

HHS Public Access

Author manuscript *J Adolesc Health*. Author manuscript; available in PMC 2019 May 01.

Published in final edited form as:

J Adolesc Health. 2018 May ; 62(5): 598-604. doi:10.1016/j.jadohealth.2017.11.304.

Patterns of Partner and Non-Partner Violence Among High-risk Youth

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Abstract

Purpose—Perpetration of violent behavior begins to increase in adolescence and peaks in young adulthood (e.g., age 18–29) before decreasing by the early 30s. Considerable variability in reported perpetration, targets, and severity of violence suggests youth may change their violent behavior patterns over time.

Methods—We use Latent Transition Analysis to describe profiles of violent behavior against partners and non-partners in an at risk sample of young adults (N = 599; 59% male; 61% African American) over a period of two years.

Results—A four-class solution provided the best fit to the data, with classes corresponding to 1) non-violent behavior (48.3% of the sample), 2) violent only toward non-partners (22.3%, 3) violent only toward partners (16.0%, and 4) violent toward non-partners and partners (13.4%). Participant sex, race, age, prior violent injury, antisocial behavior, alcohol dependence and possession of firearms were associated with baseline class membership.

Conclusion—Implications for prevention are discussed.

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violence; partner; peers; transition; young adult

INTRODUCTION

Violence is the second leading cause of death for U.S. youth (14–24 years old), with an annual economic burden in the billions of dollars.^{1,2} Exposure to high rates of youth violence, including both partner and non-partner violence, is associated with multiple long-term consequences, including mental distress, posttraumatic stress disorder, aggression, substance use, delinquency and re-occurring violence involvement.³ Substance using youth under the age of 25 are among the most at-risk for witnessing, experiencing, and perpetrating violence, with males, ethnic minorities and urban residents more likely to be involved in violence compared to females, whites, and rural populations.⁴ Violent behavior begins to increase in adolescence and peaks in emerging adults (e.g., age 18–29) before decreasing in full adulthood.⁵ Considerable variability in reported perpetration, type of violence (i.e. non-partner vs. partner), and severity of violence, however, suggests youth may change their patterns of violent behavior over time.⁶

Researchers distinguish between violence directed at non-partners (e.g., peers; coworkers; strangers) versus violence directed toward partners (e.g., boy/girlfriend, fiancée, spouse), with negative consequences for both victims and aggressors.^{7,8} Non-partner and partner violence may share common antecedents, including a history of family violence or deviant behavior⁹, suggesting that perpetrators of one type of violence may perpetrate both and that a focus on one form of violent behavior may overlook important connections among them. Ozer, Tschann, Pasch, & Flores (2004), for example, found that males who were violent toward non- partners were more likely to also be violent toward an partner.⁷ In younger adolescent samples, bullying and sexual harassment were correlated.¹⁰ Fang and Corso (2007) posited a link between early exposure to violence and later partner violence (IPV) perpetration through experiences of non-partner violence perpetration that suggests a potential progression of behavior from exposure to violence as an adolescent to IPV as an emerging young adult.¹¹ These findings are consistent with the Cycle of Violence hypothesis, whereby earlier exposure to direct victimization or structural violence encourages the developmental of behavioral scripts for perpetrating violence as a means of communicating or solving conflict.¹² Yet, whether youth change patterns – regarding both the victim(s) and severity - of their violent behavior remains largely unknown in the current literature.

We examine patterns of violent behavior with non-partners and partners over time in a sample of high-risk (history of drug use; variable victimization) youth seeking care in an urban Emergency Department. We also examine predictors of these violent behavior profiles. Profiling patterns of violent behavior and their predictors can inform focused and tailored intervention strategies to mitigate violence from those most at risk for perpetration. ¹³ Researchers who studied developmental trajectories of violence have often used small samples, cross sectional or multi-wave data with relatively long intervals between waves,

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considered just one domain of violent behavior (e.g., IPV), or limited measures of violence perpetration.^{14,15} Our study builds on this work by including a sample that incorporates a longitudinal design with five measurement occasions over two years and measures both non-partner and partner violence. This longitudinal approach allows us to examine how youth change their pattern of violent behavior during a period of development when youth are creating schemas for intimate relationships,¹⁶ adjusting to independence, work and school related stressors, but may also lack the cognitive and emotional inhibition to control aggressive behavior.¹⁷

METHODS

Data used in this study were collected as part of the Flint Youth Injury Study,^{3,18} a two-year prospective cohort study examining violence outcomes among a consecutively obtained sample of assault-injured youth (aged 14–24 years) with past 6-month drug use (Assault Injured Group [AIG]; n=349) and a proportionally sampled (by age and gender) comparison group (Control Group [CG]; n=250) of non-assaulted, drug-using youth. The study was conducted in the Emergency Department (ED) at Hurley Medical Center (HMC) in Flint, Michigan. HMC is the region's only Level 1 trauma center. The study population reflected the broader demographic characteristics of Flint, Michigan (~50–60% African American)¹⁹, which has violent crime and poverty rates that are comparable to other urban settings.

