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A Night in Tijuana: Female Victimization in a High-Risk Environment

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Abstract

We examine the epidemiology of victimization among females crossing the U.S. border to drink in Tijuana, Mexico, with the purpose of creating a framework for an intervention to improve safety among female youth in drinking settings. Drinking history, history of victimization, evening drinking experience, and environmental factors are assessed.

Among female crossers surveyed in 2005-2006, 53% reported experiencing some type of victimization, with 29% experiencing moderate physical aggression and 38% experiencing unwanted moderate sexual incidents. Youth and reported history of verbal abuse were consistently associated with victimization with more participants frequently reporting incidents of victimization. Predictors of victimization among young females (aged 16-20) generally included environmental factors, whereas evening drinking was associated with victimization among women aged 21 and older.

Introduction

Tijuana, Mexico, with a lower drinking age requirement and within easy access of Southern California youth, has long provided an easily attained party environment for young Americans. Efforts have increased in recent years to limit the flow of young border crossers in response to public health goals and local economic pressures (Romano et al., 2004). The consumption of alcohol by those who do cross has remained relatively consistent, however, and the bar environment of drink specials and risky and illicit behaviors is consistent with the high-risk profiles documented for unwanted negative experiences—specifically female victimization.

According to the National Crime Victimization Survey (NVCS), in 2005, there were 191,670 victims of rape, attempted rape, or sexual assault (Catalano, 2006), or one rape every 2½ minutes. Further, only 38%, or 1 in 3, of these rapes and sexual assaults were reported to law enforcement officials (Catalano, 2006).

Women are the primary victims of rape and sexual assault. Statistics indicate that one in six American women has been the victim of an attempted or completed rape in their lifetime (Tjaden & Thoennes, 1998, 2006). The higher prevalence among younger cohorts (1 in 5 women younger than age 50 report having been raped) may reflect willingness to report incidents, actual changes in prevalence, or both (Tjaden & Thoennes, 1998, 2006). Sexual assault, including rape, most often occurs among women in late adolescence and early adulthood (Abbey, Zawacki, Buck, Clinton, & McAuslan, 2001). Twenty-two percent of female rape victims reported that their first incidence occurred when they were younger than

12 years, 32% were between ages 12 and 17, and another 29% were between ages 18 and 24 (Tjaden & Thoennes, 1998, 2006).

Among college students surveyed in 1997, 1999, and 2001 (the College Alcohol Study), as many as 1 in 20 female students (4.7%) reported a completed rape within the current school year (Mohler-Kuo, Dowdall, Koss, & Wechsler, 2004). A similar rate of completed rape was found at a private university (6%), with an additional 4% of respondents reporting attempted rape (Nasta et al., 2005).

These assaults often involve alcohol use by the offender, the victim, or both (Abbey, 2002; Brecklin & Ullman, 2002; Horvath & Brown, 2006; Kilpatrick, Acierno, Resnik, Saunders, & Best, 1997; Testa, Livingston, Vanzile-Tamsen, & Frone, 2003; Ullman & Brecklin, 2000; Wilsnack, 1991). Women who abuse alcohol are particularly vulnerable to violent victimization and male aggression (Cunradi, Caetano, Clark, & Schafer, 1999; Gilbert & Collins, 1997; Kyriacou et al., 1999; Miller, 1998; Miller, Downs, & Testa, 1993; Miller, Wilsnack, & Cunradi, 2000; Teets, 1997; Testa, Vanzile-Tamsen, Testa, & Livingston, 2006). From May 1996 through March 1999, analysis of urine samples of rape victims presenting at rape crisis centers indicated presence of alcohol or other drugs (AOD) in close to two-thirds of the samples (Slaughter, 2000), whereas a national study of suspected AOD use in assault cases found approximately 40% positive through victim urine samples (ElSohly & Salamone, 1999). On college campuses participating in the College Alcohol Study, 72% of female rape victims reported that they were too intoxicated to consent (Mohler-Kuo et al., 2004).

The Relationship Between Alcohol and Victimization

Alcohol has been linked with violence and aggression at levels far beyond those associated with any other drug (Alden, 1995). The abuse of alcohol leaves women particularly vulnerable to unwanted male aggression and victimization (Kilpatrick et al., 1997; Wilsnack, 1991). There are several explanations as to why this connection may exist, including with environmental risk factors and characteristics of the victim and relative vulnerability associated with alcohol use. Environments where alcohol and young people congregate can pose risky settings (Leonard, Quigley, & Collins, 2003; Quigley. Leonard, & Collins, 2003). In part, this may be due to providing an atmosphere where the usual social constraints are not in operation. Social theory holds that individuals released from everyday constraints may exhibit more extreme behaviors from alcohol consumption to aggression (Listiak, 1974; MacAndrew & Edgerton, 1969). Known as the "time-out theory," individuals are expected to behave with less restraint in "time-out" situations (Lange & Voas, 2000a; Lange, Voas, & Johnson, 2002b; Voas et al., 2006).

