



Predicting Depression through Dating Violence and Drug Use among Adolescents

Max S. Brumer & Greg M. Kim-Ju

California State University, Sacramento



INTRODUCTION

- According to the Centers for Disease Control and Prevention (CDC), over 10% of people in the U.S. the age of 12 and greater use some sort of illegal drug. Nearly 8% of adolescents ages 14-15 years and nearly 18% of adolescents ages 16-17 years consume alcohol. Additionally, 11% of 16-17 year olds use tobacco products (CDC, 2017).
- Percentages of drug and alcohol consumption also vary by ethnic group. For example, 15.7% of American Indians/Alaskan Natives, 12.5% of African Americans, 10.8% of White Americans, 9.2% of Hispanic Americans, and 4% Asian Americans over the age of 12 years use illegal drugs. Additionally, 7% of White Americans, 5.7% of American Indians/Alaskan Natives, 4.5% of Hispanic Americans, 4.1% of African Americans, and 1.9% of Asian Americans over the age of 12 years are considered heavy alcohol users (CDC, 2017).
- Previous literature indicates that drug use is related to violence exposure. For example, witnessing a traumatic violent event has been identified as a significant predictor of non-medical use of prescription drugs in adolescents (McCauley et al., 2010). Specific forms of violence (e.g., teen dating violence, acts of physical, verbal, or sexual violence perpetrated from one domestic partner to another) have been associated with depression and poor academic achievement (Baynard & Cross, 2008). Furthermore, research has demonstrated that frequent tobacco use is related to depressive symptoms among adolescents (Cohn, 2018).
- Given the relationship between violence and mental health outcomes, we took this opportunity to examine violence, drug use, and mental health with the Youth Risk Behavior Surveillance System data set.

Present Study

- The present study investigated the relationship among depression, drug use, and dating violence.
- Path analysis models were computed to address the following question: Would dating violence predict depression, and if so, would drug use mediate this relationship?
- Furthermore, it was expected that data would fit the model differently when considering samples by gender and ethnicity.

METHOD

- Participants**
 - Data was drawn from the Youth Risk Behavior Surveillance System (YRBSS) public-use data set ($N = 7551$).
 - Participants consisted of a majority of White Americans (56.6%), followed by African Americans (23.8%), Hispanic Americans (13%), and Asian Americans (6.6%).
 - Participants ranged in age from 12 to 18 years ($M = 15.93$, $SD = 1.23$) and consisted of 52.1% women and 47.7% men.
- Procedures**
 - Data were extracted from the YRBSS public-use data set which were collected as part of the 2017 round of data collection sponsored by the CDC.
- Measures**
 - Items tapping into dating violence, drug use, and depression were used in the primary analyses for this study (see Table 1).

Results

Table 1.
Information for subscales used.

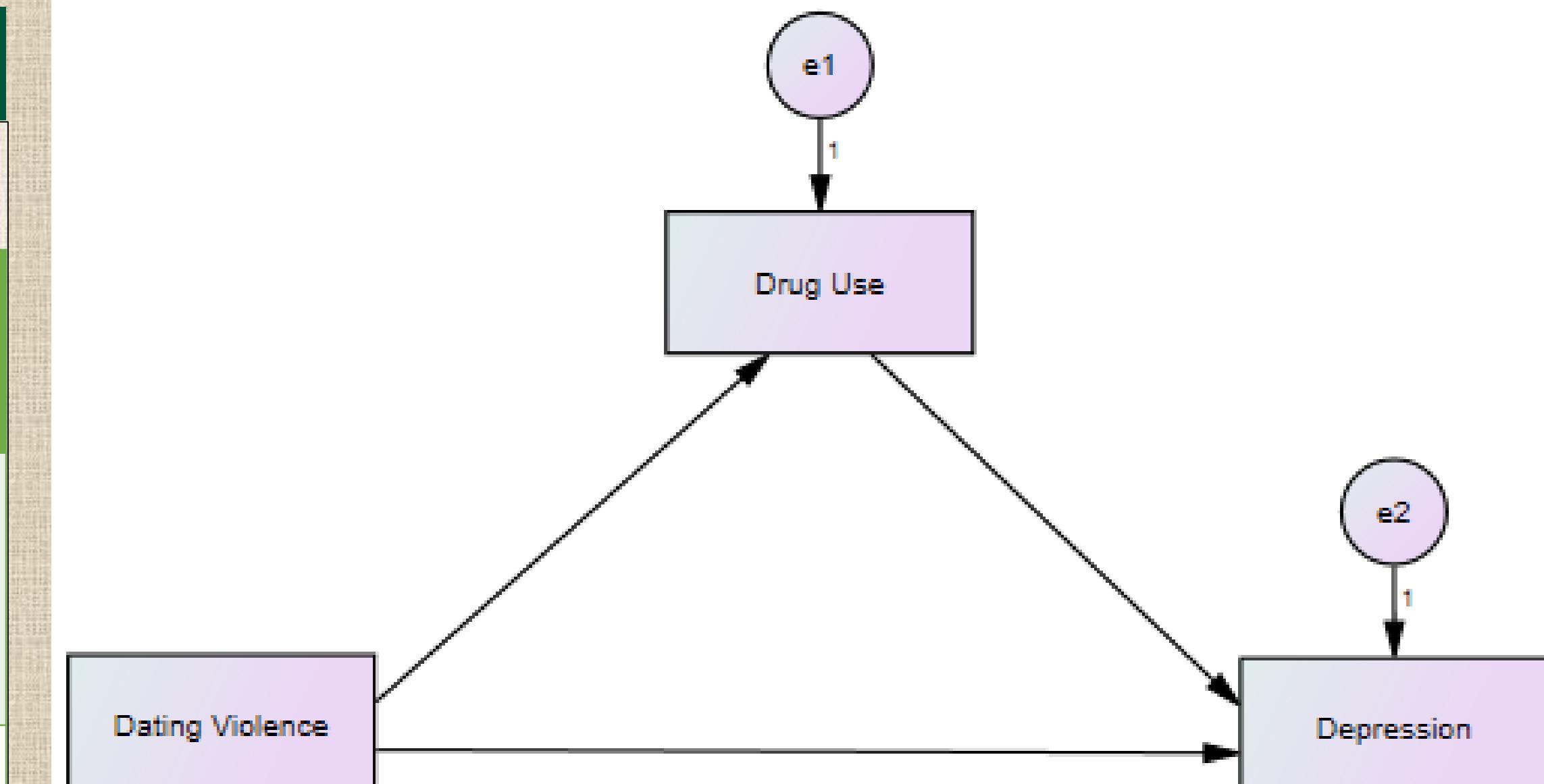
Subscale	Label (# of items)	Item Example	Alpha	Higher Scores Indicate
Dating Violence	DV (3)	"During the past 12 months, how many times did someone you were dating or going out with physically hurt you on purpose?"	.75	Higher incidence of dating violence
Drug Use	DU (4)	"During the past 30 days, how many times did you use marijuana?"	.76	Higher rates of drug use
Depression	D (3)	"During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?"	.73	More depressive symptoms

