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Teen Dating Violence Victimization in an Urban Sample of Early Adolescents: Measurement, Prevalence,
Trajectories, and Consequences

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Abstract

Objective

A critical period for the emergence of adolescent dating aggression (DA, also referred to as teen dating violence) and victimization that has received little attention is early adolescence. Key aims include evaluating methods to improve measurement of DA, estimating prevalence at this age, identifying profiles and trajectories of DA victimization, and linking DA victimization to DA perpetration, risk factors, and mental health. This project involved secondary analysis of a five-year project (the VCU-YVPC) that collected data on youth violence and associated risk factors as part of an evaluation of violence prevention efforts. Data were collected quarterly across middle school, which should provide a stronger foundation for examining patterns of change in DA victimization across middle school. Only youth with a boyfriend or girlfriend in the past three months during at least one wave ($n = 1410$ of 1795) were included.

Results

Measurement. A two-factor model of DA perpetration and victimization was preferred over a model differentiating between forms (i.e., physical, psychological). Better fitting models occurred when treating items as ordered categorical, as opposed to continuous, which accounts for item severity and frequency. Strong measurement invariance was demonstrated by sex (boys, girls), grade (sixth, seventh, eighth), time of assessment, and longitudinally across middle school. Test of construct validity indicated that DA perpetration and victimization were distinct constructs from general aggression and victimization.

Prevalence and Typologies. Approximately 40% reported perpetrating at least one act of DA and almost 50% reported experiencing one act of DA victimization in the past three months. Youth were classified in one of five different typologies of DA using latent class analysis. These included Uninvolved (54.6%), Victims (8.3%), Aggressors (9.7%), Aggressive Victims (5.4%), and Psychologically Aggressive Victims (22.0%). Sex differences included greater perpetration among girls, with boys more

likely victimized.

Typologies Relations to Risk Factors and Mental Health. Both adolescents physically and psychologically aggressive in dating relationships, as well as primarily victimized dating adolescents, were physically aggressive in other domains. Minimal differences across delinquency and no differences for substance use existed for youth classified in different typologies. Adolescents classified in typologies representative of any victimization reported more trauma-related distress symptoms, even if they were also aggressive. All findings remained significant after controlling for the potential impact of a violence prevention program, as well as witnessing and experiencing violence in their communities and with peers.

Trajectories. Examination of the patterns of change for DA across middle school suggested a linear slope model best fit the data for both victimization and perpetration. Specifically, adolescents with higher initial levels decreased over time, whereas adolescents with lower initial levels increased over time. Sex was significantly related to both the intercept and slope of both DA victimization and perpetration. On average, boys reported higher initial levels of victimization but a greater decline across middle school compared to girls. For perpetration, girls reported both a higher initial level and a greater increase across middle school compared to boys who declined in perpetration across middle school.

Implications

Early adolescence is a unique developmental period with significant changes occurring, including the initiation of dating relationships. This age marks a critical period for teaching healthy relationships skills that may reduce negative relationship behavior, such as DA. This is particularly important as early relationship violence is a significant predictor in understanding intimate partner violence in later adolescence and adulthood. First, this project provided evidence for improving measurement of DA that may be extrapolated for older populations. Specifically, measurement may be improved by using analytic approaches that account for the severity and frequency of specific acts rather than treating all items as equal contributors. Further, many early adolescent are involved in dating relationships marred by either

DA perpetration or victimization, with a quarter engaged in more serious, physical forms of DA as perpetrators or victims. Longitudinal results demonstrated an increasing trajectory of victimization and perpetration, particularly for girls, across middle school. Prevention and intervention programs that do not start until after middle school may miss a critical window. Early programming may result in lessening the perpetuation of DA to reduce the burden of the criminal justice system in combatting and prosecuting later domestic violence. Finally, the relation of DA to mental health also underscores the need for programming to address a variety of issues during early adolescence.

