

**Welcome,
This Web Conference
Will Begin Soon**



**Bystander Intervention:
Building the Evidence Base for Sexual and
Domestic Violence Prevention**

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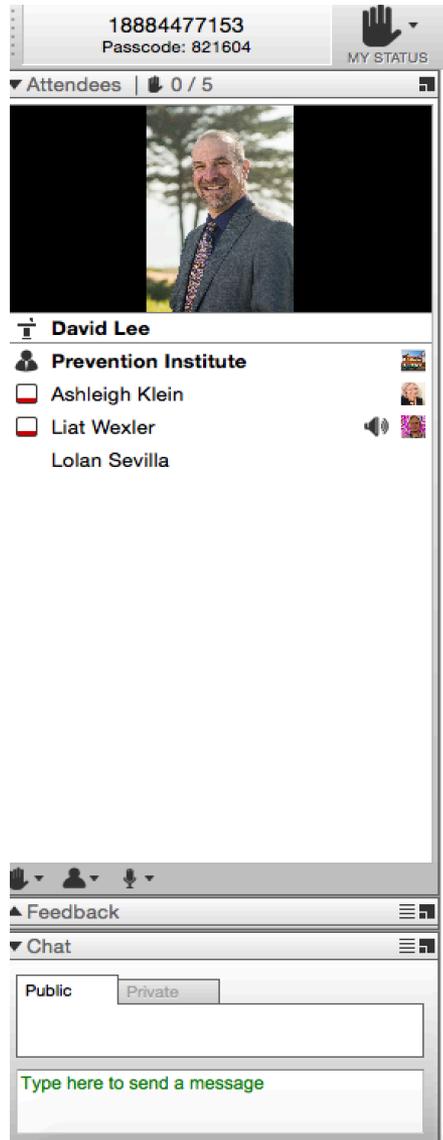
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PreventConnect

- Domestic violence/intimate partner violence
- Sexual violence
- Violence across the lifespan
- Prevent before violence starts
- Connect to other forms of violence & oppression
- Connect to other prevention practitioners



Upcoming Web Conferences

June 26: Bystander Intervention: Building the Evidence Base for Sexual and Domestic Violence Prevention

June 27: Preventing Intimate Partner Violence Across the Lifespan: A Technical Package of Programs, Policies, and Practices

June 28: From private to community accountability: Building capacity to make sexual and domestic violence prevention a community responsibility

July 19: Organizing for economic opportunity : Movements and strategies to improve economic opportunities for sexual and domestic violence prevention

July 25: #PowerInPrevention Ending Child Sexual Abuse: New Look at Addressing Children with Problematic Sexual Behavior

August 16: A safe place to call home: Strategies and movements to transform the physical/built environment for sexual and domestic violence prevention

September 20: From research to practice: Addressing shared underlying factors to prevent sexual and domestic violence



Bystander Intervention: Building the Evidence Base for Sexual and Domestic Violence Prevention



June 26, 2017

11am-12:30pm PT; 2pm-3:30pm ET

PreventConnect is a national project of the California Coalition Against Sexual Assault sponsored by U.S. Centers for Disease Control and Prevention. The views and information provided in this web conferences do not necessarily represent the official views of the U.S. government, CDC or CALCASA.

Learning Objectives

- Assess the value of bystander intervention programs
- Describe the outcomes of the Green Dot Across the Bluegrass Study
- Identify the implications from the study findings and how they can be applied to current bystander intervention and prevention work

RCT Testing Bystander Effectiveness to Reduce Violence

AMERICAN JOURNAL OF
Preventive Medicine

RESEARCH ARTICLE

RCT Testing Bystander Effectiveness to Reduce Violence

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Introduction: Bystander-based programs have shown promise to reduce interpersonal violence at colleges, yet limited rigorous evaluations have addressed bystander intervention effectiveness in high schools. This study evaluated the Green Dot bystander intervention to reduce sexual violence and related forms of interpersonal violence in 26 high schools over 5 years.

Design: A cluster RCT was conducted.

Setting/participants: Kentucky high schools were randomized to intervention or control (wait list) conditions.

Intervention: Green Dot—trained educators conducted schoolwide presentations and recruited student popular opinion leaders to receive bystander training in intervention schools beginning in Year 1.

Main outcome measures: The primary outcome was sexual violence perpetration, and related forms of interpersonal violence victimization and perpetration were also measured using anonymous student surveys collected at baseline and annually from 2010 to 2014. Because the school was the unit of analysis, violence measures were aggregated by school and year and school-level counts were provided.

Results: A total of 89,707 students completed surveys. The primary, as randomized, analyses conducted in 2014–2016 included linear mixed models and generalized estimating equations to examine the condition–time interaction on violence outcomes. Slopes of school-level totals of sexual violence perpetration (condition–time, $p < 0.001$) and victimization (condition–time, $p < 0.001$) were different over time. During Years 3–4, when Green Dot was fully implemented, the mean number of sexual violent events prevented by the intervention was 120 in Intervention Year 3 and 88 in Year 4. For Year 3, prevalence rate ratios for sexual violence perpetration in the intervention relative to control schools were 0.83 (95% CI=0.70, 0.99) in Year 3 and 0.79 (95% CI=0.67, 0.94) in Year 4. Similar patterns were observed for sexual violence victimization, sexual harassment, stalking, and dating violence perpetration and victimization.

Conclusions: Implementation of Green Dot in Kentucky high schools significantly decreased not only sexual violence perpetration but also other forms of interpersonal violence perpetration and victimization.

Am J Prev Med 2017;■(1):■■■–■■■. © 2017 American Journal of Preventive Medicine. Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

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⁶School of Criminal Justice, University of Cincinnati, Cincinnati, Ohio; and ⁷Kentucky Association of Sexual Assault Programs, Frankfort, Kentucky. Address correspondence to: Ann L. Coker, PhD, MPH, University of Kentucky, College of Medicine/OBGYN, 800 Rose Street, Lexington KY 40536. E-mail: ann.coker@uky.edu. <http://dx.doi.org/10.1016/j.amepre.2017.01.020>

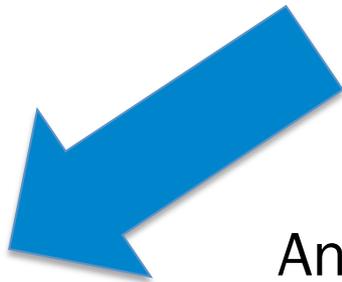


[http://www.ajpmonline.org/article/S0749-3797\(17\)30027-2/fulltext?cc=y=](http://www.ajpmonline.org/article/S0749-3797(17)30027-2/fulltext?cc=y=)



Audience Question

How many of you have looked at the article “RCT Testing Bystander Effectiveness to Reduce Violence”?



Answer on the left

Feedback

0	Yes
0	No
0	No Answer

About the Guests



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Text Chat Question



Describe how Bystander Intervention is helpful in sexual violence and domestic violence prevention efforts?

Bystander Role in Violence Prevention

- **Emerged in Mid 1990's**
- **Premise:**
 - Addressing violence requires a shift in norms.
 - Need to involve both men and women to change the context or environment that may tacitly support violence.
 - Reframing violence as engaging men as well as women in prevention efforts shifts the blame and increases the number of students willing to be involved.



Why Green Dot in Kentucky?



