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RESEARCH ARTICLE

SEXUAL VICTIMIZATION IN SIN CITY

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ABSTRACT

Las Vegas, Nevada sells sex without much discussion of the potential negative consequences to this overtly sexual environment. This paper will look at rates of sexual assault in this self-described adult playground. Criminal justice professionals in Las Vegas acknowledge struggling with elevated rates of sexual victimization. Assault rates were considered through multiple sources of data. Federal data suggests that Las Vegas has high rates for a city of its size, higher than other cities with a similar focus on tourism. Sexual victimization reported at the college level was also higher than seen at other campuses, suggesting that the risk of victimization is city wide. The sex drive of college students in Las Vegas was also examined.

Keywords: Las Vegas, sexual environment, forcible rape, prostitution, Routine Activities Theory, Sexual Experience Survey, sex drive

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INTRODUCTION

Las Vegas sells sex. The titillating nature of the overtly sexual focus of "Sin City" has been highlighted internationally in the successful "What happens in Vegas, stays in Vegas" tourism campaign. What is rarely reflected on is whether there is a downside to this sexual environment. Las Vegas is repeatedly at the top of lists ranking cities with high rates of forcible rape. This paper will consider whether Las Vegas has an environment that exacerbates sexual assault. Forcible rape rates will be considered through multiple sources of data – both through law enforcement crime data and surveys of victimization among college students.

Tourists and residents of Las Vegas are bombarded with advertising campaigns that promote sexual activity, portraying the fantasy that sexual activity in Las Vegas is easy and common place. Nevada allows legalized prostitution in certain low-population counties but prostitution is actually illegal in Las Vegas. Despite its illegality, prostitution remains a multi-billion dollar industry in Las Vegas (Farley, 2007), barely disguised in the advertisements of massage parlors, strip clubs and entertainers straight to your room. Even family entertainment has a sexual edge in Las Vegas with Treasure Island's outdoor pirate show featuring sirens in sexy clothing and Cirque de Soleil's nearly nude Zumanity show.¹

The promotion of sexual activity in Las Vegas portrays it as being consequence free. The media rarely focuses on the risk of rape in Las Vegas but police struggle with elevated rates of sexual assault, low clearance rates and lack of prevention strategies. Nevada's rate of forcible rapes is ranked number 8 in the nation (FBI, 2008). The traditional definition of forcible rape according to the FBI's Uniform Crime Reports (2008) is the "carnal knowledge of a female forcibly and against her will" but the information collated by individual states generally include victims of both genders.

This paper considers whether the overtly sexual culture of Las Vegas creates a high-risk environment for sexual victimization. Routine activities theory offers a framework for understanding the risk for criminal activity (Cohen & Felson, 1979). The everyday routines in Las Vegas may place individuals in situations where victimization is likely to occur. Under this theory, three forms of risk influence the likelihood of criminal activity including target suitability, presence of motivated offenders, and a lack of capable guardianship (Felson, 2000). The first risk, target suitability, suggests that people or

¹ www.treasureisland.com, www.zumanity.com

objects are more desirable when they are viewed as easily accessible or vulnerable. As potential targets for rape, women are portrayed and objectified in Las Vegas as sexual beings in graphic advertising throughout the city. Even restaurant advertising deconstructs meals into heterosexual innuendos such as “you’ll like our meatballs” with the food presented as simulating oral sex being performed by a woman.

The second risk is the existence of motivated offenders and is generally assumed under this theory. In Las Vegas, offenders are presented with potential targets and actively encouraged through the sexually aggressive nature of this advertising. The message sent to men is that sex is readily available for the taking. Furthermore, due to the tourism industry, there is the potential for high numbers of motivated offenders to congregate in high-alcohol and party focused areas (e.g., “The Strip,” strip clubs, bars).

The third risk that exists is the absence of capable guardianship. The city wide tolerance of the overtly sexual nature of Las Vegas is an abdication of guardianship. The alcohol-based, partying nature of the Las Vegas experience sets up the same risky routine activities that have previously been demonstrated to correlate with sexual victimization (e.g., Mustaine & Tewksbury, 2002).

This paper will examine risk for forcible rape through three research questions. The first question of whether Las Vegas has elevated rates of forcible rape will be examined through a review of related literature and secondary data. Rates will be compared to cities of similar size that are also economically focused on tourism. Also examined will be specific risks such as the existence of legalized prostitution and rape culture. The second research question will examine rates of forcible rape by comparing self-reported victimization data collected in Las Vegas to data collected in another city of similar size. The final research question explored will be the sexual motivation of Las Vegas students by looking at the sex drive or investment in sexual activity among Las Vegas college students.

