Also included in this study is the most up to date demographic and previous offending information on all drink drivers in New Zealand for the years 2009–2015.

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<sup>1</sup> See [Waters, 2014](#) for more information on New Zealand’s Alcohol Ignition Interlock programme.

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# Methodology

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## Rehabilitations programme overview

The Harmony Trust, 'One for the Road' (OFTR) drink driver rehabilitation programme was originally implemented in 2008, as a 10 hour, brief, intensive, therapeutically based programme in New Zealand. With review and development in 2013, with increased funding, this format changed to a 20 hour programme run over 6 weeks. The current model (2018) is a 22 hour format run over 8 weeks.

OFTR commenced in August 2008, beginning with three courses in 2008, seven in 2009 and increasing to 36 in 2014. By January 2015, 1487 participants had completed 147 OFTR programmes in Greater Auckland, Waikato, Eastern, and Central Districts of New Zealand. To allow for implementation issues during the first 6 months (5 initial programmes) this study reviews the reoffending data of those identified (and comparison matched control group) for both the OFTR 10 hour and 20 hour programmes from July 2009 to March 2015.

One for the Road at the time consisted of a one-hour group assessment with the group facilitator, a six hour daytime group session and a four hour evening session two days later. From 2013 the OFTR 20 hour programme consisted of the same 10 hour content as the original OFTR programme, but was extended to include an extra 10 hours involving 2 hour sessions over 5 weeks exploring additional themes and content such as; honesty and emotions, accountability, coping skills, communication, planning and consequential thinking, and relapse prevention. Both forms of the group had accommodated up to 16 attendees maximum, but with an average of 10, and were led by two qualified facilitators to achieve a 1:5 to 1:8 ratio. Sessions were held over weekends to enable people to relate their learning to their most likely drinking times and to have a real chance to practice homework. A BI (Brief intervention) approach was run over the sessions incorporating a motivational interviewing ([Miller, 1983](#)) style for groups, with a pattern of establishing empathy, developing discrepancy, supporting self-efficacy, and promoting change talk and commitment language.

OFTR group leaders typically hold qualifications in psychology, counselling and social work. Facilitators need to demonstrate that they are skilled in group work and challenging behaviours, and are enthusiastic about working with this client group as this has been reported to be key to programme integrity ([Bonta, 2001](#)). In order to achieve this OFTR group leaders are 'apprenticed' into running the group programme over a series of sessions in order to learn in practice and through mentoring. Motivational speaker Tamati Paul<sup>2</sup> attends sessions and provides an important catalyst

Attendance of support people encouraged to offer both support and an opportunity to challenge group members by bringing in real life situations. The group is therapeutic and experiential (action and activity) based rather than educational. A resource booklet is provided and videos are shown but these are secondary to group process. Therapy processes are drawn from motivational interviewing, Cognitive Behaviour Therapy (CBT), group process, gestalt, transactional analysis, role play and relapse prevention.<sup>3</sup> Part of the course is to challenge beliefs used by offenders to justify their driving while impaired, and address some of the myths, and target antisocial attitudes; weak problem solving skills; low self-control; impulsive behaviours; and substance use/ abuse. The inclusion of these topics are explained in detail by [Wanberg et al \(2004\)](#). At each session is started with a group round-review of each person's AOD logs for the week (see [Appendix B](#)) and check in with the weekly challenge set

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<sup>2</sup> Tamati Paul is a motivational speaker who was the victim of a drink driver crash where he received multiple permanent life affecting injuries.

<sup>3</sup> See Waters DDR for further information



from the previous session. This would depend on the theme for that session. Each session features a learning activity/role play.

## Participants

As is shown in [table 1](#) (below), total participants<sup>4</sup> of both programmes (n=1437) are mostly male (88 per cent) and include a high proportion of Maori (26 per cent) and Pasifika (19 per cent) participants. Ages range from 16-78 (mean 37).

Considering the high level of participants identifying as Pasifika and Maori, the group is designed to cater for this population as well as Pakeha<sup>5</sup> participants. Maori and Pasifika cultures are represented in the group facilitators and related processes. It has been reported that:

*‘Most current programs fail to cater for various subgroups of drink drivers, particularly Indigenous drivers’* ([Palk, Fitts, Wilson, Sheehan, Wishart & Taylor, 2015](#), page 2).

Clients need not show motivation to change, but must have some motivation to attend a group programme. Participants have relatively high previous drink drive convictions ([table 1](#))

*Table 1: Characteristics of Total OFTR Participants by Percentage*

Characteristic	Percentage %
<b>Gender</b>	
Male	88
<b>Ethnicity</b>	
Maori	26
Pasifika	19
European/Other	55
<b>Number of Historical Previous drink drive offences</b>	
0	2.7
1	14.2
2	37.6
3	18.7
4	11
5	4.7
6	3.6
7 plus	7.5

Referrals to the programme ([table 2](#)) come from lawyers, the Court (including those referred by the Court to complete OFTR as a special condition, and those under supervision period with probation services), and the New Zealand Transport Agency for the most part, but other sources include Harmony Trust referrals as well as Auckland Alcohol and Other Drug Treatment Courts (AODTCs) and Community Alcohol and Drug agencies. Participants will be referred to appropriate agencies if there is

<sup>4</sup> No information was available regarding those who were referred to the 10hr programme and did not attend or did not complete the programme. The total participants are all programme completers excepting for 15 of the 20hr group who were included in the 20hr group study as an intention to treat cohort. See [page 14](#)

<sup>5</sup> A European New Zealander as opposed to Maori.

a need for ongoing therapy and support. The providers inform<sup>6</sup> that they have always accepted high scoring Leeds Dependence Questionnaire (LDQ) participants and also report that they maintain a high level of programme integrity. [Andrews and Dowden](#) (2005) have written extensively on the topic of programme integrity and they propose that the failure to pay adequate attention to programme integrity may explain most instances of poor outcomes.