Researchers have found the personal and social characteristics of assaulted women include heavier drinking, going to and from bars with less well-known individuals, and frequent socializing in bars (Buddie & Parks, 2003). An association between heavy drinking and perceived sexuality by women may also contribute to the risks (Young. Morales, McCabe, boyd, & Darcy, 2005). The price of alcohol and the perceived ease of getting drunk in a bar can be enticing to youth (Lange & Voas, 2000; Lange, Voas, & Johnson, 2002b). Bars can present the environmental characteristics that pose a uniquely risky environment for violence, sometimes beyond the effect of personalities and alcohol use (Leonard et al., 2003; Quigley et al., 2003). Thus, in bar contexts, individual traits interact with alcohol use to produce a risky three-way intersection.

Borders as Risky Environments for High-Risk Individuals

The already elevated risk of socializing in bar settings is magnified by crossing the U.S.-Mexican border to an environment that is one step further removed from the daily life of American youth. On a typical weekend night, more than 6,500 American youth (Lange & Voas, 2000) cross the U.S.-Mexican border between San Diego and Tijuana. More than a third of those who are on foot at the border will be inebriated upon return to the United States (Lange & Voas, 2000). The legal drinking age in Tijuana is 18, in contrast to the minimum age of 21 in California. Tijuana is an environment that serves as a "time-out" from weekday responsibilities, and it is a place where social, heavy legal drinking is encouraged by drink specials (especially for women), minimal supervision, and tolerance of drunken behavior. Youth interviewed about their experience in Tijuana cite the availability of cheap alcohol and the relaxed environment supportive of heavy drinking as motivating factors for visiting Tijuana (Lange & Voas, 2000; Lange et al., 2002b). With normal social limits relaxed in an environment of copious alcohol availability, Tijuana serves as a nexus, putting women at exceptional risk for victimization.

Building upon previous research conducted at the U.S.-Mexican border in California (Lange, Lauer, & Voas, 1999; Lange & Voas, 2000), this paper updates the epidemiology of youth crossing the border on weekend nights to patronize the Tijuana nightclubs. Specifically, we focus on young women crossers and their experiences of victimization. Prior research at the border was limited to anecdotal information on negative experiences; yet these data suggest female victimization is prevalent among border crossers. Our aim was to verify these reports and estimate the prevalence of victimization experienced by young women crossers, providing an initial characterization of such experiences. Ultimately, these data will be used to guide the development of an intervention aimed at reducing the incidence of victimization experienced by female youth and young adults.

Methods

Administration

The Border Girls data were collected from July 2005 to December 2006 on randomly selected Friday and Saturday nights. Survey staff approached naturally occurring groups of two to eight pedestrians, with at least one female younger than 23, entering Mexico between 9 p.m. and 1 a.m. Procedures for approaching potential participants were adapted from those used for many years during roadside breath-test surveys of motorists (Voas, Wells, Lestina, Williams, & Greene, 1998) and ongoing portal surveys conducted at the U.S./Mexican border and other drinking venues (Lange, Reed, Johnson, & Voas, 2006; Voas et al., 2006). Although our interest is particularly in young women, we recruited all group members in the southbound (entering Mexico) survey and the northbound (reentering the United States) return interview survey. This was essential not only to provide data about group characteristics, but also to reduce group pressure on the young women to refuse participation in the survey.

Participants recruited southbound were asked to complete a self-report questionnaire and to provide a breath test. They were then offered a \$20 incentive to contact the survey team on their return from Mexico early the next morning. Those who agreed were identified with coded wristbands. When participants reentered the United States, they completed a 5-minute interview on their evening drinking behavior. As part of this interview, participants were also asked to complete a brief "experiences" survey and to provide an anonymous alcohol breath test so we could assess their evening experiences while in the Mexican bars. Questionnaires on evening social (victimization) experiences were administered on paper to provide privacy about these sensitive topics. As payment for participation, a \$20 money order was then issued.

(A money order was used, rather than cash, to prevent funding additional drinking on the survey night.)

Measures/Instruments

Various measures were used at the three points in time. Measures were first taken in a southbound survey, as participants entered Mexico, and then second in a northbound return interview and experiences survey as participants returned from Mexico to reenter the United States. Third, a telephone followup interview was conducted within one week of the border survey; this measure is described elsewhere (Kelley-Baker, Voas, Johnson, Furr-Holden, & Compton, 2007) and was not used in our analyses herein.