LAW ENFORCEMENT VICTIMIZATION ESTIMATES

The prevalence of forcible rape was examined using incident data compiled by the FBI for the Uniform Crime Reports (UCR). In 2008, the FBI indicated that the national average of forcible rapes was 57.7 per 100,000 females. The estimated total number of forcible rates in the United States was 89,000 in 2008, a slight decrease from 2007 (down 1.6%). In contrast to the stable or declining national rates, Nevada rates increased very slightly by 0.7% to 1102 reported offenses in 2008 (Nevada Department of Public Safety, 2008). Since 2003, Nevada rates for rape have been increasing again, in contrast to the national trend of declining rates. Nevada’s rates of forcible rape have consistently been higher than the national average as can be seen in Figure 1.

Within Nevada, Las Vegas and its county (Clark County) account for a disproportionate percentage of forcible rapes reported to law enforcement. In 2008, Clark County held 72.5% of the state’s population but accounted for 80% of the reported rapes (881 out of 1102; Nevada Department of Public Safety, 2008). Of these 881 rapes, 242 were

cleared. The Las Vegas Metropolitan Police Department received 83% of these reported rapes (729 out of 881) despite only being responsible for policing 75% of the population of Clark County.

Las Vegas has a high rate of forcible rapes for a city of its size. Las Vegas with a metropolitan population of 1.8 million had a rate of 47.1 assaults per 100,000 inhabitants (FBI, 2008). According to the UCR's reported rates of forcible rape by metropolitan areas, only one city with a population over 700,000 ranked higher than Las Vegas; Columbus, Ohio, with a metropolitan base population just under 1.8 million had a higher rate at 51.2 per 100,000. The remaining areas that reported higher rates had low population bases (73% had under 300,000 inhabitants) where a small number of rapes will quickly elevate the rates per 100,000.

What these metropolitan area statistics do not build into their estimates are the rates of tourists visiting. Las Vegas, for example, may have a base population of 1.8 million but receives over 32 million tourists each year. Other metropolitan areas that see similar surges in population due to tourism might be better comparisons for Las Vegas. Table 1 presents the UCR reported rapes for 2008 as well as the tourism estimates for Las Vegas² and three other tourism destinations, Miami,³ Atlantic City,⁴ and New Orleans.⁵

Prevalence rates of rape vary dramatically depending on whether or not tourism numbers are taken into account in population estimates. As seen in Table 1, there is no clear pattern as to rates of victimization across these tourism destinations. When rates are calculated based on resident populations, Las Vegas has the highest rates of reported rapes. However, when you take into account the number of tourists, Miami jumps to a higher prevalence rate than Las Vegas whereas Atlantic City's prevalence rate decreases.

One potential problem with trying to calculate the impact of tourists on populations is that it is difficult to determine whether these are short-term or long-term stays. Short-term stays can still have a major impact on population estimates. For example, Las Vegas often sees a weekend increase in population of approximately 800,000 to 1 million visitors, a 50% increase from the base resident population. This fluctuation in population of potential victims and offenders calls into question the precision of federal estimates of prevalence.

EXISTENCE OF LEGALIZED PROSTITUTION

² http://gaming.unlv.edu/abstract/nvstate_2008.html

³ <http://www.miamiandbeaches.com/Pictures/WebRpt/Annual%202008%20Visitor%20Profile.pdf>

⁴ <http://cber.unlv.edu/tour.html>

⁵ <http://www.neworleanssvb.com/>

One factor that possibly plays into the overtly sexual nature of Las Vegas is its proximity to legalized prostitution. Nevada is the only state in the United States that allows counties to regulate legalized prostitution. Only counties with populations under 400,000 can legalize prostitution therefore all prostitution is illegal in the metropolitan areas of Las Vegas and Reno and throughout their respective counties of Clark and Washoe. Prostitution is legal in rural areas such as Pahrump which is only 60 miles from Las Vegas. Until recently, advertising for nearby legal prostitution was largely prohibited within Las Vegas, and it still remains a miniscule part of the advertisements for commercial sexual activity. Illegal prostitution is heavily and aggressively advertised throughout Las Vegas. Newsstands containing booklets and newspapers advertising escorts and strippers surround the hotels, the Strip, and other popular tourist attractions. Along the Las Vegas Strip, individuals wearing brightly colored shirts line the sidewalks trying to hand out “nude girls direct to your room” cards which advertise various escort venues. Another ever present advertising method is the rolling billboard trucks which drive the tourist areas advertising “hot babes direct to you.”

Not all counties in Nevada have this focus on prostitution, legal or illegal. There are three counties that have specifically prohibited prostitution - Carson City, Douglas and Lincoln. There are another four counties that could have prostitution but do not currently have any operating brothels.⁶ There are eight counties that currently have legalized prostitution. Table 2 compares the rates of sexual victimization by existence of legalized prostitution businesses. The eight rural counties with brothels have higher rates of rape than the counties without brothels despite similar population sizes. Urban counties reported the highest rates of forcible rape.

