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INFLUENCING ALCOHOL CONTROL POLICIES AND PRACTICES AT COMMUNITY FESTIVALS*

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ABSTRACT

The goal of this study was to assess the feasibility and effectiveness of two interventions aimed at reducing alcohol-related risks at community festivals—a training program for festival planners and a community organizing campaign. We randomly selected four festivals for each intervention and had 24 comparison festivals. Our assessment included process evaluation to track and evaluate types of alcohol policies resulting from each of the interventions, pre and post telephone surveys of key festival planners and law enforcement agencies, and pre and post pseudo-underage and pseudo-intoxicated purchase attempts. Analyses showed that both interventions were feasible and were successful in influencing adoption of written policies and improving alcohol-related practices. However, neither intervention appeared to decrease propensity for illegal alcohol sales at these events, likely due, in part, to the short time frame of the interventions. Future research should assess effects of the interventions on alcohol-related problems and effects of enforcement interventions.

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INTRODUCTION

Alcohol use is associated with many public health problems including traffic crashes, violence, sexual assaults, and sexually transmitted diseases (Abbey, Zawacki, Buck, Clinton, & McAuslan, 2004; Cook & Clark, 2005; Savola, Niemela, & Hillbom, 2005). Numerous studies have shown that rates of alcohol use and alcohol-related problems increase with increasing alcohol availability (Babor et al., 2003; Toomey, Jones-Webb, & Wagenaar, 1993). One venue where alcohol is readily available is community festivals—annual celebrations held in many communities across the United States. However, little research has focused on availability of alcohol at these events (Toomey, Erickson, Patrek, Fletcher, & Wagenaar, 2005; Wagenaar & Toomey, 2000).

One recent study found that the likelihood of illegal alcohol sales is very high at community festivals. Toomey and associates (2005) found that individuals who appeared under age 21 could purchase alcohol without showing age identification during 50% of purchase attempts. Individuals who appeared obviously intoxicated could purchase alcohol at festivals in 89% of their attempts. Alcohol is often served by volunteers at these events, who may not receive any server training or understand current laws regarding alcohol service, which prohibit sales to youth and patrons who appear obviously intoxicated. To date, no studies have been published that describe or evaluate efforts to promote alcohol-control policies and prevent illegal alcohol sales at festivals.

Three types of interventions that have been used to prevent illegal alcohol sales at licensed alcohol establishments could be adapted for community festivals. The first approach is to provide training to alcohol servers and managers of establishments to increase their skills and confidence in complying with laws regulating alcohol sales. Servers need skills to be able to check age identification, identify intoxicated patrons, and refuse alcohol sales; however, server training alone is inadequate to change server behavior—servers need to be supported by effective management (McKnight, 1991, 1993; Saltz, 1987). Managers can set clear expectations about responsible service of alcohol by establishing written policies such as requiring servers to check age identification of all customers who appear under age 30. A one-on-one management training program developed by Toomey and associates (2001) was successful in promoting alcohol control policies in bars and restaurants. Server and management training programs have also shown promise in preventing illegal alcohol sales to intoxicated customers and lowering patrons' blood alcohol content levels (Gliksman et al., 1993; Grube, 1997); however, training programs alone have not been effective in preventing alcohol sales to minors (Howard-Pitney, Johnson, Altman, Hopkins, & Hammond, 1991; Lang, Stockwell, Rydon, & Beel, 1998; McKnight, 1991; Wagenaar, Toomey, & Erickson, 2005).

A second approach to preventing illegal alcohol sales is community organizing campaigns, where individuals within a community come together to develop an

action plan to address the issue. Action plans may include a variety of strategies including encouraging alcohol establishments to voluntarily comply with alcohol laws, providing server training, and working with law enforcement to increase enforcement levels (Wagenaar et al., 1999). Community organizers were hired and trained as part of the Communities Mobilizing for Change on Alcohol project and Project Northland to conduct grassroots campaigns to reduce youth access to alcohol in communities in Minnesota and Wisconsin (Perry et al., 2002; Wagenaar, Murray, Wolfson, Forster, & Finnegan, 1994). A variety of strategies were used across the communities, resulting in increased checking of age identification in licensed establishments and a decreased propensity for alcohol sales to minors (Wagenaar et al., 2000). Community organizing campaigns have not previously been used to specifically target alcohol sales to *intoxicated* customers at licensed establishments.