Ages for participants (n=1437) range from 16 -72yrs of age, though there are very few participants (1 per cent) under the age of 20 ([table 2](#)). Research suggests that young drivers require their own style/type of intervention and intervention for young drivers should avoid programmes aimed at adults ([Oxley, O'Hern, & Clark. 2014](#)).<sup>7</sup>

The OFTR providers inform<sup>8</sup> that the programme is suitable for people who have a court case pending, have been referred by the court, the police, probation, or are re-applying for their licence under section 65 of the Land Transport Act 1998. Those who receive a sentence of indefinite disqualification (one year and one day) or longer, are required to attend an assessment to gauge their fitness to reinstate their licence. The councillor/ assessor makes a decision at the first Section 65 assessment interview based on the following variables:-

- How they present in terms of risk- AOD (Alcohol and Other Drug) screens, current drinking or abstinence- behaviour- RODD (Risk Of Drink Driving) questionnaire, motivation to change and attitude
- Previous offending- number of EBA's- re risk factor
- Blood test result
- Whether or not they have previously completed any AOD / drink driving programmes- in the past year- verification of this requires a certificate of completion-
- Whether they have previously completed OFTR and re-offended

Acceptance to the programme is based on clinical judgement. Therefore the majority of the participants are either attending the course as a requirement of licence reinstatement or as guidance by the Courts/ Lawyer.

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<sup>6</sup> Correspondence with author, June 2018.

<sup>7</sup> See also [Waters, 2017](#) for more information on youth and drink driving interventions.

<sup>8</sup> Correspondence with author, June 2018.

Table 2: Total OFTR Participant Age Groups and Referral Source by Percentage

Characteristic	Percentage %
<b>Ages</b>	
16-19	1
20-21	4
22-24	10
25-29	16
30-34	14
35-39	14
40-44	14
45-49	12
50 plus	15
<b>Referral Source</b>	
Court	33
NZTA	28
Lawyer	24
Harmony Trust <sup>9</sup>	7
Self/AOD	3
AODTC <sup>10</sup>	2
CADS <sup>11</sup>	2
Other	1

Pre and Post group screening of each participant is completed before and after the programme using the following screens:

AUDIT (Alcohol Use Disorders Identification Test - pre group only)<sup>12</sup>

LDQ (Leeds Dependency Questionnaire - pre group only)

RCQ (Readiness to Change Motivational Screen)

RODD<sup>13</sup> (Risk of Drink Driving - a 12 question scale to assess change in drink driving risk between start and end of group participation).

A previous evaluation of the OFTR 10hr programme ([Dawes, 2010](#)) showed improvement between pre and end of programme regarding scores on the RCQ screen and the RODD questionnaire.

There were limited data on screens available for the OFTR participants (n= 611). As is shown in [table 3](#) (below) Just over 40 per cent of the OFTR participants are recorded as having no alcohol dependence and just over half as having a low level of alcohol dependence. Just over 6 per cent of the total OFTR participants record a medium to high level of dependence for the LDQ (see [figure 1](#) for screen scores information).

[Table 3](#) (below) shows that a large percentage record a low score for risk of future drink driving, as indicated by their RODD scores with 25 per cent scoring medium to high risk of future drink driving.

<sup>9</sup> Referred by Harmony Trust other services.

<sup>10</sup> Alcohol and Other Drug Treatment Courts. For more information see [Waters, 2011](#)

<sup>11</sup> Community Alcohol and Drug Services

<sup>12</sup> Not included in this study.

<sup>13</sup> See Appendix 1 for example of the RODD.

The majority of the total participants indicated that they are at the 'action' stage in the trans theoretical model of change ([Prochaska & Diclemente, 1984](#)) as reflected in their RCQ scores ([table 3](#)).

*Table 3: Screen Scores for Total OFTR Participants by Percentage*

	No Dependence %	Low %	Medium %	High %
LDQ	41	52.5	5.5	1
RODD		75	16	9
		Pre Contemplation	Contemplation	Action
RCQ		2.7	6.7	90.6

*Figure 1: LDQ, RODD and RCQ Scoring Information*

<b>Scoring for the LDQ (Leeds Dependence Questionnaire)</b>
0 No dependence
1–10 Low to moderate dependence
11–20 Moderate to high dependence
21–30 High dependence
<b>Scoring for the RODD (Risk of Drink Driving)<sup>14</sup></b>
12-24- Low to moderate risk
25-36- Moderate to high risk
30 plus- High risk
<b>Scoring for RCQ (Readiness to Change)<sup>15</sup></b>
P = pre contemplation
C =Contemplation
A = Action

Questionnaires and screens are utilised at the start and end of the programme, though no further follow up is carried out after participants complete/exit the programme.

<sup>14</sup> Due to the scoring method of this questionnaire participants can be represented in both the moderate to high and high risk categories.

<sup>15</sup> Pre-contemplation - In this stage, people do not intend to take action in the foreseeable future (defined as within the next 6 months). People are often unaware that their behaviour is problematic or produces negative consequences. People in this stage often underestimate the pros of changing behaviour and place too much emphasis on the cons of changing behaviour. Contemplation - In this stage, people are intending to start the healthy behavior in the foreseeable future (defined as within the next 6 months). People recognize that their behaviour may be problematic, and a more thoughtful and practical consideration of the pros and cons of changing the behaviour takes place, with equal emphasis placed on both. Even with this recognition, people may still feel ambivalent toward changing their behaviour. Action - In this stage, people have recently changed their behaviour (defined as within the last 6 months) and intend to keep moving forward with that behaviour change. People may exhibit this by modifying their problem behaviour or acquiring new healthy behaviours.

(<http://sphweb.bumc.bu.edu/otlt/MPHModules/SB/BehavioralChangeTheories/BehavioralChangeTheories6.html>)

## Evaluation Procedure

This study involves the comparison of reoffending for drink driving offences over a three year period. Whilst the main purpose of the evaluation was to gauge the efficacy of the OFTR 20 hour programme (as the 10 hr programme has not been active since 2013) reoffending data is also provided for the 10 hour OFTR participants. The study includes OFTR 10/20 hour participants (including an Intention To Treat group that did not complete the full 20 hour programme) and matched comparison groups (who did not attend OFTR). The 20 hour programme is further broken down by all participants who successfully completed the full programme. Also included is reoffending data for all 'other' drink drive offenders who also were not OFTR participants. The study period is July 2009 – March 2015.<sup>16</sup> Programme Participant data was gathered by RIDNZ from the programme providers. The matching and reoffending analysis was carried out by analysts at the Ministry of Justice who also supplied the previous offence data. The matched comparison group has been created based on the same predicted probabilities of being on the OFTR programme (to nearest 2 decimal places) and same year of charge outcome date/programme end date, from the pool of all 'other' drink driving offenders, with up to 3 matches per OFTR offender.<sup>17</sup> Also included is data on all individuals in the relevant districts of New Zealand who had a drink driving offence between 2009 and 2015 who were identified from court records from the Ministry of Justice Case Management System (n=62,878). Fifteen of the OFTR 20 hour participants completed the first 10 hours and at least 2 of the follow up modules but did not complete the entire programme. These participants have been included in the OFTR 20 hour results as an Intention To Treat (ITT) group.