Purpose

This project (2012-IJ-CX-0014) was designed to further the understanding of dating aggression (DA) during early adolescence to guide efforts aimed at early identification and the development of targeted prevention and intervention efforts. This project involved secondary data analysis of longitudinal data from seven cohorts of urban, early adolescents from the Virginia Commonwealth University's CDC-funded Youth Violence Prevention Center study (VCU-YVPC). The main aims of this project were: a) to evaluate the structure, stability, psychometric properties, and content validity of a modified version of the Safe Dates Dating Aggression scale, b) to describe prevalence rates and identify typologies of DA victimization and perpetration in urban early adolescents, c) to examine the extent to which witnessing community violence and victimization are related to DA typologies, d) to establish the relation between DA and mental health as reflected in frequency of aggression, substance use, antisocial behavior, and trauma-related distress, and e) to determine trajectories of DA victimization and perpetration across the three years of middle school (i.e., grades 6 to 8).

Project design, subjects, and measures

Design

This project primarily involved secondary analysis of longitudinal data collected by the Clark-Hill Institute for Positive Youth Development at Virginia Commonwealth University – a CDC-funded

Youth Violence Prevention Center (VCU-YVPC; Farrell et al., 2016). The VCU-YVPC study is a five-year project that involved extensive data collection on youth violence and associated risk factors and mental health correlates as part of a community-level evaluation of a positive youth development program. Intervention components, evaluated through a multiple-baseline design, included a universal school-based intervention and a selective family intervention component. The VCU-YVPC project was conducted in three communities in Richmond, Virginia that represent attendance zones for three middle schools. During the first year of the project, a random sample of students from all three grades (about 210 per grade) at each middle school was recruited. Each fall, 210 incoming sixth graders were newly recruited and previously non-selected seventh and eighth grade students were randomly selected to replace those who left the school. Longitudinal data were collected four times a year (October, January, April, July) from students from all three grade levels in the participating middle schools. However each participant was randomly assigned to completed only two of the four waves each year (i.e., a maximum of six waves of data for students who participated from sixth to eighth grade) to reduce participant fatigue and testing effects. Due to this design, data is missing completely at random for these participants for waves they were not selected. Students participated until they finished middle school or chose to discontinue participation. Data were available from seven cohorts of dating middle school students ranging in age from 11-16 (95% between 11-14 years old) across the study (N = 1,410; 83% African American or Black; 15% Hispanic or Latino/a; 53% female).

A second dataset, the Multi-site Violence Prevention Program (MVPP, Ikeda et al., 2004), was also used to address questions specific to measurement. This dataset was used to initially refine the Safe Dates Dating Aggression measure (i.e., consider items for deletion) and also provide additional tests of measurement invariance, including longitudinal invariance. This dataset included data from students recruited from 37 schools in four areas (Chicago; Durham, North Carolina; Richmond; northeastern Georgia) across two cohorts. Analyses were conducted on a sub-sample of participants (n = 3,894)

reporting they had a boyfriend or girlfriend in the last 3 months on surveys at either the beginning of the sixth grade ($N = 2,823$) or the end of eighth grade ($N = 2,456$). This sample was 48% female with race divided as 49% Black, 19% Hispanic, 16% White, 8% multiracial and 8% another race.

Samples

Three samples, a cross-sectional VCU-YVPC sample, a longitudinal MVPP sample (as described above), and longitudinal VCU-YVPC sample, were created to address different aspects of the outlined objectives. Due to the timing of this product's objectives, the cross-sectional VCU-YVPC sample used data from the first three years of data (2010-2013), whereas the longitudinal VCU-YVPC sample was based on data from all participants throughout the entirety of the evaluation study (2010-2015). All participants who reported having a boyfriend or girlfriend in the past three months during one or more waves were eligible to be selected for the cross-sectional VCU-YVPC dataset ($n = 938$; 52% girls; 80% of the overall sample). To ensure the sample and data was representative of current daters, only data from waves in which a youth reported dating were eligible to be selected. This dataset included one wave of data from each dating participant using a random sampling approach to select one wave of data weighted to select approximately the same number of students within each grade and assessment point. The longitudinal VCU-YVPC sample included participants who indicated having a boyfriend or girlfriend during the past three months during at least one wave ($n = 1410$ of 1795). The resulting longitudinal sample included dating youth from the fall of the sixth grade, $M (SD) = 11.82 (0.53)$ years, to the summer after the eighth grade, $M (SD) = 14.69 (0.54)$ years. Youth reported dating in at least one wave, but up to six waves, $M (SD) = 2.21 (1.31)$ waves.