RAPE CULTURE

One possible explanation for the rates of forcible rape in Las Vegas could be the culture propagated in this hypersexual community. A rape culture is defined as “a complex of beliefs that encourages male sexual aggression and supports violence against women” (Buchwald, Fletcher, & Roth, 2005, p. xi). A rape culture exists within an environment where sexual aggression is encouraged towards women (Buchwald et al., 2005). Within a rape culture, individuals assume that sexual violence is a normal part of life. This power and control behavior encourages the perpetrators to make excuses in regards to their actions and often blame their victims. Not only are power and control a part of sexual victimization but so is entitlement (Filipovic, 2008). A number of men feel entitled to control and dominate women. Sex is a commodity driven by supply and demand which can be “given, bought, sold, or stolen” (Millar, 2008, p.30).

This culture degrades women, supports rape myths, accepts violence toward women, and considers sexual intercourse to be a casual encounter (Abbey, Zawacki, Buck, Clinton, & McAuslan, 2004). Many of these cultural images are located within the media, on billboards, buses, magazines, and music videos (Buchwald et al., 2005). These

⁶ Churchill, Esmeralda, Eureka and Pershing counties

images often suggest everything is for sale and are often considered to be pornographic in nature. The city of Las Vegas is inundated by these overtly sexual messages and advertisements.

The existence of a rape culture has not been directly tested for Las Vegas. Some recent research has looked at the risks of a sexualized culture in the workplace. Ann McGinley's work on sexual harassment in Las Vegas (2007) found that employers who create highly sexualized environments set up employment conditions that require women to waive their right to sexual harassment claims. The working conditions described in her case study of the Hard Rock Casino are shocking and graphic.⁷ Contracts are worded so that women employed at Hard Rock Hotel assume the risk and knowingly accept working conditions that subject them to customer harassment. McGinley argues that hypersexual environments exploit women for the benefit of others and force women to accept responsibility from men who have difficulty controlling their sexually aggressive behavior.

Rape of College Students

Rape cultures such as those described above likely lead to increases in forcible rape rates. Rates of sexual victimization vary widely depending on the survey and measures used, which makes it difficult to obtain an accurate portrayal of the true number of those who are the victims of sexual assault in the United States each year. Estimates using surveys of college students have placed rates of rape of students between 15-30% (Fisher, Cullen, & Turner, 2000, 2002; Koss, Gidycz, and Wisniewski, 1987).

Koss, Gidycz, and Wisniewski's (1987) study of 6,159 college students, with 51% of the sample consisting of females and 49% males, revealed that nearly 54.7% of women surveyed had experienced some form of sexual victimization, while 15.4% of females reported that they had been the victims of rape. Although male sexual assault was reported much less frequently than female rape, 4.4%, or 130 males, reported that they had been the victims of sexual assault. Similarly, Johnson and Sigler (2000) found that 13.3% of college age women were forced to engage in sex while in a dating situation.

Other research has suggested that the prevalence rate of rape is actually much higher. Fisher, Cullen, and Turner (2000) found that upwards of 30% of females in college were sexually assaulted at some time in their lives. Using the National College Women Sexual Victimization Study (NCWSV), a survey of 4,446 college aged females, they found that during one school year, 1.7% of the sample had been raped and 1.1% experienced an attempted rape. This data was then compared to the national average of sexual assaults as reported by the National Crime Victimization Survey (NCVS). Their comparison between the NCWSV and the NCVS data showed that sexual assaults were reported less frequently in the NCVS, with 0.16% reporting a completed

⁷ The hostile and abusive environment that exists for female black jack dealers is exacerbated by management. See Ann C. McGinley (2007) Harassing "Girls" at the Hard Rock: Masculinities in sexualized environments, 4, 1229-77.

rape, while 0.18% had been a victim of attempted rape within a one-year period. The NCVS data further demonstrated that 1 in 34 women in the United States has either been the victim of an attempted or completed sexual assault.

Routine activities theory has been used in studies of sexual victimization of college students. Schwartz and Pitts (1995) found that college females may have a higher risk of victimization when they participate in activities such as drinking alcohol, creating situations where they are viewed as suitable targets. Fisher, Cullen, and Turner (2002) also claim that women in college have an increased risk of sexual assault victimization due to the fact that they have more opportunities to “converge regularly in time and space (with potential offenders), often with minimal adult supervision” (p. 260).

SEX DRIVE

Sex drive is the investment and interest of an individual in sexual activity. Sexual arousal or interest results from a complex interaction of motivations, biological processes and cognitive representations of incentives and inhibitors (Toates, 2009). Prior research has demonstrated that women and men differ in sex drive and responses to sexual context. Women’s sexual arousal is more tied to attachment and relationships (Toates, 2009). Women are more likely to remember relationship-oriented cues. Men are more attuned to sexually explicit information (McCall, Rellini, Seal & Meston, 2007). The explicit sexual stimuli portrayed throughout Las Vegas will probably have a different effect on desire and arousal in women and men.