Southbound Survey—The southbound survey (originally used by Lange et al., 2006) comprised demographic items (age, sex, ethnicity, and residency) and questions concerning the individual's previous visits to Mexico, drinking intentions and expectancies, and drinking history, based on the models developed by Gruenewald and Nephew (1994). A social network grid was also included to create a description of the groups in which individuals were traveling.

<u>Victimization items:</u> Added to the original (Lange et al. 2006) border survey were items related to past victimization experiences and expectations of victimization for the coming evening in Mexico. Participants were also asked to indicate their perceptions of the group's intentions to drink and/or use drugs while in Mexico and their social plans for the night (i.e., whether they intended to return to the United States with the same group members).

Northbound Return Interview and Experience Surveys—Participants interviewed as they returned northbound between 1 a.m. and 6 a.m. completed both a PDA (handheld personal digital assistant) interview and a pencil-and-paper "social experiences" survey. The northbound PDA interview included items on the perceptions of the Tijuana environment, including activities associated with binge drinking, such as the percentage of people who appeared to be drunk, using drugs, or playing drinking games (modeled from Clapp, Whitney, and Shillington [2002], and Lange and Voas [2000]). Participants were also asked about their awareness of security measures and whether fights or other overt disturbances occurred. The interview also included items regarding group risks—whether a member left the group at any point (and if so, for how long), actions that may have put group members at risk, and whether the group returned intact. Additionally, the northbound return interview collected information on the number and types of drinks consumed during the evening and the number of bars visited.

Evening/night victimization items: As part of the northbound interview procedure, female participants were asked to complete a nine-item paper-and-pencil social experiences survey assessing their night's experiences of victimization. This survey includes items from the revised Conflict Tactics Scale (CTS) (Miller et al., 1993; Straus, 1979) and the Safe Dates Project (Foshee et al., 1996) survey, covering a range from verbal insults to physical assaults and sexual victimization. The queried nine items were then categorized into five classes of victimization: (1) verbal, which included insults and threats; (2) moderate physical, being pushed or grabbed; (3) moderate sexual, being touched or grabbed in an unwanted sexual way; (4) severe physical, being punched or hit; and (5) severe sexual, including unwanted or coerced intercourse. To further investigate moderate classes of victimization, we also assessed the level of threat the act evoked, physical pain, and personal reaction (how disturbed the participant was by the act).

In addition to questions about victimization experiences, participants were asked about their relation to the assailant (in the group, outside the group, someone met tonight, or a complete stranger) and the assailant's gender.

Alcohol measures: Blood alcohol concentration (BAC) measures were taken during the southbound survey and the northbound return interview with a handheld SD400 Intoxilyzer manufactured by MPI/CMI. The participant was asked to inhale and then exhale for 3 to 5 seconds into the unit via a disposable, single-use mouthpiece. To ensure anonymity and confidentiality, the instrument's display was programmed *not* to show the BAC, which was stored internally for later download. Participants were also queried regarding the number of drinks they had consumed during the evening and their perceived state of inebriation.

Sample

Because of the multiple survey points, sample sizes vary for different measures (see Table 1). Over 15 weekends of data collection (30 nights – one weekend per month), 2,047 individuals participated in the southbound survey. Of these southbound participants, 1,608 (78%) returned to complete both the northbound social experiences and the PDA interviews. The overall return rate was slightly higher (84%) because some individuals completed one but not both northbound instruments. Because the recruitment strategy required that any group approached to participate must include at least one female younger than age 23, the resulting majority of participants were female (73%). Southbound, 1,502 females participated, and of that number, 1,172 females completed all three (the southbound and both northbound) interviews. Female respondents who completed the southbound survey, the northbound PDA survey, and the northbound social experiences survey comprise the sample population discussed in this paper.

Analyses

The data were analyzed using STATA 9.0. Because victimization outcomes are not mutually exclusive groups (e.g., an individual may report both verbal and moderate sexual victimization), each outcome (including the aggregate "any victimization") was compared to the group of respondents who reported no victimization at all. Bivariate statistics (χ^2 test for significant differences) were used to describe these groups of respondents in comparison to the control group on multiple personal characteristics. Multivariate logistic models assess the odds ratios of distinct victimization outcomes (or the aggregate "any victimization") for the groups reporting no victimization. Covariates were examined individually and in a stepwise regression that looked at personal characteristics, personal history, drinking profile, and the observed bar environment. Preliminary analyses indicated an age effect, consistent with theoretical expectations. Because the number of interactions was too cumbersome to test, the final multivariate models were stratified by age. All models were adjusted for the nonindependence of respondents, who were recruited in naturally occurring peer groups as they traveled southbound from California to Tijuana.

