The Impact of Governance, Education, Smoking, and Drugs on Sexual Violence in The Universities, In The USA

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Submitted: 09 Jan 2023; **Accepted**: 17 Jan 2023: **Published**: 21 Feb 2023

Abstract
College students are more at risk of sexual violence than any other offenses due to the significant impact of drug and alcohol use on high-risk sexual behaviors. Drug use and risky sexual behaviors have some contextual factors in common that may make young people prone to these behaviors. There are several factors related to drug use by students. These factors can be divided into two categories: personal factors and environmental factors. This research uses the Spatial Panel model. This model considers different geographic regions, such as states, as a spatial panel and considers the correlation between these regions in the regression analysis. Due to the increase in Sexual violence in the US (panel data were used as a collection of data by a large number of cross-sectional variables (N) in a period (T), from 2011-2019. The results of adjacency showed that the total effect of governance has the highest impact on sexual violence.

Keywords: Sexual violence, Governance, Education, Drugs, JEL: Z1, Z13, Z18, R38

Introduction

Substance abuse (alcohol and drugs), is a serious problem in the US. Although substance abuse can occur at any age, adolescents and young adults are encountered risky periods. Research shows that most adults who have the criteria for a substance use disorder start using drugs during adolescence and young people. Adolescent substance use is also related to high-risk sexual behaviors and is at high risk for HIV, sexually transmitted diseases (STDs), and pregnancy. Studies conducted on adolescents have shown a link between drug use and high-risk sexual behaviors such as having multiple sexes, multiple sexual partners, condomless sex, and pregnancy before the age of 15 [1].

Researchers have revealed that as the frequency of drug use increases, the likelihood of having sex and the number of sexual partners also is increased. In addition, studies show that risky sexual behaviors increase among teens who use alcohol and are highest among students who use marijuana [2]. Other drugs are cocaine, prescribed drugs (e.g., Sedatives, opiates, and stimulants), and other illegal drugs [Figure 1]. Adolescents who have not reported any drug use are less likely to be exposed to sexual risk [3].
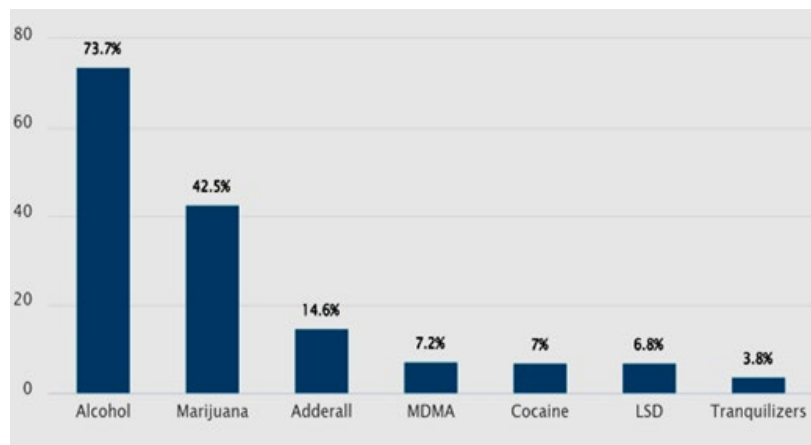
Figure 1: Prevalence of drug use in College

Source: Monitoring The Future (2018)

According to the 2017 Youth Risk Behavior Survey (YRBS), 40% of high school students ever had sex and 29% of high school students were currently sexually active. Among sexually active students, 19% drank alcohol or used drugs before their last sexual intercours [4].

Risk Factors and Prevention Activities

Drug use and risky sexual behaviors have some contextual factors in common that may make young people prone to these behaviors. As substance use is associated with other risk behaviors, it is im-portant to identify precursors early to help identify youth who are highly at risk [5].