As mentioned earlier the programme is delivered in two formats: a 10hr and 20hr programme. Both groups were matched to include a number of both demographic and previous offending variables (drink driving/other traffic/non-traffic offending). Research suggests that consideration of criminal history may be important when assessing the impact of intervention and treatment strategies for drink drivers ([Nochajski, Miller, Wieczorek & Whitney, 1993](#)). To accomplish this as much data as was able to be gathered regarding criminal history was included in this study. [Palk et al](#) (2015, page 8) also comments that:

*'Ideally, an adequate evaluation framework should include a random sample of drink drivers subjected to a rehabilitation intervention compared with a control group that has been randomly selected after matching of driver characteristics and offence history. It would also be very valuable to obtain the prior drink driving history and other criminal events for the intervention and control group.'*

Criteria for inclusion in the analysis for both the treatment and matched control groups were as follows:

- (1) completed a drink driving course for OFTR offenders OR for 'other' DD (Drink Driving) offenders (including the matched control group which were drawn from all other DD offenders) had a finalised case from 1 July 2009 to 1 March 2015) AND
- (2) a proved DD offence from the list of offences for OFTR offenders AND
- (3) which was the lead offence in the case AND
- (4) the offender was aged 17 or above AND

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<sup>16</sup> There were five initial courses (3 in 2008 and 2 in early 2009) that were not included in this study. This was to allow for any implementation or logistical issues.

<sup>17</sup> There were a total of 17 non matches.

(5) pleaded guilty if not on OFTR programme AND

(6) charged in Greater Auckland, Waikato, Eastern, or Central Police Districts AND

(7) excludes those receiving a prison sentence of more than 6 months

For the purposes of this analysis, all charges for a person on the same charge outcome date are counted as a case. The offence associated with each case is the most serious for that case.

Reoffending for a drink driving offence is based on the time when the next drink driving offence occurred, and are only counted if they were finalised up to:

- 1 year and 183 days after the programme end date for 12 month reoffending rates,
- 2 years and 183 days after the programme end date for 2 year reoffending rates
- 3 years and 183 days after the programme end date for 3 year reoffending rates

A matched comparison group has been created based on the same predicted probabilities of being on the OFTR programmes (to nearest 2 decimal places) and same year of charge outcome date/programme end date, from the pool of all 'other' drink driving offenders, with up to 3 matches per OFTR offender. Predicted probabilities that an offender reoffended (proved outcome) for a drink driving offence are based on probabilities from logistic regression analysis, by key predictor variables (age, gender, type of offence, concurrent offences, previous offending history etc.), for all drink driving offenders analysed (See Results [page 23](#)). Offending history only relates to imprisonable offences, and includes all offences going back a maximum of 30 years.

After selecting those with similar penalty/demographic characteristics to OFTR participants the control groups were matched to a 3:1 ratio and also included were all 'other' drink drivers from the same timeframe with unmatched data. ([Table 4](#) below).

*Table 4: Total Numbers of Study Participant Groups*

Offender group					
OFTR - 10 hours	Matched Comparison - 10 hours	OFTR - 20 hours	Matched Comparison - 20 hours	Other DD Offenders	Total
363	1063	129	370	63007	64932

OFTR participants were identified and excluded from the comparison groups. In total 34 per cent (n=492) of OFTR participants were able to be identified who conformed to the inclusion criteria.

Of the initial 1437 participants, 297 (21 per cent) had no matching data in the CMS. This left 1140 participants for inclusion in the study. After removal of those participants that did not meet the criteria for inclusion, or those that could not be matched, left 492 participants for inclusion in the study ([table 5](#) below).

*Table 5 : Breakdown of Participants Available for Study by Exclusion Criteria*

<b>Criteria</b>	<b>Number available</b>	<b>Number removed</b>
(0) Original number of offenders matched to CMS	1140	
(1) Maximum time to complete programme after first court hearing date of 12 months and maximum time to complete programme after charge outcome date of 9 months	606	534
(2) Had a finalised case from 1 July 2009 to 1 March 2015)	582	24
(3) Had a proved drink driving offence from the list of offences for OFTR offenders	569	13
(4) which was the lead offence in the case	559	10
(5) the offender was aged 17 or above	559	0
(6) pleaded guilty if not on OFTR programme	559	0
(7) charged in Greater Auckland, Waikato, Eastern, or Central Police Districts	523	36
(8) excludes those receiving a prison sentence of more than 6 months	510	13
(9) Final dataset – excluding offenders with demographic/offending characteristics not matched with other drink driving offenders (through propensity score matching)	<b>492</b>	<b>18</b>

The majority of the participants were excluded due to Maximum time to complete programme after first court hearing date and the Maximum time to complete programme after charge outcome date exclusion criteria.

## Demographics

The data matching across the main demographics gender ([table 6](#)) Ethnicity ([table 7](#)) and age groups ([table 8](#)) were consistent between both the OFTR participants and their control groups. There is a slight difference between the age group ([table 8](#)) matchings for the OFTR 20hr participants and their controls, this is due to the low numbers involved and the need to prioritise offending data.

Participants and their controls are mostly male (88 per cent) ([table 6](#))

*Table 6: Study Participants by Percentage of Gender*

Gender	Percent of Total				
	OFTR - 10 hours	Matched Comparison - 10 hours	OFTR - 20 hours	Matched Comparison - 20 hours	Other DD Offenders
Female	13	13	11	10	25
Male+	87	87	89	90	75
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

The study participants and their controls are well matched regarding ethnicity ([table 6](#)) and are representative of the same data on all programme participants ([table 1](#))

*Table 7: Study Participants by Percentage of Ethnicity*

Ethnic group	Percent of Total				
	OFTR - 10 hours	Matched Comparison - 10 hours	OFTR - 20 hours	Matched Comparison - 20 hours	Other DD Offenders
Maori	23	24	22	30	31
Pasifika	14	16	11	7	13
European/Other	62	60	65	63	51
Unknown	1	1	2	0	5
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

As is shown in [table 8](#) (below) there are more 22-39 year olds in the OFTR 20 hour treatment group and more 40-50+ ages in the OFTR 20 hour matched comparison group. As previously mentioned the matching was prioritised by previous offending data.

