Testing Supreme Court Assumptions in *California v. la Rue*: Is There Justification for Prohibiting Sexually Explicit Messages in Establishments that Sell Liquor?

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Abstract

The United States Supreme Court has upheld the idea that a state may prohibit the communication of sexually explicit messages and adult entertainment in establishments licensed to sell liquor (California v. la Rue, 409 U.S. 109 (1972). State liquor control boards across the country rely on this decision in order to regulate alcohol serving businesses that feature adult entertainment. These boards have accepted the untested premise that combining liquor service with adult entertainment leads to greater adverse secondary effects than merely serving liquor alone. In order to test the assumption a study of prostitution, sexual assault and other sexual offenses in Toledo, Dayton, Columbus and Cleveland Ohio was undertaken utilizing crime event data provided by the police. The results revealed that adult businesses were not the primary source of sex crime events. Often these businesses showed zero crime events. Instead, alcohol serving, non-adult establishments are a significant source of such events. The consistency of the results of the present study with past research and the implications of this study and past research for assumptions made about state regulations of sex related communication are discussed.
Testing Supreme Court Assumptions in *California v. la Rue*: Is There Justification for Prohibiting Sexually Explicit Messages in Establishments that Sell Liquor?

**SUPREME COURT DECISION MAKING AND NEGATIVE SECONDARY EFFECTS OF ADULT BUSINESSES**

Since 1976, the United States Supreme Court has decided a series of cases focusing on whether the Free Speech clause of the First Amendment allows cities and states to enact legislation controlling the location of “sexually oriented” businesses (See e.g., *Young v. American Mini Theatres, Inc.*, 427 U.S. 50 (1976); *City of Renton v Playtime Theatres Inc.*, 475 U.S. 41 (1986). “Zoning” regulations, laws or ordinances that prevent a sex-related business from operating within certain defined areas and/or within a certain number of feet of so-called “sensitive” locations (e.g., residential neighborhoods, schools, houses of worship and/or other “adult establishments”) have been predicated on the notion that municipalities have a substantial interest in combating so-called “negative secondary effects” on the neighborhoods surrounding exotic dance businesses. These secondary effects are generally said to include alleged increases in crime, decreases in property values, and other indicators of neighborhood deterioration in the area surrounding the adult establishment.

The rationale for the secondary effects doctrine was most completely laid out in *Renton v. Playtime Theatres, Inc.*, in 1986. In *Renton*, the Supreme Court considered the validity of a Renton municipal ordinance that prohibited any “X-rated” theater from locating within 1,000 feet of any residential zone, family dwelling, church, park or school. The Court stated that the ordinance would be upheld so long as the city of Renton showed that its ordinance was designed to serve a substantial government interest such as a reducing crime rates or maintaining property values.
Social Disorganization Theory and Crime

Structural characteristics of a community or neighborhood often influence crime. Social Disorganization theory was established by Shaw and McKay (1942) and has been used by criminologists to understand the causes of crime rates across urban neighborhoods. Social disorganization theory specifies that economically impoverished local communities characterized by residential instability and made-up of ethnically diverse citizens are more likely to lack social organization when compared to more affluent, homogenous neighborhoods with stable populations (Shaw & McKay, 1942).

Contemporary research has mounted considerable evidence in support of Social Disorganization theory. Scholars have reformulated and refined Shaw and McKay’s (1942) classic model (Bursik, 1988; Kornhauser, 1978; Sampson & Groves, 1989; Sampson et al., 1997; Sampson & Raudenbush, 1999; Osgood & Chambers, 2000), and have applied the principles of social disorganization to explain the link between local institutions (e.g., bars) and crime (Peterson, Krivo, & Harris, 2000; Alaniz, Cartmill, & Parker, 1998). For example, Sampson and Groves (1989) reported that family disruption (measured as divorced families), low socio-economic status, residential stability, and heterogeneity accounted for much of the effect on rates of burglary. In addition, recent studies show that burglary is influenced by other community characteristics, such as single parent households (Smith & Jarjoura, 1989; Rountree et al., 1994; Lynch & Cantor, 1992).

Alcohol Outlet Businesses and Crime

Local institutions and businesses are also associated with crime is based on the principles of social disorganization (Byrne & Sampson, 1986, p. 5). Peterson et al. (2000, p. 33; see also Nielsen & Martinez, 2003) argue that socially disorganized communities are less likely to attract
and sustain conventional institutions such as banks, libraries, and recreational centers that help control crime; whereas, businesses such as bars are likely to be more prevalent in disorganized neighborhoods that undermine crime control efforts (see also, Covington, 1999; Zahn, 1998). The alcohol outlet-crime connection is also consistent with Bursik and Grasmick’s (1993) assertion that neighborhood life is influenced by external parochial forces, such as social networks among residents who may share weak local institutions (e.g., bars). It is among these weak institutions, operating within the broader urban context, that induce crime. The presence of bars have been characterized as an indirect indicator of social disorganization (Petersen et al., 2000, p. 35) and more recently conceptualized as crime “generators” (Quimet, 2000, p. 41). Watts and Rabow (1983) found a higher concentration of alcohol outlets in 213 socially disorganized California cities. The combination of weak institutions and social disorganization attributes are likely to foster crime (Wilson, 1987; Sullivan, 1993; Short, 1997; Parker & Rubhum, 1995; Scribner, MacKinnon, & Dwyer, 1995).

