Casino Chips to Rape Kits:
The Effect of Casinos on Reported Rapes on Native American Reservations

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Abstract

‘Why do reported rape rates vary among US Native American reservations?’ is the research question this undergraduate political science thesis is constructed upon. The dataset utilized for this research design is the FBI Crimes in the U.S. 2009 statistical publication which has a specified ‘forcible rape’ category, allowing one to test for possible explanations for the disparity of reported rapes across 81 Native American reservations. Sexual violence is well documented on Indian Country and this study argues that the presence of casinos is correlated to rapes being reported to tribal law enforcement officials. Tribal gaming is a unique institutional facet of the Native American reservation and has been extolled for helping tribes develop economically. However, this study uncovers a destructive side to the Native American casino: an increase in sexual violence.
Introduction

Violence against women is a social and human rights problem that has plagued many societies over time, including the United States. However, no one group in America experiences more sexual violence in today’s world than Native American women. The US Department of Justice gathered statistics in a report revealing that Native American and Alaska Native women, as a group, are 2.5 times more likely to experience sexual violence than women in the US in general (AI, 2007, 2). It is hard to believe why such a small population within America (just 1.5%) experiences high levels of rape and sexual assault in comparison to other, larger ethnic populations. These disproportionate victimization numbers of Native American and Native Alaskan women are further troubling when the same DOJ report reveals that 34.1% of American Indian and Alaska Native women would be raped in their lifetime, while the comparable figure for the USA as a whole is less than 1 in 5.1 Clearly, as a diverse ethnic group of women is being continually exposed to bodily and psychological harm in significant numbers. Moreover, argues a 2007 Amnesty International report, these Native American women are being denied justice through inaction by political leaders and police authorities both on their own tribal lands as well as US state and federal governments to combat the prevalence of sexual violence on reservations. 2

The aforementioned Department of Justice report states, “research is needed to determine whether victimization rates vary significantly among women of

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diverse American Indian tribes and Alaska Native communities” (Tjaden, 2000, 6). It would follow then that there is a gap in this research that needs to be filled: Why do some reservations experience higher rates of forcible rape, or what I will refer to as sexual violence, than others? To help answer this research question, I consulted the annual FBI statistical report entitled *Crimes in the United States.* New to the 2009 edition is the inclusion of ‘tribal’ agencies, which means there is a way for me to look at rape numbers among different reservations. Looking further at specific tribal agencies in the first report such reservations are ever included in, it is clear that ‘forcible rape’ is a reported crime that arises far more regularly, and in higher numbers, than that of other state agencies within the report. In this study, I use original data collected from 81 American Indian reservations across 27 states identified to test possible causes for varying reported rape rates.

I tested four separate hypotheses in this research design, and the variables included a specific federal law code, the number of casinos on each reservation, proximity to large, urban populations, and lastly, the size of the tract of each tribal reservation in square mileage. I also originally tested reservation population as an independent variable. After running four regression models for this research design, I have found that the presence of casinos on Indian reservations positively affects the reported rape rate of these tribal agencies. This rate was a variable I generated, determined by dividing reported rape instances of each tribal agency by the natural logarithm of the reservation’s population, effectively controlling for population size. The significance of this explanatory variable is further troubling upon the transition

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3 Additionally included are the subsequent reported criminal offenses within the reservations known to law enforcement officials.
from the third regression model to the fourth and final model, where the significance level of casinos to rape increases from a 95% confidence interval to a 99% confidence level. It is important to point out that “the inconclusiveness of empirical analyses on the relationship between casinos and crime problems coupled with recent casino gaming expansions across Native American nations makes this an important area of inquiry” (Mays, 2007, 376). This research design should again then be viewed as an exploratory attempt into the relationship between a diverse set of Native American reservations and tribal gaming, an industry that continues to grow across Indian Country nationally.

Despite the known problem of underreporting crime (rape specifically), the correlation between tribal gaming and sexual violence in my findings cannot be ignored. It is well known that the presence of casinos in Indian Country has generated unparalleled levels of development for tribes, who have historically been economically marginalized. Despite this advancement on the reservation, I argue, that it is not the economic outcomes of Indian gaming on reservations that need further attention, but instead, the consequences of having people coming onto Indian Country casinos to gamble. Thus, I suggest further research may be needed to examine the relationship between casinos and crime, with rapes at the forefront in this important area of inquiry.

**Sexual Violence Against American Indian Women: Review of the Literature**

Before getting to my three individual schools of thought that attempt to analyze the variance of reported rapes on Native American reservations, it may be

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4 P-value for Model 3=0.048 (p<0.05) and p=value for Model 4=0.0085 (p<0.01)
helpful to establish what this subsequent literature review is specifically studying. The dataset for this research design involves looking at tribal reservations, which are ethnically specific to Native American people in the US. This unique situation means that one cannot entirely look at reservations and the Native Americans that live on them in terms of the general population. It is important to point out though that many Native people are quite Americanized, leaving some overlap. Regardless, problems that persist in Indian Country deserve some special attention, and it should be clear that some of these problems may be relevant to the outcomes of my specific research question regarding sexual violence. Within my three schools of thought, I attempt to address some how reservation-specific characteristics may contribute to reported rapes.