Measures

All data from youth were collected using a computer-assisted self-administered interview. Data were collected in schools during the school year and students' homes during the summer. Students completed measures of DA and all other constructs at each wave. For the VCU-YVPC sample, DA was

assessed by a modified version of the Safe Dates Dating Aggression measure (Foshee et al., 1996) including items related to physical perpetration (five items), psychological perpetration (five items), physical victimization (five items), and psychological victimization (five items). In the MVPP sample, dating youth completed a modified version of the Safe Dates measure which included seven items each for physical perpetration and victimization and six items each for psychological perpetration and victimization. Modifications for both samples included asking respondents to report on the previous three months rather than lifetime and excluded items of a sexual or extremely aggressive nature not appropriate for early adolescence. All items were rated on a four-point ordinal scale from *Never*, *1-3 times*, *4-9 times*, and *10 or more times*. Other constructs included measures of aggressive perpetration, peer victimization, substance use, and delinquent behavior, all measured using the Problem Behavior Frequency Scale, Revised; Farrell, Sullivan, Gonyea, & Le, 2016), as well as measures of trauma-related distress (Richters & Martinez, 1993), and exposure to community violence (Richters & Saltzman, 1990).

Analytic Plan

Measurement of DA

Categorical confirmatory factor analysis (CCFA) evaluated the structure and psychometric properties of the modified Safe Dates Dating Aggression measure using both the VCU-YVPC cross-sectional and MVPP longitudinal datasets. All items were specified as ordered categorical and estimated using a robust weighted least squares estimator (WLSMV), which is comparable to a graded response item-response theory model (Embretson & Reise, 2000). This approach was chosen over traditional scoring approaches (e.g., mean) which assumes equal intervals across points on the scale and does not account for differences in the severity across items. For example, in mean scoring, the item “punched a dating partner” is weighted equal to the item “said things to hurt a dating partner’s feelings on purpose.” Treating the items as categorical does not assume equal intervals between points on the rating scale and better reflects differences in severity and frequency of items. A four factor model differentiating physical

perpetration, physical victimization, psychological perpetration, and psychological victimization was compared to competing models, including a two-factor model of perpetration and victimization. Follow-up analyses included tests of measurement invariance (i.e., configural and scalar factorial invariance) to determine whether the same underlying trait(s) were measured across sex, grade, season, and time. A test of construct validity comparing dating perpetration and victimization to general aggression and victimization was also conducted. Models were compared using fit statistics including χ^2 difference tests, the confirmatory fit index (CFI), Tucker-Lewis Index (TLI), and the root mean square error of approximation (RMSEA). Construct validity analyses included testing a model differentiating dating aggression and victimization from general aggression and victimization (i.e., four-factor model) compared to a competing two-factor model of dating/general aggression and dating/general victimization.

Prevalence and Typologies of DA

The cross-sectional VCU-YVPC sample was used to describe prevalence and typologies in urban early adolescents. Latent class analysis (LCA) was used to identify typologies of DA victimization and perpetration using items covering physical and psychological acts. A series of LCA models were compared based on several fit indices, including the Akaike information criteria (AIC), the Bayesian information criteria (BIC), the Vuong-Lo-Mendell-Rubin likelihood ratio test (VLMR-LRT), and theoretical and conceptual contributions. Based on the final derived LCA model, all participants were classified into their most likely class based on the highest posterior probability after accounting for error rates in categorization for subsequent analyses.