A third approach to reduce the likelihood of illegal alcohol sales is enforcement campaigns. For example, compliance checks consist of underage youth attempting to purchase alcohol under the supervision of law enforcement agents. If an illegal alcohol sale is made, the server and/or the licensed holder are penalized. This type of enforcement campaigns has been shown to significantly reduce sales rates to underage youth (Grube, 1997; Preusser, Williams, & Weinstein, 1994; Wagenaar et al., 2005). Wagenaar and associates (2005) found that to achieve and maintain effects of compliance checks, all establishments within a community need to be checked regularly because effects of these enforcement campaigns may decay rapidly. Compliance checks are not feasible for preventing alcohol sales to obviously intoxicated individuals because law enforcement agencies could face potential liability for hiring individuals to become intoxicated for the enforcement campaign. However, McKnight and Streff (1994) observed decreases in sales to obviously intoxicated customers following an educational enforcement campaign.

The goal of this study was to conduct a two-year demonstration project to assess two interventions—a training program for festival planners and a community organizing campaign—for their feasibility and effectiveness in reducing alcohol-related risks at community festivals. The goal of both interventions was to increase alcohol control policies and decrease illegal alcohol sales at community festivals. In addition, although not one of our targeted interventions, we also assessed use of compliance checks at community festivals. Results of this study can assist groups that are selecting and implementing interventions targeting alcohol use and sales and related problems at festivals in their communities.

METHODS

We implemented the community organizing and training interventions at community festivals in one large metropolitan area. Our original sample consisted of 50 festivals that we assessed during Summer 2000 as part of an earlier study

(Toomey et al., 2005). From these 50 festivals, we excluded festivals that were not typical of most community festivals, including those that: 1) were very large (>250,000 in attendance), 2) charged admission, 3) only had alcohol available through local licensed establishments, and/or 4) no longer sold alcohol. We also excluded festivals that had not sold alcohol during any of our prior purchase attempts because we concluded that these festivals likely already addressed many of the issues identified in our interventions. The final sample included 38 festivals.

We randomly selected and assigned four festivals and their surrounding communities to the community organizing intervention. For the training intervention, we also randomly selected festivals—but we needed to contact a planner from each selected festival to determine if they were willing to participate in the training. We attempted to contact a planner from randomly selected festivals until we successfully contacted four festivals (we were unable to reach four festivals—we excluded these from our final sample). For the four festivals where we reached a festival planner, we had 100% agreement to participate in our training. The remaining 26 festivals were assigned to the comparison condition, but because purchase attempts were not completed at two of the comparison festivals (one festival planner identified our buyers in Year 1 and one festival did not sell alcohol in Year 2), we used 24 comparison festivals in our final analyses. At baseline, festivals in the community organizing condition ranged in size from 7,000 to 65,000 attendees, festivals in the training condition ranged in size from 5,000 to 45,000 attendees, and comparison festivals ranged from 2,000 to 250,000 attendees.

