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# Alcohol's Harm to Others' Well-Being and Health: a Comparison Between Chile and Australia

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## Abstract

**Aims:** To assess the degree to which relationships with heavy drinkers affect health and well-being of the Chilean population, and how this compares with previously published analyses of an Australian sample in order to establish intercultural differences in the effects of others' heavy drinking.

**Method:** Data are from a face-to-face survey of 1500 Chileans. Respondents were asked to identify people in their lives who were heavy drinkers. Information on respondents' well-being and health was collected using the Personal Well-Being Index and the EuroQol Group 5-Dimension Self-Report Questionnaire score (EQ-5D) index. Sociodemographic information was also gathered. Bivariate and multivariate analyses were performed to determine whether heavy drinkers in the respondents' lives (both living in or out of their household) were related to health and well-being. Results were contrasted with those for Australia reported by Livingston *et al.* [in (2010) Impact of heavy drinkers on others' health and well-being. *J Stud Alcohol Drugs* 71, 778–785].

**Results:** Heavy drinkers inside the household negatively affect the health and well-being of Chileans. Heavy drinkers outside the household have a negative but smaller effect on their health and well-being. This contrasts with Australia where most of the harm seems to arise from heavy drinkers identified outside the household.

**Conclusions:** In both countries, health and well-being are affected by others' heavy drinking. The particular structure of harm may vary across cultures: in Chile, heavy drinkers identified inside the household are the most harmful, whereas in Australia those identified outside the household are the most harmful. This should have an impact on the policy design.

## INTRODUCTION

Interest in alcohol's harm to others is recent in the academic literature, but the number of research initiatives has been growing steadily over the past years (Laslett *et al.*, 2013). Much of this research measures victimization that stems directly from others' alcohol consumption, such as physical and sexual assaults (Connor *et al.*, 2009), lost or destroyed property, harassment, insults, noise or fear (Huhtanen and Tigerstedt, 2012).

Sometimes the extent of harm from others' drinking mobilizes the victim toward help-seeking such as contacting the police or seeking help from health services. The extent of this phenomenon has been examined with the focus on others' problematic drinking behavior inside the family (Svenson *et al.*, 1995; Ray *et al.*, 2007; Velleman *et al.*,

2011; Manton *et al.*, 2014) and on the broad community (Mugavin *et al.*, 2014).

The effect of others' heavy drinking has been progressively recognized as a serious public health problem in that the drinking phenomenon causes not only social and health problems to the drinker but also negative externalities to those around the drinker (Connor *et al.*, 2009); for example, having heavy drinkers in our life might contribute to extra stress, financial or emotional, that may affect our health and well-being. Different studies (Livingston, 2009; Connor *et al.*, 2009) suggest that the presence of heavy drinkers in households negatively affects families, especially spousal relationships.

Another strand of the harm to others' literature consists of several papers that deal with the impact of others' drinking on well-being

indicators such as health related quality of life (HRQoL) and personal well-being. From our knowledge, only Australian, New Zealand and American societies have been the subjects of these types of inquiry (Strine *et al.*, 2008, for the United States; Laslett *et al.*, 2010; Livingston *et al.*, 2010, for Australia; and Casswell *et al.*, 2011, for New Zealand). The aim of this paper was to follow this last strand by applying the same methods and questions to the Chilean case. We also intend to provide an intercultural Chile–Australia comparison of the effects of others' drinking on respondents' HRQoL and life satisfaction. In order to make this comparison, this paper closely follows the methodology of Livingston *et al.* (2010) and utilizes their results as the Australian comparison benchmark.