Study Population and Recruitment

Youth seeking ED care for assault and reporting past 6-month drug use, and a proportionally sampled comparison group presenting for other non-assault related reasons and reporting past 6-month drug use were eligible for the study. Assaults were any intentional injury caused by another person, and was assessed by the RA at the time of the interview. Exclusion criteria included ED presentations for acute sexual assault, child maltreatment, suicidal ideation or attempt, or a medical condition preventing consent (e.g., altered mental status, schizophrenia). Youth <18 years old without a parent/guardian present were also excluded. Recruitment proceeded 7 days per week, excluding holidays, with trained research assistants (RAs) recruiting 21 hours (5AM–2AM) on Tuesday and Wednesday and 24 hours a day Thursday through Monday. Enrollment was from December 2, 2009, through September 30, 2011.

Study Procedures

Study procedures were approved by UM and HMC IRBs; a National Institutes of Health Certificate of Confidentiality was obtained. After an initial review of the presenting medical problem (i.e, chief complaint), Research Assistants approached assault-injured patients in ED waiting or treatment areas. Following written consent (assent with parental consent if <18 years old) participants self-administered a computerized screening survey¹⁸ to assess study eligibility. Assault-injured youth reporting past 6-month drug use or non-medical use of prescription drugs on the National Institute on Drug Abuse Alcohol Smoking and Substance Involvement Screening Test [NIDA ASSIST] were eligible for the study²⁰. Unstable trauma patients (e.g., unconscious patients who were intubated and on a ventilator) were recruited after hospital admission if they stabilized within 72 hours. The control group

(non-assaulted, drug using youth) was recruited in parallel to limit seasonal and temporal variation, and was enrolled to ensure balance by sex and age. For example, after a 21 year old assault-injured female, reporting past 6 month drug use was recruited into the study, RAs would recruit the next female in the 20–22 year old age group that arrived in the ED for a non-assault-injury and screen positive for past 6 month drug use. Youth enrolling in the longitudinal study completed a ~90-minute baseline survey, including both a self-administered and an RA-structured interview. Surveys were administered privately and were paused for medical evaluations and procedures to avoid interfering with care. In-person follow-up assessments were completed in the ED or a community setting (e.g., library, jail) at 6, 12, 18, and 24 months. Remuneration for study participation included \$1 for screening, \$20 for the baseline surveys, and \$35, \$40, \$40, and \$50 at each sequential follow-up.

Measures

Non-partner and Partner Violence—Violent behaviors toward non-partners and partners were measured using 13 physical assault items from the Conflict Tactics Scale-2.²¹ The frequency of moderate (e.g., slapped, pushed/shoved) and severe (e.g., threatened/used a knife/firearm) violence behaviors over the past 6 months were measured separately for partners (e.g., girlfriend/boyfriend, husband/wife) and non-partners (e.g., peers, friends, strangers, police). Response scales ranged from 0 (never) to 6 (20 times), but were dichotomized to present versus absent if respondents indicated 1 or more incidents of aggression.

Socio-Demographics—Demographics (age, sex, race) and socioeconomic status (i.e. public assistance) were also collected. Given prior research documenting disparities in violence exposure by sex, race, age and socioeconomic status, we included each as a predictor of baseline class membership. Race was coded as African-American and non-African American due to previously documented disparities in violence exposure for African Americans and because African Americans represented the majority of the sample (~65%). 22

Substance Use/Mental Health—Past 6-month of alcohol, marijuana, illicit drug, and non-medical prescription drug use were measured using the Alcohol Use Disorders Identification Test (AUDIT)²³ and the Substance Use Involvement Screening tests (NIDA-ASSIST).²⁰ Six items from the Brief Symptom Inventory²⁴ measured generalized anxiety symptoms. Diagnostic criteria for an alcohol or drug use disorder (i.e., abuse/dependence), major depressive episode (past 2-weeks), conduct disorder (<18 y/o) or anti-social personality disorder (>18/y/o), and PTSD (past-month) were assessed using the RA-administered Mini International Neuropsychiatric Interview (MINI).²⁵ Prior to administration, RAs practiced cases with their supervisor and were given feedback. This was done at the beginning and yearly during the course of the study. Diagnostic substance use and mental health variables were dichotomized for analysis.