*Table 8: Study Participants by Percentage of Age Groups*

Age group	Percent of Total				
	OFTR - 10 hours	Matched Comparison - 10 hours	OFTR - 20 hours	Matched Comparison - 20 hours	Other DD Offenders
17	0.0	0.5	0.0	0.0	1.9
18	0.3	0.6	0.0	0.0	4.1
19	2.2	2.0	0.8	0.0	5.3
20-21	5.5	5.3	3.1	0.0	9.3
22-24	7.7	5.6	5.4	0.0	13.2
25-29	16.3	15.0	13.2	2.2	16.1
30-34	12.7	11.5	17.1	3.8	11.1
35-39	12.9	11.9	12.4	9.2	9.7
40-44	14.0	15.4	15.5	34.9	9.1
45-49	11.3	12.0	15.5	24.6	7.6
50 plus	17.1	20.2	17.1	25.4	12.6
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>



The matching data for individual years ([table 9](#)) and Police districts ([table 10](#)) is also very close as there was a need to take into account differing Policing levels the groups were closely matched to take into account any increase/decrease in Police breath testing activities that may have occurred between 2009-2015.

*Table 9: Study Participants by Percentage of year*

Year	Percent of Total				
	OFTR - 10 hours	Matched Comparison - 10 hours	OFTR - 20 hours	Matched Comparison - 20 hours	Other DD Offenders
2009/10	15	15	0	0	23
2010/11	18	18	0	0	20
2011/12	21	21	0	0	18
2012/13	28	28	8	8	16
2013/14	17	16	56	56	15
2014/15	2	2	36	36	8
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

There were a higher percentage of OFTR 20 hour participants detected in the Auckland Police District than their control group. The control for different Police Districts was important as some Police districts would have differing enforcement resource, for example rural and urban districts ([table 10](#)).

*Table 10 : Study Participants by Percentage of Police District*

Police District	Percent of Total				
	OFTR - 10 hours	Matched Comparison - 10 hours	OFTR - 20 hours	Matched Comparison - 20 hours	Other DD Offenders
Waitemata	19.0	21.3	23.3	25.1	17.4
Auckland City	36.9	33.7	41.1	27.8	18.3
Counties/Manukau	25.1	25.2	9.3	13.0	21.8
Waikato	3.3	3.9	26.4	29.7	15.6
Eastern	2.2	3.0	0.0	1.4	12.4
Central	13.5	13.0	0.0	3.0	14.6
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

## Offending Demographics

Of high relevance when carrying out the data matching were previous offending characteristics. This included not only previous drink driving offences ([table 11](#)) but also a wide range of other offending data including:

- Repeat drink drive offending ([table 12](#))
- Previous charges ([table 13](#))
- Previous Custodial Sentences ([table 14](#))
- ANZSOC Division Convictions([table 15](#))
- Maximum Sentences([table 16](#))
- Previous Prosecutions([table 17](#))
- Maximum Penalties([table 18](#))

The majority of offenders, across treatment and control groups had 2 or 3 previous drink driving convictions whilst over 50 per cent of the total drink drivers group were represented by first time detected drink drive offenders. Whilst the programme does include first time detected offenders (usually those with high BAC levels) the majority are repeat offenders ([table 11](#)). Previous research has shown that over 50 percent of detected offenders have an historical drink driving offence ([Waters, 2012](#)).

*Table 11: Study Participants by Percentage of Historic Previous Drink Driving Convictions*

Number of previous drink driving charges	Percent of Total				
	OFTR - 10 hours	Matched Comparison - 10 hours	OFTR - 20 hours	Matched Comparison - 20 hours	Other DD Offenders
0	2.2	6.0	3.9	1.9	56.0
1	11.0	8.5	8.5	4.1	21.6
2	33.3	30.4	26.4	21.1	10.6
3	17.6	21.7	23.3	25.7	5.2
4	14.0	12.8	12.4	16.2	2.9
5	6.6	9.5	7.8	11.9	1.7
6	4.7	5.9	5.4	5.9	0.9
7 plus	10.5	5.2	12.4	13.2	1.2
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Both the treatment and control groups consisted of for the greater part, repeat offenders (all offences). For nearly 40 per cent of the other drink driver offender group the drink driving offence was their first detected offence. ([Table 12](#), below).

*Table 12: Study Participants by Percentage of Repeat Offenders - All offences*

Repeat Offender?	Percent of Total				
	OFTR - 10 hours	Matched Comparison - 10 hours	OFTR - 20 hours	Matched Comparison - 20 hours	Other DD Offenders
First Offender	1.9	4.6	3.1	0.8	38.2
Repeat Offender	98.1	95.4	96.9	99.2	61.8
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Both the control and treatment groups are evenly matched with regards to previous charges ([table 13](#)). The 'other' drink driver group had a higher percentage of those with one previous conviction whilst a larger percentage of the study groups had 2 previous charges.

*Table 13: Study Participants by Percentage of Previous Charges*

Number of charges	Percent of Total				
	OFTR - 10 hours	Matched Comparison - 10 hours	OFTR - 20 hours	Matched Comparison - 20 hours	Other DD Offenders
1	71.3	74.4	72.9	76.2	86.1
2	17.9	17.4	20.9	17.8	10.0
3	6.6	5.1	2.3	3.2	2.2
4	2.2	1.2	3.1	0.8	0.8
5	0.6	0.9	0.0	0.8	0.4
6	0.6	0.4	0.0	0.0	0.2
7	0.3	0.3	0.8	0.5	0.1
8	0.0	0.2	0.0	0.3	0.1
9	0.0	0.1	0.0	0.3	0.0
10 plus	0.6	0.0	0.0	0.0	0.1
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Previous convictions by ANZSOC (Australian and New Zealand Standard Offence Classification) category division ([table 14](#)) were consistent among all groups with the largest ANZSOC category of offending being road traffic offences.

*Table 14: Study Participants by Percentage of ANZSOC Division Convictions*

ANZSOC Division	Percent of Total				
	OFTR - 10 hours	Matched Comparison - 10 hours	OFTR - 20 hours	Matched Comparison - 20 hours	Other DD Offenders
Homicides	0.0	0.1	0.0	0.0	0.0
Dangerous acts	0.6	0.4	1.6	0.0	0.3
Road traffic	95.3	97.0	93.0	94.6	97.9
Against justice	4.1	2.5	5.4	5.4	1.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

The OFTR 10 hour control and treatment groups are evenly matched by the number of previous custodial sentences though the OFTR 20 hour treatment group contain a higher percentage of those with no previous custodial sentences when compared to their control group. The 'other' drink drive offenders have a very low percentage of previous custodial sentences ([table 15](#) below).