As shown in [Figure 2], there are several factors related to drug use by students. These factors can be divided into two categories: personal factors and environmental factors. Personal factors such as curiosity, entertainment, and peers, as peers had the highest impact on substance use among college students. Environmental factors such as being far from family, the media, and the school environment have the greatest effect on drug use by students.
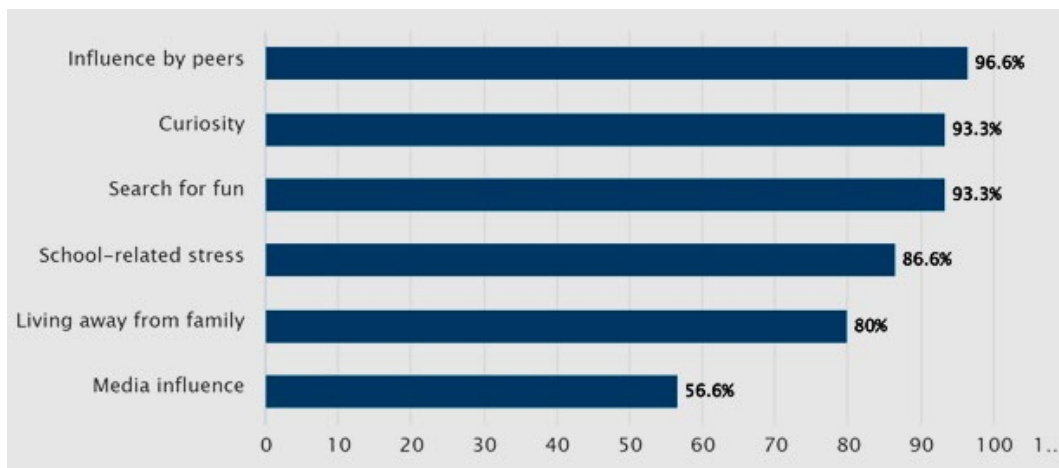

Figure 2: Top reasons for drug abuse among college students Source: Scielo.br

It was shown that college students are more at risk of sexual violence than any other offenses due to the significant impact of drug and alcohol use on high-risk sexual behaviors [6]. Studies demonstrate that 80% of female students who were attacked do not report sexual violence to the police; however, this number will change. As shown in [Figure 3], more than 40 % of college sexual assaults are against first-year students, which also requires harassment laws that require mandatory reporting and increased supervision (Mc-Naughton et al, 2020).

One in five women was sexually assaulted during their lifetime, many of whom were of university age. According to the Centers for Disease Control and Prevention (CDC), 18% of women have experienced sexual assault or attempted sexual harassment during their lifetime. A much higher ratio, 45 percent, had experienced other forms of sexual assault, such as unwanted physical contact or harassment, or had been under pressure without the violent threat (Centers for disease control and Prevention, 2014).
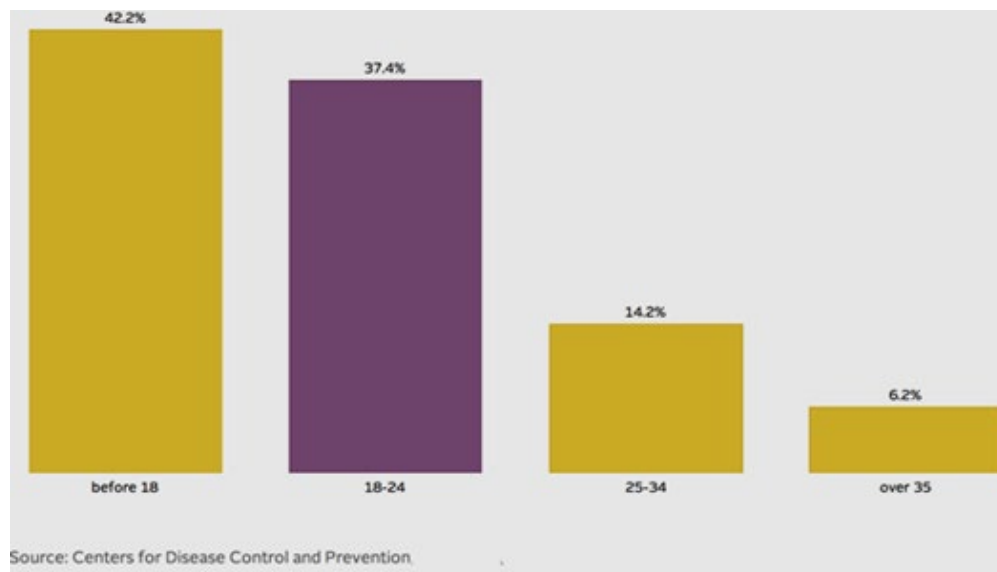
Figure 3: The average age when victims were sexually assaulted on campus

As the school or university environment has the greatest environmental effect on students' behavior, student education is a key factor in controlling this issue. The training process to recognize and deal with sexual harassment and assault should raise awareness so that employees and students understand what is considered sexual harassment. This training includes the definition of sexual harassment or sexual assault, as well as unwanted behavior of sexual nature. For example, the Title IX standard is unwanted sexual behavior or unwanted behavior based on gender that is so severe, pervasive, and objectively offensive that effectively eliminates equal access to education [7].