## CHILE AND AUSTRALIA: DIFFERENCES AND SIMILARITIES

Chile and Australia share some similarities. They are both relatively new nations that were colonized from the west in the 17th and 18th centuries. Australia received a mostly British influx, while Chilean first immigrants were Spanish. Both countries are somewhat geographically isolated from their neighbors. While Chile is separated from the rest of South America by the Andes and the Atacama Desert, Australian territory is completely surrounded by the sea. Australia and Chile's population is 89% urban (World Bank, 2014b), and both have market economies with good economic indicators. Both Australia and Chile belong to the OECD and are classified by the World Bank as high-income economies, a group comprising countries with a gross national income (GNI) per capita that exceeds US\$12746. Nevertheless, 2013 GNI per capita (purchasing power parity) of Australia (US\$42540) was more than double than that of Chile (US\$21030) (World Bank, 2014a). Regarding household conformation, according to OCDE (2011), Chilean households are larger than that of the Australian (3.72 persons per household in Chile vs. 2.53 in Australia), while the fertility rates do not differ by much (2.0 children per woman in Chile vs. 1.9 in Australia).

In terms of alcohol consumption, WHO (2014) reports that Australia's main alcohol intake (recorded as liters of pure alcohol) comes from beer (44%), while in Chile it comes from wine (41%). However, Australians also drink wine (representing 37% of their alcohol intake) and spirits (12%). In the same line, Chileans are beer (30%) and spirit (29%) drinkers.

Australians' alcohol intake is somewhat higher than that of Chileans. WHO (2014) reports that in the 2008–2010 period Australians consumed a yearly per capita average of 12.2 l of pure alcohol, while their Chilean counterparts drank 9.8 l. This difference is largely due to the proportion of abstainers in each country, which in Chile in 2010 amounted to 34% of the population aged 15 or more, while in Australia it was substantially less (16%). Interestingly, when considering only the drinkers, Australians and Chileans display an almost equal yearly per capita alcohol intake (14.5 and 14.6 l of pure alcohol, respectively). Chilean and Australian males are more prone to heavy drinking episodes than females. In fact, Chilean females almost never report having consumed more than 60 g of pure alcohol in the last 30 days. Australian females are more prone to binge drinking, but in any case the prevalence of such behaviors is less than one-third of that of males. Alcohol use disorders and alcohol dependence are more prevalent in Chile (5 and 2.5%, respectively) than in Australia (3.5 and 1.5%, respectively).

Male drinking cultures in Chile and Australia are dissimilar. In Chile—as in most Latin American societies—alcohol intake is a social motivator and a spare-time activity, and Chileans tend to share drinks as a social bound (Pyne *et al.*, 2002). Meanwhile, in Australia, male

drinking culture is more intoxication oriented. This could explain the differences in consumption between countries.

## METHOD

### Data

A national survey of the Chilean general population was undertaken in May–July 2013. The survey collected a range of data on the impact of alcohol on people other than the drinker. Through face-to-face application, 1500 completed interviews with people aged 18 and over were gathered. The questionnaire applied was prepared by the coordinating team of 'The Harm to Others from Drinking: A WHO/Thai International Research Project' and translated into Spanish and back-translated to check meaning, as the WHO translation protocols instruct.

The sampling method was probabilistic from a population of 12,291,000 inhabitants of the 13 regions of Chile (CASEN, 2011). The response rate was 71.8%. The final sample consisted of 1500 valid cases.

The questionnaire took an average of 45 min to administer. The surveys in the general population were undertaken by a private data collection organization in formal collaboration with the School of Government of the Universidad del Desarrollo. The surveyors received appropriate specific training on the guidelines and requirements of the WHO/Thai Health project. The fieldwork was done under supervision of an experienced fieldwork director. Individual answers were recorded directly into a laptop enabling automatic data inspection.

The master protocol of the study was reviewed and approved by the Ethical Review Committee of the WHO. A country site ethical committee (Comité de Ética Institucional Universidad del Desarrollo) also reviewed and approved the study from the ethical point of view.