Typologies Relations to Risk Factors Mental Health

Using the cross-sectional VCU-YVPC dataset, the resulting LCA classes were compared using multinomial logistic regression by covariates (sex, grade), community correlates (witnessing community violence, experiencing community violence), and mental health correlates (trauma-related distress, physical aggression, drug use, antisocial behavior). Based on posterior probability-based multiple

imputations, these models provided odds ratios for each covariate after controlling for the effects of all other covariates. Missing data was handled using multiple imputation with ten imputed datasets used in the regression with the results synthesized across datasets.

Trajectories of DA

Using the VCU-YVPC longitudinal sample, separate trajectories for DA victimization and perpetration were estimated using latent curve modeling techniques to examine patterns of change in DA across middle school. DA victimization and perpetration were first scored by weighting each participant's responses to the DA items by item loadings and thresholds identified in the measurement models described above. This produced factor scores of 12 repeated measures and represented improvements in scoring as outlined in the first objective. Then, a series of models of increasing complexity (i.e., intercept, linear) of 12 repeated measures of victimization, and then perpetration, were estimated. Examination in fit indices (CFI, TLI, RMSEA) and χ^2 difference tests compared models to determine the best fitting model. The final identified trajectory was examined for differences between boys and girls by treating sex as a time invariant covariate. In other words, sex (boys = 1, girls = 0) was regressed on the final latent curve factors (i.e., intercept, slope). As DA is non-normally distributed, the maximum likelihood estimator with robust standard errors (MLR) was used. Waves in which no data was available for a participant (i.e., they were not dating and did not complete the Safe Dates measure; they were not selected to participate at a given wave) were all treated as missing data and modeled using full information maximum likelihood procedures. All analyses were completed in Mplus V7.11 (Muthén & Muthén, 2013).

Key Findings

Measurement of DA

Evaluation of the psychometric properties of a modified version of the Safe Dates Dating Aggression measure was first examined using the MVPP sample, which included a longer measure (26-items) and cross-validated in the cross-sectional VCU-YVPC sample. Although the hypothesized four-

factor model fit the data well, results revealed that a two factor structure of DA perpetration and victimization fit the data as well. High correlations between physical and psychological perpetration ($r_s = .88$ to $.93$) and victimization ($r_s = .89$ to $.96$) across both samples further suggested that a two-factor model may be best as little was gained by differentiating between physical and psychological forms of victimization and perpetration. Significantly better fitting models occurred when treating items as ordered categorical as opposed to continuous. More stringent tests of item severity variation (i.e., constraining thresholds across items to be equal) resulted in significant decrease in model fit relative to models allowing severity and frequency to vary across items. These tests supported the assumption that items vary in both severity and frequency and that scoring this measure by treating items as ordered categorical data is more appropriate than traditional scoring. Also, preliminary analyses supported eliminating three items of each perpetration and victimization from the measure used in the MVPP data as removal of the items did not impact the reliability of the scale ($\Delta\alpha < .01$). Therefore, these six items were not collected in the VCU-YVPC dataset.

Factorial invariance analyses provided evidence to support meaningful comparisons across subgroups (i.e., boys and girls, sixth, seventh, and eighth grade; season of the year using VCU-YVPC data) and across middle school (beginning of sixth grade compared to the end of eighth grade using longitudinal MVPP data). Specifically, the measure's properties are equivalent across sex, grade, and season, as well as across middle school. This indicates that the items and their subsequent intervals between item response categories (e.g., threshold between *Never* and *1-3 times*) comprising the constructs of DA victimization and perpetration are consistent across middle school, as well as across sex, grade, and season. By establishing invariance, mean differences across groups indicate true differences between groups. In the MVPP sample, sixth grade boys reported more DA victimization and less DA perpetration compared to sixth grade girls, whereas eighth grade boys reported less of both DA victimization and perpetration compared to eighth grade girls. Similarly in the VCU-YVPC sample, boys reported less DA

perpetration than girls, with no mean differences in DA victimization. Finally, construct validity analyses demonstrated that DA is distinct from other interpersonal aggression and victimization during early adolescence, as evidenced in a best fitting four-factor model. Correlations between DA perpetration and victimization ($r = .78$) and general aggression and victimization ($r = .57$) were higher than correlations between DA perpetration and general aggression, DA victimization and general victimization, DA perpetration and general victimization, and DA victimization and general aggression (range $r = .38-.55$). This indicates a potentially important distinction in aggression and victimization in dating relationships compared to aggression and victimization in the context of other relationships.