For the efficacy of primary prevention activities, targeting substance use and sexual risk behaviors are the most major step in learning-based programs that promote a person's social and emotional competence. There are complex steps to have a high-quality education, and the government plays a significant role in its implementation [3].

There are three levels of government playing a role in public education. In most cases, each level of government has its tasks, which helps keep the process a little simpler.

The largest level of government involvement in education at the top is the federal government, which has the least involvement in specific educational decisions. The federal government gives money to districts and schools, and they can attach some fields to that funding. However, the federal government mostly does not play an active role in public education.

The state government is below the federal government, which determines policies for all districts and schools in a state [8]. At the state level, decisions are taken about what should be carried out in districts and schools, but generally more detailed decisions are made by local governments, which use policies determined by state

governments [9, 10]. For example, if a state government states that all students should receive sex education, the local government ensures that the curriculum matches the requirements. Similarly, the state may say that all students should take sex education courses, while the local government ensures that every student in their relevant classrooms meets these requirements (Barnes, 2021).

In recent studies, they have extracted a common set of several active principles that recommend that the federal government should do the followings:

Ensure that no student is deprived of the right to equal educational opportunity based on race, ethnicity, gender, disability, or another protected status (ACLU, 2022).

Provide compensatory funding to facilitate access to educational opportunities for needy students, including poor students and those with disabilities (State and Federal Programs, 2020).

The federal government has a crucial role in supporting education, research, and development, collecting and disseminating information about the scope and quality of the country's education system, informing policies and practices at the state and local levels in such a way that it is compatible with both unique advantages and limited capacity, and supports the development and conditions for promoting continuous improvement of state and local education systems. Given the important role of education in raising awareness in preventing people from being exposed to the risk of sexual violence, the present study examines the role of government to encourage and support states and regions to educate and control substance use and high-risk sexual behaviors for students, and the impact of the role of governance, education, drug use on sexual violence is also investigated.

Literature Review

The prevalence of crime and violence in universities has been a concern for policymakers at the federal and state levels, parents, educators, and students themselves; because students cannot focus on academic progress, and teachers cannot focus on teaching and learning in university environments where violence occurs. Thus, numerous papers on violence and sexual assaults, and drug use have been conducted considering different economic, political, and social dimensions. From economic aspects, showed that as federal, state, and local governments continue to allocate a significant share of their resources to law enforcement and correctional costs, concerns about declining education spending and welfare have risen. With fiscal pressure increasing in the United States, it is important to determine the efficacy of public spending in preventing crime and various types of violence [8]. The paper compares the effectiveness of government spending on welfare and education with law enforcement and crime correction. Using panel data from 50 US states over twenty years, the results of linear regression with panel-corrected standard errors as well as GMM estimation indicated that spending on public welfare and education could potentially decrease violent and property crime rates, but law enforcement spending can only prevent property crimes.

Also, based on the role of high statistics of sexual intercourses in universities from the social aspects, presented evidence in their paper that indicated that exposure to physical or emotional violence has a negative association with social-emotional skills and self-efficacy [11]. Subsequently, they indicated that students who experienced any type of violence were more likely to be out of school, have decreased learning, and were less likely to feel safe traveling to school. Exposure to sexual violence has an obvious negative association with students' mental health, an increased likelihood of early marriage, and a lower likelihood of being in school.

Also, Dijket al (2020) showed that while most curricula about violence and peace are developed in specific legal contexts, this paper reviews existing approaches to peace education from the perspective of communities influenced by important levels of violence. An in-depth analysis of the educational goals and practices of teachers in Brazilian slums showed how they form different levels of resistance to violence despite contextual limitations. Teachers combined a restrictive approach with an ethic of care to create peaceful alternatives while taking advantage of their social position. The analyses emphasize the transformational potential of educational environments while indicating the complex dynamics of violence that limit opportunities for change. Thus, the paper considers how a critical understanding of the context of a community can inform peace education programs that aim for transformation [12].