The questionnaire contained most of the items that were used by Livingston *et al.* (2010) in their Australian study. (The only two differences regard to an 'other' option among occupational categories, which was only present in the Chilean survey, and a 'vocational education' option in the education categories, which was available only in the Australian survey.) Their reported results were used as data for the intercultural comparison that is included in the results section. It is important to note that results from the Australian study used weighting procedures to enhance sample representativeness; this was not replicated in the Chilean case, since the random sampling method resulted in data that resembled closely the main demographic characteristics of the population.

### Measures

Two measures of well-being were used: the Personal Well-Being Index (PWI) and the HRQoL EQ-5D measure. The PWI, originally developed by Cummins *et al.* (2003), measures overall subjective well-being in a scale that ranges from 0 (*complete dissatisfaction*) to 100 (*complete satisfaction*). Details on the construction of the index can be found in the PWI manual (International Well Being Group, 2006). In turn, HRQoL is a standardized measure (The EuroQoL Group, 1990) that summarizes subjective health individual ratings across five domains: mobility, self-care, usual activities, pain/discomfort and anxiety/depression (Rabin and de Charro, 2001). The original EQ-5D measure is built in a 0–1 scale where 1 means full health and 0 means death. As in Livingston *et al.* (2010), for the purposes of this study, to put it on the same scale as the PWI the EQ-5D measure was multiplied by 100.

Several control measures were included in the analysis. Sociodemographic variables include gender, age group, employment status, education level, usual occupation and household type. Also, the drinking

pattern of the respondent was included. As in Livingston *et al.* (2010), respondents were classified into four groups: nondrinkers, low-risk drinkers (never drink more than five drinks in a session), those that do drink more than five drinks in a session less often than once a week and those that drink more than five drinks in a session once a week or more often.

The key variables of the study were those that related to the degree of involvement the respondent has with heavy drinkers. Two variables gathered this information: the number of heavy drinkers living in the household (as identified by the respondent) and the number of heavy drinkers identified outside the household. The construction of these followed the method used by Livingston *et al.* (2010). There were slight differences in the way respondents were asked to elicit the number of heavy drinkers they knew. In the Chilean survey, respondents were asked a number of times to volunteer relationships with heavy drinkers they knew. The interviewer did not explicitly name the relationship. On the other hand, in the Australian survey, respondents were asked about these relationships separately; therefore, they were explicitly named. This may have potentially contributed to the number of heavy drinkers outside the household being under-reported in Chile.

## Analysis

All the analyses on Chilean data were undertaken using Stata Version 12.0 (StataCorp LP, College Station, TX). Results for each analysis were contrasted with their Australian counterparts drawn from Livingston *et al.* (2010).

An initial analysis assessed the bivariate relationships between the main explanatory variables of this study (the number of heavy drinkers both inside the household and among other family and friends) with the two dependent variables (PWI and EQ-5D scores). Further analyses consisted of multivariate regression models examining the association of the main explanatory variables and the two dependent variables, taking into account several sociodemographic controls.

The distribution of the HRQoL scores (EQ-5D) was heavily skewed (60% of the sample reported perfect health); therefore, multivariate analysis of the index was undertaken using the Tobit regression model (censored at 100), and the nonparametric Kruskal–Wallis test was used for bivariate testing. On the other hand, the distribution of the PWI was not censored, so it was subject to ordinary least square regression and ANOVA bivariate testing. This same data particularities found in the Chilean sample were evident for Livingston *et al.* (2010) when inspecting their Australian sample, so our methodological approach follows theirs.

From the original database ( $n = 1500$ ), 130 cases were dropped since it was not possible to produce either PWI or EQ-5D scores. The presence of some missing values on the independent variables ( $n = 240$ ) caused further reduction in estimation sample used for the multivariate analyses, which were performed with 1130 valid cases. In any case no major differences across key sociodemographic variables between the original and restricted sample were found.

## RESULTS

Others' drinking seems to matter to the respondent's HRQoL both in Chile and in Australia, independently of whether the heavy drinkers are identified inside or outside the household. These results differ from those obtained through the bivariate analysis of Table 1. The largest association by far is found in the Chilean sample, where the number of heavy drinkers identified inside the household is associated with a decrease in the EQ-5D score that is more than double that identified

in Australia. In both countries, heavy drinkers inside the household display a greater negative association with EQ-5D.

