

Corrupted Alcohol Science

Introduction

There are two major areas where advocates of prohibitionist policies with respect to alcohol use have attempted to bias the policy debate with corrupted science: the health benefits and risks of moderate drinking and the effects of alcohol advertising on youth drinking and overall consumption.

The Health Benefits of Moderate Drinking

Although there is substantial evidence of the health benefits of moderate drinking, there has been a continued campaign on the part of many alcohol opponents to suppress or deny these findings. For instance, Harvard epidemiologist Carl Seltzer, a co-investigator on the Framingham study, found positive effects of moderate drinking on heart disease 25 years ago. Seltzer was denied permission to publish these results by the US National Heart and Lung Institute on the grounds that an article about such results would be “scientifically misleading and socially undesirable in view of the major problem of alcoholism that already exists in the country.” (C. Seltzer, *Journal of Clinical Epidemiology* 1997 50: 627-629 “Conflicts of Interest” and “political science”)

Moreover, the US Bureau of Alcohol, Tobacco and Firearms continues this official suppression of the truth about the benefits of moderate drinking by refusing to allow brewers, vintners and distillers to make any claims about the benefits of using alcohol, “regardless of their truthfulness”, on the grounds that such claims would be misleading given the “harmful societal effects arising from the consumption of alcohol.”

The Health Risks of Moderate Drinking

In tandem with the continued suppression of the evidence regarding the benefits of moderate drinking, there is also a continued effort to inflate the risks of moderate consumption by claiming as a recent study did that there “doesn’t seem to be a threshold at which alcohol consumption is safe.” The most recent attempt was published in 2009 in the *Journal of the National Cancer Institute*, which reported a study led by Naomi Allen from Oxford University on the cancer risks to women from even modest alcohol

consumption. (N. Allen et al Moderate alcohol intake and cancer incidence in women Jn of National Cancer Institute 2009 101: 296-305)

Allen told the UK Guardian that “Given that this is the largest study in the world to look at this, it’s clear that even at low levels of alcohol consumption, there does seem to be a very significant increase in cancer risk, and most women are probably not aware of that.”

In her comments to the US media, Allen attempted to be even more frightening, telling the Washington Post that the “take-home message” was this: “If you are regularly drinking even one drink per day, that’s increasing your risk for cancer [since] there doesn’t seem to be a threshold at which alcohol consumption is safe.”

Allen’s results, however, fail to support these alarming claims about the risks of even modest drinking. First, Allen reports that the incidence of all types of cancer studied in its non-drinking subjects was 5.7% compared with 5.3% for those subjects who had at least a drink a day and up to 14 drinks a week. So not only was there no dose-response in terms of cancer risk, but teetotalers had a higher population incidence of cancer than those consuming up to 14 drinks a week. This hardly comports with an increased risk of cancer for moderate drinkers.

Second, even those women in the study who drank the most (15 or more drinks per week) had a cancer incidence of 5.8%, which is virtually identical to those who drank nothing.

Third, the study looked at 21 types of cancer incidence. Of these, it found statistically significant associations between drinking and only four types of cancer. Moreover, even these associations were barely significant. The association with breast cancer, with by far the largest number of cases in the study (almost 22,000) was non-significant.

Far then from supporting Allen’s alarmist claims about the cancer risks of moderate drinking for women, Allen et al’s results actually refute them.

The Purported Effects of Alcohol Advertising

Additional References/Reading on Alcohol Advertising

J. Luik *Dispelling the Myth: Advertising Bans and Alcohol Consumption*
Washington Legal Foundation 2004

J. Luik *Ideology Masked as Scientific Truth: The Debate About Advertising and Children*
Washington Legal Foundation 2006

DRAFT

Some Perspective on the Alcohol Advertising Debate

Introduction

One of the more contentious aspects of alcohol policy is the question of the role of branded alcohol advertising in initiating and increasing consumption. Despite the fact that alcohol misuse has been part of the historical record for centuries, while mass media advertising has been around for only the last 150 years, for many critics of the industry, it is a given that alcohol advertising initiates consumption in the young, increases consumption in adults and thus increases the scope and amount of alcohol related harm in society. For a large number of these critics, the only appropriate policy response is a complete ban on alcohol advertising.