Several studies have focused on the number of bars (i.e., weak institutions) in local areas as a major source of crime. Some studies have posited a stronger effect for bars on crime, compared to other social disorganization predictors (Roncek & Bell, 1981; Roncek & Maier, 1991). These studies have used a variety of different census units of analysis (e.g., tracts, block groups, and blocks) that vary by geographic size. For example, studies indicate a positive correlation between blocks occupied with a higher number of bars and higher rates of crime (Roncek & Bell, 1981; Roncek & Maier, 1991; Roncek & Pravatiner, 1989; Zahn, 1998; Quimet, 2000). Nielsen and Martinez (2003) reported that alcohol establishments (operationalized as total outlet rate) had a significant effect on non-lethal violence at the census tract level. Quimet (2000) also found that the number of bars predicted offender rates at the census tract. However,
using 1990 census, crime, and alcohol outlet data at the block group level, Alaniz et al. (1998) examined the connection between immigrants and violence across three California communities. The authors reported that violence was a function of alcohol availability and family breakdown (i.e., percent divorced) at the block group level.

Overall, researchers have marshaled impressive evidence indicating that alcohol outlets influence crimes of rape, assault, homicide, robberies, auto-theft, public intoxication, and drunk driving (Scribner et al., 1995; Sherman, Gartin, & Buerger, 1989; Roncek & Maier, 1991; Watts & Rabow, 1983; Nielsen & Martinez, 2003). Some studies also report that alcohol availability has such a profound effect on crime, namely homicide, that it intensifies the effect of poverty (Parker, 1995, 1993; Parker & Rebhum, 1995).

**Combining Alcohol Service and Adult Entertainment**

The Supreme Court has maintained that States may regulate sexually explicit messages and adult entertainment in liquor serving establishments. This opinion, articulated in *California v. La Rue*, 409 U.S. 109 (1972) involved the California Department of Alcoholic Beverage Control which had issued regulations prohibiting explicitly sexual live entertainment and films in bars and other establishments licensed to dispense liquor by the drink. A three-judge District Court held the regulations invalid under the First and Fourteenth Amendments, concluding that under standards laid down by this Court some of the proscribed entertainment could not be classified as obscene or lacking a communicative element. Among the regulations at issue were those prohibiting the performance of simulated sexual intercourse, actual or simulated “touching, caressing or fondling of the breast” or “the actual or simulated displaying of the public hair, anus, vulva or genitals.” (*California v. La Rue*, 409 U.S. at 112). The Supreme Court held that in the context, not of censoring dramatic performances in a theater, but of licensing bars and
nightclubs to sell liquor by the drink, the States have broad latitude under the Twenty-first Amendment to control the manner and circumstances under which liquor may be dispensed, and here the conclusion that sale of liquor by the drink and lewd or naked entertainment should not take place simultaneously in licensed establishments was not irrational nor was the prophylactic solution unreasonable.

Although *44 Liquormart, Inc. v. Rhode Island*, 517 U.S. 484 (1996), disavowed La Rue’s “reasoning insofar as it relied on the Twenty-first amendment, “the Supreme Court stressed in that case that LaRue’s holding remained intact. See *44 Liquormart*, 517 U.S. at 516.

The doctrine established in *LaRue* that states may legally regulate sex related communication in alcohol serving establishments has been relied upon by liquor control boards across the country to justify regulation of adult entertainment in alcohol serving businesses. These boards have often accepted the untested premise that combining liquor service with adult entertainment leads to greater adverse secondary effects than merely serving liquor alone. The rationale relied upon by the Liquor Control Commission of the State of Ohio is exactly this premise. At a public hearing involving the Proposed Rule No. 4301:1-1-52 (a measure to limit the display of simulated sex acts in liquor serving establishments throughout Ohio) on September 11, 2003 the testimony of Mr. Bruce Taylor prosecutor for the U.S. Department of Justice was presented. Mr. Taylor opined:

“There have been studies that were done in cities across the country for the past 30-some years, most of which have involved adult bookstores, but other kinds of sexually-oriented businesses like strip joints and adult theatres and porno book stores that sell sexually-oriented materials or permit sexually-oriented entertainment like strip acts, like nude dancing.” (pg. 15).

“So this idea that the harmful secondary effects that have existed and have been noticed by reports or by studies around the country
is something that is (sic) sort of become a body of common knowledge.” (pg 17-18)

“But the studies…did conclude that the harmful secondary effects are, if anything worse when you combine -- you have some when you have just the nudity and sex shows and stripping. But, there are more effects and more greater degree of intensity (sic) and harm on the community and on the people in it when you mix the alcohol and the sex with alcohol and the nudity.” (pg. 66)

THE PRESENT STUDY: FOUR OHIO CITIES

The purpose of the present study is to conduct an empirical study to determine if a relationship exists between adult businesses that serve alcohol and harm done to the community in terms of sex crimes in four Ohio cities--Toledo, Dayton, Columbus and Cleveland. The following question is asked: Once variables known to be related to crime events suggested by Social Disorganization theory have been statistically controlled, does the presence of adult entertainment in an alcohol serving establishment increase sex related crimes above and beyond those crimes at alcohol serving establishments that do not present such entertainment?

Overview of Methods

The methodological approach taken here involves three procedures. First, the Computer Aided Dispatch or NIBRS data involving sex crimes in the cities of Toledo, Dayton, Columbus and Cleveland Ohio are obtained and aggregated within census block groups defined by the 2000 United States Census Bureau. Second, we measured the presence or absence of community features derived from Social Disorganization theory, including the presence of alcohol serving non-adult businesses that may be related to criminal activity. Third, these two sources of information are combined for analyses.
Block Group Level U.S. Census Demographic Information

The 2000 United States Census measures general demographic characteristics of each block group. These variables include, among others, measures of population, sex and age, race, relationships in household, household type measured at the block level. Using a Geographic Information System (GIS) program, Maptitude 4.5, we were able to link demographic characteristics of each census block group as measured by the 2000 United States Census to their geographical locations. The crime incident data were then plotted in the same map according to police records. Finally, a data file was constructed which included the demographic and crime incident frequencies for each block group.