The bivariate relationships of the number of heavy drinkers identified inside or outside the households and the PWI and EQ-5D measures are displayed in Table 1, which also displays the results that Livingston *et al.* (2010) report for their Australian sample.

Table 1 shows that Australians seem to score higher in the PWI across the sample. Conversely, Chileans report higher levels of HRQoL. In terms of the proportion of respondents that identify heavy drinkers inside the household, the Chilean case is very similar to the Australian. In both countries, respondents that report no problematic drinker among their household members amount to slightly more than 83%, while only ~3% identify two or more heavy drinkers inside the household.

In Chile the presence of heavy drinkers inside the household seems to matter a lot more than in Australia, both in terms of the mean PWI and (although less so) of the HRQoL (EQ-5D) measure. The Chilean results indicate a highly significant difference ( $P < 0.001$ ) in the mean EQ-5D and mean PWI of the respondents depending on the number of heavy drinkers in the household. This contrasts with what was observed in the Australian sample. If we state a  $P < 0.05$  threshold for significance, which is standard in the literature, no significant differences were found in the Australian sample, both in terms of PWI and the EQ-5D.

In terms of the proportion of drinkers identified outside the household, Chileans report a lower prevalence of these individuals than Australians. While in Chile 92% of the sample identifies one or no heavy drinkers outside the household, in Australia two out of three (66%) respondents report the same. In this case the number of heavy drinkers outside the household affects in a higher degree the Australian population than the Chileans, especially where the mean PWI is concerned. The lack of significance of the Chilean results might be due to the small size of the groups that report two or more heavy drinkers outside the household. Nevertheless, when collapsing the categories into bigger groups (0, 1, 2 and >3 or 0, 1 and >2 heavy drinkers identified outside the household), there are still no significant differences found among groups, either in terms of PWI or EQ-5D, even when using loose  $P < 0.01$  significance thresholds.

The results of the multivariate analyses of the Chilean data are reported in Table 2. The coefficients are estimates of the difference in PWI (or EQ-5D depending on the model at hand) between the population group in question and a reference (that is identified between parentheses). These results are *ceteris paribus*, that is, they reflect the association of the outcome and the reference group maintaining the rest of the model's variables equal. Table 2 also displays the results that Livingston *et al.* (2010) report for their Australian sample, for the sake of intercultural comparison.

It is important to remember that the size of the Chilean sample over which the multivariate estimations were performed ( $n = 1130$ ) is smaller than its Australian counterpart, which had more valid cases. (Livingston *et al.* (2010) do not report the exact number of cases used for multivariate estimation after coding unusable independent variables as missing. They report an  $n = 2422$  sample size that arises after discarding only cases where they were unable to compute the dependent variables. Nevertheless, they do state that the number of missing independent variables is small (p. 781)). This implies that some of the Chilean point estimates are actually bigger in absolute size than their Australian counterparts, while at the same time have a greater  $P$  value. Nevertheless, close inspection of Table 2 shows that these cases are not many, and they are not key to the analyses and conclusions. Results of the model do not imply causality but

**Table 1.** Bivariate results

Variable	Chile				Australia				p(a)	p(b)
	n	%	Mean PWI	Mean EQ-5D	n	%	Mean PWI	Mean EQ-5D		
No. of heavy drinkers identified in the household										
0	1148	83.8	71.37	93.01	2015	83.2	76.87	85.94	<0.001	<0.001
1	177	12.9	66.49	91.09	344	14.2	74.88	85.03	0.079	0.608
>2	45	3.3	59.95	88.4	63	2.6	76.84	80.86		
No. of drinkers identified outside the household										
0	925	67.5	70.73	92.79	816	33.7	78.01	86.81	0.464	0.148
1	333	24.3	70.01	92.23	790	32.6	77.21	85.98	0.000	0.074
2	72	5.3	68.64	92.12	468	19.3	74.82	85.93		
3	15	1.1	64.17	87.83	226	9.3	75.49	85.46		
4	9	0.7	71.21	95.5	66	2.7	73.25	82.76		
>5	16	1.2	69.53	95.29	56	2.3	70.39	67.49		

p(a) One way ANOVA.

p(b) Kruskal–Wallis test.

