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Mystery Shop Programs to Reduce Underage Alcohol Sales

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A. Abstract

This project examined a new community-level intervention strategy to achieve compliance with alcohol sales-to-minors laws: Mystery Shops. Mystery Shops are attempted purchases of age-restricted products by young, legal-age inspectors for the purpose of providing feedback to licensees on actual staff age-verification conduct. Unlike law enforcement inspections, licensees and staff face no legal penalties for failing to check the ID of someone young enough to trigger an ID-check but not under the legal purchase age. Mystery shops have shown to be effective with large national chains that implemented programs under agreements with state attorneys general. Researchers working with the Responsible Retailing Forum hypothesized that Mystery Shops will similarly improve staff performance for independently owned and operated licensees. To test this, we partnered with the Oregon Liquor Control Commission and the Texas Alcoholic Beverage Control Commission to conduct 13 monthly Mystery Shops in 24 communities, 12 in each state: in 8 communities, licensees received on-the-spot feedback and follow-up reports; in 8 communities, licensees received reports on aggregate community-level performance and Responsible Retailing best practices; and 8 other communities served as no-intervention controls. If proven to be effective, Mystery Shops will provide communities with a low-cost means for assisting licensees to reduce underage sales without taxing the limited resources of law enforcement.

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A. Executive Summary

Background

Underage alcohol use is associated with a range of negative outcomes, including increased risk of traffic crashes (Yi, Williams, & Dufour, 2001) and highway fatalities (NHTSA, 2002), accidental injuries and assaults (Hingson, 2002), vandalism and property damage (Wechsler et al., 1995), high-risk sexually activity (Strunin & Hingson, 1992; Tapert et al., 2001), damage to the developing brain (Spear, 2002), and future alcohol dependence (Grant et al., 2006; Agrawal et al., 2009). Reducing adolescent access to commercial alcohol sources has been recommended by the Institute of Medicine (IOM) report, *Preventing Underage Drinking: A Collective Responsibility* (IOM, 2003), the Surgeon General's *Call to Action to Prevent Underage Drinking* (US HHS, 2007), and the Federal Trade Commission's *Report to Congress: Alcohol Marketing and Advertising* (FTC, 2003) as a key strategy for reducing the societal and personal costs of adolescent alcohol use.

The principal approach for reducing underage access to commercial sources of alcohol has been law enforcement compliance checks, in which underage decoys attempt to purchase an alcoholic beverage while being observed by a law enforcement officer who cites the seller and/or licensee if an unlawful sale is made. Although they can be effective, some limitations of compliance checks can be noted:

- The effects of enforcement upon retailer behavior are relatively short-lived and often modest (Wagenaar, Toomey, & Erickson (2005);
- Enforcement compliance checks are labor-intensive and expensive and thus cannot be implemented with sufficient frequency to maintain high levels of compliance with underage sales laws; and
- Compliance checks alone do not show licensees what steps to take to avert non-compliance in the future.

That is, enforcement is necessary, but insufficient. Identifying other approaches to achieve compliance with sales-to-minors laws is therefore a priority.

Mystery Shop programs, which use young, but legal-age customers who attempt to purchase an age-restricted product for the purpose of observing staff ID-checking conduct, are a possible supplement to enforcement compliance checks. These programs provide immediate feedback to clerks about their performance and reports to owners/managers about staff performance. They have the advantage of being less labor-intensive and less expensive than enforcement compliance checks. They can be undertaken by retailer groups, community organizations, or public health agencies without the involvement of enforcement agencies. As a result, they can be implemented with greater frequency than enforcement compliance checks and with a broader coverage of outlets. Mystery Shop programs also provide an opportunity for retailer education on responsible sales and service practices and can motivate retailers to take steps to improve staff performance relating to underage sales.

