

COLLEGE OF CRIMINAL JUSTICE SAM HOUSTON STATE UNIVERSITY

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Violent Victimization from Late Adolescence to Adulthood: Evidence from a Population-Based
Sample of U.S. Youth
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It is estimated that in 2021 approximately 2.7 million persons aged 12 and older in the United States experienced at least one form of violent criminal victimization (Thompson & Tapp, 2022). Recent estimates from a state representative sample of Texans suggests that out of the 41% who report being a victim of crime in the past 10 years, 6 in 10 (59%) are a victim of violent crime, while 7 in 10 violent crime victims have been victims more than once (Alliance for Safety and Justice, 2017). Violent criminal victimization can include, but is not limited to, rape/sexual assault, robbery, assault, and intimate partner violence. An extensive line of research that has examined individuals who have been violently victimized during adolescence shows that victims often suffer emotional, physical, and economic hardships later in life (Janssen et al., 2021; Semenza et al., 2021; Turanovic, 2019; Turanovic & Pratt, 2015). Evidence from this body of work indicates that factors, such as antisocial behavior and involvement in crime (Averdjk et al., 2019; Menard, 2012; Schreck et al., 2017), as well as self-control and engaging in risky activities (Connolly et al., 2020; Turanovic & Pratt, 2014) are some of the most consistent correlates of violent criminal victimization experienced across adolescence into young adulthood. However, research suggests that perhaps the strongest factor associated with violent victimization during this life course stage is antisocial or offending behavior (Turanovic, 2022).

While a great deal of research has helped advance our current understanding of the prevalence and common correlates of violent criminal victimization during adolescence, comparatively less is known about violent criminal victimization during the transition from late adolescence to adulthood, especially in large population-based samples of youth. This is problematic for two key reasons. First, if there is not an understanding of how common this detrimental form of victimization is across this period of the life span - when many individuals are transitioning from college into the workplace and taking on other major life roles (e.g., spouse, parent, or caregiver) - then intervention programming will be limited in knowing when services should be delivered to be most effective.

Second, a lack of understanding of the occurrence of violent criminal victimization during this time period makes it difficult to identify correlates of risk for this form of victimization. As a result, it is unknown if antisocial behavior - a common correlate of violent victimization during adolescence - is also associated with violent criminal victimization during the transition from late adolescence to adulthood in a similar manner. Addressing this question will aid in providing policymakers and practitioners with information on potential target a for intervention/prevention programming that can be incorporated into programs tailored for at-risk individuals during this life course stage. The current report aims to begin to address these two important gaps in the existing body of research.

Sample and Measures

Sample

Data for the analysis are drawn from the Child and Young Adult supplement of the National Longitudinal Survey of Youth (CNLSY). The CNLSY is a population-based sample of children born to all female participants from the National Longitudinal Survey of Youth 1979 (NLSY79) - a nationally representative sample of young men and women between 14 and 22 years old in the United States in 1979. Participants in the CNLSY have been assessed every two years from 1986 to 2018 - totaling 16 waves of data collection across 32 years of their life. During the 1994 data collection period, participants age 15 and older have been asked to complete a 'Young Adult' self-report survey which asks participants to report on their attitudes, intimate relations, social behaviors, education, employment, household environment, substance use, and other critical life events. To date, 11,521 children born to women from the NLSY79 have been included in the CNLSY sample. The average retention rate from 1986 to 2018 has been approximately 70%. All participants with at least one valid score on the employed self-report measure of violent criminal victimization between the ages of 20 and 31 are included in the analysis. Since participants were assessed biennially, measures of violent victimization capture 2-year intervals of the life span: 20-21, 22-23, 24-25, 26-27, 28-29, and 30-31.

Measures

Violent Victimization. Violent victimization was measured in the 'Young Adult' survey of the CNLSY from 2004 to 2018 by asking participants "Since the date of the last interview have you been the victim of a violent crime, for example, physical or sexual assault, robbery, or arson?" Response categories for this question was binary: 0 = no and 1 = yes. Scores on this variable were measured at each age-interval and a global measured was created to measure the total amount of self-reported violent victimizations from ages 20-31. Table 1 presents the descriptive information for these measures. Approximately 15% of the sample (n = 1,188/N =7,815) reported have been the victim of a violent crime during this time period, with 12.64% (n = 988) reporting victimization, 2.12% (n=166) reporting two victimizations, .38% (n = 30) reporting three victimizations, and .05%(n=4) reporting four victimizations. The prevalence of violent criminal victimization remained relatively stable from ages 20 to 27 (7-8%) and then declined from ages 27 to 31 (5-6%).