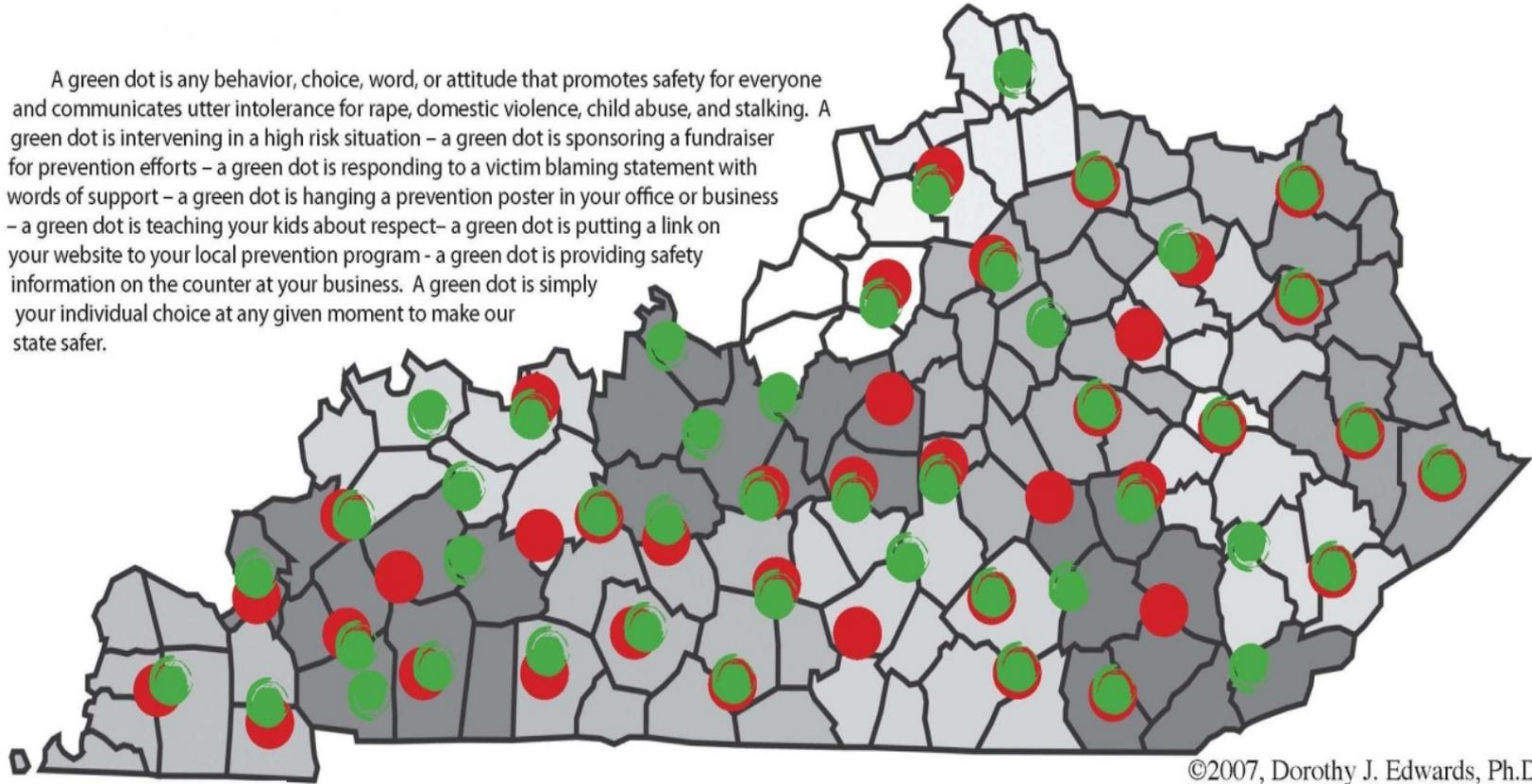
Research Partners

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 - Ann L. Coker, PhD
 - Patricia G. Cook-Craig, PhD
 - Heather M. Bush, PhD
 - Emily Clear, MPH
- Kentucky Association of Sexual Assault Programs (KASAP)
 - Eileen Recktenwald, PhD (h.c.), MSW
- 13 Kentucky Rape Crisis Center Programs
- Kentucky Cabinet for Health and Families
- Centers for Disease Control and Prevention
 - Sarah DeGue
 - Alana Vivolo



What is a Green Dot?

A green dot is any behavior, choice, word, or attitude that promotes safety for everyone and communicates utter intolerance for rape, domestic violence, child abuse, and stalking. A green dot is intervening in a high risk situation – a green dot is sponsoring a fundraiser for prevention efforts – a green dot is responding to a victim blaming statement with words of support – a green dot is hanging a prevention poster in your office or business – a green dot is teaching your kids about respect– a green dot is putting a link on your website to your local prevention program - a green dot is providing safety information on the counter at your business. A green dot is simply your individual choice at any given moment to make our state safer.



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Intervention Implementation

- Two phases
 - Green Dot persuasive speeches
 - Ideally given to the entire school population
 - Can be given in small and large groups
 - Peer/Popular Opinion Leader Bystander training
 - 5 hour bystander training
 - Focus on identified Peer Opinion Leaders (POL)

Evaluation of Active Bystander Approaches in High Schools (CDC U01CE001675) 2009-2014

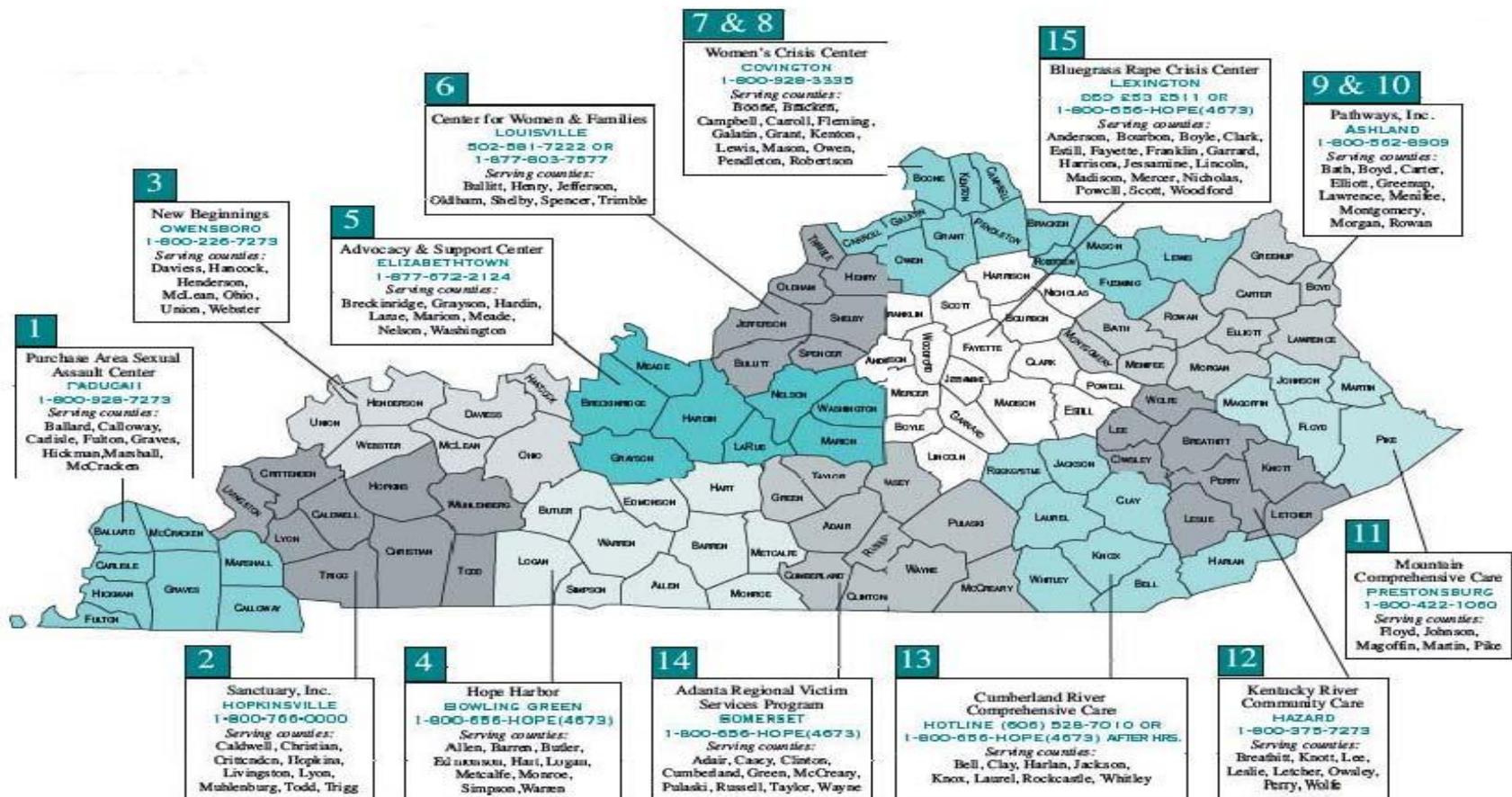
5-year cluster-randomized clinical trial

- 26 public high schools across Kentucky recruited by (Rape Crisis Center) Educators.
- Two school in each Kentucky Area Development District
- Half randomized to Intervention; half to delayed intervention (controls)
- Data collection Spring 2010 thru Spring 2014
- Focusing on analyses at school-level and as randomized.
- Primary question - **Does this program work to prevent violence?**

HOW: All students in schools were invited to complete an anonymous survey each Spring (n= 89,707; Response rate=83.9%) to assess the frequency and impact of violent victimization and perpetration behavior at baseline and over a four-year follow-up.