Findings

More than half the sample (53%) of women who answered the southbound and northbound surveys reported experiencing some form of verbal, physical, or sexual victimization (see Table 2). The most common form of victimization reported was moderate sexual aggression (38%). More than a quarter of female respondents (29%) reported incidents of moderate physical aggression. Notably, 66 females (5.6%) reported incidents of severe victimization that warranted further examination and care. Given the sample size, however, the incidences of severe physical aggression (4.1%) and severe sexual aggression (1.5%) were small enough to limit further analysis for this study.

As shown in Table 3, numerous characteristics of female respondents' personal histories and the Tijuana environment were related to the victimization outcomes in bivariate analyses. Notably, respondents aged 16 to 20 were more likely to report moderate physical and sexual incidents than women aged 21 and older. Thirty-one percent of the younger respondents

reported unwanted moderate physical incidents compared to 24% of the older respondents; likewise, the rate of unwanted moderate sexual incidents was higher for younger respondents than for respondents aged 21 or older (40% vs. 29%, data not shown). Although the objective measure of BAC was not associated with victimization reports in bivariate analyses, subjective reports of the amount the respondent had drunk and how inebriated she felt were related to the outcomes of interest.

Multivariate logistic analyses of each outcome of interest estimated the probability of the victimization outcome for reports of no victimization experiences during the evening in Tijuana. Although multivariate analyses narrow the associated characteristics, the direction of association cannot be determined from these data. Independent analyses of each outcome confirmed an overarching difference in reports based on the ages of the respondents. As a result, the final models are stratified by age, with results for respondents aged 20 and younger presented in Table 4 and results for respondents aged 21 and older presented in Table 5.

Alcohol Use

Respondents in the younger age group (16-20) are not legally old enough to drink in California. However, virtually the same proportion of the younger respondents (three of five) had one or more drinks in Tijuana (measured by BAC) as did the women aged 21 and older. Likewise, one in four respondents in both age groups were measured as legally drunk (BAC \geq .08) upon their return to the border. However, adjusting for personal history of drinking, victimization, and visits to Tijuana, and for the observed environment on her evening in Tijuana, alcohol use was not associated with reports of any of the outcomes in the younger age group.

This contrasts with the association found among the older respondents. For women aged 21 and older, having even one or more drinks in Tijuana was associated with greater odds of reporting verbal (OR=3.66, p=0.048), moderate physical (OR=4.13, p=0.012), or moderate sexual victimization (OR=4.79, p=0.003). (The same results were found when respondents aged 21 and older were coded as legally drunk, although the odds ratios were slightly smaller.)

History of Victimization

The measures of history of victimization imperfectly corresponded to the outcomes of the study but provided some indication of the respondent's experience, awareness of potential victimization, and willingness to report unwanted incidents. Respondents who reported a history of verbal abuse (approximately 43% across age groups) were more likely to report verbal, moderate physical, or moderate sexual incidents from their evening in Tijuana in multivariate models. The consistent bivariate association between a history of being physically struck and Tijuana victimization outcomes did not hold in multivariate models.

Drinking History and Experience of Tijuana

Bivariate relationships between drinking frequency (22% reported having at least one whole drink on 3 or more days per week in the past month) and recent binge drinking (20% reported having a binge-drinking episode at least weekly in the past month) did not hold up once other factors were adjusted in the model. There was no indication that having been to Tijuana in the past year (four of five respondents) was associated with the odds of a victimization experience. More recent visits to Tijuana (three of five respondents had visited in the past month) varied by age (64% of younger females crossed in the past month versus 51% of the older respondents). Past month visits were marginally associated with a reduced odds ratio of moderate physical victimization among the younger respondents (OR=0.61, p=0.052).

Night Bar Environment

Particularly among the younger respondents, the perceived environment of the bar(s) they visited apparently relates to reports of victimization. Most consistently, respondents of all ages observed a great degree of inebriation among fellow patrons. Nearly all respondents (87%, data not shown) reported that at least a quarter of fellow patrons were drunk, and two-thirds assumed this condition for at least a half of their fellow patrons. These observations were relevant to the moderate sexual victimization experiences of respondents aged 20 and younger and marginally associated with moderate sexual victimization reported by the older respondents. (Analyses of an ordinal categorization of the proportion of others appearing drunk, as well as more restrictive dichotomous categorizations, yielded the same results; thus, the most conservative observation was selected for the model.)