Author's estimations (Chilean results) and Livingston *et al.* (2010), Table 1 (Australian results).

only reflect associations between variables. In the analyses that follow, we loosely use the words ‘determinants,’ ‘effects,’ ‘associations’ and ‘relations’ as meaning the same not-necessarily-causal link between the dependent variables (PWI or HQ-5D) and the covariates.

In terms of the PWI, the Australian relative advantage of females is not replicated in the Chilean sample. Also, neither age nor employment status seems to be an important determinant of the well-being of Chileans, while they do matter for Australians. Education is not associated with the PWI in Chile or Australia (except for a minimal effect in the vocational education group for Australia). The respondent's drinking pattern also seems unrelated to the PWI in both countries. On the other hand, people living in a couple (with or without kids) are associated with higher well-being than living alone in both countries. Chilean point estimates on the ‘living in a couple with kids’ are more than double those of Australia (10.36 points in the PWI scale vs. 5.09). Living in a single-parent household is associated with higher well-being in Chile (relative to living alone) but not in Australia. Occupation does not seem to be related to well-being in either country, with the exception of a 10-point PWI advantage, in the Chilean sample, of being an associate professional (vs. never having worked).

In the line of the bivariate analyses of Table 1, the multivariate results indicate that respondents that identify heavy drinkers inside the household have a lower well-being in terms of the PWI than those that do not, while this effect is not evident for those who identify heavy drinkers outside the household. Australian results are the opposite: heavy drinkers outside the household bother these respondents, while heavy drinkers inside the household do not seem to affect them.

Finally, regarding the EQ-5D Tobit model, Chilean and Australian populations again seem to be quite different. While there is no gender gap in EQ-5D in Australia, Chilean females report, *ceteris paribus*, lower levels of HRQoL. Aging in both samples is related to lower EQ-5D scores, but Chilean point estimates are greater, meaning that the descent in HRQoL over the lifespan is steeper in Chile. While educational levels do seem related to Australian's EQ-5D scores, in Chile this association is not evident. Household type seems quite irrelevant for the analysis of both samples, with the exception of a positive effect of living in a couple (without kids) in Australia, relative to living alone. Neither does the respondent's occupation seem relevant to predicting

HRQoL in either country, with the exception of a negative association of being in elementary labor occupations (with respect to those that report to never have worked). The drinking of the respondents is not significantly related to their HRQoL in Australia. In Chile, large positive coefficients for the low-risk drinker and nondrinker (relative to the heavy drinker) are estimated but not significant ( $P > 0.05$ ) for the low-risk drinker, giving rise to the question of whether the association exists (but sample size was not enough to estimate it more precisely) or was only a random occurrence. As a robustness check, we re-estimated the model after collapsing the low-risk and no-drink groups into one. When we did this, we still obtained a positive coefficient (12.24,  $P = 0.046$ ) from belonging to this new collapsed group, with respect to being a heavy drinker. The association did become significant ( $P < 0.05$ ).

## DISCUSSION

Cross-cultural analyses help us see to which findings are universally valid and which are not. But making intercountry comparisons is difficult when empirical data and methods used are not sufficiently similar across studies. Here we have been able to use very similar instruments and methods in differing cultures.

We found that the determinants of well-being are not necessarily the same in different countries. These results are not new and have been highlighted through a very prolific research literature based on intercountry surveys such as the World Value Survey or the Gallup World Poll (see, e.g. Diener *et al.*, 2010). Nevertheless, this is the first time the association between alcohol's harm to others and well-being has been placed under this explicit intercultural scrutiny. Therefore, the main subject of this discussion section will rest on the results obtained from our alcohol-intake-related covariates.