Analyses Overview

Our analysis strategy entails first entering these census variables into a statistical analysis to control for the effects of these characteristics on crime incidents. After we control for demographic features, we then examine the relative contribution of the presence of an alcohol selling establishment in the neighborhood. Finally, after we have controlled for this variable, we then examine the impact of having an adult cabaret in the block group area on crime incidents. These analyses are undertaken on a city-by-city basis.

Criterion Variables

The analysis reported below was designed to answer the question: Once we have controlled for characteristics of the immediate “neighborhood” (census block group) known to be related to crime and community disorder, including alcohol serving establishments, what is the effect of the presence of an adult cabaret in a census block group on crime events? This comprehensive form of analysis is necessary to insure that once other sources of variability in
crime incidents, known from past research, are statistically controlled the effect of the adult
business as a source of crime and disorder in the area may manifest itself.

As we noted in the introduction several variables investigated by others have been found
to be important as predictors of crime activity. These include measures of population density,
racial composition, and neighborhood characteristics. These social variables have been
examined on the basis of the theory that a local area’s population age structure (especially the
presence of young adults), and its race/ethnic composition can affect both the size of the pool of
motivated crime offenders and the presence of suitable targets for predatory crimes. Variables
that have been investigated and have been found to be most important as predictors of crime
activity include measures of racial composition (number of African Americans and racial
heterogeneity), family structure (as measured by number of single-parent households, female
headed households), economic composition (as measured family income), and the presence of
motivated offenders, primarily males between the ages of 18 and 25 and socioeconomic status as
measured by level of education (see, e.g., Miethe & Meier, 1994).¹

In addition, it is necessary to control for neighborhood business and housing
characteristics that may contribute to social disorganization such as the presence of vacant
houses and lots and rental housing units and measures of neighborhood integration such as
number of owner occupied housing units. Specific land uses are not only important in
themselves but they also operate in interaction with variables that are indicative of social
disorganization. The presence of alcohol serving establishments or bars identifies areas that
might be particularly attractive for potential offenders (Roncek and Maier, 1991; Sherman et al.,
1989; Stark, 1987).

The list of population, general demographic characteristics, social disorganization variables and alcohol serving private club establishments measured at the census block group level included in the analyses appears immediately below.

**Variable Group 1**
POPULATION
AREA

**Variable Group 2**
MEDIAN AGE OF POPULATION
NUMBER OF NONWHITES
FEMALE HEAD OF HOUSEHOLD, NO HUSBAND
MARRIED HOUSEHOLD FAMILIES
MEDIAN AGE

**Variable Group 3**
HOUSEHOLD MEDIAN INCOME
OWNER OCCUPIED HOUSING UNIT VALUE-MEDIAN
FAMILIES BELOW POVERTY LEVEL
ADULTS (25+) WITH LESS THAN 9TH GRADE EDUCATION
PERCENT OF ADULTS (25+) WITH BACHELOR’S DEGREE OR HIGHER

**Variable Group 4**
HOUSEHOLD UNITS VACANT
OCCUPIED HOUSEHOLDS-OWNER OCCUPIED

**Variable Group 5**
NUMBER OF ALCOHOL SERVING PRIVATE CLUBS

**Variable Group 6**
PRESENCE OF ADULT CABARETS

Once the demographic and social disorganization variables are statistically controlled, the effect of the variables measuring the presence or absence of adult cabarets (variable group 6) in the block group is examined.
The Toledo Study

Method

Locating the Adult Cabarets and Alcohol Serving Establishments

A comprehensive list of adult cabaret businesses was obtained for the City of Toledo. Three alcohol serving adult cabarets establishments were identified and examined in the present study. We also obtained a comprehensive list of private club alcohol serving licensees in Toledo who were issued licenses to sell alcoholic beverages by the Ohio Department of Commerce, Division of Liquor Control. The addresses of these businesses were located within the census block groups by using the GIS mapping program.

Measuring Crime and Disorder Incidents

For the analyses below we rely on crime incident report data collected by the City of Toledo Police Department Computer Automated Dispatch (CAD). This included records of dispatches or calls for service (CFS) that were either police-initiated or calls from the public from January 1, 1998 to December 31, 2002--five years. Each record contained the date, time, location, and the disposition of the call. In this study we employ only the calls for service for which a report or arrest is made. During the period between January, 1998 and December, 31, 2002, the Toledo Police Department had dispatch records for 1074 incidents of sexual assault and rape, 248 prostitution incidents, and 377 obscene activities. The sex crime breakdown by type in Toledo is displayed immediate below.

Locating the Crime Incident Calls for Service by Address

The crime incident data were then plotted by address in Toledo using Maptitude 4.5. Initially, an attempt was made to plot all calls based upon the street name and address using the “very strict” location criterion option (i.e., only those addresses for which an exact street name and
number match to those stored in Maptitude are plotted). This resulted in the plotting of roughly 90% of all calls for service. We then use the “normal” criterion to locate the rest of incidents by allowing for some misspelling of street names by the police. This procedure allowed the GIS program to plot an additional 8% of calls for services. The remaining 2% of the calls were not plotted.

**Results**

A series of hierarchical ordinary least squares (OLS) regression were conducted. The population, demographic and social disorganization variables were entered into the regression equation in the first four blocks. The alcohol serving private club predictor variable (adult business cabarets that were private clubs were eliminated from this stage) was then entered into the model. This was followed by a block measuring the presence or absence of adult cabarets. A summary of results of the hierarchical regression analyses for sexual assault and rape, prostitution, and obscene activity calls for service events in Toledo are displayed in Table 1.

