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Gender focus of target groups for alcohol health promotion strategies in New Zealand

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SUMMARY

This paper examines issues of gender equity in relation to choice of target groups for alcohol health promotion strategies. Previous research had established a segment of male drinkers, labelled 'Young Heavy-drinking Men', who were an appropriate target group for alcohol health promotion activities, such as mass-media advertising. The current study used multivariate cluster analysis to identify a segment of female drinkers who might also have been considered an appropriate target group. The analysis was based on the responses of 754 New Zealand women aged 14–65 years. The identified segment, labelled 'Young Heavy-drinking Women', accounted for 12% of the female drinkers, 30% of female consumption and 54% of the problems resulting from women's own drinking. In determining whether limited resources should focus on the male or female target group, a number of issues were considered. The men's segment contained more drinkers, and accounted for considerably more of the total alcohol consumption and the alcohol-related problems. They also accounted for a greater proportion of those who were interested in drinking less, and who might therefore be supported by media campaigns encouraging moderate drinking. There were some data from the survey to suggest that considerably more women were experiencing harmful effects from men's drinking, than men were from women's drinking; thus there would be some benefit to women from a focus on male drinking. It was concluded that this benefit to women, on top of the other evidence supporting a male target group, would make it difficult, on the basis of the available data, to argue for a change away from the male target group.

Key words: gender; health promotion; target group

INTRODUCTION

One of the main issues facing health promotion personnel is how to most effectively use limited resources, and this is particularly the case if considering mass-media campaigns. It is often not possible, or expedient, to direct health promotion activities to all sectors of the population. It is therefore often appropriate to segment the population into groups with differing needs and then to focus health promotion activities on one target group or segment (Kotler, 1982). The problem, then, is how to determine which segment it should be.

Gender equity issues

Targeting of alcohol moderation messages via television and radio advertising in New Zealand has, to date, focused on young men, but the question has been asked as to whether the focus should be moved to a female target group. One line of reasoning is based on issues of gender equity and a belief that men have been the focus for a long time and a focus on women is needed to counter that imbalance.

However, in determining gender equity it is also important to consider the extent to which women experience negative consequences from

male drinking; it may be that women would benefit more from campaigns continuing to focus on heavy drinking males. Lehmann and Krupp (1983/1984) noted that although the research was lacking, police and social-service workers often reported that the consumption of alcohol or alcohol abuse was associated with the escalation of verbal arguments into physical abuse of women. They also reported on research that generally supported the observation that alcohol use is a contributing factor in spouse abuse. More recent evidence that alcohol is linked with violent behaviour comes from research such as that of Bushman (1993), Taylor and Chermack (1993) and Kantor and Straus (1989). Although both men and women are assaulters and victims, the primary problem is assault of women by men (Flynn, 1977; Gelles and Cornell, 1985).

The costs to women from living with alcoholic men are well described by Zajdow (1994), who noted that problem drinking by males emphasises female partners' subordinate roles. She and others (e.g. Asher, 1992) note that women's roles and identities lead to them taking on greater responsibility for caring for an alcoholic partner than is the case with males, and that this responsibility brings with it many costs. Included in these costs is the label of 'co-dependent' and the implication that the female partner is also 'sick' or 'bad' (Holmila, 1994).

Women who have heavy-drinking partners are at greater risk of becoming heavy drinkers themselves [National Institute on Alcohol Abuse and Alcoholism (NIAAA), 1990].

It might also be argued that targeting of women's drinking unnecessarily identifies them as a group with a problem, and that this would be inappropriate victim blaming, if men are causing most of the problems.

Preparedness for change

As health promotion strategies are more likely to be successful with those who are interested in changing their behaviour, another issue to consider is who is most interested in decreasing their consumption. Reinforcing people who are interested in changing and reinforcing those who currently drink in moderation are realistic goals for mass-media campaigns (Wallack, 1980).