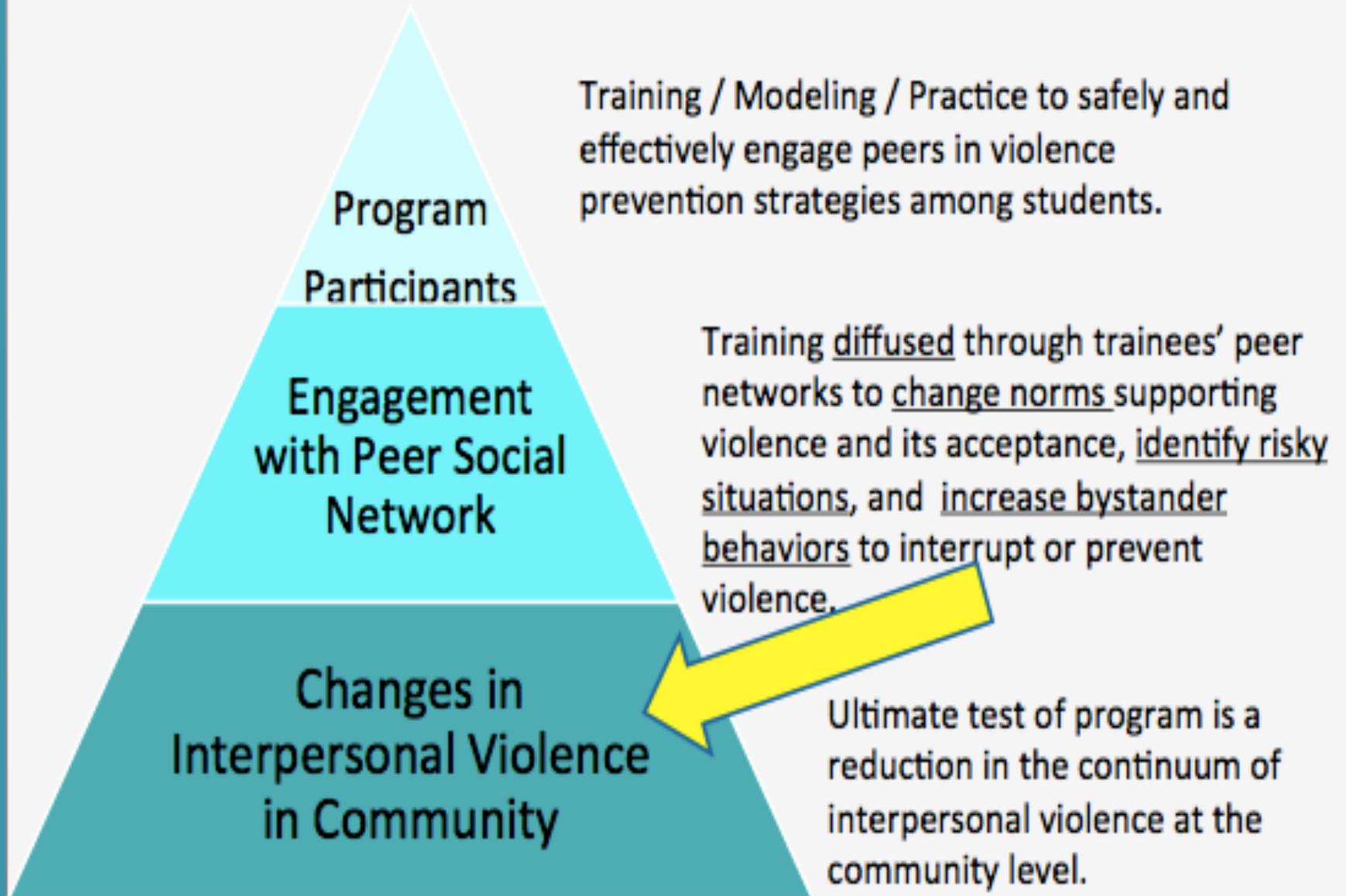


High School Selection



At least two schools per region; then randomized (UK) to intervention and delayed

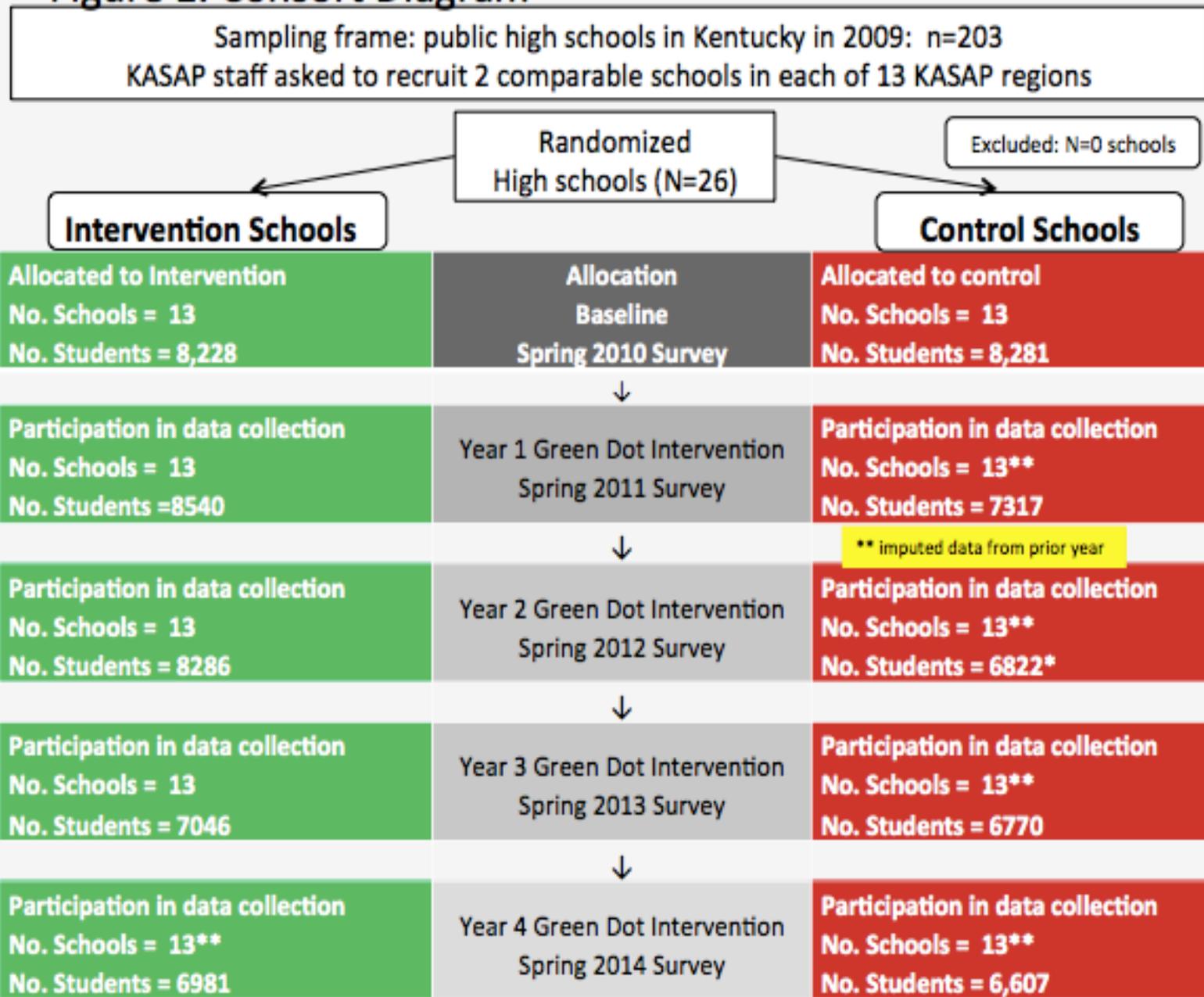
Hypothesized Effect of Bystander Programs



Design / Implementation Issues

- Anonymous surveying (asking about illegal behaviors)
- Passive parental consent
 - Letters to all parents; >30,000 letters per year
 - Refusing parent called or emailed staff
- UK team surveyed every spring 2010-2014
- All student in school on survey date were eligible if able to consent.
- Survey administration in classrooms (all day) or during one period administered to all students