Interventions

Training

The four-session training program was adapted from the Alcohol Risk Management (ARM) Program, a management training program developed to promote policies to prevent illegal alcohol sales at licensed establishments (Toomey et al., 2001). "ARM for Festivals" was designed to be implemented with the festival planners who had decision-making authority for their event and was individually adapted to each festival. The goal of this program was to educate festival planners and encourage them to implement festival policies to prevent illegal alcohol sales and alcohol-related problems. During the first session, the ARM trainer provided an overview of alcohol laws for temporary liquor licenses, discussed the importance of festival policies to prevent problems, and provided an overview of recommended policies. A festival planner and one server also completed a risk assessment survey to determine existing policies and practices. During the second session, the trainer worked with festival planners to identify which of the recommended policies were appropriate for their festivals based on the results of the risk assessment survey. In the third session, the trainer

co-facilitated a staff meeting for the alcohol servers to introduce the new festival policies, review state alcohol laws, and discuss possible serving scenarios regarding underage and intoxicated customers. During the final session, the trainer discussed the importance of implementing and enforcing the new policies. Customized, printed policy manuals were provided to each festival to be distributed to servers and other staff. The training was implemented within two months prior to the festival during Summer 2003.

Community Organizing

Two community organizers were hired for the four organizing communities to conduct a one-year, five-stage community organizing campaign between Summer 2002 and Summer 2003. Each organizer was assigned to two festivals (neither organizer was a resident of the communities to which they were assigned). The organizing stages were: 1) assessment, 2) action team creation, 3) action plan development, 4) mobilization and action, and 5) implementation. The organizing process was similar to the process used in other community organizing projects (Blaine et al., 1997; Bosma, Komro, Perry, Veblen-Mortenson, & Farbakhsh, 2005; Forster et al., 1998; Wagenaar et al., 2000). Organizers attended two trainings and were provided on-going technical assistance to standardize the organizing process across communities.

During the assessment stage, the organizers made contact and built relationships with citizens and community leaders through one-on-one meetings, doorknocking, and telephone conversations. Total number of contacts ranged from 67 to 197 across the four communities. Through this assessment process, organizers identified five to ten individuals who were interested in working together to prevent alcohol-related problems at community festivals. These action teams varied in composition; festival planners and beer vendors were involved in some communities but not in others. During the first action team meeting, University staff presented recommended policies for festivals. The action teams met with key community leaders, assessed current festival policies, and then developed and implemented an action plan. Once policies were implemented, action teams worked to help facilitate implementation of the new policies through media coverage and development of educational packages. Fifty-five team meetings (mean = 14 per festival), 12 meetings with elected officials, and 20 media events (including newspapers, local cable, and church newsletters) occurred across the four festivals. A detailed description of the community organizing process in each of the communities is provided in a manuscript by Bosma and associates (under review).

Data Collection

We evaluated the effectiveness of the interventions by conducting: 1) process evaluation to track and evaluate types of alcohol policies that resulted from each

of the interventions; 2) baseline and follow-up telephone surveys of key festival planners to assess changes in alcohol-related practices that increased control of alcohol at festivals; 3) baseline and follow-up purchase attempts at intervention and comparison festivals to assess whether either intervention was likely to prevent illegal alcohol sales at festivals; and 4) baseline and follow-up telephone surveys of law enforcement agencies to assess enforcement practices targeting intervention and comparison festivals and their surrounding communities. All data collection protocols were approved by the Institutional Review Board at the University of Minnesota.

Process Evaluation

We created a contact database to track all training and organizing activities. We also assessed potential changes in policies that occurred independently of our two interventions through monitoring of city council minutes, local newspapers, and city ordinances.

Telephone Survey of Festival Planners

We conducted a pre-post telephone survey of festival planners using a survey instrument developed in a previous study (Toomey et al., 2005). We conducted surveys with festival planners who were the key decision makers for each festival. The instrument measured festival characteristics and practices. A research assistant conducted the survey at baseline (Summer 2002) and follow-up (Summer 2003). The participation rate was 92% (35/38) at baseline and 86% at follow up (31/36). Because we removed several festivals from our comparison group, our final sample for the analyses was 28 (Intervention = 7; Comparison = 21).

Alcohol Purchase Attempts

Individuals who appeared under the age of 21 (i.e., pseudo-underage buyers) and actors who acted out signs of obvious intoxication (i.e., pseudo-intoxicated buyers) conducted alcohol purchase attempts at baseline and follow-up. A panel of judges observed and selected only individuals appearing to be 18 to 20 years old for the pseudo-underage buyers, and actors who could convincingly act out signs of obvious intoxication for the pseudo-intoxicated buyers.