Although no scholars have looked directly at this topic, it is possible to draw on scholarship in the fields of women's studies, health, criminology, and political science that focus on three important subjects: sexual violence against women, the prior history of American Indians, and the political instability that prevails on some Native American reservations. The three schools of thought I have constructed try offer differing views on why women in some tribes encounter more sexual violence than others: institutional, colonial, and geographical.

**Institutional School**

In becoming independent and sovereign nations within the United States, Native Americans were in a unique position to create their own institutions and self-governmental mechanisms on their new lands, or reservations. These include tribal police forces and tribal courts. The institutional school of thought is one that looks
at the effectiveness of Native Americans’ own agencies to prevent, combat, and treat high levels of sexual violence on tribal lands, also referred to as Indian Country. Additionally, this school looks at certain institutions within the reservation that may have an effect on reported rapes. A lasting effect of the colonial period was the establishment of the federal agency the Bureau of Indian Affairs which is an additional body that operates on all reservations.

It is vital to recognize that recently, “with the arrival of tribal gaming in the 1990s, a growing number of tribes...have been using their own funds to establish tribal police forces” (Goldberg, 2008, 12). The casino, the foundation of tribal gaming, is an important facet for the institutional school that depicts the unique conditions on tribal reservations. By this I mean gambling is legally restricted to certain parts of the country but reservations are granted the right of large-scale commercial gambling that other communities are denied. Gaming enterprises have been a means for some tribes to resolve their other institutional shortcomings, using the money generated from this gaming industry for other important services within the reservation. An example of this in my dataset is the St. Regis tribe from New York. “At the [St. Regis] Mohawk Reservation, the tribe spends more than half the revenue from its casino and other enterprises -- roughly $2 million annually -- on border patrol and other law enforcement” (Kershaw, 2006, 4).

Thinking about casinos conceptually within the institutional framework, tribes who operate casinos should have more financial resources to monitor crime and therefore should be less likely to experience high rates of sexual violence. Conversely, casinos present opportunities for Natives and non-Natives alike to come
onto tribal lands to gamble. “In a study of American Indians and crime, Greenfeld and Smith (1999) reported that 75% of intimate partner victimizations involved a non-American Indian offender” (Brownridge, 2008, 364). If this finding, that the majority of violent victimizations of American Indians are linked to non-Natives, is coupled with the influx of visitors on a reservation, then it would then follow that the number of casinos on Indian Country can affect sexual violence positively.

Moreover, the casino is an interesting part of the institutional school due to some of the inherent risks that come with gambling. One scholar suggests that casinos can bring crime to reservations by stating, “conventional wisdom has long associated gambling with crime [positively], yet evidence of a measurable impact of casino gambling on crime is inconclusive” (Mays, 2007, 376). So it is commonsensical to suggest tribal gaming could foment reported rape on reservations, with this link to crime.

In order for an institution to function well, it must have the appropriate resources. Unfortunately, in the case of most Native American agencies (aside from the BIA), resources in terms of manpower and funding are two things that they lack even with the presence of tribal gaming in Indian Country. “Existing data suggest that tribes have between 55 and 75 percent of the resource base available to non-Indian communities” (US DOJ Policing, 2001, viii). This is disheartening, but can logically explain why these 81 tribal police agencies were absent in the aforesaid CUIS report prior to 2009, despite operating for as long as agencies that have been included in the annual report for decades. It is important to point out that sparse resources should not justify omission from such crime reports.
Now, however, “tribal governments are better able to collect crime data and apply for law enforcement resources due the American Recovery and Reinvestment Act program” (Albuquerque, 2010, 1). This Act was passed by Congress with the influence of President Barack Obama in 2009 in response to the economic crisis. Despite this advancement from the stimulus Act, lack of policing as well as a lack of treatment centers for women to report sexual violence still persists on Indian Country. It would follow then that one of the dimensions of the institutional school of thought can explain varying rape numbers on tribal lands through the continual underdevelopment of tribal authorities’ policing abilities. It is important to point out that due to the size of some reservations and coupled with an understaffed tribal police department can create a situation where it could be hours for a response to a 911 call, including those distressing calls of alleged rape. Additionally, inadequate funding to provide social services that should be available to women and families in the event of sexual violence makes it hard to report these crimes to authorities and cope with the aftermath of rape.

Another institutional issue is the jurisdiction over Indian Country. “The relationship between American Indian nations and the federal government, and increasingly state governments, is an ongoing contest over competing sovereign powers” (Wilkins and Lomawaima, 2002, 5). The passage of Public Law 280 in 1953 by Congress greatly affected the way tribes operated politically. PL 280 modifies the institutional framework of tribal police authorities in terms of who is going to be responsible in the prosecution of violent crimes: either the state or the tribe. This law was not uniformly applied to all tribal reservations, with Congress giving some
states a mandatory adoption of the law (California, Minnesota, Nebraska, Oregon, and Wisconsin, and upon statehood, Alaska), while letting others optionally enforce it (Washington, Iowa, Nevada, Idaho, Montana, Arizona, North and South Dakota, and Utah). Overall, “about 23 percent of the reservations based tribal population in the contiguous 48 States and all Alaska Natives fall under PL 280” (NIJ 2005). Through a number of legal battles, retrocessions of authority back to federal and local authorities, the BIA police included, from PL 280 states has affected multiple reservations within my dataset (Goldberg, 2008, 8). These victorious tribes can be seen as taking matters into their own hands and using the U.S. legal system to fight back against state power. For reservations existing within the non-PL 280 states, federal and tribal jurisdiction remains intact. The varying nature of applicability of this law can be seen as a possible reason for differing crime rates on reservations, with sexual violence being most important to this study, given my research question. Since both PL 280 and non PL 280 reservations are within my dataset, I am able to make some potentially useful comparisons in regards to the rape numbers.