*Table 15: Study Participants by Percentage of Previous Custodial Sentences*

Number of previous custodial sentences	Percent of Total				
	OFTR - 10 hours	Matched Comparison - 10 hours	OFTR - 20 hours	Matched Comparison - 20 hours	Other DD Offenders
0	80.2	80.5	73.6	68.1	90.6
1	11.6	10.4	15.5	14.9	4.4
2	3.9	4.2	3.1	4.6	1.9
3	1.7	1.8	3.1	3.0	1.0
4	0.6	0.8	2.3	3.2	0.6
5 plus	2.2	2.3	2.3	6.2	1.5
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

There is an even distribution across all control and treatment groups regarding the percentages of maximum sentences. For this cohort of offender the highest percentage maximum sentences include community work and community detention. The 'other' drink drive offenders category consists for the greater part of monetary sanctions followed by community work ([table 16](#) below).

*Table 16: Study Participants by Percentage of by Maximum Penalties*

Maximum penalty	Percent of Total				
	OFTR - 10 hours	Matched Comparison - 10 hours	OFTR - 20 hours	Matched Comparison - 20 hours	Other DD Offenders
Imprisonment	5.5	3.2	1.6	1.9	1.5
Home Detention	11.0	8.4	7.0	7.0	1.8
Community Detention	26.4	22.8	25.6	29.5	4.8
Intensive Supervision	4.1	2.7	12.4	4.1	0.9
Community work	33.6	37.9	36.4	35.1	21.3
Supervision	7.4	3.1	10.1	3.2	2.0
Monetary	10.5	20.7	6.2	18.6	66.2
Deferment	0.0	0.1	0.0	0.0	0.0
Other	0.8	0.9	0.8	0.5	1.2
No sentence recorded	0.0	0.1	0.0	0.0	0.1
<b>Convicted</b>	<b>99.4</b>	<b>99.9</b>	<b>100.0</b>	<b>100.0</b>	<b>99.6</b>
Discharge w/o conviction	0.6	0.1	0.0	0.0	0.4
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

As with the previous data there is an even distribution of previous prosecutions amongst the controls and treatment groups of both programmes whilst the 'other' category of drink drive offenders, as observed in the previous tables, are made up for the greater part by those with no previous prosecutions ([table 17](#) below).

*Table 17: Study Participants by Percentage of Previous Prosecutions*

Number of previous prosecutions	Percent of Total				
	OFTR - 10 hours	Matched Comparison - 10 hours	OFTR - 20 hours	Matched Comparison - 20 hours	Other DD Offenders
0	2.2	6.0	3.9	1.9	56.0
1	11.0	8.5	8.5	4.1	21.6
2	33.3	30.4	26.4	21.1	10.6
3	17.6	21.7	23.3	25.7	5.2
4	14.0	12.8	12.4	16.2	2.9
5	6.6	9.5	7.8	11.9	1.7
6	4.7	5.9	5.4	5.9	0.9
7	4.7	2.6	3.1	7.0	0.5
8	2.8	0.8	3.9	2.4	0.3
9	1.1	0.9	0.0	2.2	0.2
10 plus	1.9	0.8	5.4	1.6	0.2
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Due to incomplete records only 205 OFTR study participants had screens data available. As is shown in [table 18](#) (below) around a third of the OFTR study participants are recorded as having no alcohol dependence (as measured by the LDQ), this is just over ten per cent less than the total OFTR participants as shown previously in [table 3](#). As is shown in [table 18](#) (below) over 60 per cent of the OFTR study participants have a low level of alcohol dependence (as indicated by their LDQ score), with 10 per cent of the OFTR study participants recording a medium to high level of dependence for the LDQ, this is slightly higher than the percentage for the total OFTR participants as seen previously in [table 3](#).

Similarly, [table 18](#) (below) shows a large percentage record a low score for risk of future drink driving with similar RODD scores when compared to the total OFTR participants ([table 3](#)). Again, as previously shown for the total OFTR participants ([table 3](#)), the majority of OFTR study participants indicate that they are at an action stage in the trans theoretical model of change as reflected in their RCQ scores ([table 18](#) below) this is also similar data when compared to the total OFTR participants seen previously in [table 3](#).

*Table 18: Screen Scores of OFTR study participants by Percentage*

	No Dependence %	Low %	Medium %	High %
LDQ	29	61	9	1
RODD		70.5	18.5	11
		Pre Contemplation	Contemplation	Action
RCQ		1.4	7.4	91.2

As is shown in [table 19](#) (below) the study participants are mostly represented by Court and NZTA referrals. Similar data was shown previously for the total OFTR participants ([table 2](#)). However, there are less referrals represented by lawyer for the OFTR study participants than the total OFTR participants<sup>18</sup>.

*Table 19 : OFTR Study Participants Referral Method by Percentage*

Referral Source	%
Court	41
NZTA	37
Lawyer	8
Harmony	1
Self/AOD	4
AODTC	4
CADS	4
Other	1

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<sup>18</sup> See Discussion. [Page 27](#).

# Results

## Reoffending

The rates for individual years in each table were not compared due to small numbers and differences in predicted rates of reoffending between OFTR reoffenders and matched offenders. Reoffending rates for all years combined, however, are directly comparable as the rates for OFTR reoffenders have been risk-adjusted, based on the difference between the predicted reoffending rates between OFTR reoffenders and matched offenders.

Of the 192 participants of the OFTR 20 hour programme 7.2 per cent had been detected reoffending within the follow-up period of up to 3 years with 8.4 per cent of the matched control group detected reoffending within the same timeframe ([table 20](#) below).

*Table 20: Reoffending Rate Percentages OFTR 20 hour and Controls - 3 Years*

Reoffending rate (%)					
1 year		2 years		3 years	
OFTR 20hr	Matched Comparison	OFTR 20hr	Matched Comparison	OFTR 20hr	Matched Comparison
2.6	1.1	4.6	4.9	7.2	8.4

All 'other' drink drivers also had a 10.6 per cent detected reoffending within the same timeframe ([table 21](#) below). This equates to 14.3 per cent less detected reoffending for OFTR 20 hour participants when compared to the matched comparison control group and 32.1 per cent less detected reoffending when compared to the unmatched 'other' drink drivers group. OFTR 20 hour reoffenders were more likely to be detected reoffending in year 1 (365 of re-offenders).