	Mean/%	SD/n	Min	Max	N
Violent Victimization					
Total violent victimizations Ages 20-31	.18	.46	0	4	7,815
0 victimizations	84.80%	6,627	-	-	-
1 victimization	12.64%	988	-	-	-
2 victimizations	2.12%	166	-	-	-
3 victimizations	.38%	30	-	-	-
4 victimizations	.05%	4	-	-	-
Violent victimization Ages 20-21	7.36%	226	0	1	3,072
Violent victimization Ages 22-23	8.79%	293	0	1	3,332
Violent victimization Ages 24-25	7.08%	288	0	1	4,067
Violent victimization Ages 26-27	8.07%	280	0	1	3,467
Violent victimization Ages 28-29	6.89%	240	0	1	3,480
Violent victimization Ages 30-31	5.45%	177	0	1	3,242
Antisocial behavior Ages 20-31	2.16	2.11	0	11	5,274
Antisocial behavior Ages 20-21	.54	.74	0	4	6,127
Antisocial behavior Ages 22-23	.45	.67	0	4	5,625
Antisocial behavior Ages 24-25	.37	.62	0	4	5,139
Antisocial behavior Ages 26-27	.35	.59	0	4	4,409
Antisocial behavior Ages 28-29	.32	.58	0	4	3,616
Antisocial behavior Ages 30-31	.31	.56	0	4	3,743
Age	32.05	5.67	20	44	7,815
Race/Ethnicity	2.23	.78	1	3	7,815
Hispanic	21.80%	1,704	-	-	-
Black	33.19%	2,594	-	-	-
Non-Black, Non-Hispanic	45.00%	3,517	-	-	-
Sex	.50	.50	0	1	7,815
Male	50.42%	3,940	-	-	-
Female	49.58%	3,875	-		-

Antisocial Behavior, Antisocial behavior was measured in the 'Young Adult' survey of the CNLSY from 1994 to 2018 by asking participants if they had engaged the following behaviors in the past 12 months: 1) skipped a full day or school or work; 2) gotten into a fight at school or work; 3) taken something from a store without paying; and 4) hit or seriously threatened to hit someone. Response categories for each item were binary: 0 = never and 1 = one or more times. Values for items at each age-interval were summed together to create a variety index of antisocial behavior at each ageinterval. Variety index measures demonstrated adequate to good internal reliability over time (Cronbach's alpha = .59-.65). A summative measure capturing all self-reported antisocial behavior during this time frame was created by adding responses from indexes across all ages. As presented in Table 1, on average, participants reported committing two antisocial behaviors from ages 20-31 with the average of antisocial behavior at each age-interval being less than one antisocial act and precipitously declining from ages 20 to 31 (Mean Ages 20-21 = .54 to Mean Ages 30-31 = .31).

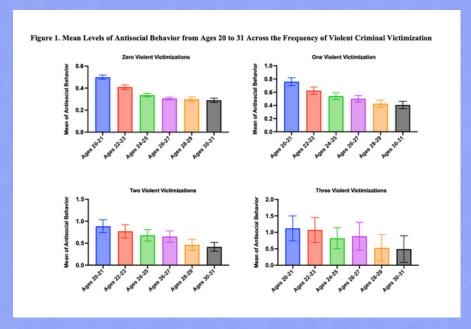
Demographics. A range of demographic characteristics were measured and included in the analysis to examine differences in victimization across individual-level factors. Age was measured by calculating the difference between participants year of birth and the most recent wave of data collection used for the analysis (i.e., 2018). The average age of participants was 32 and ranged from 20 to 44 years old. Race and ethnicity were measured by selfreported information and categorized by NLS staff into three distinct categories: 1) Hispanic; 2) Black; and 3) Non-Black, Non-Hispanic. Approximately 28% of the sample self-identified as Hispanic, 33% selfidentified as Black, and 45% self-identified as Non-Black, Non-Hispanic. Sex was self-reported and measured by a binary variable such that 0 = femaleand 1 = male. The sample was evenly split between male and female participants (50.42% males and 49.58% females).

Analytical Plan

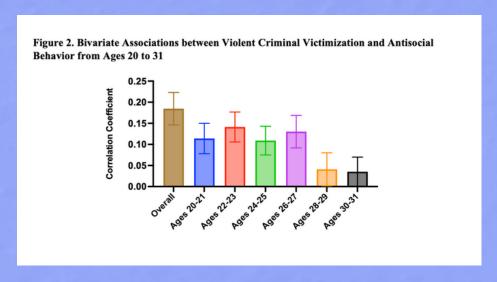
The analysis proceeded in a series of linked steps. First, the average levels of self-reported antisocial behavior from ages 20 to 31 were examined based on the frequency of violent criminal victimization. This first step focused on examining whether declines in antisocial behavior during the transition from adolescence to adulthood varied across the amount of times someone reported being the victim of a violent crime. Evidence from this segment of the analysis would provide insight into the potential association between victimization and antisocial behavior during this developmental life course stage. The next step then focused on further unpacking this relationship by assessing the strength of bivariate relation ship between violent criminal victimization and antisocial behavior with age-interval measures as well as overall measures. Based on the binary and categorical nature of age-specific victimization and antisocial behavior measures, polychoric correlation coefficients were calculated to assess the strength of association between both variables. Cramer's V correlation coefficients were calculated to assess the association between measures of overall frequency of violent criminal victimization and antisocial behavior. The last step of the analysis then examined the strength of the association between victimization and antisocial behavior from ages 20 to 31 across levels of family income, categories of race and ethnicity, and sex. This final step explored whether the nature of the relationship between victimization and antisocial behavior were different for participants from different demographic backgrounds. All statistical analyses were conducted using StataIC version 15 (StataCorp, College Station, Texas, USA; StataCorp, 2017).