In the present study, we addressed the following questions: 1) Will individualized Mystery Shop reports on staff performance sent to independently owned and operated licensees improve adherence to age-verification protocols? 2) Will broadly disseminated, non-individualized reports, using aggregated community-level Mystery Shop data, also improve adherence to age-verification protocols? If effective, programs using aggregated, community-level data would further reduce costs and improve program reach.

Study Design

The study was a randomized community trial that assessed the impact of Mystery Shops for off-premise alcohol establishments on ID-checking for age-verification. Twenty-four communities in Oregon and Texas were matched on baseline rates of ID checking for alcohol sales to young-appearing mystery shoppers and then randomly assigned to one of three study arms:

Direct Feedback Reports (8 communities). Licensees received direct feedback on staff ID-checking behavior and RR resources (Arm 1);

Community-Level Reports (8 communities). Licensees received periodic reports on aggregate results of ID-checking behavior and RR resources (Arm 2);

Control/No Reports (8 communities). Licensees in these communities received no feedback or community-level reports (Arm 3).

Within each community 11 or more outlets were randomly selected for inclusion in the study. Three monthly baseline mystery shops were conducted during which no feedback was provided, after which the communities were matched and randomly assigned to condition. The baseline was followed by 10 monthly Mystery Shop inspections. For outlets in communities assigned to the direct feedback condition, these inspections were reported to staff in real time and through follow-up letters sent to managers, which also described various responsible retailing strategies to promote staff ID-checking. For communities in the community-level report condition, these inspections were not reported to management or staff. Instead, we sent quarterly reports to every off-premise licensee in the community, whether inspected or not, that summarize the aggregated results for the community's Mystery Shop inspections during the previous 3 months. The responsible retailing resources to promote staff ID-checking were included with the reports.

Results

ID-checking rates for the communities in the Direct Feedback condition increased from 77.8% to 83.3% from baseline to the intervention period, and for communities in the Community Feedback condition they increased from 76.0% to 80.9%. For communities in the Control condition, they decreased from 77.7% to 76.8%. Generalized Linear Mixed Model logistic regressions indicated that the Direct Feedback Condition had a marginally significant ($p < .08$) effect when compared with the Control condition. Specifically, providing Direct Feedback was related to a 53% increase in the odds of checking IDs. Although not statistically significant ($p < .19$), the Community Feedback Condition was associated with a 35% increase in the odds of checking IDs. In addition, a large difference in ID-checking rates was observed between Oregon and Texas ($p < .002$); the odds of a clerk in Oregon checking IDs was 244% greater than that for a clerk in Texas. Notably, the ID-checking rates in Oregon were very high during the baseline period ($\approx 86\%-90\%$), leaving little room for improvement as a result of the interventions. In fact, ID-checking rates declined in Oregon between baseline and the intervention period; although not a significant difference, these declines were somewhat smaller in the Direct and Community-level feedback conditions compared with the Control condition. Because of the large difference in ID-checking rates between Oregon and Texas, we conducted separate analyses to explore whether the interventions were differentially effective in the two states. Consistent with the main analyses, the interventions were each related to increases in the relative odds of ID-checking, although the effect was not statistically significant for either state alone, perhaps due to the smaller sample size for each state.

Conclusion

The primary analysis indicated that the Direct Feedback intervention was associated with a modest and marginally significant increase in ID-checking. This effect was smaller than has been observed in previous studies using similar mystery shop feedback interventions. A number of factors may have contributed to this situation. Notably, the ID-checking rates in Oregon were very high even before the intervention, leaving little room for improvement. Rates of ID-checking in Texas were much lower, and the absolute percentage improvement observed there was substantially greater than that observed in Oregon. Unfortunately, the study was not powered to detect intervention effects at the individual state level. It is also unclear whether the Community Feedback intervention is effective in increasing rates of ID-checking. Looking at the percentage data, the Community Feedback intervention had an equivalent effect to the Direct Feedback intervention in Texas (i.e., $\approx 10\%$ increase in ID-checking). In Oregon, the Community Feedback condition appeared to be somewhat less effective. Given the lack of statistical significance,

G. References

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