For instance, in their 2005 paper “The Effectiveness of Regulating Alcohol Advertising: Policies and Public Health”, the Association to Reduce Alcohol Promotion Ontario argued that a review of the relevant research literature revealed “several common certainties” such as “Exposure to alcohol advertising results in youth having a more favourable attitude towards drinking, and a greater intention to drink as adults; exposure or awareness of alcohol advertising may lead to heavier or more frequent drinking among young adults; [and] exposure to alcohol advertising significantly increases the risk of adolescent alcohol use and associated consequences.”

This paper takes issue with such claims by providing some perspective on the alcohol advertising debate in four areas: 1) whether advertising changes attitudes and behaviour through manipulative psychological techniques 2)

whether alcohol advertising increases total alcohol consumption and with it alcohol related harms; 3) whether alcohol advertising initiates adolescent drinking; and 4) whether alcohol advertising bans reduce total consumption or adolescent initiation.

1. What Advertising Does

The supporters of advertising restrictions and bans are generally believers in what students of advertising call the strong theory of advertising popularized by Vance Packard's 1956 *The Hidden Persuaders*. Packard and his contemporary adherents believe that advertising changes people's attitudes through manipulative psychological techniques and because of this is able to change their buying behavior. This means that advertising is capable not only of increasing the sale of individual brands but of entire product categories like alcohol. The process of how advertising changes attitudes is generally left unspecified, though if pressed it often parrots a version of the now 80 year old hierarchy of effects model.

According to this model, advertising succeeds in persuading and shaping behaviour because it is able to move a consumer from reading or seeing or listening to an ad to believing it, remembering it, and to finally acting on it. However, the model in whichever version it appears, it always more assertion than explanation in that it never explains precisely how an advertisement moves one through the supposedly succeeding effects and never provides actual examples of how an advertisement supposedly changed attitudes and how these change attitudes were reflected in purchasing behaviours.

The model is often described as "self-evident" and based on common sense- just as the claim that alcohol advertising affects consumption is argued to be commonsensical. For instance, it is assumed as part of the model that causality is always one way- that changes in attitude about a product lead to its purchase rather than follow from its purchase, despite substantial evidence to the contrary. Or that attention to advertisements leads to interest in a product rather than vice versa.

But the most significant problems with this conception of advertising as the determinant of attitude and behaviour are to be found in the sturdy empirical facts about how advertising is actually used and how often it "works." What this research has shown is that most advertising is directed toward the selling

of branded goods and services, that many advertisements, most on some accounts, fail in their objectives, and that advertising's effectiveness is not proportional to the amount spent.

What is most striking about this conception of advertising is the fact that it relies so heavily on theoretical arguments about human nature- people's ideas about their needs and wants are easily manipulated and human behavior is easily changed- rather than on empirical evidence about what advertising actually does in the marketplace. While this might have been acceptable in the 1950's when there were few empirical studies about advertising, it is not acceptable after some 40 years of careful research on the nature of advertising.

What this research has shown is that most advertising is directed toward the selling of branded goods and services, that many advertisements fail in their objectives and that advertising effectiveness is not proportional to the amount spent. For instance, of the 9-10,000 brands being advertised in a given year, the average consumer will buy only about 400. (1) Moreover, data on individual marketing campaigns suggests advertising campaigns for established brands are successful only from 20-30% of the time. (2) Campaigns for new brands are successful even less often with one author noting that four out of five new brands fail in the marketplace. (3) As he notes in discussing the failures of this view of advertising's supposed power:

“And yet the shortcomings of the hierarchy of effect model of how advertising works were always apparent. It did not account for the uncomfortable fact that a very high proportion of new brands...fail in the market-place. And that they fail despite the fact that they are most frequently launched by major companies who have researched both product and market; who often have experience in the market, through the marketing of complementary product, who have the marketing muscle to achieve the desired levels of distribution; who have sales force and merchandising power, and who have the financial resources to mount, and sustain heavy advertising and promotional campaigns.... There is almost a total absence in the literature of case histories of how advertising changed attitudes, and how those changed attitudes affected sales.” (4)