Consistent with an earlier study (Toomey et al., 2005), all buyers participated in a training and were instructed to follow a standardized protocol. Six male and seven female pseudo-intoxicated buyers sprayed their clothes with alcohol and, while acting out signs of intoxication (e.g., staggering, acting forgetful, slurring words, dropping money), approached alcohol booths and attempted to purchase alcohol. Car keys were kept out of sight and buyers said they were riding with a friend if asked. Four male and seven female pseudo-underage buyers attempted to purchase alcohol without age identification. They were

instructed to not to try to appear older by wearing make-up, jewelry, or facial hair. They reported their true age if asked, and said their identification was in the car if asked for it.

If served alcohol, buyers discreetly discarded the beer out of sight of alcohol booths. If refused service, buyers quietly exited the area. Both types of purchase attempts were conducted at one booth at each festival, at baseline and follow-up. One pseudo-intoxicated purchase attempt was not completed at one of the training festivals at follow up because of a field staff error, resulting in pseudo-intoxicated purchase attempt data for three festivals for the training condition in the final analyses. Following each purchase attempt, each buyer completed a form describing his or her purchase attempt. The pseudo-intoxicated buyer also completed a form describing the characteristics of the festival.

Telephone Survey of Law Enforcement

We conducted a pre-post telephone survey of local law enforcement agencies. We contacted 27 law enforcement departments, with a 100% response rate at baseline and 89% response rate at follow-up (note: some local law enforcement agencies were responsible for enforcement in more than one study community). We talked with one agent from each agency who was familiar with their agencies' alcohol-related enforcement practices. Four law enforcement agency surveys were removed from the analyses because the associated festival was dropped from our comparison group. Our final law enforcement sample included in the final analyses was 23.

Measurement

Independent Variables

Independent variables were: 1) training status (training festivals vs. comparison festivals) and 2) organizing status (organizing festivals vs. comparison festivals).

Dependent Variables

We had three dependent variables. The first was an alcohol practice index that measured level of control over alcohol-related issues at festivals. The index was the summation of nine items assessed in the festival planner telephone survey: 1) manager stationed at each booth (yes, no); 2) alcohol use restricted to specific areas (yes, no, don't know); 3) servers required to receive responsible beverage service training (yes, no, don't know); 4) number of drinks restricted per sale per person (yes, no, don't know); 5) age of server restricted (yes, no, don't know); 6) free water provided (yes, no, don't know); 7) attendees prevented from leaving the event with alcohol (yes, no, don't know); 8) alcohol sales stopped before the end of the event (yes, no, don't know); and 9) containers for alcoholic beverages were distinguishable from non-alcoholic beverages (yes, no). For each

item in the index, we decided whether "don't know" responses were either coded as "no" or missing, based on whether it was possible that the respondent might not have access to the information. The other two dichotomous dependent variables measured alcohol sales to pseudo-underage and pseudo-intoxicated buyers (1 = sale, 0 = no sale).

Covariates

Two types of covariates were assessed: baseline festival characteristics, and characteristics of purchase attempts. Festival characteristics obtained from the surveys of festival planner and buyer forms included: 1) attendance (< 14,000 vs. ≥ 14,000); 2) event length (≤ 3 days vs. > 3 days); 3) type of organization that sold alcohol (licensed alcohol establishments vs. other; civic groups vs. other); 4) whether the event had any financial sponsorship by the alcohol industry (yes, no); 5) whether any of the alcohol servers were paid (yes, no); 6) whether the event planner was paid (yes, no); 7) number of booths selling alcohol (1-2 vs. > 2); 8) estimated number of teen attendees (none or few vs. many); and 9) estimated number of intoxicated attendees (none vs. few or many). Characteristics of the purchase attempts reported on the buyer forms included: 1) server's gender; 2) server's apparent age (≤ 40 vs. > 40); 3) crowd level around the booth (five-level scale dichotomized to crowded (3-5) vs. less crowded (1-2); and 4) how long the buyer waited in line (< 1 minute vs. ≥ 1 minute).