METHODS

Study 1 – Forcible Rape

Sample

The pervasiveness of rape among college students was compared across two large samples. Data was collected in Las Vegas, Nevada and was compared to data collected in Vancouver, British Columbia. These two cities are of similar size and are both popular tourism destinations.

Data was collected at the University of Nevada, Las Vegas from students in exchange for course credit. Participants gave informed consent, completed surveys in private and could choose to not answer questions without jeopardizing their credit. Of the 501 students, 291 were female in this sample. The mean age was 21.87 (SD = 5.8) and 55% reported their ethnicity to be Caucasian, 11.6% African American, 10.2% Asian, 9.2% Hispanic and 13.4% as other.

Data was also collected in Vancouver at the University of British Columbia and Simon Fraser University.⁸ Similar protocol was employed, with informed consent and survey

⁸ Thanks to Dr. Boris Gorzalka and Dr. Joti Samra for sharing the data that they collected with the second author of this paper.

completion in small, private groups in exchange for course credit. Of the 1,283 participants, 981 were female. The mean age was 19.56 (SD = 2.461). This group reported their ethnicity to be 35.8% European descent Caucasian, 51.5% Chinese or South East Asian, 0.6% Afro Caribbean, 0.8% Hispanic and 11.3% other.

Measure

Rates of sexual victimization were measured using the Sexual Experiences Survey (SES; Koss & Oros, 1982) the most commonly used and validated measure (Kolivas & Gross, 2007; Testa, VanZile-Tamsen, Livingston, & Koss, 2004). This measure contains 13 items including indicators of forcible rape. Students who reported experiencing forced sexual intercourse were deemed victims of rape, while victims of attempted rape were not included as victims for these analyses.

Study 2 – Sex Drive

Sample

Interest in sexual activity was also polled in a second sample of undergraduate students at the University of Nevada, Las Vegas. This was another research project in which students anonymously completed questionnaires in exchange for course credit. This data was originally collected for a study on attitudes toward prostitution. However, only the items dealing with the sexual drive were examined for the purposes of this paper.

This sample included responses from 867 undergraduate students. In this sample there were 352 males and 515 females. The mean age for all participants was 21.20 (SD=4.551). They reported their ethnicity to be 55.1% Caucasian, 14.3% Hispanic, 13.9% African American, 5.3% Asian and 11.4% other.

Measure

This study included five items from the Derogatis Sexual Functioning Inventory (DSFI) (Derogatis, 1978). The DSFI tool is primarily a medical tool that is used when assessing sexual dysfunction, but it has standardized U.S. norms (Derogatis, 1996). The DSFI is a self-report psychological inventory consisting of 10 sections designed to measure sexual functioning. This study focuses on the sub-section of Drive. This subsection consists of five items used to measure the level of sexual drive or level of interest or investment in sexual activities.

Students were asked to rate the five items on frequency of intercourse, masturbation, kissing and petting, sexual fantasies, and the ideal frequency of intercourse indicated by the participant. The items are scored on a 9 point scale ranging from “not at all” (scored as zero) to “four or more time a day” (scored as 8). The drive score is the sum of scores assigned to each item with a range of 0-40.

RESULTS

Forcible Rape

Las Vegas students reported higher levels of rape than the Vancouver students. These rates of victimization are presented in Table 3. To explore the differences in rates of

victimization in more detail, demographic factors were entered into hierarchical logistic regression analysis. These analyses allowed us to control for the effects of other differences between the two cities. One behavioral difference that stood out between the two samples was the rate of being sexually active. Their rates are also presented in Table 3. Engaging in consensual sexual activity was included with the demographic variables as a control variable. Other control variables included were gender, age and whether or not the participants belonged to the two largest ethnic groups (Caucasian or Asian). The dependent variable was whether forcible rape occurred. The first step of the analysis included the control variables. The samples differed in ethnicity, gender, age and rates of sexual activity therefore these variables were controlled for. The location of the sample was entered in a second step to determine if it changed the predictability of the demographic control variables. The model is presented in Table 4.

For the first step of this regression analysis including the control variables of gender, age, ethnicity and being sexually active, the model was deemed significant ($F = 21.628$, $p < .001$). This model explained 5.5% of the variability. In the second step, location was added and the R^2 change was significant ($p < .05$) raising the adjusted R^2 by 0.3%. It was a small change but indicated that location predicts victimization while controlling for the other included control predictors.

The control variables of gender, age and engaging in consensual sexual activities were significant predictors. Women were significantly more likely to be victims. The older the students, the more likely they were victimized. Engaging in consensual sexual activity increased the risk of being a victim across both samples. Being a student in Las Vegas was a significant predictor of victimization even when age, gender, ethnicity and sexual activity were controlled for.

Sex Drive

The final research question was to examine the relationship of the environment of Las Vegas to interest and participation in sexual activity. Las Vegas students were sexually active at a relatively high rate (75-80%, Table 3). Sexual activity was demonstrated to be a risk factor for forcible rape in the previous analyses. The means for Las Vegas students' DSFI Drive scores are presented in Table 5 along with the DSFI standardized norms.