Indeed, what the case history literature about how advertising works and what it can and cannot do, demonstrates something quite different from the “common sense” view of advertising. Consider, for example, the evidence of

case histories that have been published for the last 20 years by the UK's Institute of Practitioners in Advertising. The case histories are part of the Institute's Advertising Effectiveness Award program which is designed to showcase both how advertising campaigns are created and the effectiveness of such campaigns. The case histories, published in the series Advertising Works (3) now include over 200 examples with several hundred more unpublished. Commenting on these case histories, Mike Waterson observed that:

“Careful examination of these case histories makes it absolutely clear that the overwhelming majority of the advertising campaigns submitted for this competition are firmly brand-orientated and that most of the non-brand campaigns are not for products at all, but government information, charity, recruitment and other such-like campaigns.... The overwhelming majority of evidence suggests that campaigns are not directed to changing overall market sizes and do not accidentally result in overall market changes, except in some very specialist and small product areas. It should be stressed that these are prize-winning campaigns where positive results have been obtained and ... are the areas of activity where it is clear that advertising did have an impact. (5)

What these campaigns attempt in terms of brand advertising is not then a larger market reflecting increased consumption, but a larger share of the existing market. Advertising's job is to increase brand awareness, brand preference, brand usage, and ultimately brand loyalty.

Equally interesting is the work that has been done on correlations between advertising expenditures and sales in particular types of mature markets. Henry (6) for instance, examined the UK food market in two studies over a ten year period. After looking at 16 major food categories including breakfast cereals, cookies, frozen vegetables, instant coffee and bread, he concluded that in such mature markets advertising, though perhaps useful as a competitive tool between brands, did not affect the market size in any way. A similar analysis of UK newspaper sales during the late 1980's showed that despite a 200% increase in advertising expenditures, total newspaper sales actually declined whilst individual paper market shares remained unchanged.

The real world evidence about advertising then suggest that the critic's view and claims about branded advertising as an irrationally persuasive force with the capacity to change attitudes and behaviour is mistaken. The reasons for

this are various by are found partly in the fact that advertisements are extremely compressed, typically 30-60 seconds and people through selective perception tend to disengage from the vast majority of these ad arguments. This means that advertising is used primarily in mature markets like alcohol as a defensive tool: it is deployed to retain existing customers rather than to increase sales through gaining new customers. As Murray notes “The main role of advertising is defensive. It follows... that criticism of advertising on the grounds that it is irrationally persuasive... are unsound.” (7)

2. Advertising and Alcohol Consumption

Whatever the empirical evidence shows about the effects of advertising on mature markets, the advocate of alcohol advertising bans might argue that with alcohol things are different, particularly with respect to young people. Relying on the single distribution theory (8) that argues there is a causal chain between (1) the availability of alcohol and (2) the per capita consumption of alcohol and (3) the extent of alcohol occasioned harm, the critics of alcohol advertising see such advertising as a crucial determinant of the “social” availability- that is acceptability- of alcohol.

These claims, however, also run counter to an impressive body of econometric studies which have examined the relationship between alcohol consumption and such independent variables as the price of alcohol, consumer income, other prices, availability and advertising. Most of this work has been undertaken in the US and the UK, although there have been some studies that have looked at other European countries.

The major econometric study of US alcohol consumption is by Franke and Wilcox (8) who looked at beer, wine and spirit consumption from 1964-1984. They found no statistically significant relationship between beer advertising and consumption and a small statistically significant relationship between wine and spirit consumption and advertising. The authors concluded however that advertising did not significantly affect total consumption during the period under review.

A more recent analysis by Tegene (9) which used data for 21 years (1954-1975) found that advertising had no statistically significant affect on wine, beer or spirit consumption during the period. Another econometric analysis by Nelson and Moran (10) provided additional support for the claim that

there is no significant relationship between alcohol advertising and consumption.