Social climate

However, probably the greatest potential benefit from moderation advertising is in changing the overall climate of opinion (McCron and Budd, 1979), with regard to the acceptability of drinking in moderation or drinking less. A climate supportive of moderation is more likely to facilitate appropriate policy changes. Previous New Zealand research has shown that advertising campaigns focusing on individual drinking behaviour can have a positive effect on public support for alcohol control policies, probably by acknowledging alcohol-related harm as a societal issue (Casswell and Gilmore, 1989). There do not appear to be any obvious reasons to believe that focusing on a particular gender group will offer any clear advantages if the goal is changing the climate of opinion. It might, for example, be argued that the male dominance among policy-makers might make them identify more with a male target group; alternatively, a female target group might attract more of their sympathy and support for alcohol issues.

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Another issue to consider is that many women are of child-bearing age, so there is not only the issue of consequences from their own consumption, but also the consequences for any child that they might conceive. There are clearly some risks associated with heavy alcohol consumption by pregnant women, in extreme cases resulting in fetal alcohol syndrome (Philips *et al.*, 1989), which is considered to be the leading cause of mental retardation in developed countries (Abel and Sokol, 1986; Schorling, 1993). It is less clear what the effects of light to moderate alcohol consumption are on the fetus (Harlap and Shiono, 1980; Kline *et al.*, 1980; Knupfer, 1991).

Although there is some evidence from animal studies that male alcohol consumption can contribute to birth defects (Cicero *et al.*, 1990), the evidence for the influence on humans is not as strong as for fetal alcohol syndrome resulting from the mother's drinking.

Male target group

A previous paper (Wyllie and Casswell, 1993) identified a segment of male drinkers who were an appropriate male target group for health promotion strategies in New Zealand. This study used multivariate cluster analysis to identify different groupings of male drinkers.

Cluster analysis is a statistical technique that sorts individuals into groups, within which people are as similar as possible to each other and as different as possible from the other

groups. These groups, which are usually referred to as clusters or segments, are described in terms of their dominant characteristics in relation to the other clusters.

The identified target group, which was labelled 'Young Heavy-drinking Males', reported the highest levels of heavy drinking and alcohol-related problems. Also, because they were the group most likely to feel they were drinking too much, it was considered that they might be more responsive than some other segments to promotions that sought to support people who wanted to change their drinking patterns.

This Young Heavy-drinking Male segment accounted for 20% of male drinkers, but they drank 36% of the alcohol consumed by men. They drank on average once every 2 days, usually drank beer, and had an average consumption of almost eight 350 ml cans at a sitting. Over two-thirds (68%) reported feeling drunk at least once a month. Eighty-nine per cent reported experiencing at least three of the 26 types of measured problems resulting from their own drinking, with the average number per person being eight. A relatively high 59% had at some time felt they should cut down on their drinking and 37% were currently drinking 'a little' or 'a lot' more than they were happy with.

Female target group

To examine the issue as to whether a female target group should be accorded higher priority than this male target group, a similar cluster analysis was undertaken with female drinkers, drawn from the same survey as the male drinkers. This allowed for the identification of the most appropriate female target group and comparison of this with the male target group.

There have been two previous cluster analyses of women drinkers undertaken by the Alcohol and Public Health Research Unit in New Zealand. One was based on data collected in 1982 from persons aged 16 years and over, living in six provincial cities. The cluster analysis was based on 1055 females who had consumed alcohol in the previous 7 days. There were no measures of alcohol-related problems in this survey and the only heavy-drinking cluster produced, labelled Heavy Hotel/Tavern Drinkers, accounted for only 2% of the women drinkers (Martin and Casswell, 1988).

A second cluster analysis was undertaken using data collected in 1986 from a sample aged 16–65 years living in Auckland, New Zealand's largest metropolitan centre (26% of the population at the time of the survey). It was based on 906 females who reported consuming alcohol in the previous 7 days. The clustering was based on contextual and consumption variables and the resulting clusters were cross-tabulated by measures of alcohol-related problems (Martin *et al.*, 1992). The highest level of problems was recorded by a very small cluster, labelled 'Frequent Very Heavy Beer Drinkers'. However, they were only 1% of the women drinkers and accounted for 3% of the problems reported by women. Of the larger clusters, there was a cluster labelled 'Young Heavy Beer/Wine Drinkers' who were 7% of the women drinkers and accounted for 19% of the problems. The other cluster with comparatively high levels of problems was labelled 'Frequent Social Drinkers'. They were 5% of the female drinkers and accounted for 14% of the problems. These three clusters between them accounted for 13% of the women drinkers and 36% of the reported problems.