The male students reported sex drives above the normed mean. In contrast, female students reported below mean drives. The male students' average sex drive was significantly higher than the drive for the female students ($F = 79.65$, $p < .001$) even though female students were sexually active at a slightly higher rate (80% vs. 75%).

There are 5 individual items that comprise the Drive score. Table 6 presents the frequencies reported for different types of behavior. Male and female students reported engaging in similar frequencies of intercourse and kissing. Male students reported significantly higher levels of masturbatory activity ($F = 181.78$, $p < .001$). Female students did not engage in masturbation (45% not at all and another 30% only monthly) nor did they fantasize about sexual activity (31.4% never and another 31.8% only

monthly). Male students, in contrast, reported significantly more frequent sexual fantasies ($F = 99.27, p < .001$). Male students were also significantly more likely to desire sexual activity ($F = 30.58, p < .001$). Over 30.8% of the male students wanted sexual intercourse at least once a day whereas only 17.8% of female students expressed that as an ideal frequency.

CONCLUSIONS

There is a hidden cost to the sex being sold in Sin City. The cost is elevated rates of forcible rape and a suppressed sex drive for women. Las Vegas has unusually high rates of forcible rape for a city of its size according to the Uniform Crime Report statistics. It has the second highest rate of forcible rapes for a metropolitan area over 700,000 inhabitants (FBI, 2008).

Las Vegas also has higher rates of forcible rape than comparable tourist destinations. Las Vegas welcomes 16 times its base population in visitors each year. This surge in population brings both potential offenders and prospective targets. It also makes assessing the true prevalence rates of forcible rates difficult.

To directly test the risk factor of forcible rape in Las Vegas, the sexual behavior of college students was compared. The rates of rape reported by Las Vegas female students at 27.8% were higher than any rates previously reported in literature using the SES on college populations. For example, this rate was higher than recently reported rates in Florida (24.9% at Miami University; Crawford, Wright & Birchmeier, 2008), New York (17.2% in Buffalo; Testa et al., 2004) and the Midwest (13.9%; Messman-Moore & Brown, 2006). Rates of completed sexual assault vary somewhat across research published on college populations but tend to consistently fall near the 15% level for women (Kolivas & Gross, 2007). Rates reported in Vancouver at 13.9% were more consistent with prior research findings.

It appears that living in an overtly sexual environment actually suppresses women's sex drive. Las Vegas female students reported drive scores lower than in other locations. The Las Vegas score of 13.7 represent a t-score of 44 and is on par with drives seen in dysfunctional groups such as women who were drug addicted (opiate dependent women's drive = 13.0, t-score = 43; Syikis et al., 1996) and eating disordered (drive for anorexia restricting patients = 9.5, t-score = 40, for bulimic patients drive = 14.7, t-score = 46; Rothschild, Fagan, Woodall & Anderson, 1991). The Las Vegas women's drive was lower than seen in non-dysfunctional comparison groups (e.g., annual gynecological exams patients' drive = 16.2, t-score = 48; Syikis et al., 1996).

The finding that Las Vegas women's drive was so low when they had high rates of engaging in sexual activity is contradictory. Since they were sexually active at a high rate (even higher than male students) the other sexual behaviors that demonstrate an interest and investment in sex (i.e., sexual fantasies, desired sexual activity, and masturbation) were quite low for the composite scores to end up below average. Over 31% of the women reported having no sexual fantasies at all in contrast to prior

research which report the modal frequency of fantasies as 2-3 times per week among eating disordered women (Rothschild et al., 1991). The sexual subtext message of Las Vegas is clearly designed for men and does not appear to be feeding into women's fantasies, desires and masturbatory behavior.

Routine activities theory may help explain the high rates of forcible rape among Las Vegas women. The first component required is suitable targets. The current study found that college aged females were engaging in high rates of sexual activity which is a behavior that puts them at risk for sexual victimization. Also, advertisements throughout the city repeatedly portray women as sexually available.

The second component of the routine activities theory, the existence of motivated offenders, is generally assumed. The high rates of victimization in Las Vegas indicate a preponderance of motivated offenders. In addition, Las Vegas actively motivates offenders with slogans such as "What happens in Vegas, stays in Vegas" promoting irresponsible and immoral behavior. These messages inundate tourists and local residents, a constant underlying theme to all social activities.

Finally, previous research has demonstrated that there is a lack of capable guardianship when college-aged students drink alcohol and frequently participate in social events (Mustaine & Tewksbury, 2002). This lack of guardianship is related to higher rates of victimization. While other tourist destinations may have venues where consuming alcohol is common, they generally also have a balance of alternative social activities with a greater level of guardianship. Leisure activities such as visiting museums or attending sporting events have active guardianship from security personnel who step in and stop drunken and disruptive behavior. Las Vegas on the other hand has a myopic focus on heavy partying with management actively promoting drunken and sexually aggressive behavior (McGinley, 2007).