In the UK there have been a number of studies beginning with McGuinness (11) who looked at advertising, income, price and the number of places where drinks could be purchased as independent variables. He found a statistically significant relationship for spirits but no effect for wine and beer. Hagan and Waterson (12) used real expenditure on alcohol rather than alcohol consumption as the dependent variable with price, consumer income and advertising as independent variables. They found no statistically significant effect on alcohol sales from 1961-1980.

Waterson (13) also notes a series of changes in the UK drinks market that show the disconnect between advertising and consumption. For instance, from 1978 to 1978 beer advertising (total adspend) rose by over 80% while beer consumption fell by 14%. Between 1978 and 1987 advertising for spirits increased by 70% while sales fell by 4%. During the same period advertising fell in the wine market by 26% while sales increased by 65%.

Finally, in a series of studies beginning in 1981 and continuing to 2003 Duffy (14) looked at the effects of advertising on the UK drink market, concluding that the “responsiveness of ...demand with respect to advertising becomes insignificantly different from zero.”(14)

The major econometric study of advertising and alcohol consumption in Europe is Calfee and Scheraga (15) which looked at four European countries- France, Germany, the Netherlands, and the UK. For comparative purposes Sweden, which has banned alcohol advertising since 1979, was included. Advertising expenditures, price and per capita disposable income were independent variables during a period from 1971-1989. Interestingly, the authors found that consumption in all but one of the countries peaked around 1980 while advertising expenditures continued to increase. While price and consumer income were found to have a statistically significant impact on consumption in all of the countries, advertising was not found to have any influence. Most interestingly the authors discovered that strong social forces (changing attitudes toward drinking) contributed to a declining consumption that advertising was quite powerless to prevent.

The results of these individual econometric studies of the relationship between alcohol advertising and consumption are confirmed in the findings

of two review of the empirical evidence, one by Smart in 1988 (16) and the other by Fisher (17) in 1993. Smart concludes that “The evidence indicates that advertising bans do not reduce alcohol sales, total advertising expenditures have no reliable correlation with sales of alcoholic beverages and... experimental studies typically show no effect of advertising on actual consumption.” (18) Fisher notes, for instance, that commercials for alcohol occur relatively infrequently on television and depictions of drinking during programming occur six times more frequently than alcohol commercials, a finding which casts doubt on the claims that alcohol commercials initiate adolescent drinking or increase consumption. Moreover, concludes that when demography is controlled “variations in advertising and changes in consumption are unrelated in U.S. and Canadian econometric studies” and that “Changes in policies regarding permissible advertising do not change subsequent consumption”.

3. Alcohol Advertising and Adolescents

Despite the evidence about the lack of a connection between alcohol advertising and increased total consumption, the critic of alcohol advertising might still argue that even if alcohol advertising does not affect adult consumption, it most certainly affects adolescent alcohol use.

Indeed it is often suggested that increases in youth consumption could well be masked in econometric studies which focus on total consumption and are thus not sophisticated enough to pick up the effects of advertising on young people.

One way of supplementing the alleged defects of econometric data is by looking specifically at survey and experimental studies (either cross-sectional or longitudinal) done with youth. Though these studies are often based on self-reports of consumption and report attitudes as opposed to the actual purchase and consumption behaviours captured in econometric studies, and while they do not control for most of the factors influencing youth drinking, they can still provide useful information about the connections between alcohol advertising and consumption by young people.

Kohn and Smart (38), for instance, exposed groups of male university students to sports programs, with some programs having no beer advertisements, some four and some nine advertisements. The students were

able to purchase beer during the programs. While there were differences in beer consumption during the program, there were no statistically significant differences in beer consumption among the groups by the end of the programs. Lipsitz et al (39) showed groups of fifth and eighth- grade students three sorts of commercials- beer commercials, soft-drink commercials and beer commercials along with anti-drinking commercials. The students were then asked about their drinking expectancies. The authors found no statistically significant effects from the commercials on drinking expectations.