Figure 1. Consort Diagram



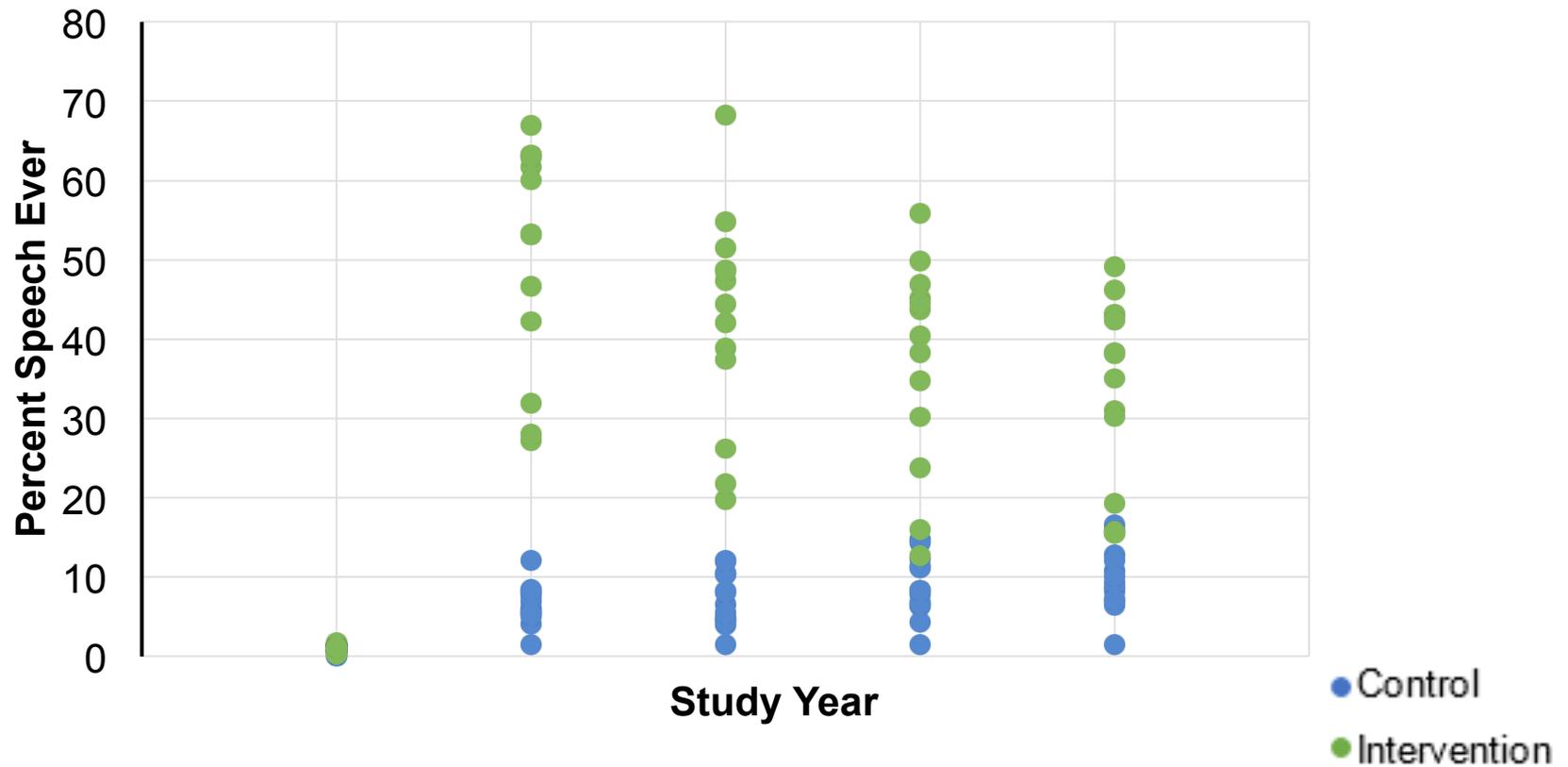
Findings: Big Picture Questions

1. Was Green Dot training implemented?
 - Measured student reports of bystander training received (2010-2014)

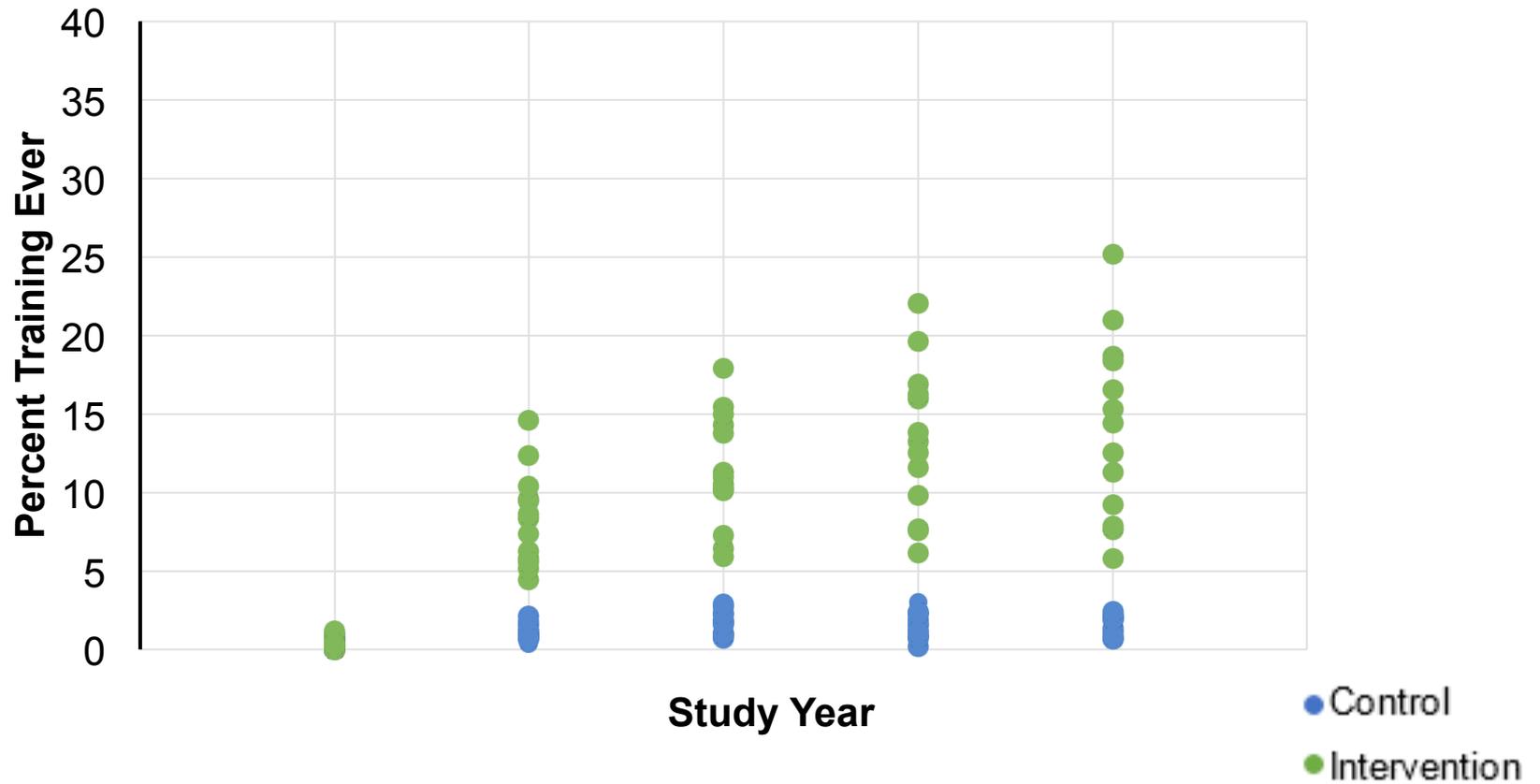
Moving toward Prevention



Intervention (Speech) Training



Intervention (POL) Training



Findings: Big Picture Questions

- Was Green Dot training implemented? **YES**

Both for Phase I (Speeches) and
Phase II (Intensive Bystander POL Training)

Moving toward Prevention



Findings: Big Picture Questions

2. Did randomization work?

Were demographic and violence proportions similar in Intervention and Control Schools at baseline?