Ultimately, the institutional school can explain varying degrees of sexual violence through multiple factors. This is possible through identifying which reservations possess certain institutional characteristics that can affect the prevalence of sexual violence. I could use measurements that involve the strength of tribal police forces, which may or may not be affected by tribal gaming revenues. A reservation that has a substantial police force that is able to patrol their Indian Country is less likely to experience high rates of sexual violence against women,
with the same going for other kinds of criminal activity. It is important to point out that, "tribes and states have voiced concerns about some of PL 280’s consequences, including perceived jurisdictional uncertainty and insufficient funding for law enforcement" (NIJ, 2005). So, in a way, it is possible that PL 280 can be used as a measurement to help illuminate which tribes would have more or less financial resources for policing.

The institutional school of thought that I have just laid out is in a better position to answer my research question than the colonial school because it deals with more modern problems that tribes face that could affect the prevalence of reported rape. Institutions are the foundations of any community and the substandard institutions on some reservations fall to the detriment of the people living on them. It is also “the failure of the dominant culture to keep promises that were made to Indian tribes” that could partially account for the inferior institutions that exist on reservations compared to other US communities (Jones, 2009, 114). This scholar’s quotation is in regards to broken treaties by the federal government and lack of federal funding from the Bureau of Indian Affairs. Although an institutional explanation for my research question fulfills both the presence of casinos and the under-policing aspect for high instances of sexual violence, I believe that there may be other, demographic reasons that need to be addressed within a different school.

Overall, the institutional school is very strong, but it possesses two weaknesses that prevent me from completely accepting it for my research design. Firstly, while the bureaucratic attributes on tribal reservations can explain much
about economic and social conditions, it is obvious that the institutions operating within each individual reservation are different. Each tribal agency is distinct and self-governing, though not completely independent of one another, so trying to make institutional claims about these reservations collectively would be similar to comparing all of the different countries of Europe in the same breath. While each reservation is regarded as a ‘nation within a nation,’ these nations cannot be bound together due to the varying institutional framework of each. The second weakness within this school involves Indian gaming operations. The outside involvement of casino corporations threatens to undermine Indian gaming as a truly genuine Native American-specific facet of the reservation. For example, the company MGM Resorts International has a joint venture with the Pequot tribe in Connecticut at their Foxwoods casino. So it is important to ask: who is really running these? If it were true that it were solely Native American tribal governments who ran, operated, and were the exclusive beneficiaries of the profits generated from tribal gaming (aside from the state tax revenues), and not the likes of MGM and Caesar’s Entertainment Corporation, then this weakness of corporations having a hand in reservations would not exist.\(^5\) It is worth noting, however, that some reservations’ commercial gaming enterprises do not have such outside involvement.

In light of these weaknesses, there may instead be more regional-specific characteristics of sexual violence in Indian Country. These semi-sovereign nations, dotted across most of the US map, could very likely possess tribal-specific differences because of their diverse geographical areas that contribute to reporting

rape. Therefore, since environment (surrounding influences) and location are not institutional issues, I am brought to two other schools of thought.

**Colonial School**

The oldest, most historical explanation (in terms of being pre-reservation) is the colonial school. While it is important to point out that the colonial school of thought is one that can be applied to multiple Native American issues, like racism, I am looking at the sole question of how colonial practices could have induced or exacerbated sexual abuse of Native women. Dating back to the voyage of Christopher Columbus, European men raped and sometimes killed women within the native villages they discovered across the Atlantic Ocean. However, this conduct itself had plenty of variation among different colonizers at different times. Regardless, colonialism introduced the behavior of white colonizers exercising both a racial and sexual superiority over indigenous women. In short, argues one scholar, “raping Indian women has essentially been a right of conquest,” though it was not a uniform and consistent practice (Pember, 2010, 27).

Some scholars argue that, in terms of gender politics specifically, when Western European settlers conquered and colonized Native American tribes, there was a twofold effect. In suppressing this race of indigenous people, white colonizers eroded, prohibited, and penalized specific cultural practices held by indigenous tribes for generations. Proselytizing Natives was a popular movement in North America and with the indoctrination of Christianity, different social norms may have emerged. “Colonization and its aftermath profoundly changed gender

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6 Andrea Smith, *Not an Indian Tradition: The Sexual Colonization of Native Peoples*, 2003
roles among Indigenous peoples. For example, settlers and government officials insisted on dealing [diplomatically] only with men, while Christian missionaries exerted pressure on Indigenous peoples to assume what their churches considered proper gender roles” (AI, 2007, 16). Some of the Arizona and New Mexico pueblo reservations included in my dataset appear to have been affected by these gender politics. “In pueblos where missionary influence [of the Spanish] was strong, matrilineal families gave way to patrilineal ones, and fertility rites of all kinds disappeared” (Demos, 2000, 15). This shift towards more a patriarchal-based society within these pueblos can justify male superiority over women with the ultimate and most violent power struggle being rape. However, superiority may not always lead to violence.