- Path analysis by total sample, ethnicity, and gender are represented in table 2.
- Given that each path analysis contained three variables and three paths, each model was considered to be saturated. Therefore, goodness-of-fit could not be determined. Only differences in regression weights were analyzed.
- Partial mediation was found for 7 out of the 12 models with a percentage of mediation ranging from 9.8% to 28.6%.
- The path between dating violence and depressive symptoms is partially mediated by drug use (12.73%) with the full sample. However, differences were found when looking at specific groups within the data set.
 - With ethnicity, drug use acted as a mediator more for Hispanic Americans (28.60%) compared to White Americans (9.80%).
 - With gender, drug use significantly mediated the path between dating violence and depressive symptoms for women but not for men.
- The direct path in the unmediated model yielded non-significant results for African Americans; however, the indirect path from dating violence to depressive symptoms through drug use was significant as shown by the Freedman-Schatzkin and Aroian tests.
- The model examining male participants yielded non-significant findings for both the mediated and the un-mediated paths

Table 2.
Standardized Regression Weight and Mediation Results for Each Path Analysis.

Model Sample (n)	Full Model IV → DV	Full Model IV → M	Full Model M → DV	Un-mediated IV → DV	Freedman-Schatzkin IV → DV (df)	Aroian Mediated IV → DV (df)	% Mediated
Full Sample (7551)	.10*	.20*	.07*	.11*	5.47 (7549)*	5.01*	12.73
White American (4272)	.13*	.21*	.07*	.15*	4.01 (4270)*	3.65*	9.80
African American (1798)	.01	.14*	.07*	.025	2.08 (1796)*	2.61*	—
Hispanic American (980)	.08*	.22*	.13*	.10*	3.59 (978)*	2.78*	28.60
Asian American (501)	.12*	.10	.00	.12*	0 (499)	.04	—
Women (3936)	.14*	.21*	.13*	.17*	7.69 (3934)*	5.95*	16.05
Men (3599)	-.02	.20*	.03	-.01	1.55 (3597)	1.73	—

Note. IV = Dating violence. DV = Depressive symptoms. M = Drug use. * $p < .05$.



Discussion

- The current study examined the relationship between dating violence and depressive symptoms through drug use across multiple ethnic and gender groups.
- In addressing our research question, we found that dating violence did significantly predict depressive symptoms with drug use mediating this relationship. Furthermore, when examining multiple subgroups of our sample, it became clear that this relationship was applicable for some but not all groups.
- Prior research supports these findings in which the paths were significant (Baynard & Cross, 2008; McCauley et al., 2010).
- Multicultural and gender differences are also supported by similar results reported by Cha, Ihongbe, and Masho (2016). These authors reported a similar relationship between dating violence and disordered eating specifically between Hispanic and White Americans as well as women across ethnic groups. These prior findings along with the current research study suggest that these groups may be more susceptible to negative mental health outcomes as a result of dating violence.
- Furthermore, the differences across subgroups demonstrate the need to empirically analyze culturally diverse samples to understand the different experiences of ethnic and gender groups in the U.S.
- Schools and local youth groups/teen centers can aim to create a safe environment for adolescents experiencing dating violence.

Limitations and Future Directions

- The variables being examined in the present study are relatively uncommon within the general public which raises some concerns about the applicability of the data and subsequent results. This distortion can be corrected to an extent using a weighted least squares procedure; however, future research may aim to examine populations that specifically experience dating violence.
- Furthermore, results of the current study give a general overview of the experiences of different ethnic and gender groups; however, future research may aim to examine smaller regions of the U.S. and incorporate qualitative methods to further understand the perspectives of individuals experiencing dating violence.
- Lastly, the current study utilizes a binary gender system; however, future research may aim to incorporate additional gender groups.

Contact Information

Presented at the 2019 Western Psychological Association Conference at Pasadena, CA.

For additional information, please contact Max Brumer at maxbrumer@csus.edu