In addition, to assess whether law enforcement conducted compliance checks in the communities where our festivals were held, we used a law enforcement survey item, "In the past two years, have you conducted compliance checks at events with temporary liquor licenses" (yes, no, don't know).

Analyses

Policies

We conducted a qualitative analysis of our process evaluation data to assess whether the interventions were effective in influencing implementation of written alcohol-related policies that we recommended—we identified 19 risk-reduction policies following a review of the alcohol policy literature and several festival implementation manuals. We evaluated alcohol policies at the festivals pre- and post-intervention, including analysis of differences in type and quality of policies adopted.

Practices

We conducted a quantitative analysis to assess changes in self-reported alcohol-related practices before and after the interventions at intervention festivals relative to comparison festivals. We assessed the relationship between each covariate and the practice index in bivariate analyses, using SAS PROC MIXED

(SAS Institute, 2004). Variables significant at the $p \leq 0.20$ level were entered into the full, multivariate models. Effects of the two types of interventions were assessed independently.

For the multivariate analyses, we conducted backwards stepwise regression using SAS PROC MIXED to identify the most parsimonious model. Covariates that were statistically significant at the $p \leq 0.05$ level were retained in the final model. The interactions between Year (1 = 2002, 2 = 2003) and the intervention variables were the primary test of the effects of each intervention on self-reported alcohol-related practices.

Purchase Attempts

To assess intervention effects on sales to pseudo-underage and pseudo-intoxicated buyers, we conducted similar analyses as used to assess changes in self-reported alcohol-related practices. Analyses were conducted with SAS PROC MIXED to identify covariates that were statistically associated with each purchase attempt outcome ($p \leq 0.20$), which were then included in the multivariate analyses. Separate backwards stepwise regression analyses were conducted for each purchase attempt outcome. SAS PROC MIXED was used to assess initial models. SAS PROC GLIMMIX, designed specifically for non-Gaussian outcomes, was used to estimate the final models. Covariates that were statistically significant at the $p \leq 0.05$ level were retained in the final models. We included a buyer identification variable in all models as a random effect to control for potential differences in buyers' abilities to purchase alcohol. Intervention by Year interaction terms were evaluated to assess intervention effects.

Enforcement

To compare enforcement practices at intervention and comparison communities, we calculated the percentage of festivals that were held in communities where law enforcement conducted checks at events with temporary licenses—we compared results for each condition (training, organizing, comparison), prior to and following the interventions.

RESULTS

Policies

Festivals participating in the ARM for Festivals training selected 15 to 18 of the 19 recommended policies (Table 1). Policies were implemented at either the alcohol booth or festival level. Two of the festivals had written alcohol control policies at baseline, however, one of these festivals had only one of our recommended policies and the other had only two of our recommended policies. Following the training, all but one of the recommended policies was adopted by