Moving toward Prevention



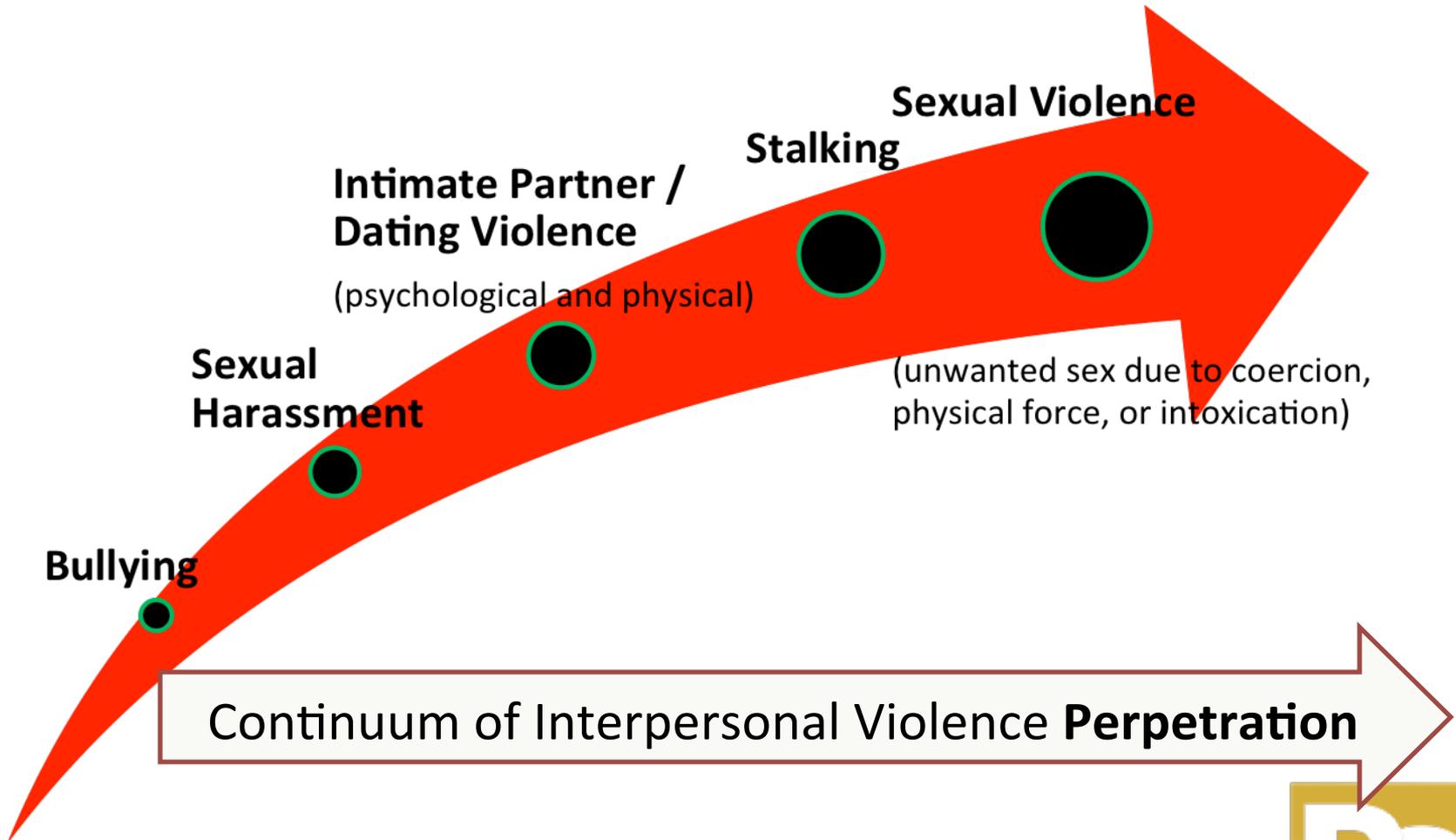
Baseline School-Level Data

Sample Characteristics	Intervention (N = 13)	Control (N = 13)
Gender: % Female	54.6	54.1
Grade: % Freshman	31.1	30.3
Race: % White	82.5	87.2
% Living in Poverty (Census 2010)	25.6	25.5
% Free or Reduced Meal	44.3	45.5
% Exclusively Attracted to Opposite Sex	86.3	86.7
% Currently in a Romantic Relationship	50.2	50.2
% Witnessed Parental IPV (lifetime)	24.7	25.7
% Binge Drinking in Past Month	27.0	28.2

No significant difference in demographics, violence risk factors, OR violence frequency by condition at baseline. Randomization worked



Measuring Outcomes: Think Continuum



Evaluating violence change over time

- Longitudinal analysis of school outcomes
 - School is the unit of analysis
 - As randomized to Intervention (n=13) and Control (n=13).
- Violence scores
 - Aggregate number of reported events (mean # events reported by students, average at school level)
 - Adjust for school size (attendance) and baseline number of violent events
 - Mischievous responders excluded.
- Means are compared for I vs. C over time
 - PROC GLIMMIX with an AR [1] R matrix and SE estimates
 - PROC GENMOD, link=log, dist=bin, using REPEATED with EXCH matrix. All analyses in SAS version 9.3 or 9.4



SEXUAL VIOLENCE (Unwanted Sex)

Sexual Violence (Unwanted Sex)

- **Victimization**

Had sexual activities even though you didn't really want to because

1. they threatened to end your friendship or romantic relationship if you didn't or because you felt pressured by the other person's constant arguments or begging?
2. because the other person threatened to use or used physical force (like twisting your arm, holding you down)?
3. you were drunk or using drugs?

- **Perpetration**

Had sexual activities with a high school student

1. because you either threatened to end your friendship or romantic relationship if they didn't or because you pressured the other person by arguing or begging?
2. by threatening to use or used physical force (twisting their arm, holding them down)?
3. because she/he was drunk or on drugs?

Response Options: # times in past 12 months: 0,1-2, 3-5, 6-9, 10+



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Research Questions & Findings

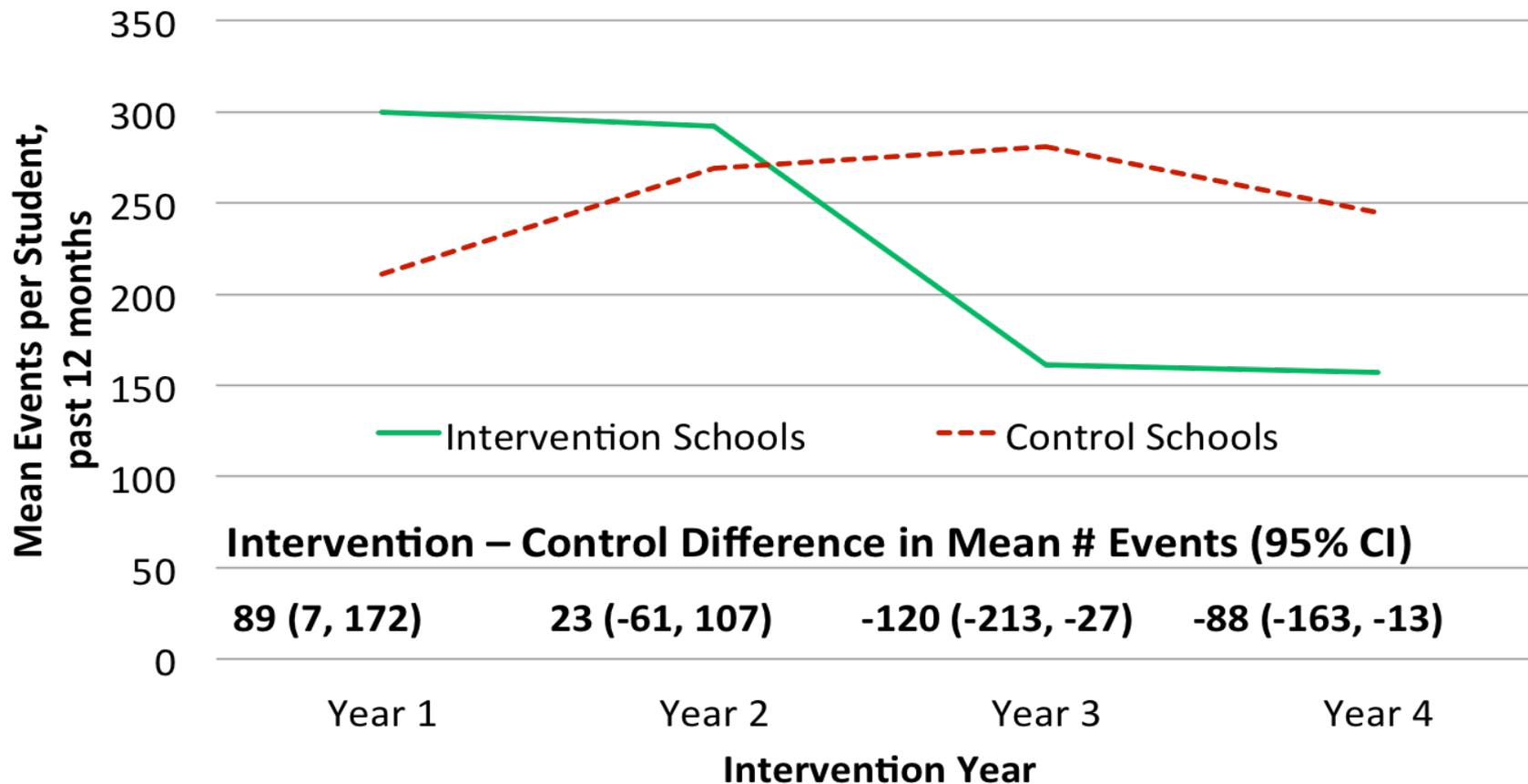
3. Does Green Dot training (as randomized at school level) reduce violence over time in Intervention high schools compare with Control schools?