Prevalence and Typologies of DA

Forty percent of the VCU-YVPC cross-sectional sample reported perpetrating at least one act of DA within the past three months with nearly half reporting experiencing at least one act of DA victimization in the same time frame. Specifically, prevalence rates by items ranged from 5% to 25% for psychological perpetration, 5% to 13% for physical perpetration, 6% to 31% for psychological victimization, and 4% to 13% for physical victimization. These rates are higher than rates reported in other early adolescent samples and may be specific to the economically disadvantaged urban population of the VCU-YVPC dataset.

Latent class analyses indicated that youth experience different patterns of DA during middle school as illustrated by five latent classes. These classes included over half the sample (54.6%, $n = 512$) represented as Uninvolved in DA, with smaller groups of Victims (8.3%, $n = 78$), Aggressors (9.7%, $n = 91$), and Aggressive Victims (5.4%, $n = 51$). Notably, over a fifth of sample (22.0%, $n = 206$) were classified as Psychologically Aggressive Victims, suggesting many youth are engaging in less severe forms of DA. Better understanding how this less severe but early involvement in DA may be related to subsequent DA or intimate partner violence is critical. The findings are consistent with peer aggression research that has identified typologies of well-adjusted, victimized, aggressive, and aggressive-victim

youth. DA patterns by sex mirrored prior studies with older adolescents that found greater perpetration among girls compared to boys (e.g., Cascardi, Avery-Leaf, O'Leary, & Slep, 1999) with girls using multiple forms (i.e., psychological, verbal, physical) of DA (Sears, Byers, & Price, 2007). These patterns were noted in the LCA analyses as girls were more likely to be classified in the aggressor and psychologically aggressive victim typologies as compared to the uninvolved or victims only groups. Moreover, boys were more likely to be in typologies consisting of victimization.

Typologies Relations to Risk Factors and Mental Health

This objective examined how DA is related to mental health correlates, specifically, physical aggression, delinquency, substance use, and trauma-related distress, after consideration of exposure to other violence. Consistent with typology work in the adult intimate partner violence literature (Holtzworth-Munroe & Meehan, 2004), adolescents physically and psychologically aggressive in dating relationships were also physically aggressive in other domains. One of the strongest and most consistent predictors for later DA is a history of aggressive behavior (e.g., Gidycz, Warkentin, & Orchowski, 2007; Smith, White, & Holland, 2003). This suggests the possibility of aggressive continuity in romantic and non-romantic relationships across the lifespan that starts in early adolescence. Interestingly, primarily victimized dating adolescents were also more physically aggressive across domains compared to psychologically aggressive and victimized adolescents. There were no differences across classes in rates of drug use and only adolescents defined as both aggressive and victimized reported greater delinquency than youth classified as primarily victimized.

Adolescents classified in typologies representative of any victimization reported more trauma-related distress symptoms. This held true for adolescents who were also aggressive, suggesting that adolescents experience distress even in mutually aggressive dating relationships. Perhaps, adolescents victimized in multiple domains are also then more vulnerable to DA victimization. This is supported by the poly-victimization literature (Finkelhor, Omrod, & Turner, 2009) which indicates that youth

victimized in one domain (e.g., peers, community) are more likely to be victimized in other domains (e.g., dating relationships). In this study, these youth victimized in dating relationships who also experience victimization from peers and increased exposure to community violence may remain vulnerable to DA victimization even when aggressive toward their boyfriend or girlfriend. All relations with mental health correlates were evident after controlling for key demographics (i.e., sex, grade), exposure to violence prevention programming, and witnessing and experiencing violence in their communities and with peers.