*Table 21: Reoffending Rate Percentages 'Other' Drink Drivers - 3 Years*

Reoffending rate (%)		
1 year	2 years	3 years
3.2	7.2	10.6

However fifteen of the 20 hour group sample did not complete the full programme, but the initial 10 hours of the 20 hour programme and two to four hours of the 10 hour weekly component. These have been included in the data as an intention to treat (ITT) group. Removal of this ITT group and their controls improved the effect on reduced reoffending to 20.2 per cent for the OFTR 20 hour graduates when compared to the remaining control group ([table 22](#) below). The 20hr programme completers were twice as likely to be detected reoffending in the first year.

Table 22: Reoffending Rate Percentages OFTR 20 hour Completers and Controls - 3 Years

Reoffending rate (%)					
1 year		2 years		3 years	
20hr Completers	Matched Comparison	20 hr Completers	Matched Comparison	20hr completers	Matched Comparison
2.6	1.3	5.3	5.7	7.5	9.4

There were a total of 59 offenders detected reoffending for the follow up period of the study. Fifty two of these were from the OFTR 10 hour programme. Of the 363 participants of the OFTR 10 hour programme, 14.5 per cent had been detected reoffending within the follow-up period of up to 3 years with 10.6 per cent of the matched control group detected reoffending within the same timeframe ([table 23](#) below). As with the 20 hour programme completers and participants, the 10 hour programme participants were almost twice as likely to be detected reoffending in the first year.

Table 23: Reoffending Rate Percentages OFTR and Controls - 3 Years

Reoffending rate (%)					
1 year		2 years		3 years	
OFTR 10hr	Matched Comparison	OFTR 10hr	Matched Comparison	OFTR 10hr	Matched Comparison
4.4	2.5	9.9	6.1	14.5	10.6

As mentioned previously 10.6 per cent of all drink drivers had a detected re-offence within the same timeframe. This equates to 36 per cent more detected reoffending for the 10 Hour treatment group when compared to the matched comparison and the unmatched all 'other' drink driver groups.

## Detected Reoffenders

The OFTR detected reoffenders display characteristics that closely match both the OFTR study participant group and the total OFTR participant demographic ([table 24](#) below). These characteristics have been previously reported for this cohort of offender in New Zealand ([Waters, 2013a](#)). These include that offenders are more likely to be male, will be represented by around 30 per cent Maori with a large percentage being in the 25-29 year old age group. The larger percentage of the OFTR detected reoffenders are represented by the 50 plus age group (17 per cent) this is consistent with the percentage of this age group represented in both the 10 hour and 20 hour study programme participants ([table 7](#)) as well as total OFTR participants ([table 2](#)).

Similarly the previous drink drive offending data for the detected OFTR reoffenders ([table 24](#)) is consistent with the same data for all OFTR study participants ([table 2](#)) and total OFTR participants ([table 7](#)), with the greatest percentage being those with 2 previous convictions.

*Table 24: Detected OFTR 10 and 20 Hour Programme Reoffenders Demographics and Previous Drink Drive Convictions by Percentages*

<b>Gender</b>	<b>%</b>
Male	91.5
Female	8.5
<b>Ethnicity</b>	<b>%</b>
European/Other	61
Maori	27
Pasifika	12
<b>Age Groups</b>	<b>%</b>
19	3
20-21	12
22-24	12
25-29	15
30-34	9
35-39	10
40-44	12
45-49	10
50 plus	17
<b>Previous Drink Driving Convictions</b>	<b>%</b>
0	1.7
1	10.2
2	37.3
3	15.3
4	8.5
5	6.6
6	5.1
7 plus	15.3



As is shown in [table 25](#) (below), those referrals that came from a lawyer were over represented in the reoffending data. With only 8 per cent of the OFTR participant study group being referred by lawyer but with 38 per cent being represented in the detected reoffending data. Conversely those referred by NZTA, who make up a large percentage of the study group (37 per cent [table 18](#)) are considerably underrepresented in the detected OFTR reoffending data. The Court referral path shows a slightly higher percentage data for the OFTR detected reoffenders ([table 25](#) below) when compared to both the total OFTR participants (37 per cent, [table 2](#)) and the OFTR study participants (41 per cent, [table 18](#)).

*Table 25: Detected Reoffenders Percentage by Referral Source*

Referral Source	%
Court	47
NZTA	4
Lawyer	38
Harmony	2
Self/AOD	2
AODTC	2
CADS	5

## Offenders Screen Scores

Regarding the screens data, around a fifth of the OFTR detected reoffenders are recorded as having no alcohol dependence, this is almost 75 per cent less than the percentage amount for the total OFTR participants as seen in [table 3](#) and nearly 50 per cent less than the OFTR study participants ([table 17](#)). As is shown in [table 24](#) (below). Over 70 per cent of the OFTR detected reoffenders reported a low level of alcohol dependence (as indicated by their LDQ score), with 7 per cent of the OFTR detected reoffenders recording a high level of dependence for the LDQ, this is higher than the same data for the total OFTR participants (1 per cent, [table 3](#)) and the OFTR study participants (1 per cent [table 17](#))

Just over 40 per cent of the OFTR detected reoffenders record a low score for risk of future drink driving this is less than both the total OFTR participants (75 per cent [table 3](#)) and the OFTR study participants (70.5 per cent, [table 17](#)). There are a greater percentage of reoffenders with a high score for risk of future drink driving as indicated by their RODD score (27 per cent [table 26](#) below) than both the total OFTR participants (9 per cent [table 3](#)) and the OFTR study participants (11 per cent, [table 17](#)). As is shown in [table 26](#) (below) and similarly when compared to the total OFTR study participants ([table 17](#)) and the total OFTR participants ([table 3](#)), the majority of reoffenders indicate that they are at an action stage in the trans theoretical model of change as reflected in their RCQ scores.

*Table 26: RODD LDQ AND RCQ Scores of Detected Reoffenders by Percentage*

	No Dependence %	Low %	Medium %	High %
LDQ	20.5	70.5	2	7
RODD		41	32	27
		Pre Contemplation	Contemplation	Action
RCQ		2.6	7.9	89.5

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## Discussion

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Whilst the number of OFTR 20 hour participants involved in this study were low, the findings suggest that the 20hr programme appears to be an effective intervention for repeat and high level first time detected drink drivers. Participants who completed the full programme were 20 per cent less likely to reoffend over the 3-year period when compared with the control groups (7.5 per cent recidivism rate among 20hr programme participants compared to 9.4 for the matched control group, and 10.6 per cent unmatched 'other' drink drive offenders among the controls). These findings are consistent with a previous matched control evaluation of a similar duration and content DDR programme ([Mills et al, 2008](#)). This may be due to the course content: knowledge, attitudes and behaviours related to drink driving; and skills developed through OFTR participation as well as retention of participants for the full programme duration. Of note is the greater rate of re-offending for OFTR programme graduates in the first year post group, indicating that if OFTR graduates are going to re-offend there is a greater likelihood this will be in the first year post group. A possible explanation is these 'early re-offenders' represent the more resistant or 'hard-core' drink drivers (drinkers) who, while they have graduated, have not engaged as well taken on board the 'zero drink driving' message.