As drug abuse has a significant impact on the increase of risky sexual behaviors, Sachidanandan et al (2022), in a study, investigated the effect of education on drug abuse [13]. They showed that with more careful planning and consideration of proper theory, programs that more directly address the diverse requirements of the learner and the broader professional development system for substance abuse treatment should be developed and delivered. OAT CPD (Continuing professional development (CPD) for opioid agonist therapy (OAT) does not act as a drug policy separately. Programs must be used in combination and interaction with other policy initiatives to have micro, meso, and macro impacts on educational results and population health.

In this field, Thom (2017) examined school-based alcohol training programs. The results of his study showed that in the development of alcohol education programs, there is a need to use the evidence and experiences obtained from previous efforts. Program development and implementation can apply the results of evaluating programs to design alcohol education programs by the specific contexts, resource availability, the perceived needs of the target group, and the problem to be considered.

From the political aspects, considering the crucial role of the government in education, Silver et al, (2022) investigated the assessment of the effects of government policies on education-related patterns of alcohol consumption [14]. This study examined the effects of a comprehensive measure of the state alcohol regulatory environment (the State Alcohol Policy Score or SAPS) on heavy drinking—a risk factor for premature death—on different population groups, described by education level, then by race. It was found that decreasing the gap in alcohol policies between states may reduce heavy drinking among individuals with lower educational achievements.

Rasberry et al (2022) also investigated the increase in student knowledge and protective behaviors following increased support for sexual health education in a school district [15]. They showed that school-based sexual health education (SHE) can teach students important knowledge and skills. For effective SHE, school districts can provide strong curriculum support and professional development. This study assessed changes in students' sexual health knowledge and sexual behaviors following the implementation of enhanced support for SHE delivery in one school district.

Although several studies have examined the impact of education on drug use or risky sexual intercourses, no study has investigated the simultaneous effect of governance and the role of the government on the education and control of drug use and risky sexual intercourses. Considering the significant role of the government in education and control of various affairs, the present study attempted to take an effective step to reduce drug use and risky sexual intercourses among students with the help of the government and the education system, so that we can raise the necessary awareness in the society.

This study focuses on new fields of research on sexual violence in the university. It attempted to investigate the influencing factors on students' behavior toward sexual violence. According to the obtained results, the variable of governance and education had a neg-

ative impact and the variables of alcohol and drug use, smoking, threats with guns, and multiple sexual intercourses had a positive effect on the increase of sexual violence.

Methodology

This research uses the Spatial Panel model following Elhorst, (2017); Lee, (2010), and Belotti et al, (2013). This model considers different geographic regions, such as states, as a spatial panel and considers the correlation between these regions in the regression analysis. This area included all US states. The main advantage of working with the spatial panel model is that spatial and time-specific effects can be controlled (Elhorst, 2017) [16, 17, 18].

According to the studies reviewed in the literature review, the most important variables are Drank Alcohol Or Used Drugs Before Last Sexual Intercourse(among students who were currently sexually active), and Students who Had Sexual Intercourse.; Sexual Violence(being forced to do sexual things (counting such things as kissing, touching, or being physically forced to have sexual intercourse) they did not want to do by someone they were dating or going out with one or more times.; Were Threatened Or Injured With A Weapon (such as a gun, knife, or club.; Ever Tried Cigarette Smoking(even one or two puffs).;Education services.; the voice and accountability index (Educational budget from the government for Protection and Advocacy of Individual Rights) is considered the most important indicator of good governance.

The Panel Spatial Model

Spatial Econometrics deals with establishing relationships between economic units in space by econometric techniques, where space is physical or economic in nature (Lee et al., 2009) [19]. The most attention in economics for a cross-sectional model is the Spatial Autoregression (SAR) model by Ord and Cliff (1973) [20]. Spatial Econometrics is concerned with spatial panels, where panel data (Enslin, 1988; Elmhurst, 2003) contain time series observations of several spatial units (postal codes, municipalities, regions, jurisdictions, states, countries, etc.).

Panel data allow researchers to provide more comprehensive modeling than single-equation cross-sectional models, which the spatial econometric literature has long focused on. Unlike cross-sectional data, panel data have more complex behavioral hypotheses that cannot be performed with cross-sectional data (Hsiao, 2005). Elhorst (2010) provides a list of estimation problems for four-panel data models that are commonly used in applied research, involving the autocorrelation of spatial error or a spatially lagged dependent variable: fixed effects, random coefficients models, fixed coefficients, random effects [21, 22].