Intent To Treat (ITT) analysis

Trial Registration: [ClinicalTrials.gov](https://clinicaltrials.gov) Identifier:
NCT01878097



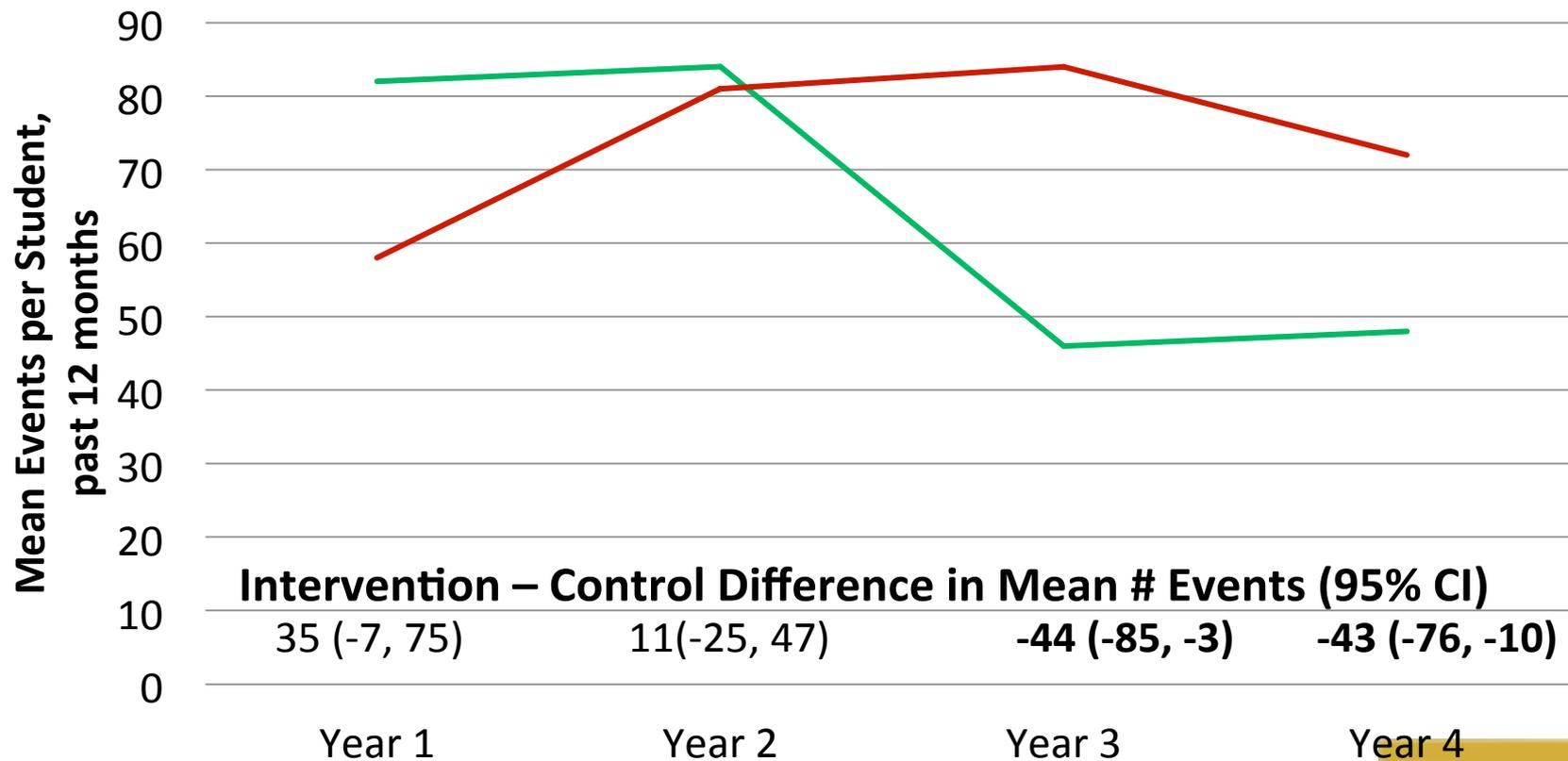
Sexual Violence Perpetration (School-Level)



Condition x Time: F test for I-C = 7.18; p=.0003

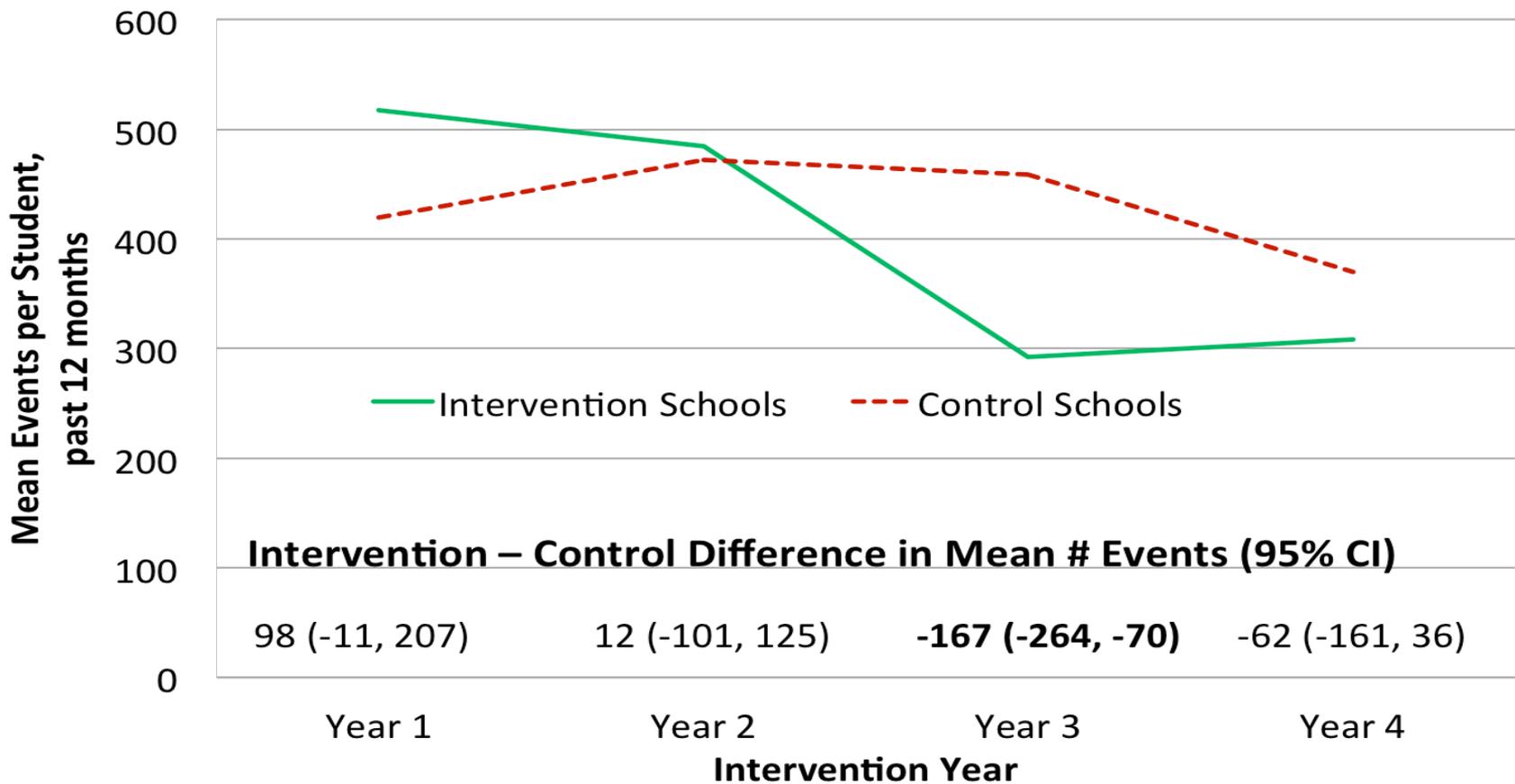
Sexual Violence Perpetration (School-Level)

SVP – Item 3: Alcohol or drug facilitated sex



Condition x Time: F test for I-C = 8.53; $p < .0001$

Sexual Violence Victimization (School-Level)



Intervention x Time: F test = 7.12; p=.0003

Sexual Violence Perpetration (yes to ANY of 3 items)

Year	Sexual Violence (12 months) Prevalence Rates		Prevalence Rate Ratio (95% CI) by year
	Intervention	Control	All
0	7.00	7.26	0.96 (0.85, 1.09)
1	7.40	6.61	1.12 (0.96, 1.30)
2	7.22	7.67	0.94 (0.81, 1.10)
3	5.28	6.33	0.83 (0.70, 0.99)*
4	4.97	6.28	0.79 (0.67, 0.94)**

Interpretation: 17-21% reduction in SV perpetration among all students in Intervention years Y3 and Y4, respectively.