However, an important caveat of this study is that the numbers involved are quite low. From a pool of participants (n=1437) only 492 (34 per cent) were able to either be identified or matched the inclusion criteria. A certain amount were unable to be matched to the CMS data and the MOJ informs that this is usually the case in that they usually can match around 70 per cent of offenders in their data. The majority of exclusions were related to maximum time to complete programme after first court hearing date and the maximum time to complete programme after charge outcome date exclusion criteria.

It is worth noting that the previous OFTR 10 hour programme (by itself) appears to be an ineffective intervention, with both the control group and all drink drivers outperforming the treatment group. Brief intervention for this cohort of drink drivers, at least when reviewing the reoffending data for the treatment and control groups, does not appear to achieve the desired outcomes of reduced reoffending. Without review of the comparison control group and just using reoffending data alone the data suggests a high level of non-reoffending, but when matched to controls the poor outcome is revealed. Future evaluations should not rely on just post programme detected reoffending alone without the use of any comparison control group.

The Ministry of Health (MoH) provides funding for further DDR programmes throughout NZ and it was not possible to identify those who may have participated in a DDR programme delivered by a different provider elsewhere in NZ. So there was no way to identify if the control group had received any DDR treatment elsewhere as the Ministry of Justice Case Management System does not include information regarding previous Court referral DDR participation. An evaluation of all the programmes available in NZ (the MoH funded programmes at least) would help to control for those who undertook programmes elsewhere indeed an evaluation of all programmes funded by the MoH would allow for the isolation of those who participated in different MoH funded DDR programmes. Considering the reduced reoffending data of those who did the full OFTR 20 hour programme, further evaluations should be undertaken with a greater treatment/control groups to confirm these observations into the future.

A considerable limitation to previous drink driver rehabilitation programme evaluation research is that it has been mainly based on the repeat offending rates of those who have completed a programme or their involvement in drink driving related crashes ([Freeman et al, 2005](#)). Since most

programmes are only part of an intervention, along with licence sanctions and other conditions imposed, re-offending rates may not reflect the effectiveness of the programme ([Sheehan et al, 2005](#)). Low detection rates may also impact on the use of re-offending as an evaluation measure ([Mills et al, 2008](#)). It has also been reported that in New Zealand it requires 375 instances of crash free drink driving to generate just one conviction ([Miller & Blewden 2001](#), page2).

Reduced breath tests since 2014 have been reported by [Waters \(2017\)](#) and [Howard \(2018\)](#) with the latter reporting significant reductions in Police breath testing activities throughout NZ. The majority of the reoffenders had two previous drink driving convictions.

Regarding the referral pathways it is interesting that lawyer referrals made up such a small percentage of the OFTR study group yet were over represented in the offending data. One possible explanation for this is that the lawyer referrals were made to provide a judge with evidence that the offender had made attempts to address their drink driving prior to sentencing in the hope of a more favourable sentence outcome. It may be that the lawyer referrals are predominately repeat offenders who may have incurred a lengthy custodial sentence and therefore were included in the exclusion criteria. As mentioned in the methodology all the exclusion criteria were also applied to the matched control group. The NZTA referrals were underrepresented in the reoffending data. For the most part these NZTA referrals would have come from those having to participate in the course as a requirement of licence reinstatement. Treatment when combined with licence disqualification has been previously reported as the most effective measure in reducing reoffending (Yu and Brisco as cited in [Mills et al 2008](#)). This may indicate that those who apply for their licence to be reinstated are more dedicated to behaviour change and want to maintain driving in a legal manner (with a licence), or that possibly the licence is desired for employment and/or identification purposes.

The main bulk of the reoffenders were referred by the Courts. The programme providers report<sup>19</sup> that there is usually a lot of resistance to programme engagement from this cohort (from a feeling that they have been forced to undertake the programme). The lawyer and Court referrals would appear to be the referral groups that require the highest attention as these are possibly the most dangerous offenders.

The data from screens appears to indicate that the detected OFTR reoffenders had a higher percentage of high risk alcohol dependence and similarly a high risk of reoffending as indicated by their RODD scores. The RODD appears to be a good predictor of future drink drive offending. However, the RCQ data indicates that the OFTR detected reoffenders scored similarly to both the total OFTR participants and the OFTR study group, the majority indicating that they were in the action stage. This may be evidence of clients 'faking good' to present to group leaders signs of change that may work in their favour, though the use of the 'Readiness to Change Questionnaire' ([Heather & Rollnick, 1992](#)) has been proven to be a good predictor of recent self-reported drink driving ([Wells-Parker et al, 1998](#)). No information by way of follow up was available regarding the RCQ for recent self-reported drink driving or any of the screens/questionnaires involved during the programme; this may be a matter that needs addressing by the OFTR programme providers. However, it has been observed that the validity and reliability of the measurement tools used in drink driver rehabilitation remains uncertain ([Freeman et al, 2007](#)).

The use of screens to measure self-efficacy (need for offenders to believe in their ability to succeed at changing their behaviour) to change drinking and drink driving would also be a source of data for programme evaluation purposes. Research has noted that Individuals with low self-efficacy may feel

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<sup>19</sup> Correspondence with author, September 2018.

overwhelmed with treatment and feel unable to implement the strategies taught due to a sense of their own incapability ([Chambers et al, 2008](#)).

As reported by [Waters \(2012\)](#) it would be desirable to follow up on other lifestyle changes. Other aspects that could be taken into consideration to evaluate programme effectiveness may include health, alcohol use, lifestyle and attitudinal changes ([Ferguson et al, 1999](#)). Programmes that have focused on these lifestyle issues have been shown to have a positive effect overall ([Wells-Parker et al, 1995](#)).

The present study did not include data on changes in alcohol consumption over time or follow up data regarding the questionnaires and screens used in the programme. The providers do not carry out any longer term follow up information so the study could not include the use of self-report to complement the reoffending data and examine the impact of OFTR on knowledge, attitudes and behaviours related to drink driving through OFTR participation. The follow up process of participants has been recognized to be a formidable challenge in the data gathering procedure for evaluation ([Freeman et al, 2004](#)). Information on Blood/Breath Alcohol Concentration (BAC) levels of drink driving offending was not available for this study, though [Kunitz et al, \(2002\)](#) identified the BAC as a significant predictor of recidivism.