Three other observations of the bar environment were consistently associated with victimization accounts by younger respondents, although these characteristics of the bar scene were reported at equivalent rates by younger and older respondents. Three of five respondents reported drink specials, over half of all respondents witnessed clothing removal, and about 30% reported seeing fights. Among younger respondents only, the odds ratio of each victimization outcome was positive and significantly associated with their observation of drink specials, other patrons removing clothing, and fights in the bars. Overall, the odds of any victimization report was approximately double given reports of fights (OR=1.9, p=0.001) or removal of clothing (OR=2.08, p<0.001), and 63% higher given the observation of drink specials (OR=1.63, p=0.003). For older respondents, observed bar characteristics apparently were less prominent; the observation of clothing removal was significant associated with reports of moderate sexual victimization, and observation of fights was associated with increased odds of physical victimization. Finally, among the younger respondents, observing others' use of drugs (equivalently reported by younger and older respondents) was associated with greater odds of experiencing moderate physical (OR=2.0, p=0.006) or sexual victimization (OR=1.8, p=0.019). (The interpretation of the association of victimization outcomes and older respondents' reports of drug-related bar characteristics are limited by the sample size.)

These negative aspects of the bar environment were countered by respondents' observations of an individual who appeared to have some sort of official capacity in the bar and appeared available to help in the event of a (undefined) problem. At least two-thirds of respondents, across age groups, noticed the presence of these "official persons." Although the odds ratio was not significant among respondents aged 21 and older, among respondents younger than 21, the odds of reporting verbal (OR=0.54, p=0.014), moderate physical (OR=0.61, p=0.038), or moderate sexual (OR=0.62, p=0.026) victimization were lower for respondents who observed that officials persons were available to help as needed.

Discussion

The population of youth traveling to Tijuana for evening entertaining is a compelling sample of individuals seeking alcohol in a risky environment (Lange & Voas, 2000; Lange et al., 2002a). Notably, younger females in this sample were more likely to report incidents of moderate physical or sexual victimization. Additionally, several characteristics of younger individuals' historical and Tijuana evening experiences are associated with their reported victimization. Among younger respondents, a reported history of verbal abuse was consistently associated with evening reports of victimization. Further, several environmental characteristics of the Tijuana bar scenes were positively associated with the three types of victimization, including observing drink specials, clothing removal, fights, and the relative inebriation of other bar patrons. By contrast, observing the presence of officials was negatively associated with victimization reports. The observed use of drugs by other bar patrons was associated with

moderate physical and sexual victimization reports by younger women. These findings generally do not pertain to the older respondents. For example, the bar environment was not associated as prominently with victimization reports by older respondents. A consistent finding for older respondents, however, was the positive association between having drunk any alcohol (or being inebriated) and victimization reports. Thus, the analyses presented herein differentiate the experiences of the younger and older women visiting Tijuana.

The finding that younger women are more likely to report incidents of moderate victimization and that the evening's experiences differ by age should be further explored. These data do not indicate whether younger women experience a higher incidence than older women (aged 21 or older). It would be consistent with other research that younger women are more vulnerable (Abbey et al., 2001; Tjaden & Thoennes, 1998, 2006). Another possibility, however, is that the younger respondents are less experienced, more sensitive to unwanted events, or both, leading to better or more critical recall at the end of the evening. This suggests that older women may be at a disadvantage, if they discount their negative experiences and, thus, lower their expectations about their personal safety.

The expected association between the consumption of alcohol and incidents of victimization is not apparent in these data for women aged 20 and younger but does appear for women aged 21 and older. Younger respondents who drink less may be remembering their evening's experiences more clearly, thus countering a higher (but unmeasured) rate of victimization among the more inebriated respondents aged 20 and younger. There is a question of better recall among respondents who, by virtue of more extensive experience, are more accustomed to negative experiences while drinking. Further, females who have been drinking may feel culpable for some degree of victimization (Chomak & Collins, 1987; Collins, 1993; Richardson & Campbell, 1982; Wilsnack & Wilsnack, 1978) and thus minimize labeling its occurrence (Murnen, Perot, & Byrne, 1989). Additionally, there may be unmeasured nonverbal clues to vulnerability that supersede exhibited characteristics of inebriation, leading to victimization incidents (Parks, Miller, Collins, & Zetes-Zanatta, 1998).