SEXUAL HARASSMENT

Sexual Harassment

Victimization

1. Tell you sexual stories or jokes that made you uncomfortable?
2. Make gestures, rude remarks or use sexual body language to embarrass or upset you?
3. Keep asking you out on a date or asking you to hookup even though you said No?

Perpetration

1. Tell sexual stories or jokes that made another high school student uncomfortable?
2. Make gestures, rude remarks, or use sexual body language to embarrass or upset another student?
3. Keep asking another high school student out on a date or ask to hookup even though they said No?

Response Options: # times in past 12 months: 0,1-2, 3-5, 6-9, 10+



Measures of SV/DV Impact (3 items)

In the past 12 month, because of unwanted sexual activity or because a current or previous boyfriend/girlfriend hurt you on purpose,

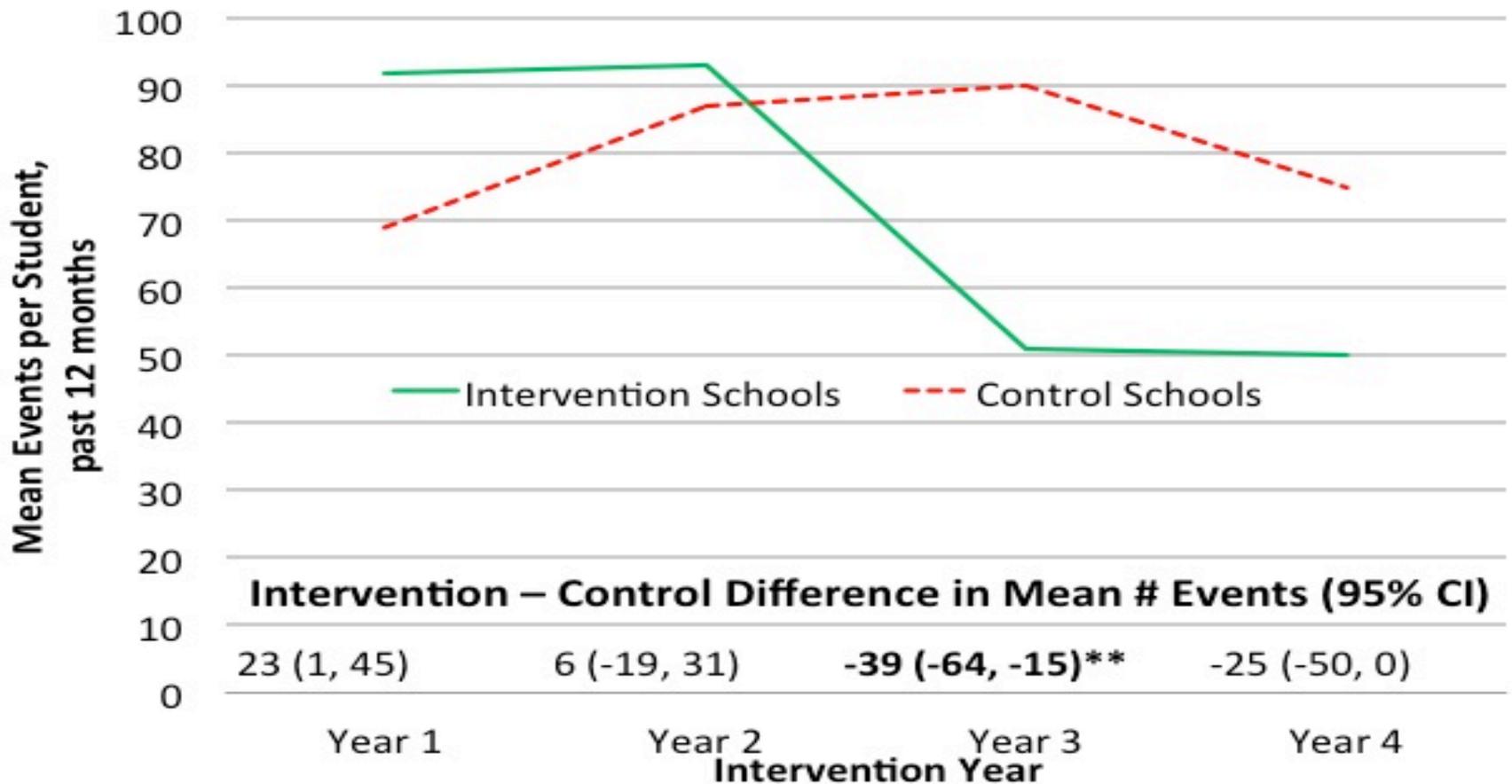
How frequently

1. Were you physically hurt?
2. Did you missed school?
3. Seek care from a doctor, school nurse, hospital, school counselor, social worker, therapist or other mental health expert?

Response Options: # times in past 12 months: 0,1-2, 3-5, 6-9, 10+



School-Level Reports of Missed School



Intervention x Time: F test = 9.54; $p < .0001$

Summary of Findings

- Does Green Dot training reduce violence over time in Intervention v Control high schools? **YES for....**

Violence Form	Victimization	Perpetration
Unwanted sex	✓ yes	✓ yes
Sexual harassment	✓ yes	✓ yes
Dating violence	✓ Yes psychological	✓ Yes psychological
Reproductive coercion	✓ yes	NOT measured
Stalking	✓ yes	✓ yes
Combined forms	✓ yes	✓ yes
Impact of SV/DV	✓ Yes (physical hurt, missed school, sought help)	NOT measured

Moving toward Prevention



Conclusion

- Evidence that Green Dot works, as implemented by trained Rape Crisis Center Educators, to reduce interpersonal violence victimization and perpetration
 - Sexual violence
 - Sexual harassment
 - Reproductive coercion
 - Psychological dating violence
 - Stalking

Next steps

- Through trained Rape Crisis educators, KASAP will provide Green Dot to additional high schools across Kentucky.
- Evaluation efforts will continue in these high schools.
- Cost and Cost-Effectiveness Analyses

Moving toward Prevention





COST ANALYSIS OF GREEN DOT DURING THE 5-YEAR STUDY PERIOD

Cost Analysis

- Cost estimates were classified as start-up and ongoing implementation
 - Data for estimates obtained via interviews of key personnel, evaluation of budgets, and surveys collected from educators and directors
 - Cost associated with data collection for the purpose of evaluation are not included
- KY plan for implementation utilized existing resources in Rape Crisis Center educators

Bush JL, Bush HM, Coker AL, Brancato CJ, Clear ER, Recktenwald EA. (2016) Total and Marginal Cost Analysis for a High School Based Bystander Intervention. Journal of School Violence



Cost Analysis for 5-year Period

- Approximate cost of implementing GD over a 5 year period: \$1,613,000
 - Start-up costs: \$62,000
 - Coaching for Educators : \$165,000
 - Center Educators: \$1,260,000*
 - Travel Re-imbursement and Supplies: \$135,000
- Cost to add another school
 - \$15,000 (educator*) + \$2,100 (travel/supplies)
- Working on Cost analysis and Cost effectiveness papers

*Best estimate based on educators survey, ~ 20 hours/month spent on Green Dot training. Range of personnel costs: \$420K- \$1.26M





IMPLICATIONS FOR PREVENTION PRACTICE

Bystander Can Reduce Perpetration



www.nsvrc.org/publications/nsvrc-publications/engaging-bystanders-sexual-violence-prevention