Firearm Possession—Because firearm possession is a risk factor for violent behavior, we included a composite measure used in our prior work characterizing carriage/ownership firearm possession in the past 6-months.²⁶ Firearm possession for hunting or sporting was

excluded.²⁷ An affirmative answer to any individual measure was coded as firearm possession.

Analytic Plan

We used latent transition analysis (LTA) to identify distinct profiles of violent behavior across the five measurement time points. We fit a series of unconditional (i.e., no covariates) models to first identify the class (henceforth 'status') structure. We also compared item response probabilities conditional on status membership that were free to vary over time versus constrained to be the same across time. Model selection was based on both empirical fit criteria and substantive meaning. We used Akaike's Information Criteria and Bayesian Information Criteria to compared relative fit to the data with lower values indicating a better fitting model. We then ran an additional model including all covariates as predictors of baseline status membership. In addition, we conducted post hoc multinomial regression analyses to examine covariate effects on specific group membership. We used SAS version 9.4 and the Proc LCA/LTA program for all analyses.²⁸

RESULTS

Sample Characteristics

Overall, 599 youth (AIG=349; CG=250) were enrolled in the longitudinal study. Baseline characteristics and the study flowchart have been previously characterized.³ We found no differences between cohorts for age, sex, race, or socio-economic status. The baseline sample was 59% male, 61% African-American, and 69% received public assistance. Follow-up rates were 85.3%, 83.7%, 84.2%, and 85.3% at 6, 12, 18, and 24-months, respectively. Males ($\chi^2(1)=9.20$, p < .01) and non-African Americans ($\chi^2(1)=5.19$, p < .05) were more likely to leave the study, whereas there was no differential attrition based on age (t(597) = 1.53, p = .12), public assistance ($\chi^2(1)=2.85$, p = .09), violent injury ($\chi^2(1)=0.03$, p = .86), PTSD ($\chi^2(1)=0.51$, p = 48), substance use disorder ($\chi^2(1)=2.02$, p = .16), depression ($\chi^2(1)=0.18$, p = .68), anxiety (t(597) = 0.33, p = .74) or firearm possession ($\chi^2(1)=0.31$, p = .58).

Latent Status Structure

Models 1–5 compared the latent status structure of transition models with an increasing number of violence profiles (i.e., testing between 2–6 latent statuses). Model fit improved as the number of statuses increased until a five status model yielded poorer overall relative fit (Table 1). A four-class solution provided the best fit to the data with conceptually meaningful profiles. The four classes (Table 2) were: 1) non-violent behavior (48.3%), 2) violence only with non- partners (22.3%), 3) violence only with partners (16.0%), 4) violence with both partners and non- partners (13.4%). A four status solution where conditional items response probabilities were constrained to be equal across time points (Model 6) improved fit over an unconstrained four status model so we adopted Model 6 for further analysis.

Status Membership Prediction

The probabilities that a participant would report a particular type of violent behavior in the past 6 months *given their status membership* are reported in Table 2. Members of the non-violent profile were unlikely to report any form of violence perpetration. Youth involved in non- partner violence had a high likelihood of reporting moderate (65%) or severe (78%) violence behaviors against non-partners, but much lower likelihood of violence against intimate or dating partners. Conversely, youth involved in partner violence were much more likely to report moderate (85%) or severe (50%) violence against their partners, with very few reporting violence against non-partners. Finally, youth in the partner and non-partner violence class reported high rates of both moderate and severe violence.

Significant predictors of baseline class membership included participant sex, race, age, violent injury at baseline, antisocial or conduct personality disorder, alcohol use disorder and firearm possession (Table 3). Relative to those in the non-violent status, youth in the partner violence only class and those in the partner and non-partner classes were more likely to be female, whereas those in the non-partner only class were more likely to be male. Age was negatively associated with violence, with all three violence profiles having younger members than those in the non-violent status. Relative to youth in the non-violent status, those in the partner and co-occurring partner/non-partner classes were more likely to be African-American, whereas those in the non-partner only violent status were less likely to be African-American. Participants in violent profiles were also more likely to have been in the assault-injured cohort at the baseline ED visit, more likely to report firearm possession at baseline, and have a diagnosis of an alcohol use disorder, and either antisocial personality or conduct disorder diagnosis. Post hoc multinomial analyses regressing most probable class membership given posterior probabilities on the baseline predictors of interest supported the LTA prediction coefficients (Table 4) and were consistent with the LTA model results.