I have already pointed out that in the act of colonizing, Europeans introduced social practices and traditions previously foreign to the isolated Native Americans. It is critical to understand that some colonization theorists argue that, “domestic violence is an issue which dates back throughout history among European populations,” while conversely, “domestic violence is a relatively recent phenomenon which coincides with the advent of colonial rule and the subjugation of Native Americans” (McEachern, 1998, 35). This means then just like the horses, the weapons, and the diseases colonizers brought over from Europe, the practice of sexual violence could have also been a novelty for Native American tribes who vary enormously in cultures. While it may be easy to compartmentalize sexual violence as a colonial and European practice, the lack of hard evidence by this scholar to support this claim makes it difficult to accept it as even remotely true. Claiming that
domestic violence is intrinsically and even uniquely European is a huge weakness in this school.

In weighing the validity of this colonial school of thought to reasonably account for differing levels of violence among tribal reservations in 2009, there are both strengths and weaknesses. By reiterating the Greenfeld and Smith study from the institutional school that states approximately 75% of rapes of Native American women are committed by non-Natives, it would then follow logically that the continued colonial superiority of Anglo-whites from 400 years ago has persisted into the present day at the expense of Native American women on reservations. One scholar points out that “the normalization of sexual assault is a facet of historical trauma,” which mars the colonial contact period between Native Americans and Europeans (Pember, 2010, 28). It is justifiable then that colonization theory can account for non-Native men sexually assaulting Native women but not within the framework of Native men raping Native women, which weakens this school. If I were to utilize this school to explain how rape numbers differs across the 81 tribes in my dataset, I have an option of measures. Ultimately, tribes most victimized by colonialism could arguably experience high rates of sexual violence today. This idea includes tribes who participated in the most armed conflicts; those who faced forced removals from their own lands; tribes whom the US government has broken treaties with. Additionally, I could look at the estimated percentage rates of these tribal populations killed off by Europeans during the colonization period. All of these measures signify a colonial blame for the sexual violence that is endemic on reservations today.
It seems all too convenient to justify the high numbers of forcible rape of Native American women on tribal reservations solely from a historical context because much has changed for Native Americans since the time of contact. I believe that more contemporary factors must be present that makes women, on a diverse assortment of tribal reservations, more vulnerable to sexual violence than other ethnic groups who do not reside on reservation lands, including urban Native American women. The racial hierarchy that existed during the colonial period in America, which included, in some places, taking Natives as slaves, is not the same as it is today.

However, it appears that there is a gap in the literature that would make it hard to completely reject the colonial school. One scholar writes, “future research is [still] needed to directly test whether a link exists between colonization and Aboriginal women’s elevated risk of violent victimization” (Brownridge, 2008, 366). This presents a possible opportunity for me to test one of the aforementioned colonial victimization measures. However, the multiple limitations in gathering such colonial measurements cause me to reject this school for my research design. Treaties have been modified and renegotiated and victimization numbers may be hard to distinguish in light of inter-tribal killing. Despite the flaws of the colonial school, it is important to recognize that the two other schools of thought I discuss retain foundations from the act of colonizing Native Americans, as the colonial period caused the American government to treat tribes differently from the overall population.
Geographical School

The geographical school of thought stems from, as one scholar points out, the actions of the United States government who, "left most Native Americans clustered in economically marginal rural areas of the country" (Jones, 2009, 114). The idea of creating these reservations, which are sovereign nations within a nation, is the application of segregating a group of ethnic people from others for political purposes. Here, sovereignty and segregation coexist within Indian Country on a tribe-to-tribe basis. It has been argued that, "the aspect of institutional discrimination most widely studied for its health implications has been residential segregation" (Williams, 2008, 35). It is important to realize that the ends of this institutional inequity were reached through geographic means. Native American women's sexual health and overall wellbeing are being affected negatively from this seclusion, in being isolated as an ethnic group on Indian Country. Creating nations with sovereignty is not in itself discrimination, but the land allotted to Native Americans for their reservations were in these rural and sometimes isolated parts of the country which can create an economic disadvantages.

Geographic isolation is a logical explanation for one's propensity to commit a violent crime, or for this study, rape specifically. If there is a small, dispersed population within a given area, the chances of someone getting caught for doing something illegal decreases. Within this school, it is easier to imagine geographic conditions within the mindset of a criminal, a rapist specifically, to realize the strengths of this school. If a man encounters a woman on a desolate road on a South Dakota reservation, with the next home being miles away, he will feel that his
chances of getting caught for sexual assault are a lot less than if they are together on a reservation that is on the outskirts of a large, densely populated city where onlookers and potential witnesses are more common. Moreover, isolation can play a role in the response time of tribal police authorities to emergency calls of sexual assault. Because of the institutional factor of small, ill-equipped police agencies working over vast reservations, an isolated incident on the edge of a reservation may not get adequate attention in due time from tribal police in the reservation is in a non-PL 280 state. This factor could be an incentive for men to commit such sexual atrocities because they know they will have time to get away from the scene of the crime, or even leave the reservation, gaining impunity. This stems from the assumption that fear of apprehension and punishment is the main deterrent for committing rape. Therefore, if a reservation is closer to an urban area, I predict less violence because of a greater chance of bystanders. Additionally, if a reservation has a land area that is large, I predict more violence.