**Sexual Assault and Rape**

In Toledo, the hierarchical regression model explained 54-percent of the variability in sexual assault and rape incidents across census block groups ($R^2 = .54$). The first variable cluster measuring population and geographic area accounted for 5-percent of the variability. The addition of the demographic variables set added another 39-percent to the explanatory power of the model. The addition of the next block of variables contributed 5-percentage points to the model’s explanatory power. The block measuring the housing variables was statistically significant and explained an additional 4-percent of variability. The addition of the single variable measuring alcohol-serving establishments added approximately 2-percent to the model’s
predictive power. Finally, the variable measuring the presence of an adult cabaret added no statistically significant predictive power to the model.

**Prostitution**

As can be seen from Table 1, the hierarchical regression analyses for prostitution calls for service events in Toledo accounted for 30-percent of the variability in these crime incidents across census block groups. The first variable cluster measuring population and geographic area was not a significant contributor to predicting prostitution incidents in Toledo. In the second step, the addition of the demographic variables set added a statistically significant 15-percent explanatory power to the overall model. The addition of the next block of variables significantly contributed 9-percentage points to the model’s total explanatory power. The block measuring the housing variables was statistically significant and contributed an additional 4-percent to the model. The addition of the single variable measuring alcohol-serving establishments added approximately 3-percent to the model’s predictive power. Finally, the variable measuring the presence of an adult cabaret added no statistically significant predictive power to the model.

**Obscene activities**

The hierarchical regression analyses for public obscene events in Toledo explained 33-percent of the variability in these crime incidents across census block groups. The first variable cluster measuring population and geographic area is significant contributor accounting for almost 5-percent of the total variability in the model. In the second step, the addition of the demographic variables set added a statistically significant almost 13-percent explanatory power to the overall model. The addition of the next block of variables significantly contributed about 4.5-percentage points to the model’s total explanatory power. The block measuring the housing variables was statistically significant and contributed an additional 7-percent to the model. The
addition of the single variable measuring alcohol-serving establishments added approximately 3-per cent to the model’s predictive power. The variable measuring the presence of an adult cabaret added was significant and added around 1.3-percentage point to the explanatory power of the model. Overall the result of this regression analysis suggests that although the presence of an adult cabaret may be a statistically significant factor, social economic status, demographics, and the presence of non-adult alcohol serving private clubs are far better predictors of where these obscene activities occur in Toledo.

**Comparison of alcohol serving and cabarets in terms of sex crimes**

Although our regression analyses revealed that the presence of non-adult alcohol serving establishments is a far better predictor of sex related crime incidents than the presence of adult cabarets in Toledo, one may still argue that sex crimes may occur on the premises of these cabarets more frequently than non-adult alcohol serving businesses. In other words adult cabarets may not be located in areas where sex crimes frequently occur, but these cabarets themselves may be the “hotspots” of such crimes incidents as compared to a non-adult alcohol serving club. To test this possibility, we compared the number of sex crime related police dispatches to non-adult alcohol serving establishments and adult cabarets in Toledo. The result of this analysis suggests 13 non-adult alcohol serving businesses in Toledo reported at least one sex-related incident in the period of 5 years. In contrast, zero sex-related crime incidents were reported at the three adult cabarets in Toledo, OH.

**The Columbus Study**

**Method**

A comprehensive list of adult cabaret businesses was obtained from the City of Columbus, OH. 15 alcohol serving adult cabarets establishments were identified and included in
the present study. We also obtained a comprehensive list of private club alcohol serving
licensees in Columbus who were issued licenses to sell alcoholic beverages by the Ohio
Department of Commerce, Division of Liquor Control. These business addresses were located
within each of census block groups using a Maptitude 4.5.

Measuring Crime and Disorder Incidents

For the analyses below we relied on crime incident report data collected by the City of
Columbus Police Department Computer Automated Dispatch (CAD). This included records of
dispatches or calls for service that were either police-initiated or calls from the public in a period
of five years from January 1, 1998 to December 31, 2002. Each record contained the date, time,
and location of the call and the disposition of the call. In this study we employ only the calls for
service for which a report or arrest is made. Due to the nature of radio codes used by Columbus
Police Department, further categorization of sex offenses is impossible. A general sex offenses
category was used to indicate all sex crimes in progress and sex crime reports. A total of 3580
sex offense incidents were included in the police calls for service data during the five year
period.

Locating the Crime Incident Calls for Service by Address

The crime incident data were plotted by address in Columbus using Maptitude 4.5.
Initially, an attempt was made to plot all calls based upon the street name and address using the
“very strict” location criterion option. This resulted in the plotting of roughly 92% of all calls for
service. Next, we used the “normal” criterion that allows for some misspelling of street names by
the police the remaining addresses to plot an additional 7% of total calls for service. The
remaining 1% of the calls was not plotted.
Results

Using the same groups of variables described in the Toledo analysis above, a hierarchical multiple regression analysis was conducted to predict sex offense incidents in Columbus, OH. The population, demographic and social disorganization variables were entered into the regression equation in the first four blocks. The alcohol serving private club predictor variable (adult business cabarets that were private clubs were eliminated from this stage) was then entered into the equation. This was followed by a variable measuring the presence or absence of adult cabarets.

The result of this hierarchical regression analysis is displayed in Table 2. The table displays the variables that were entered at each of the six different stages and how much variance in sex assaults and rape events across the census block groups in Columbus is accounted for at each stage. As can be seen from the table, the overall regression model successfully accounted for 40-percent of the variability in sex offense incidents across census block groups.