Trajectories of DA

Despite evidence that DA occurs prior to high school, most longitudinal work begins immediately before or during high school with few longitudinal studies during middle school. The majority of these studies have relied on annual waves of data collection, been confounded by implementation of a DA prevention or intervention program, or have relied on growth mixture modeling techniques to identify groups of adolescents following similar trajectories. Significant flaws exist with these methods. For example, early adolescent relationships often are short and influenced by the school year, suggesting annual follow-ups limit examination of potentially rapid changes in DA. Further, the use of growth mixture modeling techniques assume that latent groups of youth exist with findings primarily data driven with a strong subjective nature in interpretation. Further, mixture modeling techniques identify different classes of youth in non-normal data, such as DA, whether or not distinct groups truly exist (Bauer & Curran, 2003). Therefore, modeling the changing trajectory of DA across middle school using quarterly data across three years will better inform our understanding of the normative, general trend of DA at this age.

Unconditional latent curve models examined patterns of change for DA victimization and perpetration across middle school. A linear slope model best fit with significant co-variance between the level of DA victimization at the beginning of sixth grade and the change in DA victimization across middle school ($\psi = -0.017, p < .001, r = -.68$). Adolescents who reported higher initial levels of DA

victimization tended to decrease over time, whereas adolescents who reported lower initial levels of DA victimization tended to increase over time. Both sex and baseline levels of DA perpetration were significantly related to the intercept and slope of DA victimization. Follow-up probing indicated a significantly higher initial starting level of victimization for boys compared to girls with significantly different trajectories across time for both boys and girls. Specifically, on average, boys reported higher initial levels of victimization but a greater decline across middle school, whereas the girls reported lower levels of dating victimization at the beginning of sixth grade with an increase in victimization across middle school (see Figure 1).

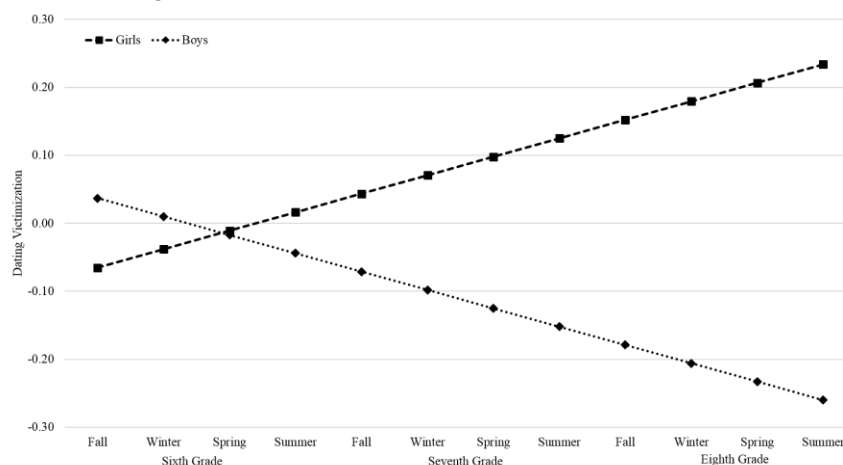


Figure 1. Trajectories of dating victimization for boys and girls across middle school.

For perpetration, a linear slope model also best fit with significant co-variance between initial DA perpetration and the change in DA perpetration across middle school ($\psi = -0.014$, $p = .001$, $r = -.60$). This indicates that those with higher initial levels of DA perpetration tend to decrease more rapidly over time and vice versa. Sex was also significantly related to the intercept and slope of DA perpetration. Probing indicated that girls had a significantly higher initial starting level of perpetration and increased across time, whereas boys decreased across time (see Figure 2).

