ABSTRACT

Examining the Combined Effects of Environmental Prevention Strategies and *AlcoholEdu* for College on College Drinking Behaviors

A dissertation presented to the Faculty of The Heller School for Social Policy and Management and the Graduate Faculty of Brandeis University Waltham, Massachusetts

By: Ann-Marie Matteucci, MHA

High-risk alcohol use by college students continues to be a serious issue on most college campuses. Studies have found that 44% percent of college students drink in high-risk ways and the consequences from this level of drinking are well documented in the literature, ranging from academic difficulties to injury and death. One way to address high-risk drinking is to utilize a combination of prevention strategies, including environmental strategies that reach the entire student population, and targeted strategies, such as online alcohol education, used for selected populations.

The research questions that guided this dissertation were: 1) How do schools implement environmental prevention strategies? 2) Does implementing a full-range of prevention strategies predict lowered drinking patterns, and consequences? 3) Does a combination of environmental prevention strategies and an online alcohol course, *AlcoholEdu*, predict sustained, improved reductions in drinking?

The secondary data source included survey data from first-year college students regarding drinking and consequences, and information about prevention strategies used at 29 campuses. Primary data supplemented the secondary data including an alcohol outlet density assessment for each campus community.

Analyses included multilevel modeling to account for the clustering of students on campuses. The models included dependent variables of individual-level drinking patterns and

exploratory variables of campus-level environmental prevention strategies. Interaction variables were used to examine the combined effect of the environmental prevention strategies with *AlcoholEdu*.

The findings for this study were mixed. Some environmental prevention strategies consistently predicted increased alcohol use, including strategies that would "create a normative environment" and policies offered by the community. However other strategies offered by campuses, including a combination of policies that decreased the availability of alcohol and provided "an alcohol-free environment" on campus, showed promise of decreased alcohol use and related problems. Many of these findings were continued when examining the interaction with *AlcoholEdu* though some of the findings were only significant in the third wave of the study.

These findings will help inform college administrators regarding combinations of strategies to combat high-risk and underage drinking. Colleges should increase alcohol-free social opportunities, and strengthen campus policies that reduce access to alcohol and increase the costs (social and monetary) of drinking. Colleges and communities should also work together to limit alcohol advertisements on campus, improve retail/server trainings, and limit the number of alcohol retail outlets.

Dissertation committee: Sharon Reif, Ph.D., Chair Stephen Fournier, Ph.D. William DeJong, Ph.D. Mallie J. Paschall, Ph.D.

Defense hearing: Friday, April 3rd, 2015 At 1pm – 3pm Heller, room 147