Although technically, Indian Country is isolated in terms of sovereignty, some reservations may be quite close to large towns and cities. The closer the reservation is to an urbanized area may lower the rates of sexual assault of Native women, which is in unison with the geographical concept of isolation. So, the geographical school can suggest causes of some instances of sexual violence in Indian Country that are rurally isolated, it may fail to substantiate high rape numbers on reservations that are close to large cities where there is a greater chance, in terms of population, for non-Indians to come onto tribal land and commit crimes. However, the potentially for witnesses, getting caught, and fast response times by tribal or
state police may all decrease the risk of forcible rape instances for reservations that are close to urban areas.

**Theory and Hypothesis**

It is clear that the colonial, institutional, and geographical schools can accommodate a partial explanation for varying sexual violence on different Indian reservations. While a partial explanation is really all one could hope for, I still think that a fuller explanation can be reached using different measurements, making this research question all the more interesting. Taking from the latter two schools, I will synthesize my own unique argument to disentangle this both puzzling and troubling phenomenon of rape on reservations. The idea of one scholar that “institutional neglect and disinvestment in poor, segregated communities contributes to increased exposure to environmental toxins, poor quality housing and criminal victimization” is more of a sound reason of why varying levels of sexual violence occur across different reservations, rurally isolated or not (Williams, 2008, 35). The reported rape numbers generated by the FBI, allow for four hypotheses to test for significance.

Thinking within the institutional school and the jurisdictional issues brought on by the application of Public Law 280, tribes in different states are affected differently. Tribal sovereignty is ceded to state jurisdiction in PL 280 states, while in non-PL 280 states, more localized authority, as well as BIA jurisdiction, remains intact. Based on the assumption that localized authority is more effective than state police leads to the following testable hypothesis:
**H1:** Public Law 280 should have a positive effect on reported rape rates on the reservations befalling within the states it is applicable to.

Native American casinos give tribes a means for economic development. Within the context of the institutional school, Indian gaming is an industry that attracts many Americans onto reservations. If a reservation has no casino present, the chances for non-Native visitors are likely to be less. Thus, this suggests the following testable hypothesis:

**H2:** The number of casinos present on a reservation will increase the reported rape rate.

An aspect of the geographical school is the idea of isolation and slow responses from police authorities that must cover large areas of reservation land. Additionally, distance may affect the likelihood of committing violent acts. This leads to the following two testable hypotheses:

**H3:** Proximity to an urban area should cause decreases in the reported rape rate on a reservation.

**H4:** The larger the land area, in square miles, of a reservation will cause an increase the reported rape rate.

**Data and Measurement**

**Dependent Variable:** To test the four hypotheses surrounding varying sexual violence on reservations, I utilize the FBI dataset ‘forcible rape’ instances within 81 individual tribal agencies and divide by the logarithm of each tribal population to eventually produce a ‘reported rape rate’ as my dependent variable. It is important
to control for population within this type of analysis so large reservations do not 
drive up the outcome of the results. Therefore, this new dependent variable controls 
for population and will generate more proportionate statistical results.

Taking from US Department of the Interior’s Bureau of Indian Affairs’ 
was able to find most of the 81 tribal populations living on or near each reservation 
in my dataset. For those tribes that did not participate, which are only a few, I used 
the 2000 U.S. Census data to fill the gap. This 2005 report is the most up-to-date 
publication regarding tribal populations and since it was the tribes themselves that 
provided the population information to the BIA, I thought that these numbers would 
be the most accurate for my study.\(^8\) I have chosen to exclude the two tribal agencies 
of ‘Eastern Nevada’ and ‘Northern Pueblos’ (of New Mexico) outright because they 
are comprised of multiple reservations, of different tribal identities, and detract 
from my research design’s intent of finding variability on a tribe-to-tribe basis.

It is important to provide the exact definition of the ‘forcible rape’ category, 
as there are many degrees of sexual violence. The FBI’s Uniform Crime Reporting 
Program defines “forcible rape...[as] the carnal knowledge of a female forcibly and 
against her will. Attempts or assaults to commit rape by force or threat of force are 
also included; however, statutory rape (without force) and other sex offenses are 
excluded” (FBI 2008). So rape attempts and sexual assaults will be within the 
dataset, although these instances are not explicitly differentiated. The fact that other 
types of sex offenses are left out of the data, including but not limited to sexual

\(^8\) See U.S. Department of the Interior, Bureau of Indian Affairs, Office of Tribal Services, *American 
Indian Population & Labor Force Reports*, 2005
harassment, stalking, indecent exposure, and groping, creates a clear-cut dependent variable of calculated rape rates (both attempted and accomplished incidences).