Baltaggi et al. (2003) consider testing for spatial dependence in a panel model where spatial dependence is allowed in the disturbances []. In addition, Baltaggi et al. (2007b) consider serial and spatial dependence tests in an extended model, where serial correlations over time are also allowed in the disturbances. Kapoor et al. (2007) provide a theoretical analysis for a panel data model with SAR disturbances and error components [23]. To allow for different spatial effects in the random component and disturbance conditions, Baltaggi et al. (2007) extended the panel regression model in [23]. When we use different geographic regions such as countries, the disturbance terms are spatially autocorrelated. We have two stages in the spatial model:

First, the spatial autocorrelation disturbance components show that the errors are not independent, so the estimation of the regression parameters through normal regression analysis is biased and statistical deductions are not reliable due to biased and inconsistent standard errors. Therefore, the appropriate method is spatial Econometrics because common econometric methods are not applicable. In the recent decades that spatial autocorrelation has been known, various tools have been proposed to measure it. The most common statistical tool is I-Moran (Moran, 1950) [20]:

$$I = \left(\frac{n}{\sum_{i=1}^{n} \sum_{j=1}^{n} W_{ij}} \right)\left(\frac{\sum_{i=1}^{n} \sum_{j=1}^{n} W_{ij} (X_i - \bar{X})(X_j - \bar{X})}{\sum_{i=1}^{n}(X_i - \bar{X})^2} \right) (1)$$

Where X is a dependent variable, I and j are indicators of spatial locations, and n is the number of observations or areas. Wij is a binary weight matrix of general cross-product statistics, so Wij = 1 if the locations i and j (two different cells or points) are adjacent and zero for all cells, points, or areas that are not adjacent and are zero according to the Wii=0 When a cell or area is not adjacent. The structure of neighborhood locations are shown in this matrix shows. Cij is given by (xi-mean (x)) (xj-mean (x)) or by multiplying the distance by the value of xi at the location i and Xj at location j by the global average of the values of z. The counter (xi-mean (x)) (xj-mean (x)) means that "Take the value of the cell in question, i, the mean of all the values of z (mean (x)) less than this i (cell a) and then multiply it by the mean value subtracted from cell j "(Sawada, 2009). Spatial classification is indicated by a positive sign on the I-Moran statistic. The maximum and minimum values for this statistic are not necessarily in the range (1, 1) [25, 26].

Second, spatial effects should be included in the model when there is significant spatial autocorrelation and should be estimated using the maximum likelihood method or moment generalization [27, 28, 29]. There are two types of spatial dependence on data in spatial econometric literature: 1) Spatial error dependence: Error components are correlated with different spatial units. 2) Spatial lags dependence: The dependent variables of the locations I and j affect the dependent variable Y in location i.

In this research, considering the spatial dimension of panel data, the spatial panel pattern has been used. The spatial panel pattern is as follows [18]:

$$y_{it} = \alpha + \tau y_{it-1} + \rho \sum_{j=1}^{n} w_{ij}\, y_{jt} + \sum_{k=1}^{k} x_{itk}\, \beta_k + \sum_{k=1}^{k} \sum_{j=1}^{n} w_{ij}\, x_{jtk}\, \theta_k + \mu_i + \gamma_t + \vartheta_{it} \quad (2)$$

$$\vartheta_{it} = \lambda \sum_{j=1}^{n} m_{ij} \vartheta_{it} + \varepsilon_{it} \quad i = 1, \dots, n \ \ t = 1, \dots, T$$

[If $\tau \neq 0$, then the model is dynamic, and if $\tau = 0$, then the model is static.

Spatial Durbin model (SDM) in $\lambda = 0$.

Spatial autocorrelation (SAR) when $\lambda = 0$ and $\theta = 0$.

Spatial error model (SEM) when $\rho = 0$ and $\theta = 0$.

Generalized spatial panel with random effect (GSPRE) when $\rho = 0$ and $\theta = 0$ and $\mu = \emptyset j = 1 n w i j \mu i + \eta i$.] [37].