We noted that the respondent's drinking pattern does not seem to be a determinant of personal well-being (PWI) in either country. On the other hand, while it is not a determinant of HRQoL (EQ-5D) in Australia, there is still doubt about whether there is an association in the Chilean sample, as discussed previously when analyzing the Tobit results. Chilean low-risk drinkers and nondrinkers display a

**Table 2.** Multivariate models of subjective well-being and HRQoL

PWI	PWI				EQ-5D			
	Chile		Australia		Chile		Australia	
	Coef.	<i>P</i> > <i>t</i>	Coef.	<i>P</i> > <i>t</i>	Coef.	<i>P</i> > <i>t</i>	Coef.	<i>P</i> > <i>t</i>
Gender: Female (vs. male)	-0.80	0.373	2.65	0.000	-8.23	0.000	0.07	0.930
Age group								
25–34 years old (vs. 18–24 years old)	-1.66	0.210	-4.79	0.000	-3.66	0.158	-3.44	0.020
35–44 years old (vs. 18–24 years old)	-2.21	0.124	-2.69	0.041	-6.05	0.029	-4.33	0.000
45–54 years old (vs. 18–24 years old)	-1.93	0.230	-4.69	0.000	-12.21	0.000	-7.71	0.000
55–64 years old (vs. 18–24 years old)	-3.49	0.064	-2.97	0.036	-16.45	0.000	-11.68	0.000
65–74 years old (vs. 18–24 years old)	-2.81	0.288	-0.51	0.779	-20.72	0.000	-7.46	0.000
>75 years old (vs. 18–24 years old)	5.72	0.137	1.21	0.551	-21.34	0.001	-14.15	0.000
Current employment status								
Studying (vs. working)	0.28	0.879	-3.51	0.014	3.85	0.285	-7.62	0.000
Retired (vs. working)	-0.57	0.857	0.60	0.597	-6.25	0.268	-7.43	0.000
Home duties (vs. working)	-2.64	0.290	1.80	0.054	-7.51	0.113	-0.16	0.910
Other (vs. working)	-2.91	0.220	-5.55	0.001	-1.58	0.731	-19.19	0.000
Education level								
High school (vs. not high school)	2.44	0.064	0.94	0.333	2.91	0.215	6.79	0.000
Vocational education (vs. not high school)	-	-	2.04	0.024	-	-	4.14	0.000
University (vs. not high school)	2.67	0.062	1.41	0.089	3.31	0.207	5.94	0.000
Respondent's drinking pattern								
>5 less than weekly (vs. weekly or >5)	2.10	0.547	1.98	0.082	9.99	0.107	2.33	0.050
Low-risk drinker (vs. weekly or >5)	5.21	0.137	1.46	0.208	12.06	0.052	0.51	0.690
Nondrinker (vs. weekly or >5)	3.17	0.365	1.78	0.182	12.43	0.045	-0.59	0.690
Household type								
Couple household (vs. lone person)	5.26	0.002	7.25	0.000	1.26	0.685	4.20	0.000
Couple with kids (vs. lone person)	10.36	0.000	5.09	0.000	2.73	0.505	2.12	0.160
Single parent (vs. lone person)	5.91	0.000	0.46	0.736	4.04	0.159	0.81	0.660
Other household (vs. lone person)	3.10	0.032	2.92	0.032	3.65	0.184	2.29	0.190
Occupation								
Elementary clerical, services and laborers, etc. (vs. never worked)	-3.74	0.128	-1.17	0.388	-0.97	0.838	-4.59	0.010
Intermediate clerical and service, production (vs. never worked)	0.63	0.806	-0.11	0.932	6.86	0.173	-2.31	0.210
Tradesperson, etc., advanced clerical and service (vs. never worked)	-4.96	0.050	0.50	0.694	-0.32	0.947	-1.20	0.490
Associate professional (vs. never worked)	10.02	0.040	0.86	0.561	2.57	0.784	-1.64	0.420
Professional or manager (vs. never worked)	4.18	0.094	1.23	0.313	6.60	0.178	-0.21	0.900
Other (vs. never worked)	-0.48	0.813	-	-	0.46	0.909	-	-
No. of heavy drinkers identified in the household	-5.65	0.000	0.59	0.274	-7.45	0.000	-3.19	0.000
No. of heavy drinkers identified outside the household	-0.93	0.055	-1.08	0.000	-1.95	0.035	-2.13	0.000
Constant	65.18	0.000	72.07	0.000	101.04	0.000	91.54	0.000