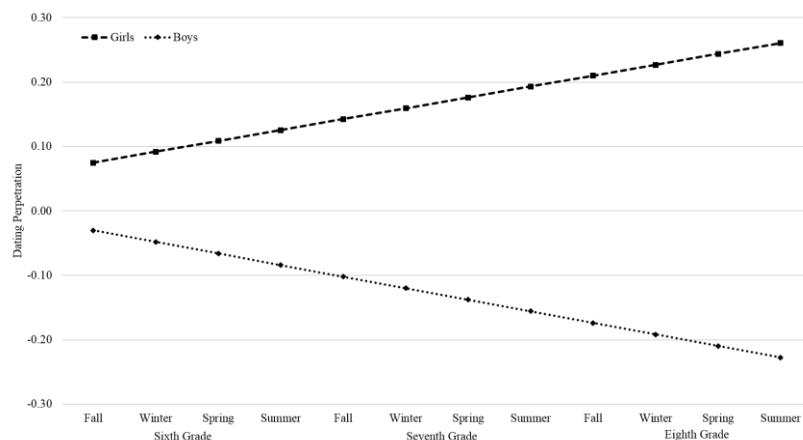


Figure 2. Trajectories of DA perpetration for boys and girls across middle school.

Implications for criminal justice policy and practice in the United States

Early adolescence is marked by significant transitional events, including puberty, beginning middle school, and changing parent and peer relationships, including the initiation of dating. Though many early adolescents are dating, skills useful in interpersonal situations take time to develop and may not fully emerge until later (Zimmer-Gembeck & Petherick, 2006). This skills deficit (e.g., limited interpersonal problem solving skills, poor cognitive flexibility) tied with less developed empathy may lead to DA perpetration and victimization. Research also demonstrates a significant connection between early DA and later violence, such as intimate partner violence, in adult relationships. Understanding the onset of DA during early adolescence can provide critical information for prevention and early intervention programming. Intervening in the early stages of DA could provide a substantial reduction in later, more costly interventions. Further early prevention and intervention efforts may reduce more serious problems later in life, such as delinquency, adult crime, and substance abuse.

Measurement of DA during early adolescence is critical to improve our estimates of prevalence at this age (Teten et al., 2009), as well as for testing the effectiveness of prevention and intervention efforts. Prevention and intervention programs, such as *Safe Dates*, *Shifting Boundaries*, or *Start Strong*, have significant relevance for improving criminal justice policy and practice in the United States. As these programs and others are initiating implementation starting in middle school, reliable measurement will

help indicate if programs are effective. Specifically, by modifying and testing the measurement tool used to assess the effectiveness of *Safe Dates*, researchers considering adaptations for younger middle school students can better test whether the program is impacting DA behavior. To guide prevention programming aimed at healthy relationships, this project provided evidence for the distinction between DA and other forms of aggression. Although general violence prevention and intervention programs may combat some DA behaviors, this distinction also suggests that we need DA specific programs.

This project also demonstrated substantial rates of DA perpetration and victimization beginning as early as sixth grade, with around a fifth of urban middle school youth engaging in less severe forms of DA as defined in the latent class of psychologically aggressive victims. Importantly, approximately another quarter of middle school youth are involved in substantially more severe forms of DA as a victim, perpetrator, or both. This suggests that efforts toward prevention may be too late if they begin in high school. There is also some evidence that programs and interventions may need to be tailored for some youth who are experiencing any forms of victimization, as they may also have higher rates of trauma-related distress symptoms or involvement in other forms of violence. It is also possible that existing, more general violence prevention programs in middle school could be expanded to more thoroughly address DA prevention.

The factor analyses supported combining physical and psychological acts into one score. Notably, these results account for severity and frequency of acts, which allows for a differential weighting of certain items. As such, less severe (i.e., psychologically aggressive) acts, such as not letting a partner do things with others, are not weighted as much as more severe (i.e., physically aggressive) acts, such as pushed, grabbed, or shoved, in the total score. However, the results of the latent class analyses suggest a significant group (22%) of youth who are engaging in primarily psychologically aggressive acts, a group that may not be uniquely identified in the combined scoring. Therefore, researchers should carefully consider their research questions when choosing a scoring approach. For example, if an intervention program is being evaluated, use of a total combined score may provide more precise estimates of the total decrease in DA victimization and perpetration. However, in a prevention setting, identifying a group of

youth who are engaging in less severe forms may be useful for tailoring prevention programming to interrupt a trajectory of potentially more severe DA behavior.

