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Increases in consumption and harms among young people in the context of alcohol policy liberalisation

A thesis presented in partial fulfilment of the requirements for the degree of Doctor of
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Abstract

Objective: To assess drinking patterns and alcohol-related harms among young people in the context of substantial liberalising alcohol policy change in New Zealand. Five studies were developed to address this objective which assessed: (i) trends in drinking patterns, alcohol-related problems and harms during the time of the liberalising policy change and (ii) specific policy changes relevant to young people in New Zealand: the lowering of the minimum purchase age, the introduction of ready to drinks and alcohol outlet density (alcohol outlets had proliferated due to the relaxation of the liquor licensing system).

Methods: General population alcohol surveys and routinely collected harms datasets were utilised. Survey measures were: typical occasion quantity, drinking frequency, heavier drinking, self-reported drunkenness, alcohol-related problems and individual demographic measures. Harms measures included: prosecutions for disorder offending, prosecutions for driving with excess breath alcohol, alcohol-involved crashes (all and fatal) and individual demographic measures. Analysis techniques utilised in Studies One through Five were as follows: quantile regression, general linear models, broken stick Poisson regression, logistic regression (and analysis of variance) and multi-level modelling. When possible the wider New Zealand population was considered in relation to young people. Young people were defined as those up to 24 years of age (inclusive).

Results: In the context of alcohol policy liberalisation young people, and in particular teenagers, were observed to experience the greatest increases in typical occasion quantities, alcohol-related problems and harms relative to other groups in the New Zealand population. Specific liberalising policy contexts relevant to young people, including the lowering of the minimum purchase age, ready to drinks and alcohol outlet

density were also associated with increased quantities consumed or increased harms among teenagers.

Conclusion: The public health problem of increased alcohol consumption and related harms among young people in New Zealand can be reduced. It will, however, take effective restrictive alcohol policy controls to achieve this.

Forward

This thesis is based on five individual, but related, published research studies undertaken during my PhD candidature. Two manuscripts are published in *Addiction*, one is *in press* at *Journal of Studies on Alcohol and Drugs* and two are published in *Drug and Alcohol Review*. These manuscripts are drawn together to form a PhD thesis fulfilling Massey University requirements.

A sixth study was undertaken as part of this thesis however, in the end, it did not fit cohesively into the theme. This study is included in Appendix 1 (published in *Addiction*).

I gratefully acknowledge the above journals for allowing these publications to be included in this thesis.

I am first author on all studies and the work I present is my own. My primary supervisor helped me to structure my arguments and statisticians undertook the SAS analysis; therefore Professor Sally Casswell and various statisticians are co-authors on the manuscripts. In one study a Geographical Information Systems analyst was also included as a co-author. Statements of the candidate's contribution to each publication are in Appendix Five.

Results from these studies were presented at scientific conferences, including several Kettil Bruun Society meetings. A presentation was also given at the Alcohol Advisory Council (ALAC) Working Together conference.

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