Empirical Model
In this study, the dependent variable is Experienced Sexual Violence(being forced to do sexual things (counting such things as kissing, touching, or being physically forced to have sexual intercourse) they did not want to do by someone they were dating or going out with, one or more times and independent variables are Drank Alcohol Or Used Drugs Before Last Sexual Intercourse(among students who were currently sexually active), Students who Had Sexual Intercourse.; Threatening or injuring with a weapon (such as a gun, knife, or club.; Ever Tried Cigarette Smoking (even one or two puffs).; Education services.; Government budget for Education in Protection and Advocacy of Individual Rights in the unites states in 2011-2019. The states have a spatial dimension. Based on the Wald test and the Lm test, all independent variables were selected with a significance level of 5%. Therefore, removing any of the variables reduces the fitting power of the model, and all the independent variables included in the model cause significant explanatory power. Based on the Brusch-Pagan test, the hypothesis of random effects is rejected, so the empirical model is as follows:

SDM ($\lambda=0$) is derived from an SEM model by the matrix notation:
(3-9)

SV = x β+ u

x β = β_1D + β_2GOV+ β_3E+ β_4SI+ β_5W+ β_6CS

u= λWu +Ɛ

u(1- λw) = Ɛ   u=Ɛ/((1- λw))

SV (1- λw) = x β(1- λw) + Ɛ

SV = λwy + x β - λw x β + Ɛ

If: Ɵ= - β λ → the model is a SDM

SV = λwy + (D + GOV+ E+ W+ SE+ CS) β - Ɵw (D + GOV+ E+ W+ SE+ CS) + Ɛ

Spatial panel data models need the n * n matrix of spatial weights.

The camera spatial model (SDM) has a special place among spatial models in the dynamic spatial econometric method. The feature of this model is the inclusion of the spatial lag of the explanatory variables as a new explanatory variable and the simultaneous inclusion of the spatial lag of the dependent variable in the model, which makes this model superior compared to other spatial models (SEM, SAR). In spatial models, we need to quantify the spatial aspects before the variance of spatial heterogeneity and spatial dependence.

There are two sources of information for spatial quantization. First, adjacency matrices should be used to reflect the relative position in the viewing area. Second, use the adjacency matrix based on the distance. Because in econometric models, the hypothesis is that each spatial segment is not its neighbor. In the first method, the numbers on the main diameter are zero. Other matrix numbers are equal to zero or one depending on the neighboring or non-neighboring states.

Next, the adjacency matrix must be standard. By standardizing the weighting matrix and then multiplying it by the dependent variable vector, a new variable is obtained that represents the average of the observations of adjacent areas. This variable is called the spatial lag variable. To show the effect of the explanatory variables of other states on the dependent variable in the Spatial Durbin Model (SDM), in addition to the spatial lag, the product of the standard weight matrix in the vector of the explanatory variables creates a new variable that shows this effect [30].

Different things affect each other, "according to the first law of geography" [31]. Spatial dependence was considered an important factor in the spatial panel model. A weight matrix in the model is the relationship between states.

The concept of spatial lag means a set of spatial neighbors in many studies where the data have a spatial dimension. The lag factor In this case, covers the weighted average of neighboring observations. patial methods take into dependence between the disturbed conditions and the spatial heterogeneity variance observations. When we use geographically diverse regions such as states, the error terms are spatially autocorrelated. In this model, adjacent units show a degree of spatial dependence in the analysis.

Considering the use of the spatial panel model, we have to confirm the model and the spatiality of the model using the relevant tests. First, stationary tests are performed with Fisher's generalized unit root test [32]. In the Fisher test for panel data, the null hypothesis of a unit root is rejected at the 5% significance level [Table 1]. The cross-sectional correlation test is performed with a freeze test [Table 1]. The null hypothesis of no correlation is rejected at the 5% level of significance.

Table 1: Fisher unit root and Freeze test

Method	Value	P value
Chi-square of Fisher Dickey Fuller	185.24	0.003
Freeze Cross-Section Correlation	72.2	0.002

Source: Research Findings

We also use the Hausman test to examine fixed versus random effects:

$$h = (beta_f - beta_r)(var_f - var_r)^{-1}(beta_f - beta_r) \ (10)$$

The constant effect coefficient is shown with the betar and random effects are shown with the betaf. Also, the variance-covariance matrix of fixed effects is shown with Varr and the random effect is shown with Varf. We use the fixed effects model because the null hypothesis of no fixed effects is rejected.

Empirical Results

The first step is the test of autocorrelation in the spatial model. The Moran statistic is 5.03, which is significant at the 0.002 probability level. The LM lag (Robust) and LM error (Robust) statistics also reject the null hypothesis of no autocorrelation.