Table 1. Written Policies Resulting from Training and Organizing Interventions

	Training festivals				Organizing festivals			
Policies	A	B	C	D	A	B	C	D
Check ID of those appearing ≤ 30	↑	↑	↑	↑	→	↑	↓	↓
Sell alcohol in enclosed areas	↑	↑	→	↑		↓	↑	↑
Limit number of servings to 1 per person	↓	↓	↓	↓	→	↑		↓
Use wristbands to identify those ≥ 21	↑	↑	↑	↑	→	↑	↑	↑
Use distinguishable cups for alcohol	↑	↑		↑		↑		↑
Limit beer cup size to 12 oz.				↑	→			
Offer and promote food and non-alcoholic beverages	↑	↑	↑					
Stop alcohol sales 1 hour before end of event	↓	↓	↓		→			↑
Do not discount alcohol	↑	↑	↑	↑		↓	↑	↑
Train servers on responsible service of alcohol	↑	↑	↑	→	→	↑	↑	
Restrict age of servers to ≥ 21	↑	↑	↑	↑	→		↑	↑
Hire adequate security		↑	↑	→	↑	↑	↑	↑
Have manager/lead worker always on duty	↑	↑	↑	↑	→	↓	↑	↑
Do not allow servers to drink before or during shift		↑		↑	→	↑		↑
Provide copy of policy manual	↑	↑	↑	↑				
Use incident report form	↑	↑	↑	↑				
Hold pre-shift meetings to discuss policies	↑	↑	↑	↑				
Monitor grounds for suspicious activity		↑	↑	↑				
Limit alcohol industry sponsorship/promotions	↑	↑	↑	↑				
Require dramshop liability insurance*								↑
Do not allow alcohol in parking lot*								↑
Post warning signs*					↑	↑	↑	↑

↑ = Passed as recommended or stronger
↓ = Passed with recommendations that made policy weaker than recommended
→ = Written policy existed at baseline
* = Not included originally in University's recommended policies

two or more of the training festivals (only one of the festivals adopted the policy to limit the beer cup size to 12 ounces). All of the training festivals that chose to limit the number of servings per person per sale and to stop alcohol sales before the end of the event modified the recommended policies, potentially weakening the effect of the policies on the intoxication levels of attendees—instead of restricting number of servings to one per person per sale, festival planners chose to restrict the number of servings to two per person; instead of cutting off alcohol sales one hour before the end of the event, the festival planners chose to cut off service 30 minutes before the event ended.

Three of the community organizing teams (Festivals B, C, D) influenced passage of comprehensive community-level policies (Table 1). All of these policies require alcohol to be served in an enclosed area, use of wristbands to identify individuals over age 21, a manager to be on duty at all times, and servers or a manager to receive responsible beverage service training. In addition to our recommended policies, a few of the communities created additional policies—require dramshop insurance, prohibit alcohol allowed in parking lot, and post warning signs.

The action team for the fourth festival (Festival A) did not target community-level policies for two reasons. First, the festival had already implemented most of the recommended policies two years earlier. Second, comparison festivals were also located in this community, and thus, we discouraged the team from working on community-wide polices that would also affect those comparison festivals. Because the action team for this festival included festival planners motivated to reduce potential liability, the team reviewed existing festival policies and decided to focus on ensuring adequate security and improving implementation of existing policies. The team created warning signs that reinforced existing policies (such as checking age identification) in multiple languages to educate non-English speaking attendees. They also modified the existing server training program to emphasize recognition of obviously intoxicated patrons, and gave servers a small business-sized card that listed signs of obvious intoxication.

Through our process evaluation data, we assessed whether community-wide policies had been implemented in other communities that could affect the comparison festivals. None of the other communities included in this study passed community-wide policies affecting community festivals.

Practices

Intervention festival planners reported more alcohol control practices than planners for comparison festivals at follow-up as compared to baseline. Relative percent changes in number of practices for the organizing and training festivals were 19% and 12% respectively. However, as expected given the small sample size in the intervention conditions, observed differences were not statistically significant (Table 2).

Table 2. Results of Multivariate Analyses Assessing Changers in Self-Reported Alcohol Practices

Policy Index[a]	*N*	Level of variable	LS Means	Estimate (SE)	*F*-test (*p*)
Training	47			.8818 (1.4122)	.39 (.5358)
Intervention × Year:		Year 1	7.49		
Intervention		Year 2	8.49		
Intervention × Year:		Year 1	5.75		
Comparison		Year 2	5.86		
Organizing	45			1.3887 (1.5971)	.76 (.3899)
Intervention × Year:		Year 1	6.56		
Intervention		Year 2	8.06		
Intervention × Year:		Year 1	5.74		
Comparison		Year 2	5.86		

[a]Controlled for number of days and number of attendees.