Sobell et al showed advertisements about beer, nonalcoholic beverages and food to 96 male college students in order to determine the possible effect of alcohol advertising. In order to control for possible confounding, half of the students viewed a popular television program that contained drinking scenes, and half saw the same program without such scenes. The results showed no statistically significant relationship between alcohol consumption and alcohol advertising, even controlling for viewing the television program drinking scenes.

Strickland (40) administered a self-report questionnaire to a group of 7th, 9th and 11th grade students in St. Louis in an effort to examine the relationship between advertising exposure and alcohol consumption. After analyzing the data, Strickland concluded that “reducing the amount of advertising for alcoholic beverages is likely to have a negligible impact on the level of consumption among teenagers. Given the presumed vulnerability of youth to mass media influences, and especially for those who hold certain susceptible orientations, the findings fail to sustain the argument that alcohol advertising is a primary factor in drinking behavior.” (41) Strickland noted that even the small media effects found in the study pointed to the fact, noted above, that parental influences both in socializing children with respect to the media and in consumption decisions were far more crucial in the drinking decision. He also notes the crucial importance of peer influences who “provide the direct incentives and social rewards” for youth drinking behaviors.

Summarizing the results of these experimental findings, Fisher notes that the “experiments that did test the effect of advertising on consumption were by and large negative. No instance of advertising directly affecting total consumption was reported.”

Strickland and others emphasis on the role of risk factors other than advertising for adolescent drinking is reflected increasingly in current research on the causes of underage alcohol use. For instance, in a recent study of the risk factors for adolescent alcohol initiation, Donovan found that the most consistent risk factors predicting adolescent drinking were parental and peer approval and adolescents' own prior involvement in delinquent behaviour. Donovan's findings are echoed in a recent longitudinal study by Hops et al that followed 365 children in grades 2-4 and 9-10 and examined the role of five key risk factors for alcohol and other drug use: peer pressure, success in school and classroom behaviour, playground behaviour, and child-parent- family conflict. Hops et al found that peer pressure and family conflict were the best predictors of male underage drinking, while poor school performance best predicted female drinking. They note that ... children who experience social, behavioural and/or academic problems in early life appear to be at risk for non-normative or deviant alcohol, tobacco and other drug use...Current family conflict added predictive strength for most of the drug use combinations. The interactions between the early school environments, both academic and social, with concurrent family conflict suggest that levels of negative experience in all three environments are particularly detrimental.”

These studies along with others suggest that young people consume alcohol not because of advertising but because of social norms deriving from the behaviour and pressure of their peers; because they perceive individual benefits- such as tension and stress reduction; and because they believe it provides social benefits- such as increasing enjoyment and enhancing confidence in social situations.

Williams, for instance, in a National Institute on Alcohol and Alcoholism monograph on the effects of the mass media on alcohol use, comes to a similar conclusion about family and peer influences as the major causes of adolescent drinking. He writes:

“Researchers also need to recognize that to a certain extent they may be ‘swatting at gnats while being swallowed by a tiger’ by spending so much time focusing on advertising while ignoring factors such as family and peer pressure, which account for the greatest impact on consumption, particularly among adolescents.”

And William's perspective is to some extent echoed in a recent study by the Institute of Medicine on Reducing Underage Drinking: A Collective Responsibility, which noted that a "clear causal link between advertising and youth consumption has not been established...."

These experimental, survey and econometric results are confirmed in a recent analysis of student drug use by my colleague Professor Gerald Wilde of Queens University. Wilde took the data compiled by the Centre for Addiction and Mental Health in Toronto Canada in their Drug Use Among Ontario Students, a survey of the drug use of between 2800 and 4700 students in Grades 7, 9, 11, and 13 in odd-numbered years between 1977 and 1999. The survey asked students to indicate the extent to which they used each of 16 different substances (42). What Wilde found was a remarkably similar usage pattern across all drugs. (See Figure J-2 Insert Figure J-2) From a high in 1977 all drug use declined in tandem until 1991 and then increased through 1999. This similarity can be determined through reliability analysis, factor analysis, multiple regression and analysis of cross-correlations with time lags. According to Wilde's analysis one can predict the usage of any single drug from the use rates of all other drugs with complete precision. In effect, the changes in use of all drugs are caused by some other factor.