Table 2: Moran And Lagrange Coefficient Tests Results

Test	Moran I-statistic	Lm error	Lm Lag	Lmerror_robust	Lmlag_robust
Statistic	5.03	412.20	538.07	632.10	1068.53
Probability	0.002	0.001	0.00	0.00	0.00

Source: Research Findings

In this research, we evaluate the impact of governance, education, smoking, and drugs on Sexual Violence by employing the Spatial Panel model. The results are shown in [Table 3]. Also, we report the sign of the coefficients and their elasticity in [Table 4].

Drinking alcohol or using drugs and smoking has a positive relationship with sexual violence. It shows that sexual violence will increase with increased drinking of alcohol or using drugs. Drinking a lot of alcohol and consuming harmful substances has destructive effects on a person's mind and causes loss of intellect and leads to brutal sexual behavior [33].

The good governance indicator has a negative and significant impact on sexual violence. Improving each of the governance indicators, such as the accountability index that relates to the government budget for education in the protection and advocacy of individual rights in the unites states, improves the sexual violence of each state (Stead 2015). The combination of political, economic, and institutional features of good governance, especially accountability and responsibility, increase the budget for education and improves

the quality of education. It leads to increasing awareness and reducing dangerous and violent sexual behaviors. Good governance, as embodied, for example, in the design and implementation of effective regulatory policies, significantly improves the quality of education (Sheker et al, 2020).

The increase in the number of partners in sexual relations also increases the risk of sexual relations, which can also increase the risk and brutal relations by some inappropriate people [34].

Also, having a gun and threatening a person with it causes high-risk behaviors such as rape and brutal sexual behavior [35].

Being different from zero in the RHO [Table 3] indicates accurate spatial performance. The highest coefficients in the weight matrix relate to drinking alcohol or using drugs. As mentioned earlier, the interpretation of the coefficients in [Table 4] should be converted using spatial results. In [Table 4], different effects of spatial analysis are obtained by considering the influence of the adjacency matrix.

Table 3: Spatial Panel Estimation Result

Variables	Coefficients	Z statistics	Standard deviation
Drank Alcohol Or Used Drugs	2.63***	2.43	1.08
Students who Had Sexual Intercourse	0.57**	14.25	0.04
Threatening or injuring with a weapon	0.65*	2.32	0.28
Cigarette Smoking	0.80***	3.32	0.23
Education services Governance	-0.009**	-2.25	0.004
Spatial rho	-0.79***	-26.33	0.03
	0.57**	3.53	0.15

Source: Research Findings

"In the spatial panel model, direct and indirect proximity to a place is considered. The effect of an explanatory variable in a spatial environment affects not only that unit, but also its neighbors [36]. Direct adjacency means a percentage change in an independent variable at location I on sexual violence in location my. The indirect proximity effect means the effect of a one percent change in an independent variable in place i on the sexual violence in location j. An indirect adjacency effect shows the difference between direct and total adjacency that is due to spatial lags" [37]. The results of adjacency are presented in [Table 4]. The total effect of governance has the highest effect on sexual violence [38].

The total effect for the governance indicator is -1.89, so a 1% increase in governance (through increasing the education budget to improve the awareness level of students) will reduce sexual violence by 1.89%. This is an important effect. Of this reduction, 1.23% is related to direct sexual violence under the influence of the governance indicator for the state, and -0.66 percent of Sexual Violence is indirectly under the influence of the lack of proper governance and not allocating the necessary educational budget in other states of the region. This means that weak governance in other states is accompanied by an increase in sexual violence, and affects the state in the USA [39]. For this reason, the performance of a state affects other states indirectly [40].

The total elasticity for the drank alcohol or used drugs is equal to 1.43, so if the drank alcohol or used drugs increases by 1%, sexual violence will increase by 1.43%. Of this increase, 0.62% is related to direct sexual violence under the influence of drinking alcohol or using drugs in each state and 0.81% percent of sexual violence is indirectly under the influence of drinking alcohol or using drugs in other states of the region (RAINN, 2022). This means that drinking alcohol and using drugs in one state also affects its distribution in neighboring states and the behavior of people in one state affects the behavior of neighboring states.