It is essential to mention that actual incidence of sexual violence versus the reported numbers in the FBI dataset can be inconsistent due to underreporting. Underreporting is typical of all crimes, not just rape. It would obviously be ideal to account for actual incidence of sexual violence across different American Indian reservations. Unfortunately, measuring the occurrence of actual rape on reservations is unfeasible unless victimization surveys could be extended to women in every different tribal community. A recent article in the *Australian and New Zealand Journal of Criminology* elaborates on this problem by saying “the very high cost of random sample surveys makes them extremely prohibitive for most large jurisdictions, including states, and even more so for small rural AIAN [American Indian and Alaskan Native] tribes. As such, official data from police will likely remain the principal means to monitor levels of violence against AIAN women at the local level” (Bachman, 2010, 213). My utilization of the FBI dataset should then be viewed as an appropriate means to observe the levels of sexual violence of women known to tribal law enforcement on the local level.

Explanatory (Independent) Variables: To test the effects of PL 280 for H1 on sexual violence, I categorize all 81 reservations in my dataset on a 2-point scale. I chose ‘1’ to represent instances when the reservation is under federal BIA/tribal jurisdiction, while ‘2’ applies to reservations which continue to experience state jurisdiction that supersedes tribal and BIA authority. Reservations that fall within the ‘PL 280 optional’ states, creating a mix of authority remain as ‘1,’ as well as
reservations which won back local jurisdiction from the mandatory or optional PL-280 states since the law passed over 60 years ago. Additionally, tribes who were never affected by the law are designated as ‘1’. To test H2, I was able to discern which reservations have casino and gaming centers as well as those who do not currently have gambling present on tribal land. For H3, I introduce a geographical measure for reservations distance from a large city, or urban area. This is a nominal measure. It is based on a reservations’ distance from an urban area of 50,000 people or more in terms of miles. Finally, for testing H4, I examined the land area of each reservation to discern the total square miles of tribal jurisdiction.

**Results**

Before getting to the regression results of my dataset, it is easier to first introduce some descriptive statistics about the main features of the data. It is important to point out that for Table 1, two of the three outliers I ended up removing from the data are taken out. So for the 79 tribal agencies that are included in the final model, the median of the number of report rapes with in the dataset, as seen in Table 1, is 2.5. This means the average reservation, within my set of observations, experienced about 3 reported rapes in 2009. The maximum number of reported rapes would have been 374 if I had chosen to keep the Navajo Nation outlier, which I will discuss in full later on. For the Public Law 280 variable, most of the tribal agencies overwhelming fell into the ‘federal/tribal’ category, with only 14 susceptible to state jurisdiction. This is reflected in the table below as the average tribe being a ‘1’ which I used to describe the non-Public Law 280 tribes and those who were retroceded back authority. The mean for number of casinos within my
dataset was 1.2, so the average tribe is operating at least one casino or gaming center on their land. There were a total of 18 tribal agencies within the data that do not operate any Indian gaming enterprises on their land. For the ‘miles to an urban area’ variable, I took the natural log of each, with the average reservation being 60 miles away from a large city or town. Lastly, for the size of reservation in square miles, the average reservation is about 853 square miles, or 546,000 acres.

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**Outlier Issues**

Utilizing standard OLS regression models, I tested the competing theories of mentioned above in explaining reported rape rate variation on 81 American Indian reservations in Models 1 and 2. *Table 2* below shows the first two initial models I ran that included the tribal agencies of Fort Apache and the Navajo Nation. This first set of findings produced some interesting results but also promoted the creation of a new dependent variable that controlled for population. In the first model, population and land area were significant variables in regards to reported rape numbers. The aforementioned 374 rapes of the Navajo Nation, with not only the
largest population, but also the largest land area, caused me not to trust the results of the first model. The land area of the Navajo Nation is bigger than 10 of the 50 US states, and is roughly the same size as the state of West Virginia. Clearly, this observation is an extreme outlier and warrants exclusion. In the second model, tested before the eventual removal of the Navajo outlier, I attempted to control for large reservation population by taking the natural logarithm of population.

Additionally, noticing the high prevalence of reported rapes on two Arizona reservations and the low incidence of reported rapes in the state of Oklahoma, I coded for each of the two individual states. Both states ended up becoming significant, each in a different direction. Arizona became positively-related to reported rapes and Oklahoma negatively-correlated. The tribal agency with the second-highest reported rape number was the Fort Apache tribe in Arizona. With 65 reported rapes, I also regarded it as an extreme outlier and subsequently removed it after the second model because I did not want either tribal agency creating significant associations with any of the independent variables such as land area and population. It is also for this reason I decided not to code for individual states.

Before dropping the Navajo and Fort Apache outliers, these first initial models provided some insight into the significance of distance to an urban area in relation to reported rapes, which would uphold the geographic school of thought’s argument that isolation contributes positively to more reported rapes to tribal police. However, as I have said, I could not fully trust these results because these two reservations in Arizona had the two highest instances of reported rape numbers.
and the extreme disparity in relation to the other 79 tribal agencies justified their elimination, leading to the two subsequent models.