The 1988 survey, on which the current study is based, was the first of the three studies with national coverage and it was also the first that was specifically designed with the intention of undertaking a cluster analysis.

Data collection

Data from 881 women aged 14–65 years were collected as part of a national drinking survey undertaken in late 1988. Of these women, 10% had not consumed alcohol in the previous 12 months. A further 4% were excluded from the cluster analysis because of incomplete data, leaving a sample of 754.

The questionnaires were administered face-to-face in respondents' homes by trained market-research company interviewers. The sample was selected using proportional stratification, random sampling and cluster procedures. Up to six calls were made to try and obtain interviews and the thoroughness of the call-back procedure resulted in a response rate of 68%, which was relatively high for this type of survey in New Zealand. The sample closely matched the New Zealand population in terms of gender, age and geographic distribution. It did, however, underrepresent people in the Maori ethnic grouping. Because of the small Maori and Pacific Islands samples, ethnic differences are not reported.

The questionnaire included measures of: needs, motivations and attitudes relating to drinking; drinking context; consumption and ways in

which alcohol might impact negatively on people's lives (these will be referred to as 'problems'). The problems section was self-completed and then placed in a sealed envelope. Respondents were asked to indicate, from a list of eight items, areas of their life where someone else's drinking had had a harmful effect in the previous 12 months. There were also questions on the impact of other people's drinking relating to motor vehicle crashes, other types of accidents causing injury or major damage, and physical assault. The measures of problems from their own drinking included nine areas of their life where they could indicate if there had been any harmful effects (see Table 2). These were similar to those used in United States surveys (Hilton and Clark, 1987). There were also 17 more specific items, ranging from feeling the effects of alcohol after drinking the night before through to problems indicative of alcohol dependence. They were asked to indicate which of these they had experienced in the previous 12 months (see Table 3). These items were based on those used by Kendell *et al*. (1983), with some modifications. It should be noted that not all types of problems were measured and that surveys can only identify problems that people are aware of. For example, some of the frequent drinkers may be at risk of cirrhosis, but they will probably not specify it as a problem that they are currently experiencing.

More details on the methodology can be found in the report on the male component of this survey (Wyllie and Casswell, 1993).

Data analysis

Initially, two separate factor analyses were performed. One was based on 24 attitude items and the other on 19 consumption-related variables: overall frequency of drinking, their frequency of drinking at main drinking locations, their frequency of drinking larger amounts and of feeling drunk, beverage types and their annual consumption. The Statistical Analysis System (SAS) computer software procedure FACTOR was used with principal component analyses followed by varimax rotation. The number of factors retained was determined by the screen method. These factors were then used as input to a cluster analysis, along with the number of problems respondents had experienced from their own drinking in the past year, whether they were happy with their level of drinking, and how this level had changed in the past year, these being variables on which discrimination was being sought. It should be noted that demographics and support for alcohol-control policies were not input into the clustering, but the resulting clusters were cross-tabulated by these variables.

The FASTCLUS procedure from the SAS package was used for this analysis. This performs disjoint cluster analysis on the basis of Euclidean distances. The number of clusters used was based on the pseudo-F statistic. The resulting clusters were cross-tabulated with all relevant variables to provide cluster descriptions.

For comparing subgroups of the sample, nonparametric methods were used. Specific test and significance details have not been included in the text, but all cluster characteristics commented on are statistically significant from the other clusters at the 5% level. The Statistical Analysis System (SAS) computer software procedures FREQ (mostly for chi-square tests) and NPARIWAY (mostly for Mann–Whitney-U and Kruskal–Wallis tests) were used. The SAS Users' Group International (SUGI) Supplemental Library procedure MRANK was also used (mostly for generalised Friedman nonparametric analysis of variance).

RESULTS

Female heavy drinking segment

Five clusters (segments) were produced for the female drinkers, many of which were similar in defining characteristics to the male segments previously reported (Wyllie *et al*., 1993). For the purposes of this paper, the segment descriptions will be limited to the segment that was the most suitable as a female target group for alcohol health promotion strategies (for descriptions of the other segments see Wyllie and Casswell, 1989). This segment has been labelled 'Young Heavy-drinking Women' and accounted for 12% of women drinkers, 30% of female alcohol consumption and 54% of the problems reported from women's own drinking.