Results

The analysis began by examining the mean-level changes in self-reported antisocial behavior from ages 20 to 31 by the frequency of violent criminal victimization experienced during this time. Due to the low sample sizes across age-intervals for participants who reported four victimizations (n=4), the analysis focused on participants who reported zero, one, two, and three violent criminal victimizations. Figure 1 presents the means for antisocial behavior with corresponding 95% confidence intervals for each group of violent criminal victimization. As can be seen, participants who reported no violent victimization from adolescence to adulthood reported lower levels of antisocial behavior at every age-interval, compared to participants who did report a victimization. Antisocial behavior decreased incrementally over time for participants without a history of violent victimization, while decreases were less apparent for those who report two and three violent victimizations, suggesting that antisocial behavior may be associated with risk of violent victimization during this life course period.



Having established that levels of antisocial behavior were higher and decreases were slower for participants who reported more violent victimizations from ages 20 to 31, the next step in the analysis focused on examining the strength of the association between violent victimization and antisocial behavior overall and at specific ages. Figure 2 presents the correlations with corresponding 95% confidence intervals. Overall violent criminal victimization was modestly and positively correlated with antisocial behavior (r = .18, 95% CI = .15-.22). Violent victimization was also positively correlated with antisocial behavior at ages 20-21 (r = .11, 95% CI = .08-.15), 22-23 (r = .14, 95% CI = .11-.18), 24-25 (r = .11, 95% CI = .08-.14), and 26-27 (r = .13, 95% CI = .09-.17), but not at ages 28-29 (r = .04, 95% CI = .002-.08) or ages 30-31 (r = .02, 95% CI = .001-.05). These findings suggest that while antisocial behavior is generally associated with violent victimization over time, the strength of this association weakens as individuals transition from late adolescence to adulthood.



Violent Victimization from Late Adolescence to Adulthood

The last step of the analysis focused on examining whether trends of violent criminal victimization from ages 20-31 varied across categories of race and ethnicity as well as males and females. Figure 3 presents the prevalence rates along with corresponding 95% confidence intervals for violent criminal victimization at each age-interval across race and ethnicity. As can be seen, Hispanic and Black participants reported slightly higher rates of violent victimization compared to Non-Black, Non-Hispanic participants over time. However, these were not statistically significant differences as evidenced by overlapping 95% confidence intervals and employed statistical analyses (p > .05).

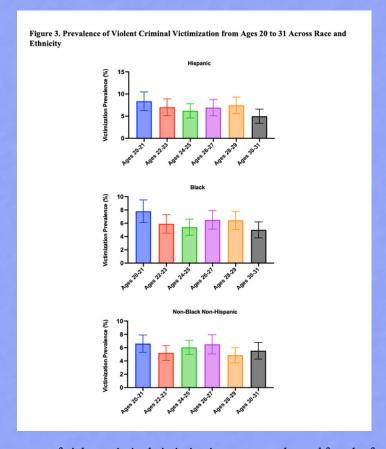
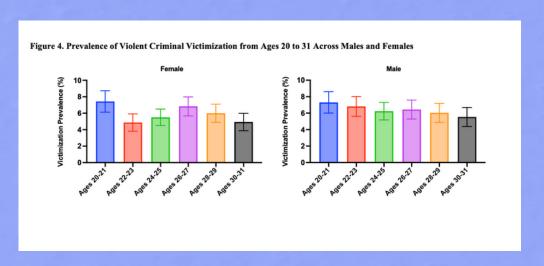


Figure 4 presents the prevalence rates of violent criminal victimization across males and females from adolescence to adulthood. While the rates were similar for most ages, males reported a significantly higher prevalence rate of violent criminal victimization during ages 22-23 (7.4%, 95% $\rm CI = .06-.08$) compared to females (4.8%, 95% $\rm CI = .03-.05$). With respect to the trend of victimization, 7.5% (95% $\rm CI = .06-.09$) of females reported a violent victimization during ages 20-21 and experienced a significant decrease with 4.8% of females reporting a violent victimization at ages 22-23 (95% $\rm CI = .03-.05$). The rate of victimization increased from ages 23 to 27 and then declined from ages 28 to 31. Males demonstrated more stable rates of violent criminal victimization from the ages 20 to 31 (6-7%) with rates slightly declining as they reached ages 30-31.