The first variable cluster measuring population and geographic area accounted for 1.5-percent of the variability. The addition of the demographic variables set added another 28-percent to the explanatory power of the model. The next block of variables measuring social economic status and education contributed a statistically-significant six-percentage points to the model’s explanatory power. The block measuring the housing variables, although was statistically significant, only contributed an additional two-percent to the model. The addition of the single variable measuring alcohol-serving establishments added approximately three percentage points to the model’s predictive power.
Finally, the variable measuring the presence of an adult cabaret added no statistically significant predictive power to the model. In fact, reveals a *negative* beta coefficient for the variable measuring the presence of adult cabarets in the last step of the regression model.

*Comparison of alcohol serving and cabarets in terms of sex crimes*

To test this possibility that sex offenses may have higher occurrences at the adult cabarets than at the non-adult alcohol serving private clubs despite of the fact that they are not located in areas where such incidents frequently occur, we conducted a analysis comparing the number of sex offense police dispatches to non-adult alcohol serving establishments and adult cabarets in Columbus. This analysis revealed that the 22 non-adult private clubs were associated with a total of 30 sex offenses in five years of available data. However, there were only 2 sex incidents during the same five-year period at the 15 alcohol-serving adult cabarets.

**The Dayton Study**

**Method**

*Locating the Adult Cabarets and Alcohol Serving Establishments*

A comprehensive list of adult cabarets, adult video/bookstores and other adult businesses was obtained from the City of Dayton, OH. The 5 alcohol-serving adult cabarets establishments were examined in the Dayton study. A comprehensive list of private clubs in Dayton with alcohol serving licenses issued by the Ohio Department of Commerce, Division of Liquor Control was also obtained. These business addresses were located and plotted within the census block groups.

*Measuring Crime and Disorder Incidents*

In the Dayton study, we relied on crime data reported by the Dayton Police Department to the National Incident Based Reporting System (NIBRS) in a four-year period of time from
1/1/1999 to 12/31/2002. Being a part of the widely used Uniform Crime Reporting (UCR) program, NIBRS is an incident-based reporting system for crimes known to the police. For each crime incident coming to the attention of law enforcement, a variety of data are collected about the incident. These data include the nature and types of specific offenses in the incident, characteristics of the victim(s) and offender(s), types and value of property stolen and recovered, and characteristics of persons arrested in connection with a crime incident.

Unlike CAD, which is a comprehensive index of both police activity and crime activity, NIBRS provides a large amount of information only about crime activities. The information is also organized in complex ways, reflecting the many different aspects of a crime incident. Based on the codebook provided by the National Archive of Criminal Justice Data, three categories of sex crimes were devised in this study: 1) Forcible Rape, which included Forcible Rape, Forcible Sodomy, Sexual Assault with an Object, and forcible fondling. 2) Prostitution, and 3) Other Sex Crimes, which included Obscenity, Statutory Rape, Incest, and Peeping Tom. During the four years for which we had data, there were 940 forcible rape incidents, 1970 prostitution incidents, and 111 other sex crimes.

**Locating the Crime Incident Calls for Service by Address**

The crime incident data were plotted by address in Dayton, OH, using Maptitude GIS software. Because each crime incident included the NIBRS data was recorded with high levels of precision, we were able to plot all 100% of crime incidents using the “very strict” mapping criterion.

**Results**

Using the same groups of geographical, demographic, and social economic variables used in the Toledo and Columbus analyses above, a series of hierarchical multiple regression analyses
were conducted to predict sex crimes in Dayton, OH (see Table 3). The population, demographic and social disorganization variables were entered into the regression equation in the first four blocks. The alcohol serving private club predictor variable (adult business cabarets that were private clubs were eliminated from this stage) was then entered into the equation. This was followed by a variable measuring the presence or absence of adult cabarets.

**Predicting forcible rape crime incidents**

The result of this hierarchical regression analysis successfully accounted for 50-percent of the variability in forcible rape crime incidents across census block groups. The first variable cluster measuring population and geographic area accounted for 4-percent of the variability. The addition of the demographic variables set added another 27-percent to the explanatory power of the model. The next block of variables measuring social economic status and education accounted for 14-percent of the total variability in rape crime. The block measuring the housing variables, although was statistically significant, only contributed an additional 4-percent to the model. The addition of the variable measuring alcohol-serving establishments added approximately 3.5-percent to the model’s predictive power. Finally, the variable measuring the presence of an adult cabaret added no statistically significant predictive power to the model.

Similar to the Columbus results, the hierarchical regression analysis for forcible rape revealed a *negative* but non-significant beta coefficient for the variable measuring the presence of adult cabarets in the last step of the regression model.

**Predicting prostitution incidents**

The overall regression model successfully accounted for 33-percent of the variability in prostitution incidents crimes across census block groups. The first variable cluster measuring population and geographic area accounted for 3-percent of the variability. The addition of the
demographic variables set added another 5-percent to the explanatory power of the model. The next block of variables measuring social economic status and education accounted for 9-percent of the total variability in rape crime. The block measuring the housing variables, although was statistically significant, only contributed an additional 7.6-percent to the model. The addition of the variable measuring alcohol-serving establishments added approximately 7.8-percent to the model’s predictive power. Finally, the variable measuring the presence of an adult cabaret added no statistically significant predictive power to the model.

In addition, we again found a negative beta coefficient for the variable measuring the presence of adult cabarets in the last step of the regression model.