The Young Heavy-drinking Women drank relatively large amounts but did not drink as frequently as one of the other segments. They drank on average twice a week and on a typical occasion they would average the equivalent of almost six 350 ml cans of beer. This amount was about three-quarters of that drunk by the Young Heavy-drinking Men.

Compared with other segments, they reported relatively high levels of drinking larger amounts

and feeling drunk; 46% felt drunk at least once a month. Most of these women reported experiencing problems from their own and others' drinking. They were the women's segment who reported the greatest number of alcohol-related problems, averaging seven from their own drinking and three from others' drinking. Almost all (92%) reported experiencing three or more types of problems from their own drinking in the previous 12 months.

The most popular type of alcohol amongst this segment was beer (60% of their consumption), although they also drank some wine (24%) and spirits (16%). They most often drank in their own homes, (although much less often than one of the other segments of women drinkers). As with the Young Heavy-drinking Men, a portion of this segment were regular hotel patrons; 29% went to a hotel bar at least weekly.

A relatively high proportion (51%) had, at some time, felt that they should cut down on their drinking. They were the group of women most likely to report that they were currently drinking 'a little' or 'a lot' more than they felt happy with (33%). A relatively high proportion (47%) had actually reduced their consumption of alcohol in the previous 12 months, although there were also a relatively high number who had increased their consumption (21%). This was the segment most likely to have cut down for financial reasons, or because of a concern over losing control of their drinking. However, the most commonly mentioned reasons were similar to those of other segments, these being (in order of the most frequently mentioned): not wanting to drink and drive, a dislike of hangovers, not going out as much, it being generally more acceptable to drink less, wanting to maintain or increase physical fitness, concern at the effects on health, entering a phase of life where less importance is placed on drinking, and having family responsibilities. Women in this segment who said they had increased their consumption in the previous 12 months were taking part in more social activities involving alcohol now that they were older.

Young Heavy-drinking Women were more likely than women in other segments to agree with many of the pro-alcohol attitude statements, particularly those reflecting alcohol as an aid to meeting people, for cheering people up, making life more fun, and reducing tensions. They were more likely to agree that it was OK to get drunk now and again. They were the most likely to admit to driving after drinking and they were also more likely than most women to say that they would drink more if it wasn't so expensive. Accordingly, they were more supportive than most of alcohol being easier to afford, although there were still only 19% who supported this.

Most of these women were young, with an average age of 26; 84% were aged under 35. Almost half were single and they tended to be of lower socioeconomic status.

Relativity with male segments

A major issue of relevance to the priority to be given to female versus male segments as the focus of health promotion activities, was the share of total problems reported from the respondents' own drinking. These data are presented in Table 1, and the data have been weighted to reflect the correct proportions of men and women in the population.

Young Heavy-drinking Men accounted for 10% of the drinkers compared with the 6% who were Young Heavy-drinking Women. In terms of consumption, the Young Heavy-drinking Men consumed 28% compared with 7% for the Young Heavy-drinking Women.

The greatest share of the problems was accounted for by the Young Heavy-drinking Male segment (35%), although the share accounted for by the Young Heavy-drinking

Table 1: Relativity of male and female segments

	Share of drinker sample (%)	Share of alcohol consumption (%)	Share of total problems from own drinking (%)	Share of those feeling drink too much (%)
Young Heavy-drinking Women	6	7	19	18
Other women	44	19	17	16
Young Heavy-drinking Men	10	28	35	35
Other men	40	46	29	30

Women was not insubstantial (19%). The dominance of the male segment in terms of the proportion of problems, was in keeping with the greater proportion of drinkers and alcohol consumption that it accounted for compared with the female segment. It must be noted that all the problem measures recorded incidence of the problem and not frequency. This means that a person who experienced a type of problem once, received equal weighting to someone who experienced it 20 times. The numbers of problems reported are the numbers of different types of problems experienced in the preceding 12 months. One might hypothesise that those

Table 2: Areas of own lives where own drinking caused harmful effects for Young Heavy-drinking Women and Men