These findings have a considerable significance for the alcohol advertising debate with respect to youth in Canada. Of the 16 drugs surveyed over the two decades, only tobacco and alcohol were advertised. Yet usage patterns for tobacco and alcohol were precisely the same as for unadvertised drugs. Clearly advertising could have been a causal factor in tobacco and alcohol use only if it was a factor in the use of all other drugs, which it was not. Whatever the causes of alcohol use, it was clearly not caused by advertising.

Despite the strength of these findings, the critics of alcohol advertising continue to argue their cases. Two recent studies, widely reported in the press as demonstrating the connection between alcohol advertising and underage drinking, deserve particular comment. The first is a study by Phyllis Ellickson (Does alcohol advertising promote adolescent drinking?) which claims that certain forms of advertising such as exposure to in store beer displays, exposure to magazines with alcohol advertisements and to beer concession stands at sports or entertainment events predicts the frequency of grade nine drinking.

The Ellickson study, however, has significant flaws which effectively undermine its claims about alcohol advertising and underage drinking. First, despite her claims that she controlled for the other risk factors for youth drinking, out of the hundreds of factors that affect youth drinking, only a handful of these were taken into account, which makes it impossible to say which specific factor causes adolescent alcohol use. Second, the study never objectively measures alcohol use or supposed advertising exposure, but relies on participant self-reports which are notoriously unreliable. Again, the study data comes from one state, South Dakota which ranks among the top ten US jurisdictions for adolescent and young adult drinking. Fourth, the study's results are barely statistically significant, suggesting that there is not a causal link between alcohol advertising and underage drinking. For instance, the odds ratio for linking exposure to TV beer advertisements and subsequent drinking is only 1.05, while for magazines with alcohol advertisements and subsequent drinking it is only 1.12. Associations like these below 3 are generally discounted by most statisticians. Again, the study found that exposure to beer advertisements on television was NOT a predictor of subsequent alcohol use.

More importantly, the associations that are most significant in the study are NOT related to alcohol advertising. For instance, adult approval of drinking, poor grades, low religiosity, and low parental monitoring are all better predictors of underage drinking according to the study than exposure to alcohol advertising. Finally, the authors fail to pick up on the significance of one of the strongest predictors of alcohol use found in the study, viewing particular television programmes with frequent portrayals of drinking. As Fisher notes, the connection between watching depictions of drinking on TV and subsequent drinking is hardly surprising given that alcohol use during programmes occurs six times more frequently than do advertisements for alcohol, while ads for soft drinks occur four times more frequently than alcohol ads.

The second study currently used by those claiming a link between alcohol advertising and underage consumption was published in January, 2006 by Snyder et al. It looked at the relationship between alcohol advertising expenditures and exposure to alcohol advertising and adolescent drinking. The authors conclude that "individuals who saw one more advertisement on average than other individuals had 1% more alcoholic drinks per month."

Unfortunately, the Snyder et al study is as deeply flawed in its conclusions as the Ellickson research. Four problems are particularly significant. First, the authors failed to control for hardly any of the risk factors for adolescent drinking. Second, and more crucially, the authors failed to control for perhaps the two most important risk factors for adolescent drinking, parental and peer influence, making it impossible to know with any degree of confidence what their contribution to underage drinking versus the contribution of advertising might be. Third, the authors, like Ellickson, rely on self-reports about the amount of alcohol advertising seen by their subjects. Since there is often a significant difference between one's memories of an event and the event itself, the study cannot guarantee the accuracy of its most crucial measurement, a measurement integral to its conclusion. Fourth, the results barely reach statistical significance since the confidence intervals on market-level advertising expenditures per capita are 1.002-1.056 and mean advertising exposure intervals are 1.001 to 1.021. These represent a risk not appreciably different from 1.00- which means no increased risk and provide no basis for a scientific finding that alcohol advertising "contributes to increased drinking among youth" as the authors claim.