Transition Probabilities

Table 5 lists the probabilities of transitioning from one status to another between each adjacent time point over the 24 months. The larger probabilities in the off-diagonals denote substantial movement between classes across the five waves with the largest movement from a violent profile to a non-violent profile. The transition patterns indicate that most youth transitioned to the non-violent class by the 24-month follow-up (87.9%). A second pattern suggests movement from the class with co-occurring non-partner and partner violence to either of the other violence classes. Far fewer youth transitioned into the co-occurring non-partner and partner violence class over time, with less than 10% of the sample predicted to transition at some time point from either the non-violent or isolated partner or non-partner statuses into co- occurring partner/non-partner violence status during the course of the 24-month study. Continuity of class membership was most evident for the non-violent class with the next most consistent class membership occurring for the isolated partner violence class.

DISCUSSION

Researchers typically distinguish between violence directed at peers or non-partners and that directed at dating or partners. We add nuance to the current understanding of the co-occurrence of these two types of violence by highlighting the distinct patterns of violent behavior among youth and the transitions between different violent behavior profiles. Membership in either non-partner or partner violence only groups was more common than membership in the co-occurring class, but movement between groups was observed at each time point and most common within the first 12 months after the initial assessment. These findings suggest a certain degree of fluidity between partner and non-partner violence, indicating a need to design interventions that address underlying co-occurring behaviors leading to both partner and non- partner violence, as well as a greater understanding of what drives transitions in behaviors.

Our results also suggest little distinction between moderate and more severe forms of violence for the isolated non-partner and co-occurring classes. This was not the case for isolated partner violence. One possible explanation for this finding rests in base rates of partner violence versus non-partner violence by sex. Male youth were more likely to be involved in non-partner violence than females in our sample. Evidence suggests the reverse is true for females in that they are more likely to perpetrate partner violence, but it is less severe than males.²⁹ Alternatively, Katz, Kuffel & Coblentz (2002) found that severity of partner violence increased as the length and commitment of the relationship increased.³⁰ Given the developmental stage of our respondents, however, many may not have been in committed, long-term relationships, which may have influenced their responses to partnerbased questions. Our results also support the conclusion of Bushman et al. (2016) who reported in their review of longitudinal studies of violence that a small minority of youth maintain a stable trajectory of violence.³¹ Youth in the co-occurring class were also disproportionately associated with firearm possession and antisocial personality disorder and/or conduct disorder at baseline. This too is consistent with prior research indicating high levels of chronic re-occurring violence involvement and criminal behavior. Yet, our results also add to the consistent finding that youth generally age out of violent behavior as they move from adolescence to adulthood.

Characterizing patterns of violence behavior, identifying transitions between classes of violence involvement, and analyzing factors associated with the violence profiles can help inform primary and secondary violence prevention initiatives. Researchers highlight the importance of an ED visit for violence, both in terms of the high risks for future violence involvement³ and the opportunities for intervention to reduce future risk (e.g., teachable moment).³² Our findings suggest that youth in all three violence-involved profiles having a higher likelihood of an ED visit for violent injury at baseline than the non-violence class. Prior research has found that single session brief interventions for violence^{32–34} and combined multi- session collaborative care interventions³⁵ can be effective in decreasing a range of violence behaviors, including peer and dating aggression and weapon carriage among youth samples. While these interventions may be effective among youth fitting certain violence profiles or that youth who have a higher likelihood of transitioning to

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greater violence involvement may require more intensive intervention than a single EDbased session. Baseline predictors of class assignment suggest that the focus of intervention efforts may also need to vary by class. For example, the finding that an alcohol use disorder diagnosis has a higher association with the isolated partner violence class in comparison to other class assignments suggests that prevention of partner violence may benefit from a focus on the treatment of alcohol use disorders in combination with violence behaviors. Further, because youth in the co-occurring class had a higher likelihood of firearm possession, this suggests that interventions for them focus on risky firearm behaviors, particularly since firearm possession increases both the risk of firearm homicide and nonfatal firearm assault.³⁶