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1) Reported Rape</th>
<th>(2) Reported Rape</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>-0.000258*</td>
<td>3.318</td>
</tr>
<tr>
<td></td>
<td>(0.000150)</td>
<td>(7.167)</td>
</tr>
<tr>
<td>Public Law-280 Code</td>
<td>2.361</td>
<td>3.318</td>
</tr>
<tr>
<td></td>
<td>(7.485)</td>
<td>(7.167)</td>
</tr>
<tr>
<td>Number of Casinos</td>
<td>-1.291</td>
<td>-0.412</td>
</tr>
<tr>
<td></td>
<td>(1.870)</td>
<td>(1.897)</td>
</tr>
<tr>
<td>Miles to Urban Area</td>
<td>-0.0449</td>
<td>-0.0400</td>
</tr>
<tr>
<td></td>
<td>(0.0479)</td>
<td>(0.0468)</td>
</tr>
<tr>
<td>Land Area of Reservation (Square Miles)</td>
<td>0.0131***</td>
<td>0.0113***</td>
</tr>
<tr>
<td></td>
<td>(0.00140)</td>
<td>(0.000911)</td>
</tr>
<tr>
<td>New Mexico</td>
<td>1.473</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(6.976)</td>
<td></td>
</tr>
<tr>
<td>Oklahoma</td>
<td>-28.43***</td>
<td>-26.26***</td>
</tr>
<tr>
<td></td>
<td>(8.051)</td>
<td>(7.897)</td>
</tr>
<tr>
<td>Natural Log of Population</td>
<td></td>
<td>-3.212</td>
</tr>
<tr>
<td>Arizona</td>
<td>17.44*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(9.038)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-0.177</td>
<td>20.36</td>
</tr>
<tr>
<td></td>
<td>(10.51)</td>
<td>(17.38)</td>
</tr>
<tr>
<td>Observations</td>
<td>81</td>
<td>81</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.766</td>
<td>0.775</td>
</tr>
</tbody>
</table>

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

In Table 3 below are the results of Models 3 and 4. The creation of the new variable is clear here with the ‘Reported Rape Rate’. The presence of casinos becomes statistically significant after the removal of the two extreme Arizona outliers. Upon further inspection within my dataset, it is clear that there is an outlier
within the casino variable that could be affecting the significance. The Spokane tribal agency in Washington state has ten casinos on its tract of land, which is five more than second-largest Indian gaming enterprise operated by the Seminole tribe in Florida, with five casino locations. The fourth model below should be viewed as the most important to this study.

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>Reported Rape Rate (3)</th>
<th>Reported Rape Rate (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL-280 Code</td>
<td>.0574972 (.1454001)</td>
<td>.056138 (.1434164)</td>
</tr>
<tr>
<td>Number of Casinos</td>
<td>.0622527** (.0368724)</td>
<td>.1252298*** (.05116)</td>
</tr>
<tr>
<td>Miles to Urban Area</td>
<td>-.0091923 (.0365153)</td>
<td>.0031284 (.0366981)</td>
</tr>
<tr>
<td>Natural Log of Land Area of Reservation (Square Miles)</td>
<td>.0000231 (.0000254)</td>
<td>.0000161 (.0000254)</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.177 (10.51)</td>
<td>.0684592 (.2509428)</td>
</tr>
<tr>
<td>Observations</td>
<td>79</td>
<td>78</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.0713</td>
<td>0.1082</td>
</tr>
</tbody>
</table>

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

After dropping the Spokane outlier, the significance level of casinos increases to the 99% confidence interval. However, by looking at the Figure 1 below, a scatter plot, it is clear that the outlier with 10 casinos is pulling the line down, making it flatter. Running this fourth regression model, where the Spokane reservation was dropped, made the line of the graph from Figure 1 even steeper. This means that the
outlier is not driving down the results too drastically and the positive significance of the casinos to reported rapes per capita remains.

Unanswered Questions

Before concluding this research design, some questions within the dataset need to be addressed. There were multiple limitations within this research project that prevent me from fully associating possible theories surrounding reported rape rates and Indian gaming. As I have already said, the underreporting factor of rapes to tribal police agencies may have affected the final outcome of reported rapes within data. Secondly, within the ‘Results’ section of this research design, I have demonstrated that the incidence of casinos on a reservation is correlated to reported rapes; however, the FBI data does not provide further details about the nature of each of the offenses. Left with questioning if the perpetrator of each
reported rape is a visitor, an outsider, a Native, or a non-Native, it is impossible to make any deterministic claims about any category of possible offender. So secondly, this gap about who is committing the crime prevents me from conclusively saying it is non-Natives coming onto Indian Country, possibly getting drunk while at the casino, and sexually assaulting Native American women. The same can be said for the victim of each reported rape offense, for I am unable to establish irrefutably if the rape victims were Native American women given the information within the FBI dataset.

Additionally, it is clear that further research is needed to justify an argument based on drinking alcohol and gambling, and how these two actions together can lead to sexual violence being reported to tribal police authorities, as this was my main inclination after the conduction this research project. Since the data does not indicate if alcohol was a factor in the crime, I can only suggest a potential probabilistic relationship between the two. However, counter to this intuition, it is important to point out that the tribal agency (Las Vegas Paiutes) operating within the city limits of Las Vegas, Nevada, where gambling is legalized and casinos are everywhere, experienced no reported rapes.