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Each approach taken in this study provided data indicating elevated rates of forcible rapes. There are strengths and weaknesses with each way that the data was collected. Previous research demonstrates that only one in six women will report their victimization to the police (Kilpatrick et al., 2007). Reports from the Uniform Crime Report website which are counted and designated as founded incidents of forcible rape are underestimations of the true levels of crime.

Limitations of collecting information directly from potential victims are also important to consider. College samples are convenient and also represent a population that is at higher risk for victimization. Previous research demonstrates that women who are in their late teens to early 20's are four times more likely to be raped than women at other ages (Rand & Catalano, 2007). Given that the typical student is in that age range, researchers have argued that this elevates the perceived rates of victimization (Fisher et al., 2000). However, lifetime prevalence is the core interest in looking at the extent of victimization so collecting data from an at-risk group may not be a major limitation.

The most obvious limitation may be the lack of generalizability of data collected in one city. The vast majority of social science research is collected in a single location for each research project, but the authors recognize and argue that the very environment of Las Vegas may create a specific risk factor for victimization. The overtly sexual tone in advertising that was once limited to Sin City is now seen on billboards and music videos throughout North America. The findings from this study may in fact be relevant to other communities. This was a descriptive and exploratory study that is a first step in looking at overtly sexual environments and may provide a framework for future theory and research.

While this paper did not directly test the existence of a rape culture in Las Vegas, it did identify some factors that suggest areas of future research. For example, the existence of legalized prostitution appears to be a risk factor for rural counties in Nevada. It is troubling that the rural areas with operating brothels had rates of forcible rape much higher than the rural counties without legalized prostitution despite their similar population bases. Another area of future research is the problem of institutionalized sexual harassment in many jobs in Las Vegas. McGinley has argued that female employees are held responsible for the sexually aggressive behavior of patrons whose predatory behavior is exacerbated by management's active promotion of this harassing activity. Most of the students in Las Vegas work full-time and this study did not explore whether their experiences of rape were related to school or work activities.

The data discussed in this paper demonstrated that there appears to be a correlation between victimization and the overtly sexual environment of Las Vegas. The anything-goes attitude toward sexual activity inundating Sin City's advertising results in reduced sex drives for women and elevated risk for forcible rape.

REFERENCES

- Abbey, A., Zawacki, T., Buck, P.O., Clinton, A.M., & McAuslan, P. (2004). Sexual assault and alcohol consumption: What do we know about their relationship and what types of research are still needed? *Aggression and Violent Behavior: A Review Journal*, 9(3), 271-303.
- Buchwald, E., Fletcher, P., & Roth, M. (2005). *Transforming a rape culture*. Minneapolis, Minnesota: Milkweed Editions.
- Cohen, L. & Felson, M. (1979). Social change and crime rate trends: A routine activities approach. *American Sociological Review*, 44 (4), 588-607.
- Crawford, E., Wright, M.O., & Birchmeier, Z. (2008). Drug-facilitated sexual assault: College women's risk of perception and behavioral choices. *Journal of American College Health*, 57(3), 261-272.
- Derogatis, L.R. (1996). *Derogatis interview for sexual functioning: Preliminary scoring, procedures, & administration manual*. Baltimore, MD, Clinical Psychometric Research.
- Derogatis L.R., (1978) *Derogatis Sexual Function Inventory* (revised ed.). Clin. Psychometrics Res., Baltimore.