Purchase Attempts

The overall sales rates at baseline were 87.5% and 30% for pseudo-intoxicated and pseudo-underage buyers, respectively. Although the intervention festivals were randomly selected for assignment and/or recruitment, the baseline sales rates for pseudo-underage was lower at the intervention festivals compared to comparison festivals (organizing = 0%; training = 20%; comparison = 36.4%), although these differences were not significant. Additionally, the pseudo-underage and pseudo-intoxicated sales rate decreased in the comparison festivals in addition to the intervention sites. Sales rates at follow-up were 86.7% and 21%, for pseudo-intoxicated and pseudo-underage buyers, respectively. Our multivariate analyses showed that the organizing and training interventions did not create substantial changes in propensity for either sales to underage youth ($F_{organizing} = 0.73$, $p_{organizing} = 0.40$; $F_{training} = 0.02$, $p_{training} = 0.89$) or intoxicated customers ($F_{organizing} = 0.00$, $p_{organizing} = 0.98$; $F_{training} = 0.00$, $p_{training} = .98$).

Enforcement

At baseline, 5 of the 23 (22%) law enforcement agencies we surveyed conducted compliance checks at events with temporary liquor licenses. Among the four training communities, none conducted checks at events with temporary liquor licenses at baseline or follow-up. Among the four organizing communities,

the percentage of communities increased from 33% at baseline to 50% at follow up. In the comparison communities, the percentage of the communities that conducted compliance checks at temporary licenses decreased from 39% to 20%.

DISCUSSION

Policies and Practices

Both the community organizing and training interventions were successful in influencing adoption of written policies targeting alcohol sales and use at community festivals although more written policies were adopted for festivals in the training condition than in the community organizing condition (Table 1). One reason for this may be that our recommendations included adopting policies that may address liability issues among servers and planners, such as requiring servers to attend pre-shift meetings and using an incident report form to track problems, but that may be less important to community citizens and elected officials primarily concerned about preventing alcohol-related problems. An advantage of festival planners and vendors selecting and implementing policies is that they may have greater "buy in" and may be more likely to voluntarily fully implement policies they have selected.

Three of the four community organizing communities passed community-level policies that affected all of the festivals in the community, not just the festivals included in this study. This is particularly important because we found that locations of festivals, organizations in charge of the festivals, and/or beer vendors could change from year to year. From our telephone survey of festivals planners, we found that five comparison festivals and one training festival changed beer vendors between baseline and follow. In these situations, it is unlikely that festival- or booth-level policies would be institutionalized because the training would need to be implemented each time there was a change. However, community-level policies would apply each year, regardless of who was planning the event or selling the alcohol. Furthermore, the community organizing process creates support for the policies throughout the community—which may increase pressure on the festival planners and vendors to comply with the community policies.

Although the interventions were successful in influencing the adoption of many new policies, we faced several challenges in implementing the interventions and learned several lessons. For example, because organizing festivals were not selected based on their readiness to address alcohol policies or because they had experienced alcohol-related problems, organizers and their teams needed to convince festival leaders and elected officials about the importance of implementing policies to prevent the likelihood of future alcohol-related problems. Other challenges in the organizing process were differential levels of support for policy recommendations by beer vendors and festivals planners, and

the short timeline (1 year) for implementation of action plans and implementation of policies (Bosma et al., under review). We also faced challenges in implementing the training intervention. The training program was designed to be implemented with individual festival planners; however, when the trainer arrived for the first few sessions, beer vendors and some volunteer servers were also present because they felt that selected policies would also affect them. The trainer needed to be flexible enough to adapt the training to include these additional individuals and to help build consensus on the new policies. Another challenge was that the festival planners, vendors, and the servers were volunteers and were not available to participate in the training until just before the festival began—decreasing the amount of time available for education and full implementation of the policies.