*Predicting other sex crimes*

The result of a third hierarchical regression analysis suggests that the overall model successfully accounts for almost 30-percent of the variability in rape crimes across census block groups. The first variable cluster measuring population and geographic area was not statistically significant. The addition of the demographic variables set added a significant 14-percent to the explanatory power of the model. The next block of variables measuring social economic status and education accounted for 6-percent of the total variability in rape crime. The block measuring the housing variables, although was statistically significant, only contributed close to 3-percent to the model. The addition of the variable measuring alcohol-serving establishments added approximately 5.5-percent to the model’s predictive power. Finally, the variable measuring the presence of an adult cabaret added no statistically significant predictive power to the model. Once again, we found a negative beta coefficient for the variable measuring the presence of adult cabarets in the last step of the regression model.
Comparison of alcohol serving and cabarets in terms of sex crimes

To test the possibility that sex crimes may occur more frequently at the adult cabarets than at the non-adult alcohol serving private clubs despite of the fact that they are not located in areas where sex crimes frequently occur, we conducted a analysis comparing the number of different types of sex crimes at non-adult alcohol serving establishments and adult cabarets in Dayton. We found that 14 non-adult alcohol-serving private clubs reported a total of 41 sex offenses during 1/1/1999 and 12/31/2002. However, there is not a single sex crime at the five adult cabarets during the same four-year period. It is clear that adult cabarets in Dayton, OH, do not have a higher sex crime rate than non-adult alcohol serving private clubs.

The Cleveland Study

Method

Locating the Adult Cabarets and Alcohol Serving Establishments

The Cleveland analysis examined 12 alcohol-serving adult establishments. We obtained a comprehensive list of private club alcohol serving licensees in Cleveland who were issued licenses to sell alcoholic beverages by the Ohio Department of Commerce, Division of Liquor Control. These business addresses were located and mapped within the census block groups by using Maptitude 4.5.

Measuring Crime and Disorder Incidents

The City of Cleveland Police Department’s CAD records from December 31, 1997 to February 28, 2003 were examined in this study. Each record contained the date, time, type, and location of the call. Due to limitations of the dataset provided by the Cleveland Police Department, we were not able to select only those calls for service for which a report or arrest is
made. For the 5-years available CAD data, there were 953 rape incidents, 1205 prostitution incidents, and 1803 pubic indecency incidents.

**Locating the Crime Incident Calls for Service by Address**

The sex crime incident data were plotted by address using Maptitude 4.5. The initially attempt plot all calls based upon the street name and address using the “very strict” location criterion option resulted in the plotting of roughly 86% of all incidents. Next, we used the “normal” criterion to allow for an additional 8% plotting rate. The remaining 6% of the calls were not plotted.

**Results**

A series of hierarchical multiple regression analyses were conducted to predict three types of sex crimes in Cleveland, OH (see Table 4). The population, demographic and social disorganization variables were entered into the regression equation in the first four blocks. The alcohol serving private club predictor variable (adult business cabarets that were private clubs were eliminated from this stage) was then entered into the equation.

**Predicting rape incidents**

The overall regression model successfully accounted for 44-percent of the variability in rape crimes across census block groups. The first variable cluster measuring population and geographic area accounted for almost 3-percent of the variability. The addition of the demographic variables set added another 30-percent to the explanatory power of the model. The next block of variables measuring social economic status and education accounted for 7.5-percent of the total variability in rape crime. The block measuring the housing variables, although was statistically significant, only contributed an additional 1.3-percent to the model. The addition of the variable measuring alcohol-serving establishments added approximately 2-
percent to the model’s predictive power. Finally, the variable measuring the presence of an adult cabaret added no statistically significant predictive power to the model.

**Predicting Prostitution Incidents**

The overall regression model successfully accounts for 23-percent of the variability in prostitution incidents across census block groups. The first variable cluster measuring population and geographic area accounted for one-percent of the variability. The addition of the demographic variables set added another 14 percent to the explanatory power of the model. The next block of variables measuring social economic status and education accounted for five-percent of the total variability in rape crime. The block measuring the housing variables, although was statistically significant, only contributed an additional three-percent to the model. The addition of the variable measuring alcohol-serving establishments added approximately seven tenth of a percent to the model’s predictive power. Finally, the variable measuring the presence of an adult cabaret added no statistically significant predictive power to the model.

**Predicting Public Indecency and Indecent Exposure**

The overall regression model successfully accounts for almost 45 percent of the variability in public indecency incidents across census block groups. The first variable cluster measuring population and geographic area was statistically significant and contributed close to three percent of the total variability in indecent exposure and public indecency calls for service. The addition of the demographic variables set added a significant 28 percent to the explanatory power of the model. The next block of variables measuring social economic status and education accounted for 9-percent of the total variability in rape crime. The block measuring the housing variables, although was statistically significant, only contributed close to two percent to the model. The addition of the variable measuring alcohol-serving establishments added
approximately three percent to the model’s predictive power. Finally, the variable measuring the presence of an adult cabaret added no statistically significant predictive power to the model.

**Comparison of alcohol serving and cabarets in terms of sex crimes**

To test this possibility that sex crimes may occur more frequently at the adult cabarets than at the non-adult alcohol serving private clubs despite of the fact that they are not located in areas where sex crimes frequently occur, we conducted a analysis comparing the number of different types of sex crimes at non-adult alcohol serving establishments and adult cabarets in Cleveland. The result of this analysis suggests that 28 non-adult alcohol-serving private clubs reported a total of 36 sex related calls for service during 12/31/1997 and 2/28/2003, while there were only 2 sex related calls for service from the 12 adult cabarets during the same five-year period. It is clear that adult cabarets in Cleveland, OH, do not have a higher sex crime rate than non-adult alcohol serving private clubs.

**Discussion**

In order to test the assumption that adult cabarets that serve alcohol are associated with negative secondary effects, an empirical study of prostitution, sexual assault and other sexual offenses in Toledo, Dayton, Columbus and Cleveland Ohio was undertaken utilizing crime event data provided by the police (computer aided dispatch and NIBRS data). The following research question was posed: Once variables known to be related to crime events suggested by Social Disorganization and Routine Activities theories have been statistically controlled, does the presence of adult entertainment in an alcohol serving establishment increase sex related crimes above and beyond those crimes at alcohol serving establishments that do not present such entertainment? The results revealed that the adult businesses were not the primary source of sex
crime events. Often these businesses actually showed zero sex crime events. Instead, alcohol serving, non-adult establishments are often a significant source of such events.