Areas of lives where own drinking had a harmful effect in last 12 months	Share of problems reported by Young Heavy-drinking Women (%)	Share of problems reported by Young Heavy-drinking Men (%)
Friendships and social life	19	38
Health	21	29
Outlook on life	22	29
Home life or marriage	25	36
Work and employment opportunities	18	39
Financial position	20	39
Appearance	24	35
Energy and vitality	21	33
Children's health or well being	47	16

Table 3: Problems experienced from own drinking in previous 12 months, as reported by Young Heavy-drinking Women and Men

Problems experienced from own drinking in previous 12 months	Share of problems reported by Young Heavy-drinking Women	Share of problems reported by Young Heavy-drinking Men
Felt you should cut down on your drinking or stop altogether but been unable to do so	24	33
Sometimes got drunk when there was an important reason to stay sober	19	36
Felt the effects of alcohol after drinking the night before	11	21
Awakened the next day not being able to remember some of the things you had done while drinking	16	36
Felt the effects of alcohol while at work, study or engaged in household duties	13	30
Taken an alcoholic drink first thing when you got up in the morning	4	57
Been told by a doctor or health worker that the amount you were drinking was having a bad effect on your health	22	27
Had your hands shake a lot in the morning after drinking	22	44
Stayed intoxicated for several days at a time	17	50
Been told to leave a place because of your drinking	12	68
Been away from work because of your drinking	7	63
Got into a physical fight because of your drinking	18	53
Been ashamed of something you did while drinking	21	35
Been involved in a motor vehicle crash when you have been drinking	21	54
Been involved in an accident while at work, study, or doing household duties after you have been drinking	8	51
Been involved in a serious argument after you have been drinking	23	35
Found that you need more alcohol to get the same effect from it as before	12	55

currently reporting the greatest number of types of problems might also be experiencing them the most frequently, and therefore the share of problems accounted for by the Young Heavy-drinking Men relative to the women may be underestimated in this analysis.

While the men's segment accounted for a greater proportion of the problems overall, it may be that there was a difference in the nature of the problems being reported by the men's and women's segments. Tables 2 and 3 show the proportion of the people who reported each problem who were in the Young Heavy-drinking Men and Young Heavy-drinking Women's segments. For example, of all the people who reported that their drinking had a harmful effect on their health in the previous 12 months, 29% were in the Young Heavy-drinking Men's segment and 21% in the Young Heavy-drinking Women's segment. This greater proportion of the problems accounted for by the Young Heavy-drinking Men was common to all but one of the items in Tables 2 and 3. The Young Heavy-drinking Women's segment included more of the people who reported that their own drinking was having a harmful effect on their children's health or well being (47% compared with 16% for the male segment). This was in accord with a greater proportion of the women's segment having children (53% compared with 33% for the men's segment). There were some specific problems on which the Young Heavy-drinking Men accounted for particularly high proportions compared with the women's segment, these being: having a drink first thing in the morning; needing more alcohol to get the same effect; feeling the effects while at work, study or engaged in household duties; being away from work; and not being able to remember events from the night before (Table 3).

Another issue of relevance to decisions about choices of target groups is the interest in reducing consumption. As shown in the last column of Table 1, it was the Young Heavy-drinking Men who accounted for the greatest share of those who felt they were drinking too much (35% compared with 18% for the women's segment).

Assaults by drinkers

As mentioned previously, the gender equity discussion needs to take into account the effect of men's drinking on women, and vice versa. While this was not directly measured in the current study, a question on the frequency of physical assaults by someone who had been drinking and was living in the same house at the time was one measure that was likely to relate quite closely to the impact of men's drinking on women and vice versa. Of all such assaults in the 12-month period, 78% were reported by women. This figure takes into account the frequency of assaults, but a similar figure is obtained when only the 12-month prevalence of assaults is considered; of those people reporting at least one assault from a co-habitant who had been drinking, 76% were women. This is a very basic measure as it does not examine issues such as the severity of the assaults, power relations between persons involved, and different types of assault. Qualitative research is really needed to understand how men and women interpret the term 'physical assault'; some women might, for example, not include rape. However, the indication from these limited data is that women are experiencing considerably more assaults that are linked with men's drinking than men are experiencing in association with women's drinking.