Two categories of adults providing security were measured: official bar security and the presence of "someone official who could help" in the event of a problem. Interestingly, it was the "official person who could help" rather than the formal security that was associated with reduced odds of negative verbal and moderate physical incidents. Official bar security may be a tip-off that establishment expects problems during the evening. Although it makes sense for border crossers to select a bar where responsible officials are visible, if those officials look as if they are focused on security, there may be a reason for their presence and thus a reason to avoid that bar. Still, the bar environments are not devoid of conflict in that at least 70% of the sample reported observing fights. Despite this widespread characteristic of the environment, observing fights (mirroring a history of verbal threats) was a consistent predictor of negative experiences during the evening among the larger sample of younger respondents. This also has been observed in other studies of bar violence (Collins, Quigley, & Leonard, 2001).

Notably, the sample of younger women is four times as large as the sample of women aged 21 and older, potentially masking relationships in analysis of the older respondents. When parsimonious models are estimated to reduce the demands on the models and the rates of Type I and Type II errors, nearly the same results are found. (Odds ratios are reduced slightly in the parsimonious models, with tighter confidence intervals reflecting the greater stability of the smaller models.) Additionally, this approach indicates some evidence in both age groups of a protective effect of recent trips to Tijuana against sexual victimization and suggests that some aspects of the bar environment and a history of verbal abuse may be as relevant for women aged 21 and older as they are for teenagers. These relationships should be explored further in a larger sample allowing for adjustment of other characteristics.

Of note, several of the environmental variables that are associated with the study outcomes—witnessing drink specials and fights, witnessing other patrons' removing their clothes—also predict an individual's BAC. Despite this study's focus on the respondent's BAC in association with victimization, the direct correlations (range -0.03 to 0.07) between these environmental variables and BAC do not warrant removing the environmental variables from the final models. Further, among respondents aged 16 to 20, BAC remains insignificant whether or not the environmental variables are in the models.

The Border Girls sample was specifically recruited in groups (data not shown). In initial analysis, although group composition (a measure of gender balance within the group) was associated with the study outcomes in bivariate analyses, the association disappears in multivariate models. Particularly in the case of group composition, the identity of aggressors is relevant as most aggressors are usually known to their victims (Fisher, Cullen, & Turner, 2000; Murnen et al., 1989; Ullman, Filipas, Townsend, & Starzynski, 2006; VanZile-Tamsen, Karabatsos, & Koss, 2005). Qualitative data has indicated that women may be incapable of asserting control in the face of coercive behavior exhibited by known male companions (Murnen et al., 1989). For in-group negative experiences, the BACs of the aggressors, as well as that of the victims, also merit investigation.

Some limitations apply to this study. To summarize the challenges of self-reported data in this context, reports of an evening's experiences may be biased from several perspectives. Evening drunkenness may bias victimization reports and environmental descriptions. Past experience may color reports of the evening's experiences. A history of sexual victimization could heighten awareness and reporting of negative experiences during an evening in Tijuana or, conversely, may contribute to low self-esteem that diminishes a respondent's capacity to report openly her negative experiences.

Further, in this study, we do not examine the role of alcohol on the scaled severity of victimization. The rates of victimization in Ullman et al.'s college studies are dated (mid-1980s), but victim alcohol use and greater victim resistance were associated with greater severity of aggression (Ullman, Karabatsos, & Koss, 1999a, 1999b), although they found no evidence that more offender drinking led to greater severity of aggression. With a larger sample, the relative severity of victimization incidents in Tijuana could be examined.

Finally, there is limited followup data on southbound participants who were not captured in the northbound survey, despite the opportunity for all participants to place an anonymous telephone call to surveyors in the weeks after they return from their evening in Tijuana. The telephone survey response rate was less than half of participants who initially agreed to participate. Although collecting data via the telephone survey from those participants who were not captured in the northbound survey at the border was an express goal, only 1% of non-returning participants called in to the telephone survey (Kelley-Baker et al., 2007).

Herein, we describe a study of U.S. border crossers with the specific intent of examining victimization experiences and laying the framework for a group-level intervention to reduce risk. This study finds that youth, a history of verbal abuse, and risky characteristics of the Tijuana bar environment are associated with victimization. Alcohol consumption is related to self-reported negative experiences among women aged 21 and older. Further research addressing the individual's history and the aggressor's identity would elucidate the circumstances placing female youth at increased risk and inform interventions to reduce victimization. Victim defense tactics usually target individual efforts, not group dynamics (Murnen et al., 1989). Notably, this research has the potential to inform interventions that target group and individual behavior.

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NIH-PA Author Manuscript **Table 1**Summary of Surveys Administered in the Border Girls Project, July 2005 – December 2006 NIH-PA Author Manuscript NIH-PA Author Manuscript

Survey	${ m Total}^a$	Males		Females	
	N	u	%	u	%
Southbound	2,047	545	26.6	1,502	73.4
Northbound-PDA interview b	1,657	453	27.3	1,204	72.7
Northbound-Social experiences b	1,680	442	26.3	1,237	73.7
Answered all surveys	1,608	436	27.1	1,172	72.9

 a Southbound, 8 respondents were not identified as male or female, and so are excluded from the Total N.

b Northbound, males were not pursued by surveyors as persistently as females.