**Consistency with Previous Research**

Few studies have been undertaken to test the assumption made by state liquor control boards that there are more effects and the effects are of a greater degree of intensity and harm in communities with business establishments that serve alcohol and feature exotic dancing and nudity. The research that has been undertaken in other states is consistent with the results obtained in the present study of Ohio cities. Linz, Fisher, and Yao (2004) estimated the effects of social disorganization variables, alcohol sites, and adult cabarets on police calls for service at the census block level in Daytona Beach Florida. The authors also matched (based on census socioeconomic and demographic characteristics) 1000-foot perimeter control-sites, with those of the adult cabaret perimeters to help isolate the sources of crime. The regression analysis showed no association between adult cabarets serving alcohol and crime at the census block level. Rather, the results indicated that social disorganization and alcohol establishments that did not feature sexually explicit communication or entertainment were better predictors of crime. Similarly, Linz, Land, Williams, Ezell, & Paul (2004) found that adult businesses that served alcohol were not associated with crime in Charlotte, North Carolina.

Fisher, Linz, & Paul (2004) examined the link between sexual entertainment, sexual aggression and the presence of adult businesses and the prediction of rape rates in Florida. This study examined whether rates of crime are associated with the rates of adult businesses in the 67 counties of Florida once other variables related to crime are controlled. Rates per 100K people in the population were computed for the numbers of nonsexual adult businesses: drinking establishments, gambling establishments, and hotels and motels in each county. These measures,
along with measures of social disorganization and demographic variables, were examined for their relative ability to predict UCR. The model estimated in this research explained 34.3% of the variance in rates of rape with three variables make unique, significant contributions to prediction of rates of rape: percentage of the population that is classified as nonWhite, the number of drinking establishments per 100K population and the number of nude and semi-nude businesses per 100K population. However, the correlation for the presence of adult businesses as was the case in the analyses for two of the Ohio cities examined above was negative.

**Implications for Assumptions Underlying California v. la Rue**

The United States Supreme Court has ruled that a state may prohibit “the actual or simulated touching, caressing, or fondling of the breast, buttocks, anus or genitals” in establishments licensed to sell liquor (*California v. la Rue*, 409 U.S. 109 (1972). State liquor control boards across the country and specifically, in Ohio have accepted the premise that combining liquor service with adult entertainment leads to greater adverse secondary effects than merely serving liquor alone. This premise is not supported by either the current research or past studies.

What does the lack of empirical evidence of a relationship between sexually oriented businesses in the community and secondary crime effects mean, regarding the Ohio liquor control board’s underlying rationale for regulating sex oriented businesses despite a lack of empirical evidence of adverse secondary effects? It may be an incidence of what Justice Souter in the *City of Los Angeles v. Alameda Books, Inc.* (2002) has referred to as a weak demonstration of facts indicating viewpoint discrimination.

In *Alameda* Justice Souter has said that sound empirical investigations of presumed adverse secondary effects are helpful in guarding against unconstitutional restrictions of freedom
of sexual speech. Lacking empirical proof of its own the state of Ohio may be engaging in disapproval of adult speech rather than attempting to regulate sex communication out of concern for adverse secondary effects.

**Explaining the Lack of Crime**

Results from previous studies and the results from the present study suggest either no relationship or even a negative relationship between the presence of alcohol serving adult entertainment establishments and adverse secondary effects in the form of sex related crime activity. These findings may not be surprising given developments in the adult nightclub business over the last decade. First, the adult nightclub business in the late-1990s in many respects may be quite unlike that of the 1960s and 1970s when these establishments were relatively new forums of entertainment in American society. Adult nightclubs have been subjected to over two decades of municipal zoning restrictions across the country, and they usually must comply with many other regulations as well. These clubs do not appear to be locations where potential offenders gather to prey on desirable targets in the absence of crime suppressors, such as employees whose role is to ensure the safety of customers and the maintenance of order within the clubs.

The establishments themselves have evolved more closely into legitimate businesses establishments with management attention to profitability and continuity of existence. To meet these objectives, it is essential that the management and/or owners of the clubs provide their customers with some assurance of safety. Accordingly, adult nightclubs, including those in the Ohio cities under investigation often appear to have better lighting in their parking lots and better security surveillance than is standard for non-nightclub business establishments. These may be factors producing fewer crime opportunities and lower numbers of reported crime incidents in
the surrounding areas of the clubs. The extensive management of the parking lots adjoining the exotic dance nightclubs, in many cases including guards in the parking lots, valet parking, and other control mechanisms, may be especially effective in reducing the possibility of violent disputes in the surrounding area. In addition, unlike other liquor-serving establishments (bars and taverns that do not offer adult entertainment) that may be present in the control areas, violent disputes in the areas surrounding exotic dance clubs between men over unwanted attention by other males to dates or partners are minimal due to the fact that the majority of patrons attend the clubs without female partners. Thus, the possibility of sexual aggression may be greatly reduced in the vicinity of adult dance clubs, compared to most other locations where adults congregate, such as bars or taverns that do not feature adult entertainment.
References


California v. la Rue, 409 U.S. 109 (1972)

City of Los Angeles v. Almeda Books Inc. et al., 222 F. 3d 719 (9th Cir.) (2000).


Table 1

Summary of hierarchical regression analyses for natural-logged sex crime calls for service incidents in Toledo, OH. (N = 340).