Author's estimations (Chilean results) and Livingston *et al.* (2010), Table 1, (Australian results).

higher level of HRQoL than high-risk drinkers, but the significance of the results is not sufficiently high to consider these results definitive, nor sufficiently low to discard them.

The other's drinking pattern does seem to have a cross-cultural effect both in general and in health-related well-being. Nevertheless, the results lead us to realize that the subtleties of these associations are not identical across cultures. While in Chile drinking patterns inside the household seem to matter most to general well-being, Australians are bothered more by heavy drinkers they know outside the household. Similar results are found for health, where although in both countries respondents are bothered by both types of heavy drinkers, in Chile the association is more than three times larger when heavy drinkers belong to the household. Australians' effect, on the other hand, is only 50% larger when the heavy drinker belongs to the household.

Some of the differences in the results may arise from the different drinking patterns among women in both countries. While in Chile there is a gender gap in drinking, Livingston *et al.* (2010) report a non-significant difference between genders in their Australian sample. According to Homish and Leonard (2005), the relationship between

alcohol consumption and marital satisfaction is complex; it could even be beneficial to the relationship if there is an equivalence between the drinking partner of husband and wife. Further research is needed to prove if this could explain the differences in the Australian and Chilean results.

Another explanation of the different results might relate to different household constellation: extended family members may be more likely to live in the same household in Chile. We are not able to make fine comparisons with the data available today, but at least we know (as described in the Introduction of this article) that Chilean households are indeed larger than the Australian, while the fertility rates do not differ by much. Further research is needed to test this hypothesis.

Although not directly comparable, Casswell *et al.*'s (2011) study for New Zealand is another work that includes the PWI and the HRQoL, and its results are in line with the findings for Australia and Chile (in that exposure to heavy drinking is negatively related to health and well-being). Other studies such as Strine *et al.* (2008), for the United States, point in the same direction implying that harm from other's drinking might be an issue of importance worldwide. These

consistencies across cultures should be taken into account in the global discussion of alcohol control policy in the same way as the role of passive smoking was considered in the tobacco debate. Disentangling the intra- and extra-household components of the effects is crucial, since the policies involved for prevention or remediation may differ.

The limitations of this study: First, the Chilean sample is smaller than the Australian, and therefore, the precision of the estimates of the latter is greater. On the other hand, Australian results arise from a telephone survey with a lot of attrition and nonresponse, while the Chilean sample was interviewed on site. Also, as noted earlier in this article, there were slight differences in the way respondents were asked to elicit the number of heavy drinkers they knew. These changes are more likely to affect the number of drinkers than the quality of life measures elicited. These differences might affect the comparability of the results. In favor of comparability, nonetheless, we have questionnaire and methods of analysis that are almost identical.

Secondly, we caution the reader that although a two-country comparison gives an indication about how stable results are across cultures, this is not enough to make universal statements. Both Chile and Australia share much in common, e.g. belonging to the occidental world, being mostly urban and relatively stable in economic issues. More intercountry studies should be made in order to establish the main cross-cultural regularities. In this sense the WHO/Thai International Research Project 'Harm of Others from Drinking,' of which this article is part, will provide a rich source of data to further advance this intercultural research.

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