Table 2

Evening Negative Experiences (Females)

			95% C.I.	
N=1,172	n	%	lower	upper
Any negative experience ^a	619	52.8	50.0	55.7
Verbal aggression	261	22.3	19.9	24.7
Moderate violence	344	29.4	26.7	32.0
Moderate sexual aggression	444	37.9	35.1	40.7
Severe violence	48	4.1	3.0	5.2
Severe sexual aggression	18	1.5	0.8	2.2

aAny victimization reflects any experience of verbal, moderate, or severe events as listed in the table. Rates are not mutually exclusive between categories; an individual may report multiple victimization events

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Table 3

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Sample Distribution by Victimization Outcome^a

		No victii	No victimization	Any vic	Any victimization	Verbal vi	Verbal victimization	Moder	Moderate violence	Moderate sext	Moderate sexual aggression
	<u> </u>	553	%	619	%	261	%	344	%	444	%
Demographics											
Ages 16-20		436	1.62	512	82.9	218	83.5	290	84.6*	379	85.4*
Hispanic		260	48.2	247	*40.9	104	40.8	141	42.0	174	40.1*
White, non-Hispanic		133	24.6	180	29.8	73	28.6	98	25.6	135	31.1^*
Personal History											
Repeat TJ visit (past year)		439	82.1	510	84.3	218	85.8	286	84.4	357	82.1
Repeat TJ visit (past month)		349	63.1	374	60.4	169	64.8	201	58.4	251	56.5
Drank $3+$ days/week in past month b		105	19.1	151	24.6	69	26.4*	72	21.1	113	25.5*
Ever binge drank in past month		341	62.2	413	67.2	176	2.79	225	65.8	302	68.3
Binge drank weekly+ in past month		94	17.2	144	23.4**	99	25.4**	72	21.1	109	24.7**
Verbally threatened (past year)		180	32.6	328	53.2 ***	150	57.7	188	55.0***	240	54.2 ***
Physically struck (past year)		100	18.2	168	27.3	74	28.6	100	29.2	117	26.5
Threatened with weapon (past year)		48	8.7	65	10.5	33	12.7	51	14.9	42	9.5
TJ Evening Drinking											
BAC: any alcohol at all		319	58.3	391	63.7	164	63.1	209	61.3	278	63.3
BAC: legally drunk		141	25.8	152	24.8	99	25.0	78	22.9	107	24.4
Binged (4+ drinks)		256	46.5	341	55.3**	146	56.2*	183	53.5*	244	55.2
Feeling drunk or very drunk		59	10.7	66	16.1**	45	17.2**	49	14.3	73	16.5
Number of bars visited (2+)		180	32.6	204	33.0	84	32.2	102	29.7	149	33.6
TJ Evening Environment											
25%+ of others appear drunk		446	81.4	571	92.3	239	91.6	319	92.7***	415	93.5
Witnessed drinking games		99	12.0	103	16.7*	45	17.3*	09	17.5*	73	16.6*
Witnessed drinking specials		300	55.0	413	8.99	179	***	226	**1.99	301	8.29
Witnessed clothes removal		231	41.9	391	63.3	161	61.7***	228	86.3	287	64.8
Witnessed fights		105	19.0	240	38.8	124	47.5	151	***	172	38.8

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		No victin	o victimization	Any vic	Any victimization	Verbal vi	Verbal victimization	Modera	Moderate violence	Moderate sext	Moderate sexual aggression
	<u>=</u>	553	%	619	%	261	%	344	%	444	%
Witnessed presence of bar security		469	85.1	557	**1.06	235	***************************************	313	81.0*	401	*60.5
Witnessed presence of other officials who could help		424	77.1	430	**8.69	172	65.9	228	66.5	309	70.1*
Observed people using drugs		29	12.9	141	24.3	63	25.8***	68	27.9	102	24.3
Observed people selling drugs		34	6.5	59	10.2*	34	13.9**	34	10.7*	44	10.5*
Someone tried to sell drugs to respondent		18	3.5	46	**6.2	27	11.1	28	**8.8	33	**6.7
Someone tried to give drugs to respondent		18	3.5	33	5.7	18	* 4.7	19	0.0	22	5.3
ınt											

^aEach chi² test compares distribution of that characteristic for outcome subsample to the characteristic distribution for the group that reported no victimization (n=590).

* p<.05

 b Drinking history queries the number of days the respondent consumed at least one whole alcoholic beverage during the past 30 days.