- Farley, M. (2007). Prostitution and Trafficking in Nevada. Making the Connections. San Francisco, CA: Prostitution and Research Education.
- Federal Bureau of Investigations (FBI) Uniform Crime Reports. (2008). Crime in the United States. Washington, DC: U.S. Department of Justice.
- Felson, M. (2000). "The routine activity approach as a general crime theory." In *Of Crime and Criminality: The Use of Theory in Everyday Life*. Thousand Oaks, CA: Pine Forge Press.
- Flipovic, J. (2008). Offensive feminism: The conservative gender norms that perpetuate rape culture, and how feminists can fight back. In Friedman, J., & Valenti, J. (Eds.), *Yes Means Yes: Visions of Female Sexual Power and a World Without Rape* (pp. 13-27). Berkeley, California: Seal Press.
- Fisher, B. S., Cullen, F.T., & Turner, M.G. (2000). The sexual victimization of college women, Research Report. Washington, D.C.: U.S. Department of Justice, National Institute of Justice. NCJ 182369, pp. 1-39.
- Fisher, B., Cullen, F., & Turner, M. (2002). Being pursued: Stalking victimization in a national study of college women. *Criminology & Public Policy*, 1(2), 257-308.
- Johnson, I., & Sigler, R. (2000). Forced sexual intercourse among intimates. *Journal of Interpersonal Violence*, 15(1), 95-108.
- Klein, C., Kennedy, M.A., Gorzalka, B.B. & Yuille, J.C. (2003, August). Rape myth acceptance among prostitution clients and a comparison group. Poster presented at the Annual Meeting of the American Psychological Association, Toronto, Ontario.
- Kilpatrick, D.G., Resnick, H.S., Ruggiero, K.J., Conoscenti, L.M., & McCauley, J.M. (2007). Drug-facilitated, incapacitated, and forcible rape: A national study (NCJ 219181-Final Report). Washington, DC: U.S. Department of Justice, National Institute of Justice.
- Kolivas, E.D., & Gross, A.M. (2007). Sexual aggression: Addressing the gap between rape victimization and perpetration prevalence rates. *Aggression and Violent Behavior*, 12, 315-328.
- Koss, M., Gidycz, C.A., & Wisniewski, N. (1987). The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of Consulting and Clinical Psychology*, 55(2), 162-170.
- Koss, M.P., & Oros, C. (1982). Sexual Experiences Survey: A research instrument investigating sexual aggression and victimization. *Journal of Consulting and Clinical Psychology*, 50, 455-457.
- McCall, K.M., Rellini, A.H., Seal, B.N., & Meston, C.M. (2007). Sex differences in memory for sexually-relevant information. *Archives of Sexual Behavior*, 36, 508-517. DOI 10.1007/s10508-006-9106-7
- McGinley, A.C. (2007). Harassing "Girls" at the Hard Rock: Masculinities in sexualized environments. *University of Illinois Law Review*, 2007 (4), 1229-1277.
- Messman-Moore, T.L., & Brown, A.L. (2006). Risk perception, rape and sexual revictimization: A prospective study of college women. *Psychology of Women Quarterly*, 30, 159-172.

- Millar, T.M. (2008). Toward a performance model of sex. In Friedman, J., & Valenti, J. (Eds.), *Yes Means Yes: Visions of Female Sexual Power and a World Without Rape* (pp. 29-41). Berkeley, California: Seal Press.
- Mustaine, E.E. & Tewksbury, R. (2002). Sexual assault of college women: A feminist interpretation of a routine activities analysis. *Criminal Justice Review*, 27, 89-123.
- Nevada Department of Public Safety (1998-2008). *Crime and Justice in Nevada*. Retrieved February 1, 2010, from <http://nvrepository.state.nv.us/crimejustice.shtml>
- Rand, M. & Catalano, S. (2007). *Crime Victimization, 2006*. Washington, D.C.: Bureau of Justice Statistics, U.S. Department of Justice.
- Rothschild, B.S., Fagan, P.J., Woodall, C., & Andersen, A.E. (1991). Sexual functioning of female eating disordered patients. *International Journal of Eating Disorders*, 10(4), 389-394.
- Schwartz, M., & Pitts, V. (1995). Exploring a feminist routine approach to explaining sexual assault, *Justice Quarterly*, 12(1), 9-29.
- Svikis, D.S., Brooner, R.K., Rutigliano, P., Gazaway, P., Fagan, P., & Gupman, A. (1996). *The Journal of Sex Research*, 33(2), 103-111.
- Toates, F. (2009). An integrative theoretical framework for understanding sexual motivation, arousal and behavior. *Journal of Sex Research*, 46, 168-193. DOI 10.1080/00224490902747768
- Testa, M., Vanzile-Tamsen, C., Livingston, J., & Koss, M. (2004). Assessing womens' experiences of sexual aggression using the sexual experiences survey: Evidence for validity and implications for research. *Psychology of Women Quarterly*, 28, 256-265.