Researchers have also worked to isolate predictors that are shared between non-partner and partner violence, versus those that are unique to IPV.^{9,37} Comparison of the odds ratios between the isolated non-partner and partner groups and follow-up multinomial analyses suggest that participant sex, race, and antisocial behavior may help differentiate risk for violence involvement with a non-partner versus a dating partner. Violence is a multifaceted phenomenon with variability not just in aggressors and victims, but in location, severity, and motivation. Although we included a number of potential risk factors for violence based on previous research, future research that considers multilevel influences on violent behavior and factors that may disrupt violent trajectories (i.e., protective factors) would be useful.^{37,38}

Limitations

Several limitations of our study require attention. First, the participants came from a single city, limiting generalizability to both suburban and rural settings, but it did occur in a city with a high prevalence of violent behavior. Second, although our sample reflected the local population, future studies among other racial and ethnic groups are needed. Third, to aid data analysis, we dichotomized indicator variables, losing information regarding the frequency of reported violence behaviors. Considering isolated versus persistent aggressors with higher frequency of behaviors may have added an additional dimension and generated additional insights for violence researchers. Nevertheless, violence incidents are uniformly low frequency events with very small numbers of participants reporting high values, limiting this type of subgroup analysis. Fourth, the use of self-report survey data is a potential limitation. Yet, researchers have found self-reported violent behavior is reliable and valid when privacy/confidentiality is ensured and when using self-administered computerized assessments.^{39,40} Fifth, because this was a sample of drug-using youth (including youth with any marijuana or other drug use in the past 6 months) and excluded youth without a parent or guardian present and victims of sexual assault, our ability to generalize the study findings to broader youth populations (e.g., without past 6-month drug use) is limited. However, given that a single episode of marijuana use during a 6-month period met eligibility criteria for study inclusion, there was significant variability in severity of drug use within the sample and the impact of this limitation is therefore potentially small. Finally, between group comparisons of baseline predictor odds ratios was not possible. Although comparisons from the multinomial models begin to address this limitation, such models assume certainty in group classification. Yet findings were consistent across both analyses and in expected

directions. Despite these limitations, our study adds vital new information regarding patterns of violent behavior and how such patterns may change over time.

Acknowledgments

Funding Sources/Disclosures: This work was funded by NIDA R01 024646 and in part, by NICHD R03HD083397, CDCP 1R49CE002099 and NIH/NIDA K23DA039341. The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the funding agencies. Dr. Heinze authored the first draft of this manuscript. No honoraria, grants or other form of payment were received for producing this manuscript.

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IMPLICATIONS AND CONTRIBUTION

It is critical to consider multiple types of violence because they co-occur less frequently, with violent perpetrators typically focusing their violence on either peers or partners. Prevention strategies may be more effective if they focus on the type of violence instead of its severity.

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Model comparison and relative fit.

	Log-likelihood	AIC	BIC	d.f.	Item Response Parameter Restrictions
2 status	-3316.90	2149.72	2463.09	1048526	Free
3 status	-3135.86	1959.63	2337.63	1048489	Free
4 status	-3002.43	1782.79	2358.57	1048444	Free
5 status	-2953.56	1791.04	2599.77	1048391	Free
6 status	-2925.19	1856.31	2933.15	1048330	Free
4 status	-3028.09	1706.10	2000.58	1048508	Fixed

Probability of youth reporting past 6-month violent behavior (i.e., item response probabilities) given their violent behavior profile (i.e. latent status at baseline; n=599)

Latent Status (i.e.,			(i.e., violence profile)	
Past 6 month violent behavior ^{≠§}	Non-Violence	Isolated Non-partner Violence	Isolated Partner Violence	Co-occurring Partner & Non-partner Violence
Non-partner violence (moderate)	0.01	0.65	0.10	0.89
Non-partner violence (severe)	0.01	0.78	0.03	0.96
Partner violence (moderate)	0.03	0.17	0.85	0.99
Partner violence (severe)	0.00	0.07	0.50	0.83
		Proportion	of Overall Sample	
Baseline	0.49	0.22	0.15	0.13
6-month	0.67	0.13	0.11	0.09
12-month	0.76	0.08	0.10	0.06
18-month	0.83	0.05	0.09	0.03
24-month	0.88	0.03	0.06	0.03

Note:

 ${}^{\not \! \bullet}$ Values are probability of responding "Yes" to each violence item given class membership.

\$ Item response probabilities constrained to be equal across each measurement occasion.