Table 4Multivariate Models of Negative Evening Experiences (females aged 16-20)

	Any victimization ^a	Verbal aggression	Moderate violence	Moderate sexual aggression
	n=818	n=565	n=627	n=707
Demographics				
White, non-Hispanic	1.15	1.07	0.92	1.16
Hispanic	1.02	0.95	1.02	1.00
Personal History				
Repeat TJ visit (past year)	1.03	1.05	0.99	0.84
Repeat TJ visit (past month)	0.71	0.79	0.61	0.67
Drank 3+ days/week in past month ^b	1.42	1.40	1.13	1.57
Ever binge drank in past month	1.04	1.09	1.04	1.04
Verbally threatened (past year)	2.10***	2.46***	2.46***	2.16***
Physically struck (past year)	0.97	0.94	1.05	0.99
Threatened with weapon (past year)	0.79	0.79	1.10	0.63
TJ Evening Drinking				
BAC: any alcohol at all	0.96	0.87	1.04	0.98
Number of bars visited	0.97	0.90	0.92	0.90
TJ Evening Environment				
25%+ of others appear drunk	1.59	1.51	1.81	1.95*
Witnessed drinking games	0.96	0.70	0.94	1.03
Witnessed drinking specials	1.63**	2.17***	1.59*	1.67**
Witnessed clothes removal	2.08***	1.70*	2.39***	2.03***
Witnessed fights	1.89**	2.86***	2.54***	1.89**
Witnessed presence of bar security	1.39	1.40	1.45	1.60
Witnessed presence of other officials who could help	0.71	0.54*	0.61*	0.62*
Observed people using drugs	1.72*	1.60	2.04**	1.80*
Observed people selling drugs	0.85	1.43	0.66	1.11
Someone tried to sell drugs to respondent	2.58	2.27	5.35**	2.30
Someone tried to give drugs to respondent	0.98	1.18	0.43	0.90

aThe reference group of each victimization model are respondents ages 16-20 who reported no victimization (n=436). Estimates are odds ratios.

^{*} Significance represented by p<.05

^{**} Significance represented by p<.01

^{***} Significance represented by p<.001

 $^{^{}b}$ Drinking history queries the number of days the respondent consumed at least one whole alcoholic beverage during the past 30 days.

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Table 5Multivariate Models of Negative Evening Experiences (females aged 21+)

	Any victimization ^a	Verbal aggression	Moderate violence	Moderate sexual aggression
	n=186	n=131	n=140	n=154
Demographics				
White, non-Hispanic	1.36	2.69	0.73	1.35
Hispanic	0.93	1.35	0.63	1.16
Personal History				
Repeat TJ visit (past year)	1.13	0.60	1.03	1.50
Repeat TJ visit (past month)	0.81	1.66	0.70	0.46
Drank 3+ days/week in past month ^b	0.90	1.64	0.66	1.55
Ever binge drank in past month	0.91	0.64	0.97	1.12
Verbally threatened (past year)	2.28*	2.20	2.19	3.74**
Physically struck (past year)	1.65	2.61	1.24	1.70
Threatened with weapon (past year)	0.45	0.86	0.39	0.21
TJ Evening Drinking				
BAC: any alcohol at all	4.48***	3.66*	4.13*	4.79**
Number of bars visited	0.97	0.97	0.75	1.48
TJ Evening Environment				
25%+ of others appear drunk	2.93	2.24	2.60	9.90*
Witnessed drinking games	0.94	1.59	0.78	1.40
Witnessed drinking specials	0.77	0.58	0.96	0.70
Witnessed clothes removal	2.67*	2.19	1.92	5.11**
Witnessed fights	2.19	2.88	3.38*	2.52
Witnessed presence of bar security	1.31	1.84	1.70	0.65
Witnessed presence of other officials who could help	1.07	0.99	0.89	1.60
Observed people using drugs	0.97	1.43	1.13	0.84
Observed people selling drugs	0.17	0.36	0.00***	0.00***
Someone tried to sell drugs to respondent	2.71	0.83	c	_ <i>c</i>
Someone tried to give drugs to respondent	1.09	1.08	2.08	0.78

aThe reference group of each victimization model are respondents aged 21+ who reported no victimization (n=115). Estimates are odds ratios.

^{*} Significance represented by p<.05

^{**} Significance represented by p<.01

^{***} Significance represented by p<.001

 $^{^{}b}$ Drinking history queries the number of days the respondent consumed at least one whole alcoholic beverage during the past 30 days.

 $^{^{\}it C}{\rm Variable}$ predicts no victimization perfectly and thus dropped from model.