Discussion and Policy Implications

Over the two decades, a wealth of research has revealed much about the prevalence of and correlates for violent criminal victimization across adolescence and into emerging adulthood. Less empirical attention has been given to examining the rate of violent victimization from late adolescence to adulthood among individuals from a large population-based sample of youth and assessing whether these trends vary across theoretical risk factors, such as antisocial behavior, as well as demographic characteristics. The current report aimed to begin to address these important gaps about violent criminal victimization for U.S. individuals during this stage of their life course. Three key findings emerged that warrant further discussion. Finally, as anticipated by the fourth research question, shown in Model 4 of Table 2 is the three-way interaction model examining whether the moderating effects of school connectedness on bullying victimization varies between the two gender groups. The coefficient corresponding with the threeway multiplicative term is non-significant, suggesting no such relationship. It should be noted, however, that an examination of the AMEs from this model revealed that a statistically significant two-way interactive relationship between bullying victimization and school connectedness emerged among female youth but not among males.

First, the prevalence of violent criminal victimization remained relatively stable (7-8%) from ages 20 to 27 suggesting that risk remained the same during this period of late adolescence to adulthood. However, the rate of self-reported victimization decreased from ages 28 to 31 (8% to 5%). This finding indicates that risk for violent victimization likely continues to decrease as individuals age. There are several potential explanations for this decrease that range from biological maturation of the prefrontal cortex (i.e., a region of the brain responsible for higher executive functioning, such as critical thinking) which completes around age 25 to lifestyle changes (e.g., employment, marriage, or other critical turning point) whereby individuals perceive less reward than cost tied to risky behaviors that may place them at risk of violent victimization. It is more likely that both biological and social processes are co-occurring at the same time, which influence the degree of exposure to unsafe environments where victimization is possible. However, one notable exception of violent victimization not measured in the current analysis is physical intimate partner violence, which has been shown to increase in early adulthood and associated with later life depression (Connolly et al., 2022) and other adverse mental health outcomes (Gonggrijp et al., 2023). Future research should explore the changes in this form of violent victimization to better understand vulnerable points of intervention. Based on the current report, generated findings suggest that Texas state resources may be better spent on initiatives aimed at preventing violent victimization in individuals between the ages of 20 to 27, while victim compensation may become more important for victims in middle adulthood.

Second, desistance from antisocial behavior from ages 20 to 31 was slower among participants who reported more violent victimizations during this time period, suggesting that both victimization and antisocial behavior are tied to one another. Additional analyses designed to further unpack this association across time revealed that not only were total scores of violent criminal victimization and antisocial behavior associated with one another, but the association was relatively stable from ages 20 to 27 and then negligible from ages 28 to 31. These findings offer important new insight into the role of antisocial behavior for violent criminal victimization from late adolescence to adulthood. The results suggest that involvement in antisocial behavior should be taken into consideration when designing prevention programs for violent victimization during ages 20 to 27, but less so when the target population for prevention is close to 30 years old. Evidence of antisocial behavior as a correlate of violent victimization from ages 20 to 27 aligns with other work examining these relationships during adolescence (Menard, 2012; Schreck et al., 2017; Turanovic, 2022), but future work needs to understand what types of factors are linked to violent victimization in middle to late adulthood. A better understanding of these connections will inform state-level strategies for reducing the prevalence of violent criminal victimization in Texas and help policymakers better allocate resources to effectively address risk factors for violent crime and potentially save Texas taxpayers millions of dollars each year.

Third, the prevalence of violent victimization from ages 20 to 31 did not considerably vary across race and ethnicity, or for males and females. While this pattern of findings largely aligns with other national estimates of violent criminal victimization when several forms of victimization are included in the primary measure (Thompson & Tapp, 2022), there are still several areas of inquiry that need to be explored. For example, future research should assess whether antisocial behavior plays a unique role in the likelihood of violent criminal victimization across race and ethnicity as well as males and females from late adolescence to adulthood. Other risk and protective factors during this life course period should be examined to provide practitioners with information on what type of modifiable targets for intervention should be incorporated into genderspecific programming. Moving forward, future work should also examine individual forms of violent victimization during this stage of the life course in order to better understand the trends across demographic characteristics and whether there are unique or common correlates of different types of victimization. A stronger comprehension will help Texas officials, victim advocates, social workers, and criminal justice practitioners better understand the range of needs that should be addressed amongst victims of violence in order to make sure that these individuals never have to suffer through a similar traumatic life-changing event again.

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