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Factors associated with baseline latent status membership. (n=599)

		4 Class M	odel	
	Non-Violence	Isolated Non-partner Violence	Isolated Partner Violence	Co- occurring Partner & Non- partner Violence
Sex ¹ ***	•	0.69	4.38	4.44
Age [*]		0.87	0.86	0.86
African American**		0.82	2.17	2.17
Violently Injured**		2.01	1.69	2.60
Public Assistance		1.20	0.99	0.99
Depression		2.01	1.41	2.75
Anxiety*		1.29	1.43	1.43
Posttraumatic Stress		1.56	1.77	2.26
Antisocial Personality/Conduct Disorder ***		2.61	3.44	10.34
Firearm Possession ***		2.99	3.25	4.72
Alcohol Use Disorder**		1.81	2.93	1.70
Drug Use Disorder		1.73	2.05	2.34

Note: Values are odds ratios predicting likelihood of class membership relative to the referent class given a unit increase in the predictor. Nonviolent class is reference category. Referents are male and non-African American for Sex and African American, respectively.

* p<.05,

** p < .01,

*** p<.001

Multinomial regression of most likely baseline latent status membership on risk factors. (n=599)

	4 Class Model			
	Non-Violence	Isolated Non-partner Violence	Isolated Partner Violence	Co-occurring Partner & Non-partner Violence
Sex		-0.41 (.26)	1.11 (.28) ****	1.21 (.32) ****
Age		-0.11 (.05)*	-0.05 (.06)	12 (.06)
African American		-0.06 (.23)	0.78 (.27) **	0.52 (.32)
Violently Injured		0.58 (.23)	0.44 (.27)	0.76 (.30) **
Public Assistance		0.15 (.26)	-0.24 (.30)	-0.05 (.34)
Depression		0.03 (.03)	0.05 (.03)	0.07 (.36)*
Anxiety		0.07 (.03)	0.08 (.03)*	0.06 (.04)
Posttraumatic Stress		0.15 (.45)	0.02 (.47)	0.44 (.46)
Antisocial Personality/Conduct				
Disorder		0.84 (.30) **	0.94 (.34) **	2.06 (.34) ***
Firearm Possession		0.75 (.26)**	0.79 (.30) **	1.28 (.32) ****
Alcohol Use Disorder		0.40 (.25)	0.86 (.26) **	0.38 (.31)
Drug Use Disorder		0.44 (1.04)	0.60 (.29)*	0.54 (.32)

Note: Values are log odds predicting likelihood of class membership relative to the referent class given a unit increase in the predictor. Non-violent class is reference category.

Referents are male and non-African American for Sex and African American, respectively.

* p<.05,

** p < .01,

*** p<.001

Latent status transition probabilities from Time 1 to Time 2 and Time 2 to Time 3. (n=599)

	4 Status Model			
			Time 2 Status	
Baseline Status	Non-Violence	Isolated Non-partner Violence	Isolated Partner Violence	Co-occurring Partner & Non-partner Violence
Non Violent	0.87	0.07	0.04	0.02
Non-partner Only	0.62	0.31	0.00	0.07
Partner Only	0.41	0.09	0.43	0.07
Partner & Non-partner	0.34	0.11	0.17	0.39
			Time 3 Status	
Time 2 Status	Non-Violence	Isolated Non-partner Violence	Isolated Partner Violence	Co-occurring Partner & Non-partner Violence
Non Violent	0.91	0.04	0.04	0.02
Non-partner Only	0.62	0.31	0.00	0.03
Partner Only	0.42	0.09	0.43	0.08
Partner & Non-partner	0.34	0.11	0.17	0.39
			Time 4 Status	
Time 3 Status	Non-Violence	Isolated Non-partner Violence	Isolated Partner Violence	Co-occurring Partner & Non-partner Violence
Non Violent	0.97	0.02	0.01	0.01
Non-partner Only	0.56	0.39	0.00	0.05
Partner Only	0.37	0.04	0.53	0.07
Partner & Non-partner	0.24	0.00	0.49	0.27
			Time 5 Status	
Time 4 Status	Non-Violence	Isolated Non-partner Violence	Isolated Partner Violence	Co-occurring Partner & Non-partner Violence
Non Violent	0.97	0.03	0.00	0.00
Non-partner Only	0.66	0.10	0.19	0.04
Partner Only	0.40	0.00	0.40	0.20
Partner & Non-partner	0.25	0.13	0.26	0.36

J Adolesc Health. Author manuscript; available in PMC 2019 May 01.

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