Figure 1. Nevada and national rates regarding forcible rapes

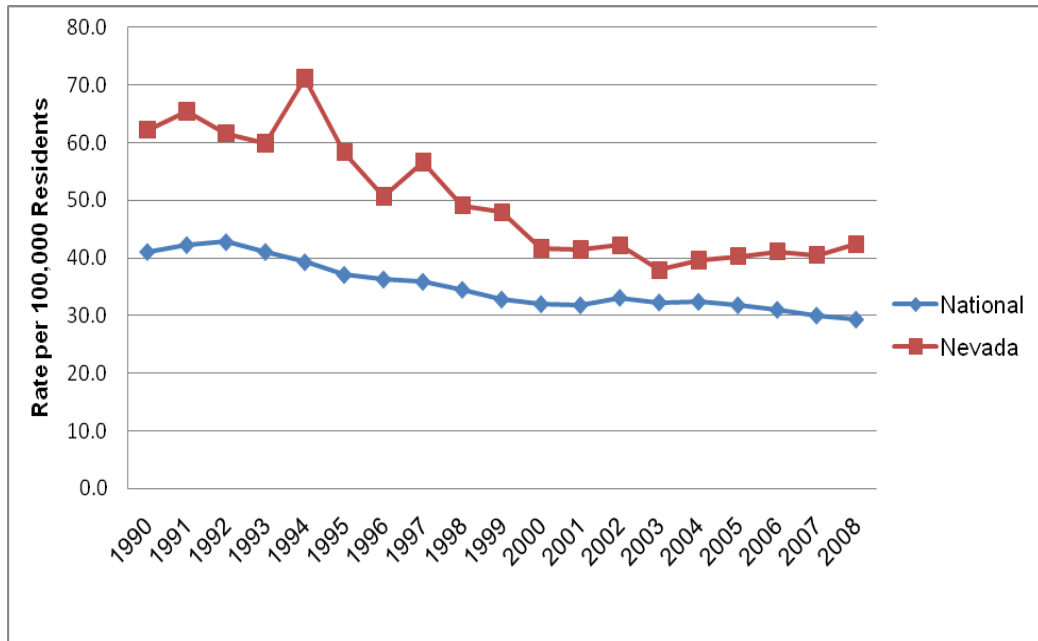


Table 1. Rates of reported forcible rape by metropolitan area in 2008

Area	Rape Incidents	Permanent Residents	Rates per 100,000 Residents	Estimated Annual Tourists	Rates per 100,000 of Residents plus Tourists

Las Vegas, NV	881	1,967,716	44.77	37,481,552	2.23
Miami, FL	685	2,373,744	28.86	12,128,600	4.72
New Orleans, LA	65	281,440	23.10	7,600,000	0.82
Atlantic City, NJ	37	39,425	93.85	31,800,000	0.12

Table 2. Rape rates and legalized prostitution in Nevada

	Rates of rape per 100,000 inhabitants		2008 Population
	2003	2008	
Urban counties without legal prostitution	40.6	43.0	2,376,802
Rural counties without legal prostitution	15.7	10.0	150,376
Rural counties with legal prostitution	24.6	34.5	188,622

Table 3. Rates of sexual activity and victim of forcible rape among two college samples

% Yes (n)	Las Vegas		Vancouver	
	Female	Male	Female	Male
Victim of forcible rape	27.8% (80)	5.3% (11)	13.9% (135)	4.7% (14)
Sexually active	79.5% (230)	74.5% (156)	45.4% (450)	45.5%(140)

Table 4. Logistic regression analysis adding location in the second model and sexual activity

Variable	B	SE B	β	p-value
Step 1				
Gender	-0.133	0.018	-0.175***	.000

Age	0.008	0.002	0.111***	.000
Ethnicity – White	-0.032	0.022	-0.046	.153
Ethnicity – Asian	-0.042	0.023	-0.059	.065
Sexually Active	0.078	0.017	0.114***	.000
R ² = .058, Adj. R ² = .055				
<hr/>				
Step 2				
Gender	-0.140	0.018	-0.184***	.000
Age	0.007	0.002	0.100***	.000
Ethnicity – White	-0.024	0.022	-0.035	.273
Ethnicity – Asian	-0.024	0.024	-0.034	.314
Sexually Active	0.071	0.017	0.103***	.000
Location	0.046	0.020	0.060*	.025
R ² = .061, Adj. R ² = .058, R ² change = .003, Adj. R ² change = .003				

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 5. Derogatis Sexual Functioning Inventory - Drive

	Males Mean (SD)	Females Mean (SD)
UNLV	18.8 (7.8)	13.7 (7.6)
US Norm	17	17

Table 6. Derogatis Sexual Functioning Inventory - Drive Item Endorsements

Drive Item	Gender	Frequency of endorsement (%)									Mean
		Not at all	Less than Once /month	Once or Twice /month	Once /week	2-3 times /week	4-6 times /week	Once /day	2-3 times /day	4 or more /day	
Intercourse											
	Female	23.7	12.8	14.8	10.3	23.5	8.9	2.4	3.0	0.4	2.51
	Male	22.6	9.7	14.7	8.2	24.4	12.4	3.5	3.2	1.2	2.77
Masturbation											
	Female	45.1	17.9	12.9	7.3	8.5	4.2	2.5	1.5	0.2	1.47
	Male	12.7	11.7	10.2	14.2	21.1	12.7	12.0	3.3	2.1	3.35
Kissing and Petting											
	Female	9.6	11.0	13.9	5.5	12.2	12.0	8.2	11.6	15.9	4.22
	Male	12.5	7.4	12.2	5.9	13.4	13.9	8.6	11.9	14.2	4.22
Sexual Fantasies											
	Female	31.4	18.0	13.8	10.1	9.2	5.0	5.0	3.8	3.6	2.23
	Male	13.9	11.5	7.3	10.3	12.4	7.6	15.5	10.9	10.6	3.99
Ideal Frequency of Intercourse											
	Female	18.2	7.0	8.2	10.6	26.2	12.1	8.9	4.7	4.2	3.40
	Male	9.5	4.1	5.4	10.8	23.8	15.6	12.7	10.5	7.6	4.31

Note: Item scores ranged from zero (0) for “Not at all” to eight (8) for “Four or more times per day.”