Lastly, the small representation of Native American tribes included within the FBI dataset highlights the shortcomings of many tribal agencies in the field of law enforcement. It is difficult to make claims about Indian Country as a whole with the incomplete dataset missing many agencies that may experience different levels of sexual violence that are currently unknown, including a multitude of tribes in Alaska and California. I do not believe this is as much an error on the FBI's part as
much as the individual tribal police agencies that may not possess the reporting capabilities to this federal agency. Despite these exclusions, this paper provides a small piece of the puzzle regarding sexual violence on reservations and should be viewed as attempting to inaugurate a new, unexplored field of research. In summation, the gap purported by the Department of Justice statistical report about the victimization of Native American women is filled and it is clear that rates of sexual violence do vary significantly among the diverse communities of Native American reservations.

_Silver Lining_

Fortunately for Native Americans residing on reservations, a recent bill signed into law by President Barack Obama this past July demonstrated that, “the Obama Administration has taken action...with landmark financial support, increasing funding for programs that work with tribal courts and law enforcement by nearly $180 million in fiscal year 2011. This represents a 250 percent increase over the past two years for such programming” (Pember, 2010, 28). The Tribal Law and Order Act is a piece of legislation that can be seen as a governmental effort to combat the frequent sexual violence, among other violent crimes, that occur in Indian Country. The increased funds can help reconcile the resource disparity that tribal police agencies currently face and may well help contribute to a fuller inclusion of tribal agencies in subsequent FBI _Crimes in the US_ annual reports with increased reporting capabilities.

Although it is obvious that this groundbreaking bill will not wholly eradicate sex crimes on reservations, the more severe sentencing laws, increased police
presence, and more transparent jurisdiction within the Act can all possibly be considered deterrents to commit unlawful acts in Indian Country, including forcible rape. Even the same human rights advocacy group, Amnesty International, who penned the aforementioned “Maze of Injustice” claim, “in time it will decrease the high levels of rape and finally provide Native women with effective recourse if they are sexually assaulted. In short, this legislation challenges the long-standing mindset that Native women are not worthy of protection” (AI Applauds 2008). The ‘recourse’ this quotation is referring to is the local tribal police authorities that Public Law 280 had previously superseded. Additionally, I the ‘long-standing mindset’ regarding Native women as a product of colonialism and racism. The Law and Order Act is a step in the right direction of the federal government in keeping its compacts with tribes, which promise not just the safety of Native American women, but the wellbeing of an entire race of historically marginalized and diverse people. The idea that “when victims know that their perpetrators will be held accountable for their behavior, they will be more likely to report crimes,” means this Act could lead to more accurate reported rape numbers on reservations (AI Landmark 2010). Underreporting could possibly be reduced with this Act, creating a more accurate picture of violence crimes that occur on Indian Country which could then lead to more effective solutions to combat the problem of rape on reservations.

**Conclusion**

Despite the limitations and questions surrounding the data for this research design, which can be both unavoidable and intrinsic to any research question, this project should be viewed as evidence contributing to the literature that casinos can
cause more reported instances of sexual violence. Overall, this research design tests some of the possible geographical and institutional reasons for varying reported rape rates across a diverse set of tribal agencies in the US. In my sample, I find evidence that tribal gaming is useful in explaining differences in sexual violence across 79 reservations. The significance of casinos to reported rape rates could reaffirm the statistic that “75% of intimate partner victimizations involved a non-American Indian offender,” because these gaming enterprises are meant to attract non-Native tourists onto Indian Country (Brownridge, 2008, 364). However, the aforementioned limitations within the data prevent me from fully endorsing this relationship. While the prevalence of sexual violence in Indian Country cannot wholly be attributed to non-Natives coming onto tribal land, this correlation of non-Native gamblers to violence suggests more research is needed to look at the causes of casino-related rape incidences.

It is important to point out that no scholar has attempted to answer this research question making this an inventive and original opportunity for an undergraduate political science student. Consequently, my formulated research question, instead of altering an existing opinion on a subject, has created one. In this case, it is the newfound argument that the more casinos a tribe has on its land, the more reported rapes would likely occur. Additionally, this highly personal and harrowing topic is bold in attempting to call attention to an ethnic civil rights issue that will continue to remain highly relevant to the policies of tribal, state, and federal governments.

It has been argued that, “governmentally sanctioned gambling creates
revenues for political entities as well as for those employed by the industry and, despite potential social consequences, United States policy toward gambling is guided to a great extent by the anticipated economic benefits” (Mays, 2007, 375). This revenue-driven attitude can no longer persist on Indian Country because it comes at the expense of more reported rapes to tribal police agencies. Unfortunately, this for-profit approach may still persevere, but it is possible that the revenues from casinos will go towards enlarging and enhancing social services that might, in turn, help to reduce circumstances that lead to rape. Nonetheless, the prevailing opinion that casinos are a constructive, institutional means for tribes to develop economically opposes the findings of this research design and calls into question the repercussions of Indian gaming on a reservation, particularly how it may lead to increased sexual violence. From now on, every casino that is established on Indian Country needs to take into account the risk of sexual violence it may produce in its vicinity.
Works Cited