<table>
<thead>
<tr>
<th></th>
<th>Sexual Assault &amp; Rape</th>
<th>Prostitution</th>
<th>Obscene</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R² Change</td>
<td>F Change</td>
<td>R² Change</td>
</tr>
<tr>
<td>Step 1</td>
<td>0.052</td>
<td>9.27***</td>
<td>0.008</td>
</tr>
<tr>
<td>Step 2</td>
<td>0.387</td>
<td>57.55***</td>
<td>0.146</td>
</tr>
<tr>
<td>Step 3</td>
<td>0.048</td>
<td>6.15***</td>
<td>0.086</td>
</tr>
<tr>
<td>Step 4</td>
<td>0.035</td>
<td>11.87***</td>
<td>0.041</td>
</tr>
<tr>
<td>Step 5</td>
<td>0.018</td>
<td>12.57***</td>
<td>0.027</td>
</tr>
<tr>
<td>Step 6</td>
<td>0.002</td>
<td>1.67</td>
<td>0.004</td>
</tr>
</tbody>
</table>

*Note. The total R² for the regression model predicting sexual assault and rape is .54; the total R² for the regression model predicting prostitution is .31; the total R² for the regression model predicting obscene activities is .33.*

*p < .05, **p < .01 ***p < .001
Table 2

Summary of hierarchical regression analyses for natural-logged sex crime calls for service incidents in Columbus, OH. (N = 737).

<table>
<thead>
<tr>
<th></th>
<th>Sex Crimes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R2 Change</td>
</tr>
<tr>
<td>Step 1</td>
<td>0.015</td>
</tr>
<tr>
<td>Step 2</td>
<td>0.280</td>
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<tr>
<td>Step 3</td>
<td>0.058</td>
</tr>
<tr>
<td>Step 4</td>
<td>0.019</td>
</tr>
<tr>
<td>Step 5</td>
<td>0.033</td>
</tr>
<tr>
<td>Step 6</td>
<td>0.000†</td>
</tr>
</tbody>
</table>

Note. The total R² for the regression model predicting sex crimes is .41.
† The Beta coefficient for Step 6, a single variable for the presence and absence of adult cabarets in a census block is -.008, p = .792.
** p < .01, *** p < .001
Table 3

Summary of hierarchical regression analyses for natural-logged sex crime calls for service incidents in Dayton, OH. (N = 405).

<table>
<thead>
<tr>
<th>Step</th>
<th>Forcible Rape</th>
<th>Prostitution</th>
<th>Other Sex Crimes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R² Change</td>
<td>F Change</td>
<td>R² Change</td>
</tr>
<tr>
<td>Step 1</td>
<td>0.042</td>
<td>8.80***</td>
<td>0.030</td>
</tr>
<tr>
<td>Step 2</td>
<td>0.266</td>
<td>38.13***</td>
<td>0.052</td>
</tr>
<tr>
<td>Step 3</td>
<td>0.135</td>
<td>19.13***</td>
<td>0.090</td>
</tr>
<tr>
<td>Step 4</td>
<td>0.040</td>
<td>14.97***</td>
<td>0.076</td>
</tr>
<tr>
<td>Step 5</td>
<td>0.035</td>
<td>28.34***</td>
<td>0.078</td>
</tr>
<tr>
<td>Step 6</td>
<td>0.003†</td>
<td>2.66</td>
<td>0.003††</td>
</tr>
</tbody>
</table>

Note. The total R² for the regression model predicting forcible rape is .52; the total R² for the regression model predicting prostitution is .33; the total R² for the regression model predicting other sex crimes is .30.

† The Beta coefficient for Step 6, a single variable for the presence and absence of adult cabarets in a census block is -0.06, p = .10.

‡‡ The Beta coefficient for Step 6, a single variable for the presence and absence of adult cabarets in a census block is -0.053, p = .22.

††† The Beta coefficient for Step 6, a single variable for the presence and absence of adult cabarets in a census block is -0.033, p = .46.

** p < .01, *** p < .001
Table 4

Summary of hierarchical regression analyses for natural-logged sex crime calls for service incidents in Cleveland, OH. (N = 1029).

<table>
<thead>
<tr>
<th>Step</th>
<th>Rape R² Change</th>
<th>F Change</th>
<th>Prostitution R² Change</th>
<th>F Change</th>
<th>Indecency R² Change</th>
<th>F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>0.027</td>
<td>14.28***</td>
<td>0.012</td>
<td>5.99***</td>
<td>0.029</td>
<td>15.34***</td>
</tr>
<tr>
<td>Step 2</td>
<td>0.300</td>
<td>113.90***</td>
<td>0.138</td>
<td>41.40***</td>
<td>0.279</td>
<td>103.07***</td>
</tr>
<tr>
<td>Step 3</td>
<td>0.075</td>
<td>25.64***</td>
<td>0.050</td>
<td>12.69***</td>
<td>0.092</td>
<td>31.28***</td>
</tr>
<tr>
<td>Step 4</td>
<td>0.013</td>
<td>10.93***</td>
<td>0.034</td>
<td>22.62***</td>
<td>0.021</td>
<td>18.77***</td>
</tr>
<tr>
<td>Step 5</td>
<td>0.020</td>
<td>35.52***</td>
<td>0.007</td>
<td>9.76**</td>
<td>0.031</td>
<td>57.69***</td>
</tr>
<tr>
<td>Step 6</td>
<td>0.001</td>
<td>1.01</td>
<td>0</td>
<td>0.001</td>
<td>0</td>
<td>0.003</td>
</tr>
</tbody>
</table>

Note. The total R² for the regression model predicting rape is .44; the total R² for the regression model predicting prostitution is .24; the total R² for the regression model predicting public indecency is .45.

**p < .01, ***p < .001