Snyder et al's claims are also brought in question by a recent study by Nelson, which looked at the question of whether alcohol advertisements in magazines, on which the industry spent \$ 394 million US in 2003, target underage youth. Nelson looked at 3,675 alcohol ads in 28 magazines from 2001-2003 and analyzed them according to demographics including percentage of young readers, percentage of adult males readers, circulation, and content category. In 14 of the 28 magazines the youth readership is equal to or greater than 20%. Nelson found that despite the claims that the alcohol industry targets young people in its magazine advertising, a careful regression analysis of the data does not support these claims. Given the size of the young adult population (ages 21-34), the fact that they drink more and do not yet have established brand loyalties, the industry focuses its advertising on this group as opposed to adolescents. As Nelson notes "The percent of youth readers is not significant in any of the regressions, regardless of the model or specification. The results fail to support the allegation that beer and spirits advertisers are targeting young readers. Beer advertisers favour magazines with more young adults, male readers and larger adult audiences, but not adolescents. Spirits producers favour magazines with more adults, male readers and larger adult audiences, but not adolescents."

4) Alcohol Advertising Bans

What then about the effectiveness of bans on alcohol advertising? Do such bans actually reduce alcohol consumption, prevent underage drinking and reduce alcohol related harm? The consistent empirical evidence from around the world, and particularly in Canada, is that they do not.

In Canada two experiences with advertising bans, one of short duration in the British Columbia and the other lasting some 58 years in Saskatchewan, have been analyzed to determine the relationship between advertising and consumption. The British Columbia ban prohibited alcohol advertising from September 1971 to October 1972. Smart and Cutler in their analysis of the effectiveness of the ban noted that “the yearly per capita consumption data do not show any striking effects of the ban on sales.” Indeed, despite the limitations of the ban the authors concluded that “the data presented lent little support for the view that the B.C. advertising ban reduced alcohol consumption. Both the yearly and monthly analyses of beer, wine or liquor consumption show no substantial effect of the ban.

The Saskatchewan ban, being of considerably longer duration, provided a much better opportunity to test the claim that alcohol advertising increases consumption by a real time measure of alcohol advertising on a population that had not been previously exposed to such advertising during most people’s lifetime. Makowsky and Whitehead, who examined the affects of the ban’s repeal during the 1980’s, hypothesized that allowing alcohol advertising would lead to an increase in alcohol consumption, as the champions of such ban claim. In order to test the hypothesis the authors compared the experience of Saskatchewan with New Brunswick, which had a similar ban on alcohol advertising that continued after the repeal of the Saskatchewan measure.

The results of the study failed however to confirm the author’s hypothesis about the effects of banning alcohol advertising. Data was collected on monthly alcohol sales from 1981-1987, for both Saskatchewan and New Brunswick. Even after allowing for a gradual build-up of advertising affects, the authors concluded that “The change in legislation regarding alcohol advertising produced neither an abrupt permanent nor a gradual permanent effect on the patter of the total volume of sales in Saskatchewan.” What did

happen, according to Makowsky and Whitehead, was a significant shift in consumption patterns, with beer consumption increasing while spirit consumption declined. “In spite of what appears to be a substitution effect between beer and spirits, overall sales of alcohol did not increase between 1981 and 1987 in Saskatchewan...there was no increase in overall sales in Saskatchewan following a change in advertising policy. IN comparison with New Brunswick where total sales did not change, the authors note “the change in alcohol policy in Saskatchewan, when viewed in context of changes in New Brunswick during the same period, presents little support for the contention that alcohol advertising contributes to alcohol consumption.”