The total elasticity for threat or injury with a weapon is 1.15, so if a threat or injury with a weapon increases by 1 percent, sexual violence increases by 1.15 percent. Of this increase, 0.58 percent was due to direct sexual violence due to a threat or injury with a weapon in one state, and 0.57 percent was indirect sexual violence due to the effects of a threat or injury with a weapon in other states in the region. It means the impact of the negative behavior of people in a state on the neighboring state [41].

The total effect of education services is -1.32, so a 1% increase in educational services will reduce sexual violence by 1.32%. This is a significant impact. Of this reduction, 0.83% is related to direct sexual violence under the influence of education services in the state, and -0.49 percent of sexual violence is indirectly under the influence of the lack of proper education in other states of the region. This means that low education services in other states are accompanied by an increase in sexual violence, and affects the state in the USA [42]. For this reason, the performance of a state affects other states indirectly. Increasing educational services increases people's awareness and avoids exposure to sexual violence [43].

The total elasticity for those who had sexual intercourse with different partners is equal to 1.42, so if sexual Intercourse increases by 1%, sexual violence will increase by 1.42%. Of this increase, 0.77% is related to direct sexual violence due to sexual Intercourse in the state and 0.65% percent of sexual violence is indirectly due to sexual Intercourse in other states of the region. This means that sexual Intercourse in one state affects other states as well. The more a person wants to have sex with different partners, the more likely a person will be exposed to sexual violence. This wrong culture affects the neighboring peoples [44].

Table 4. Spatial Panel Results Including the Impact of the Adjacency Matrix

Variable	Coefficients	Z statistic	Standard deviation
Direct			
Drank Alcohol Or Used Drugs	0.62	20.66	0.03
Governance	-1.23	24. 6	0.05
Threatening or injuring with a weapon	0.58	14.52	0.04
Cigarette Smoking	0.22	5.51	0.04
Education services	-0.83	-13.83	0.06
Students who Had Sexual Intercourse	0.77	-25.66	0.03
Indirect			
Drank Alcohol Or Used Drugs	0.81	20.26	0.04
Governance	-0.66	16.51	0.04
Threatening or injuring with a weapon	0.57	19.01	0.03
Cigarette Smoking	0.76	15.02	0.05
Education services	-0.49	-12.25	0.04
Students who Had Sexual Intercourse	0.65	-32.05	0.02

Total			
Drank Alcohol Or Used Drugs	1.43	47.66	0.03
Governance	-1.89	37.79	0.05
Threatening or injuring with a weapon	1.15	38.33	0.03
Cigarette Smoking	0.98	19.59	0.05
Education services	-1.32	-32.98	0.04
Students who Had Sexual Intercourse	1.42	-47.33	0.03

Source: Research Findings

Conclusions

This study focuses on new fields of research on sexual violence in the university. It attempted to investigate the influencing factors on students' behavior toward sexual violence. According to the obtained results, the variable of governance and education had a negative impact and the variables of alcohol and drug use, smoking, threats with guns, and multiple sexual intercourses had a positive effect on the increase of sexual violence.

Therefore, considering the negative relationship between education and governance on sexual violence, increasing the cost of education can potentially lead to a decline in the rate of sexual violence as well as an increase in social and human capital. Also, by considering the high coefficient of governance (increasing the educational budget), the effect of educational spending in the experimental model is strong and increases the impact of educational achievements on sexual violence and brutal behavior. Therefore, the increase in education costs by the government in universities helps to increase the number of individuals with at least a bachelor's degree and reduces the level of violence by increasing educational attainment. Thus, among the suggestions of this research is the complex and delicate education about GBV (Gender-based violence), which is a courageous action that requires an increase in emotional and intellectual tasks. Teachers should focus on training to resolve the complexities of feminist Praxis and negotiate with their students using dominant knowledge sources. Their narrations offer lessons for other teachers who intend to engage in similar transformative teaching and point to the value of drawing on teachers' identities and equipping students as elements of change through a reflective process that prioritizes protecting vulnerable students over engagement with teachers. This study seeks to emphasize the importance of the extensive prevalence of sexual violence among students and its causes and relationship with other influencing factors. Hence, one of the most important outcomes of sexual violence in universities as mentioned in this research is the need to engage in strategies and curriculum development that is action-oriented and rooted in both the systematic context of sexual violence and intersectional lived experiences. In future research, classrooms, students, and faculty can collect the perspectives of experienced and new educators who are involved with sexual violence education from various levels.

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