It should also be noted that this measure can in no way ascertain that the assaults were caused by the alcohol; simply that the assailant had been drinking. There were, however, measures in the survey in which people were asked to identify areas of their lives where they felt that *someone else's* drinking had had a harmful effect in the previous 12 months, so in these cases the respondents did have an opportunity to identify that they believed other persons' drinking was contributing to problems. Two of these measures provide some indication of possible effects of men's drinking on women and vice versa. These measures asked whether someone else's drinking had had a harmful effect on home life or marriage, and children's health or well being. Both these measures are likely to relate quite closely to the drinking of spouses/partners. On both measures there were significantly more women reporting harmful effects. Thirteen per cent of the total sample of women compared with 8% of men reported a harmful effect of someone else's drinking on their home life or marriage. Of those with children, 9% of women compared with 5% of men reported a harmful effect of someone else's drinking on their children's health or well being. There is therefore some evidence that women are experiencing considerably more negative consequences from men's drinking than men are from women's drinking.

DISCUSSION

An important argument for having a female target group for alcohol health promotion activities, especially mass-media advertising, is on the grounds of gender equity. It can be reasoned that the focus to date in New Zealand has been solely on men, and that this gender imbalance should be redressed. The data show that there is a segment of women, labelled as Young Heavy-drinking Women, who are experiencing high levels of alcohol-related problems as a result of their own drinking and who would be an appropriate female target group. The question is how to balance up the claims of this group versus the most appropriate male target group (labelled Young Heavy-drinking Men).

The Young Heavy-drinking men accounted for almost twice the proportion of alcohol-related problems that people reported from their own drinking than did the Young Heavy-drinking Women. Young Heavy-drinking Men also accounted for the greatest proportion of those who felt that they were drinking more than they were happy with. As mentioned previously, one of the things that mass-media health promotion advertising can achieve is to support and reinforce those who are interested in reducing their consumption. (While it cannot be automatically assumed that believing you are drinking too much equates with a desire to cut down, it was the best indicator of this that was available in the current study.)

One also needs to consider who else experiences the negative consequences of drinking. Although there are only limited data available in the current survey, the results suggest that women are likely to be experiencing considerably more problems from men's drinking than men are experiencing from women's drinking. This is also consistent with the international literature cited previously (Flynn, 1977; Gelles and Cornell, 1985).

In relation to the alcohol and pregnancy issue, it should be noted that the Young Heavy-drinking Women are likely to include those women who are at risk of possible fetal damage from heavy alcohol consumption and this is an argument for focusing on this segment.

There are other issues to consider, as noted in the Introduction, which the current research has not been able to address. These include issues around victim blaming and changing the climate of opinion.

The focus of this paper has been on the priority of male versus female targeting; however, the similarities in the characteristics of the male and female segments raise the question as to whether campaigns targeted at the Young Heavy-drinking Men might not also have some appeal and impact with the Young Heavy-drinking Women. Recent qualitative research that has examined the responses of 18–29-year-old heavier drinking men and women to a series of television advertisements promoting alcohol, found that advertisements that appear to be targeting men were often also appealing to women (Holibar *et al.*, 1994). However, that research would not support an argument that advertising targeting women would also appeal to men.

It might be argued that campaigns should be developed that target both the Young Heavy-drinking Men and Women at the same time. Such an approach is likely to be inconsistent with good marketing practices, as successful strategies are likely to differ between the men and women. For example, Young Heavy-drinking Men place a lot of importance on the male peer group (Wyllie and Casswell, 1991) and therefore many of the successful strategies are likely to focus on male-only drinking situations. There may be some areas in which successful advertising could be developed to target both males and females, but these are likely to be limited and may not be the best strategies for reaching either group.

In conclusion, it would seem that on many of the criteria that this paper has been able to address, there is justification for continuing to focus on the men's segment with mass-media campaigns. One of the key gender equity issues is that a focus on the male segment offers potential benefits for women who experience negative consequences as a result of male drinking. Given the continual recruitment of young men to the Young Heavy-drinking segment, ongoing campaigns are appropriate. However, if additional resources allowed an additional target group, the identified cluster of Young Heavy-drinking Women would seem to warrant attention.

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