As reported earlier the OFTR providers adopt the philosophy of taking ‘all comers’ to their programme. This attitude may well be self-defeating and the providers should ensure more rigorous screening of their potential participants for inclusion into the programme. This could either result in referral to other providers for other treatment (e.g. alcohol dependence) or it may require the providers to construct another level of programme in a tiered response as proposed by [Waters \(2015\)](#). It may be that the 10 hour programme whilst seemingly not effective for the repeat drink driver offenders may well be suited to first time detected offenders and both the MoJ and the MoH should consider the possibility of a pilot programme aimed at this cohort of offender. Indeed since July 1<sup>st</sup> of this year (2018) New Zealand has introduced a mandatory<sup>20</sup> interlock programme for repeat and high level first time detected drink drive offenders. At least one of the study participants was referred by NZTA whilst on the interlock programme<sup>21</sup> and it would seem an appropriate time to investigate the construction of an Interlock Support Programme, including group rehabilitation, aimed at those drivers mandated to interlock; thus enabling them to practice newly acquired skills whilst able to drive in a safe and responsible manner whilst adhering to the conditions of their Alcohol Interlock Licence (AIL).

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<sup>20</sup> For more information go to: <https://www.nzta.govt.nz/driver-licences/driving-offences-and-penalties/alcohol-sentencing/alcohol-interlock-programme/> Last Accessed October 3, 2018.

<sup>21</sup> Generally the interlock can only be removed if the offender has had six months free of violations before applying for removal. A violation is earned, for example, when an offender attempts to start the vehicle with alcohol on their breath, or they attempt to tamper with the interlock. The six-month violation free period can be reduced to three months if the offender obtains a satisfactory alcohol assessment which could include participation in a DDR programme.

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# Recommendations

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Whilst the numbers of participants for this study were low, and the fact that detected offending can only ever be a proxy for actual behaviour, given the detailed information regarding the matching for the control group the author is confident that the data indicates that the OFTR 20 hour programme is an effective initiative, particularly for those referrals from NZTA. There may be a need to refer those who indicate high dependence on alcohol, as indicated by their LDQ score, to a more appropriate intervention, though it remains to be seen if this cohort will react positively to DDR when under the imposition of an alcohol interlock sentence. It may be of benefit to the OFTR providers to investigate developing an Interlock support programme.

It is recommended that all 20 hour OFTR graduates continue to be evaluated to observe whether or not the 20 per cent reduction in reoffending for programme graduates, when compared to their control group, is improved upon, as well as continuing to evaluate the OFTR study group involved in this research and its associated control group.

It is further recommended to the OFTR providers, that records and data for all those mandated to the programme, whether attending or not or completing or not, be kept up to date and managed for ease of access and reference. This would include all screen scores as well as all other demographic and offending information involved in this report.

The OFTR providers should attempt to gather follow up data regarding the screens involved during the programme. The use of email and social media may provide a vehicle for this endeavor.

Other recommendations include:

- That it would be of value if the Ministry of Justice carries out research into the feasibility of gathering Court referred DDR participation data for inclusion in the CMS.
- The author suggests that any further evaluations of any DDR programmes should include a matched control group to ensure more accurate efficacy information. This will be of high relevance to the Ministry of Health who since 2012 have provided funding for DDR programmes that use established best practice ([Waters, 2012](#); [Matua Raki, 2012](#)) when conducting their own evaluations of the programmes they fund.
- Whilst the author did not believe the exclusion criteria for this study were overly stringent, it appears that 49 per cent of the participants did not meet the criteria. Detailed investigation and information of the timeframe from detection to programme start ( this being accountable for the majority of the exclusions) is necessary to achieve higher evaluation participant rates for inclusion in any further evaluations.

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## Appendix A

### Risk of Drink Driving Questionnaire

©Harmony Trust/2008/NZ/Risk of Drink Driving/Screening Tool

**RODD: Name** \_\_\_\_\_ **Date** \_\_\_\_\_

**(Please answer by circling your choice)**

**1. It is safe for me to drive after a few drinks.**

Strongly agree - agree - don't know - disagree - strongly disagree

**2. I sometimes find myself in situations where there is alcohol & I need to drive afterwards.**

Strongly agree - agree - don't know - disagree - strongly disagree

**3. I intend to avoid driving if I have been drinking any alcohol.**

Strongly agree - agree - don't know - disagree - strongly disagree

**4. Some people can drive safely after 6 standard drinks of alcohol.**

Strongly agree - agree - don't know - disagree - strongly disagree

**5. Sometimes I drink alcohol when planning to drive afterwards.**

Strongly agree - agree - don't know - disagree - strongly disagree

**6. I have a plan to help me avoid future drink-driving.**

Strongly agree - agree - don't know - disagree - strongly disagree

**7. The risks of drink-driving are not as bad as people make out.**

Strongly agree - agree - don't know - disagree - strongly disagree

**8. I sometimes drive when I know I am likely to be close to the legal limit**

**for drink-driving.**

Strongly agree - agree - don't know - disagree - strongly disagree

**9. I have trustworthy people who will support me to avoid drink-driving again.**

Strongly agree - agree - don't know - disagree - strongly disagree

**10. Our drink-driving laws in NZ are too tough.**

Strongly agree - agree - don't know - disagree - strongly disagree

**11. I sometimes drive when I know I am likely to be over the legal limit**

**for drink-driving.**

Strongly agree - agree - don't know - disagree - strongly disagree

**12. In future I will be able to separate my drinking from my driving**

**(this may be through not drinking at all/abstinence).**

Strongly agree - agree - don't know - disagree - strongly disagree

*Admin/Scoring: assign number for each question/response from 5,4,3,2,1, working from left to right, and record below.*

*ie strongly agree = 5. Exceptions are questions 3,6,9,12, which are reverse of this, ie strongly disagree is 5.*

*A) Attitude(add Q1,4,7,10): B) Behaviour(add Q2,5,8,11): C) Intention (add Q3,6,9,12):*

*For total RODD score (add A, B, C): (The higher the Score = the higher the Risk of Drink Driving)*

## Appendix B:

*Harmony Trust- Daily Alcohol (and other Drug Use) Log- to be presented weekly at OFTR group*

[illegible]



Researching Impaired Driving in New Zealand