Despite these challenges, we concluded that both interventions were flexible enough to accommodate the complexities of community festivals and could both influence written policies targeting alcohol sales and use at community festivals. In addition, self-reported alcohol-related practices increased in intervention festivals compared to comparison festivals, although the organizing intervention resulted in a greater change than the training intervention (relative percent change of 19% vs. 12%).

Purchase Attempts

Neither intervention appeared to be likely to decrease the propensity for illegal alcohol sales at these events. There are several possible explanations for this finding. First, as indicated in the telephone survey, all of the festivals (intervention and comparison) had some alcohol-related practices in place at baseline. It is possible that the observed improvements in reported practices at intervention festivals did not sufficiently increase the level of alcohol control to result in changes in sales practices at follow-up. Additionally, the sales rates for pseudo-underage attempts started at a lower rate in the intervention festivals than at the comparison festivals even though we randomly selected the festivals. Perhaps four festivals per intervention condition is too few to achieve equivalent groups. In addition, we were only able to reach 50% of the festivals randomly selected for recruitment to the training intervention–festivals that were easier to contact may differ from other festivals in ways that may also affect our purchase attempt outcomes. Finally, the pseudo-intoxicated and pseudo-underage sales rates also decreased in the comparison festivals over time, making it less likely to detect intervention effects.

In addition to methodological shortcomings, lack of observed effects may be the result of intervention deficiencies. Written policies for all intervention festivals were implemented close to the time the respective festivals were held in Summer 2003. It is possible that there was not sufficient time to adequately inform and train all of the relevant parties on how to comply with the new policies. This will be an ongoing challenge for communities working with community

festivals given that most of the festivals are organized by volunteers and many of these volunteers change from year to year.

Another issue that we encountered was that among our 19 recommended policies, many address the likelihood of attendees becoming intoxicated (e.g., limit the number of servings per sale per person) or controlling attendees (e.g., hiring adequate security) rather than preventing service to underage patrons or those who are already intoxicated. A more appropriate outcome for future studies may be average intoxication levels (e.g., blood alcohol concentration levels) or rates of alcohol-related problems such as traffic crashes and violence.

Enforcement

In the research literature addressing illegal alcohol sales at licensed establishments, one of the most promising interventions are enforcement compliance checks (Grube, 1997; Preusser et al., 1994; Wagenaar et al., 2005). Only 22% of the enforcement agencies we contacted reported conducting compliance checks at temporary licenses, and only 17% reported doing checks at temporary licenses at follow-up. Although community organizing efforts may lead to increased enforcement, our community organizing teams deliberately chose to focus on implementing policies rather than increasing enforcement because it was a less antagonistic approach; hence, it is not surprising that enforcement was increased in only one of the community organizing festivals. Even if enforcement had increased more across the organizing festivals, it is possible that that we would not have observed any affects on our purchase attempt rates because of several potential limitations in the effectiveness in using compliance checks at festivals. For example, penalties applied for failed compliance checks may not be a deterrent for festivals that are only held on one day—it would not be possible to observe the effects of the enforcement until the following year. Furthermore, given the decay of enforcement effects observed at licensed alcohol establishments (Wagenaar et al., 2005), it is unlikely that a deterrent effect would still be in effect one year later. In addition, many of the planners and servers also change over time, meaning that those who received the penalty may not still be part of the festival planning and implementation process at a later date.

SUMMARY

Despite limitations, this demonstration project is the first study to assess different types of interventions targeting alcohol-related issues at community festivals. Our results show that not only are both interventions feasible to implement, both training and community organizing interventions influenced adoption of written alcohol policies. However, the organizing intervention may have a larger effect on community problems given that community-level policies affect all festivals held within a given community. Further research is needed

to assess whether: 1) the interventions implemented alone or combined result in long-term reductions in alcohol-related problems, 2) implementation of other policies may lead to reductions in illegal alcohol sales, and 3) enforcement efforts can reduce both illegal alcohol sales and alcohol-related problems.

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