Similar studies in the United States have looked at the effects of advertising restrictions on alcohol consumption and misuse. Studies by Nelson, Ornstein and Hanssens and Hoadley use state data to examine the results of bans on billboard alcohol advertising of spirits. In every instance, consumption of spirits was in fact higher in states that had banned billboard advertising. Ogborne and Smart compared Canadian and US data as to the effects of advertising restrictions on consumption and alcoholism. They concluded that advertising restrictions had no discernable effect on either total consumption or on alcoholism. Schweitzer et al conducted a cross-sectional analysis of both alcoholism and total consumption in 35 states over the course of one year. As with Makowsky and Whitehead they found that while advertising restrictions shifted the pattern of drinking (from beer to spirits) it did not in any case reduce consumption.

Saffer examined data from 17 OECD countries from 1970-1983 in an effort to determine whether restricting broadcast alcohol advertisements affected alcohol consumption, road accidents and deaths from liver disease. He found that there was no statistically significant connection between advertising restrictions and liver disease but that there was such a connection between total consumption and road accidents, with lower consumption and fewer accidents in countries with greater restrictions. Saffers analysis was criticized by Young who after re-examining the data concluded that Saffer had mistaken the direction of causality. Rather than advertising bans bringing about lower consumption, countries with low consumption and death rates tend to adopt advertising bans. Even this connection disappears when serial correlation analysis is used. Most importantly, according to Young, Saffer’s data shows that bans result in increases not decreases in consumption.

A more recent analysis of OECD countries for the years 1977-1995 by Nelson found that while broadcast bans of alcohol advertising might affect brand and beverage choices, they do not reduce consumption or alcohol abuse. As Nelson notes “The empirical results do not support the notion that bans of broadcast advertising of alcoholic beverages will reduce consumption or alcohol abuse. The evidence indicates that a complete ban of broadcast advertising of all beverages has no effect on consumption relative to countries that do not ban broadcast advertising. Equally important for alcohol policy, the results fail to provide evidence that advertising bans have significant negative effects on alcohol abuse outcomes, including cirrhosis mortality and motor vehicle fatalities.”

Finally, Calfee and Scheraga in their comparative analysis of European countries consumption and advertising patterns included Sweden in a separate data run for the years of its advertising ban, 1979-1989, in order to test the theory that consumption should be different during a ban. They concluded that the banning of alcohol advertising in Sweden “had little if any effect on the dynamics of the Swedish market.” When Sweden was compared with the Netherlands and the UK, “Similar nations with and without advertising,” the results “suggest that banning advertising does not substantially affect the workings of the alcohol market.”

These results about the effectiveness of alcohol advertising ban support R G Smart, formerly of the Addiction Research Foundation who, after a comprehensive review of all the data, concluded that “The evidence indicates that advertising bans do not reduce alcohol sales, total advertising expenditures have no reliable correlation with sales of alcoholic beverages and ... experimental studies typically show no effect of advertising on actual consumption.”

Conclusion

The paper has reviewed the empirical evidence about how advertising works, the connection between alcohol consumption and alcohol advertising, both with adults and adolescents, and the effectiveness of alcohol advertising bans. It has argued that advertising for the most part does not have the power to initiate consumption, and that its use with branded products like alcohol is to defend or increase market share through enhancing brand awareness, preference, usage and loyalty. Further, it has shown that the vast majority of

econometric studies that have examined the relationship between alcohol consumption and advertising have found that alcohol advertising does not affect either underage drinking or total consumption. Finally, it has noted that the studies which have looked at the effectiveness of alcohol advertising bans, particularly in Canada, have found that such bans do not reduce alcohol consumption or alcohol related harm.

The unfortunate consequences of the unjustified policy fixation on alcohol advertising bans extend far beyond the weakening of the public policy process through the championing of policy options that lack credible, rigorous, and consistent evidence and show little rational promise of accomplishing their ends. They extend as well to the fact that bad policy inevitably tends to drive out good policy. By focusing so exclusively on advertising as the cause of underage drinking and advertising bans as the answer to underage drinking, promising new approaches to youth alcohol use such as the determinants of health model which focuses on such protective factors for substance abuse as keeping young people in school, reducing income disparities, supporting stable home environments and addressing issues of self-esteem and stress, fall off the policy menu. And that is too great a price to pay for bad policy.

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