Alcohol availability is a part of the built environment. The severity of alcohol-related problems in a community is negatively associated with the density of alcohol-selling outlets among its neighborhoods. In addition to density, the characteristic of alcohol outlets can differ, such as alcohol outlet density, independently influence alcohol-related drinking norms, consumption, and health outcomes. Given the high concentration of alcohol outlets across the urban landscape and the limited research on the structural determinants that may promote or sustain outlet proliferation, the purpose of this study is to identify structural predictors associated with the promotion or growth of alcohol outlets; determine if the association varies by the type of alcohol outlet; and assess the impact of neighborhood indicators of race and class on outlet density. A multivariate regression analysis was used to identify relevant neighborhood structural features significantly associated with alcohol outlet exposure among the census tracts of Washington, D.C.

**Objectives**

Identify structural characteristics associated with the promotion or proliferation of alcohol outlets; determine if the association varies by the type of alcohol outlet facility, and assess the impact of neighborhood indicators of race and class.

**Methods**

Data used for this study pertain to the city of Washington, D.C. Based on the 2000 decennial census, Washington, D.C. had a total population of 672,039. The District of Columbia consisted of 180 census tracts and 5,074 census blocks. Citywide, 16.7% of the families and 22.0% of the individuals lived below the poverty line. The median household income was $40,127 and 79.5% of the population was non-Hispanic white, 16.2% African American, 7.9% Hispanic or Latino, 2% American Indian and Alaska Native, and 0.1% Native Hawaiian and Other Pacific Islander. In this study, the unit of analysis is the census tract, which serves as a proxy for community neighborhoods. The population in a census tract ranges from 1,000-4,000 persons. The research draws on population data from various secondary sources to develop an analytic database. The diversity of community structural characteristics was constructed using 2000 decennial census data and municipal-level population data was used to identify outlet density and violent crime events. Dependent Variables. Washington, D.C.’s Alcohol Beverage Regulation Administration (ABRA) provided data on the outcome variable of alcohol outlets for the year 2008. In Washington, D.C., there are four primary types of alcoholic licenses: class "A" licenses are for package stores which permit the sale of beer, wine, and liquor for consumption off the premises; class "B" licenses are generally reserved for grocery stores to sell only beer and wines for consumption off the premises; class "C" licenses are for the consumption of wine, beer, and liquor on the premises and class "D" licenses function as the same as class "C" licenses, except for the sale of liquor in this study. Alcohol outlets were grouped into the categories of cornerstone outlets, off-premise outlets, and overall or total number of outlets.

**Independent Variables.** Identified in previous research as structural correlates of alcohol outlets, sixteen variables were considered as indicators of community structural features and used to develop the most parsimonious model. Specifically, the research considered census-based covariates of outlet densities that were constructed using Census 2000 Data Engine Software. Of the 0 census-based variables, two were indicators of economic determinants (crime, household poverty and family composition); two were indicators of population density (household crowding and occupying per room and people per square mile); one measure of racial/ethnic composition (American African); two capturing residential stability (family and home ownership); and indicator of educational attainment (the number of high school dropouts); and is a measure of gender composition (male ages 16-24).

Municipal-level population data was used to construct the four indicators of violent crime, commercial land use, social capital, and disorder. Violent crime data were obtained from the Washington police department and, in accordance with the Uniform Crime Report (UCR), violent crime was defined as the aggregate number of homicides, robberies, sexual assaults, and aggravated assaults. An indicator of commercial land use was the proportion of the census tract dedicated to commercial land use. Social capital and disorder were assessed as the number of registered voters and the number of occupied households, respectively. Each were expressed otherwise, all variables were divided per population based rates (percapita) to their respective census tracts.

The third set of variables reflect the geographical features of racial segregation and class. The class composition of a community was assessed using the two indicators of the number of female headed households of 18 or older in the 1990 federal poverty level with children below the age of 18 and the median household income, which ranged from $0,000 to $103,000 across census tracts. Racial segregation was assessed using the U.S. Census mutually exclusive groups are distributed across the geographic units that make up a larger geographic entity, for example, the distribution of African Americans and whites across the census blocks that make up a census tract. Values of the index range from 0-1, or the index can be scaled from 0-100, with values approaching zero assumed a greater degree of random distribution of African Americans and whites across the geographic space. The standard criterion for characterizing an area as being segregated is an index value equal to 52 or above.

**Results**