Finally, although the general trajectory of both DA victimization and perpetration during middle school is increasing, the results differ for boys and girls. Specifically, boys begin middle school, on average, experiencing more DA victimization, but less perpetration, than girls, but then decrease across time in both. On the other hand, girls, on average, show an increase in DA victimization and perpetration across middle school. Although these results are preliminary and require replication, they suggest that an important transition may occur during middle school that increases risk for girls. Importantly, this could be critical for tailoring intervention programs. Further, risk for involvement in DA may be exacerbated in youth exposed to higher rates of negative neighborhood characteristics such as poverty or high exposure to community violence, as relevant to this sample (Henry & Zeytinoglu, 2012).

Future Directions

Although this research addressed some gaps in the DA literature specific to early adolescent youth, this work also highlights gaps in the current state of the field. This work suggests relations between DA victimization and perpetration related to mental health correlates, such as trauma-related distress, aggression, and substance use, and other relevant constructs, such as exposure to community violence and peer victimization. The field would benefit from future research that could examine whether changes in DA victimization over time may be related to changes in mental health or other risk factors. These questions could be answered using longitudinal data through time-ordered or cross-lagged analyses. Second, the population for these studies is a majority African American sample living in economically disadvantaged, urban communities. It is unclear what role these factors (i.e., race, culture, socio-economic status, urbanicity) play in the measurement, prevalence, profiles, and trajectory of DA victimization, as well as how these factors impact the relation between DA victimization and other risk factors and mental health. Specific risk factors need to be identified the individual-, peer-, family-, school-, neighborhood-, and community-levels. The field would benefit from replication and validation of these findings in diverse or nationally representative samples. Future research could also benefit from including dyadic

data from early adolescent couples or by following early adolescent dating relationships across time to indicate if DA victimization and perpetration changes as dating partners change (i.e., a youth begins dating a new boyfriend or girlfriend). Finally, measurement work could be improved by moving beyond act based measures with greater emphasis on understanding intent, context, motives, and consequences.

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Appendix

Scholarly products produced or in process

1. Goncy, E. A., Sullivan, T. N., Farrell, A. D., Mehari, K. R., & Garthe, R. C. (in press). Identification of patterns of dating aggression and victimization among urban early adolescents and their relations to mental health symptoms. *Psychology of Violence*. doi: 10.1037/vio0000039
2. Goncy, E. A., Farrell, A. D., Sullivan, T. N., & Taylor, K. A. (in press). Measurement of adolescent dating aggression during middle school: Structure, measurement invariance, and distinction from general aggression. *Journal of Research on Adolescence*. doi: 10.1111/jora.12208
3. Goncy, E. A., Farrell, A. D., Sullivan, T. N., & Le, A. (in preparation). A latent growth model of adolescent dating aggression and victimization during middle school.
4. Goncy, E.A., Farrell, A. D., & Sullivan, T. N. (in preparation). Risk factors and mental health adjustment related to adolescent dating aggression and victimization during middle school: A longitudinal study.
5. Goncy, E. A., Sullivan, T. N., Farrell, A. D., Mehari, K. R., & Garthe, R. C. (2015, May). Prevalence, patterns, and mental health correlates of dating aggression among urban middle school youth. In L. Leve (Chair), Development and predictors of aggression and dating violence. Paper presented at the 2015 Society for Prevention Research Conference, Washington, D. C.
6. Goncy, E. A., Farrell, A. D., Sullivan, T. N., & Taylor, K. A. (2014, November). Is peer aggression different from dating aggression during middle school? In C. Mulford (Chair), Conceptualizing and measuring abuse in adolescent dating relationships. Paper presented at the 2014 American Society for Criminology, San Francisco, CA.
7. Goncy, E. A., Farrell, A. D., Sullivan, T. S., Taylor, K. A., Mehari, K. M., & Le, A. (2014, May). Measurement of early adolescent dating aggression during middle school: Structure, stability and distinction from peer aggression. In E. A. Goncy (Chair), Dating violence from early adolescence to young adulthood: Measurement and stability. Paper presented at the 2014 Society for Prevention Research Conference, Washington, D.C.