Text Chat Question

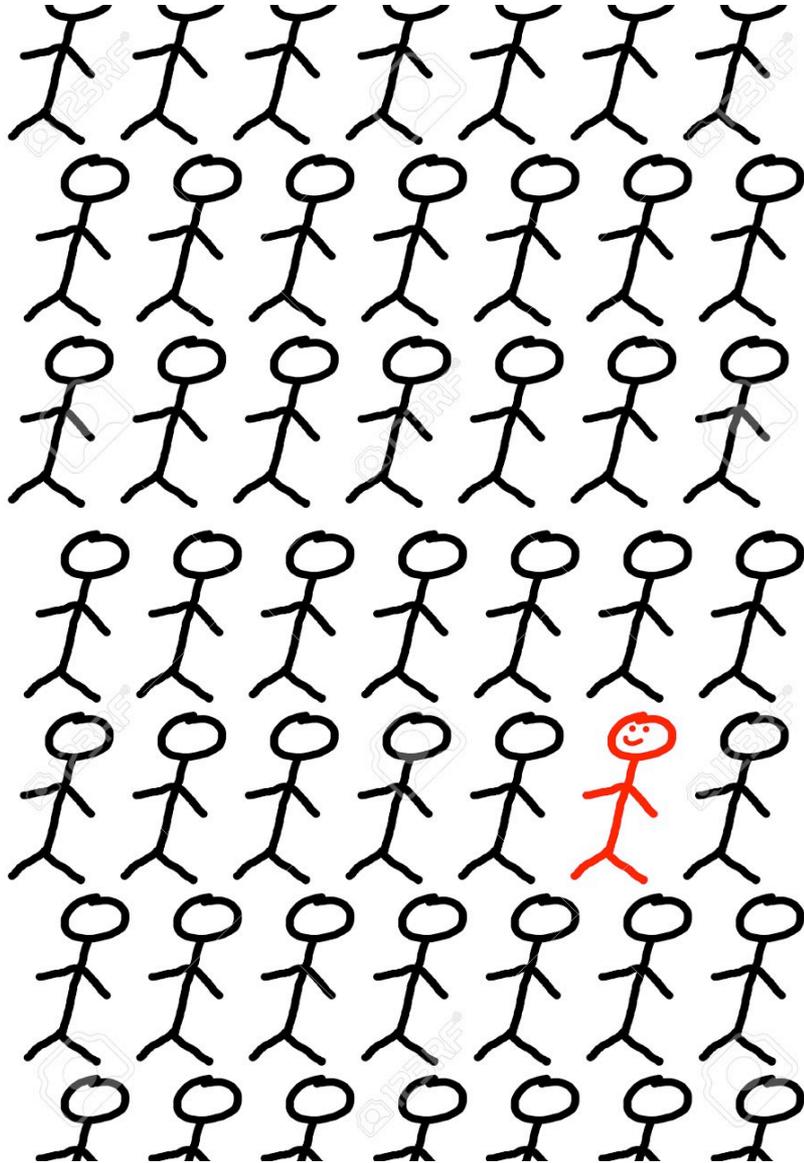


**Should bystander training be gender-neutral (same for males and females)?
Advantages or disadvantages specific to gender and sexual orientation?**

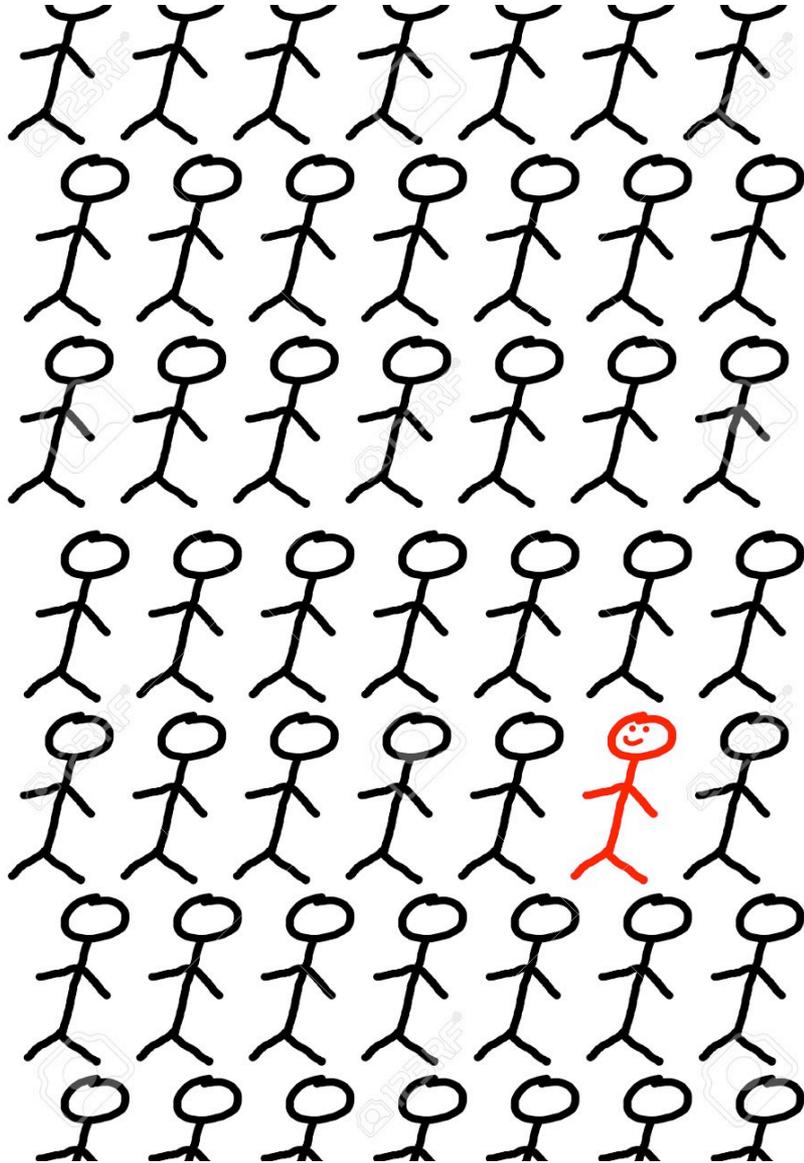
School/Community as Target of Change



School/Community as Target of Change



School/Community as Target of Change





MO LEWIS, NSVRC



Work with your local centers



Look for Leaders



Text Chat Question



**Why is leadership
within the community
important to prevent
efforts?**

Train Well

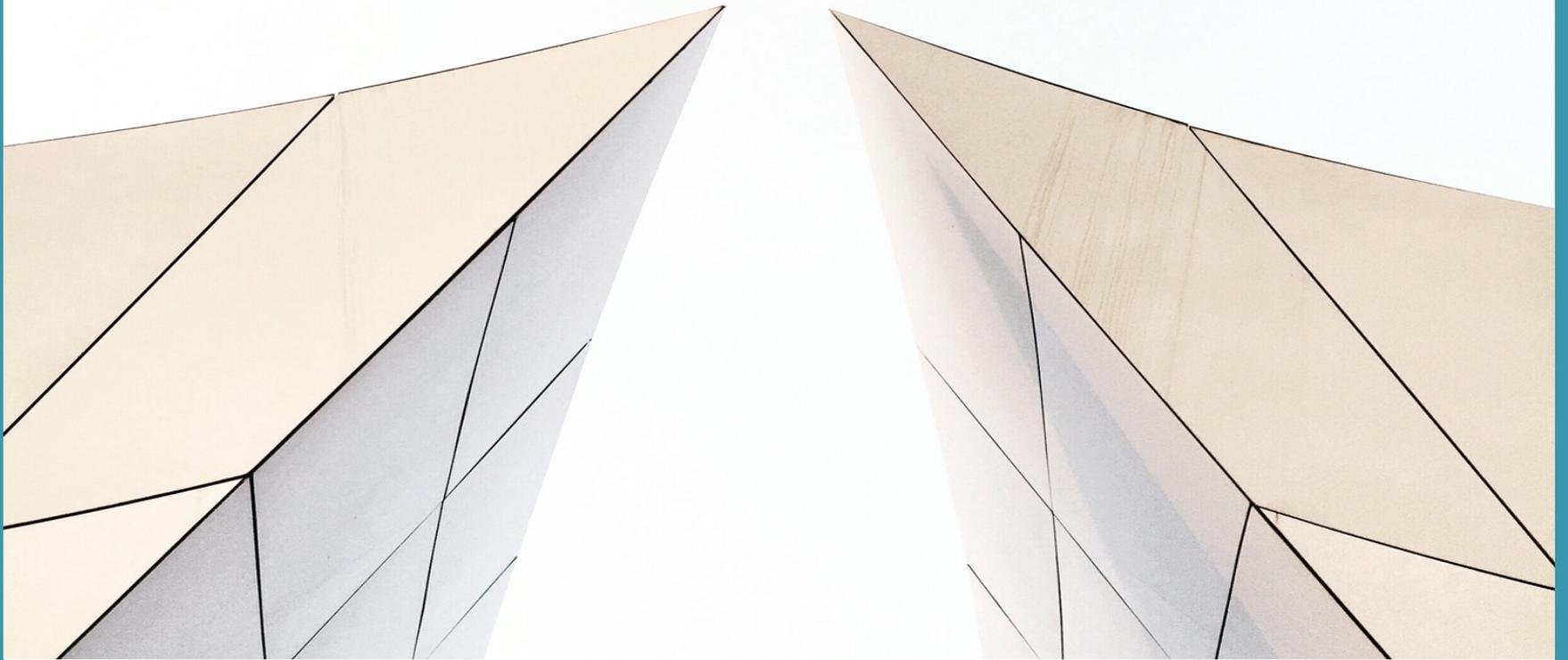


Turnover and Training: The Cost of Sustaining Green Dot

- Ongoing training issue costs and scheduling challenges
- Monthly planning meetings are essential
 - Steering group (State Capacity Building Team)
 - meeting of educators (Program Implementation Committee—PIC)
- (after RTC) Cost of coach for the educators proved cost prohibitive



Check for Fit



Fidelity & Adaptability



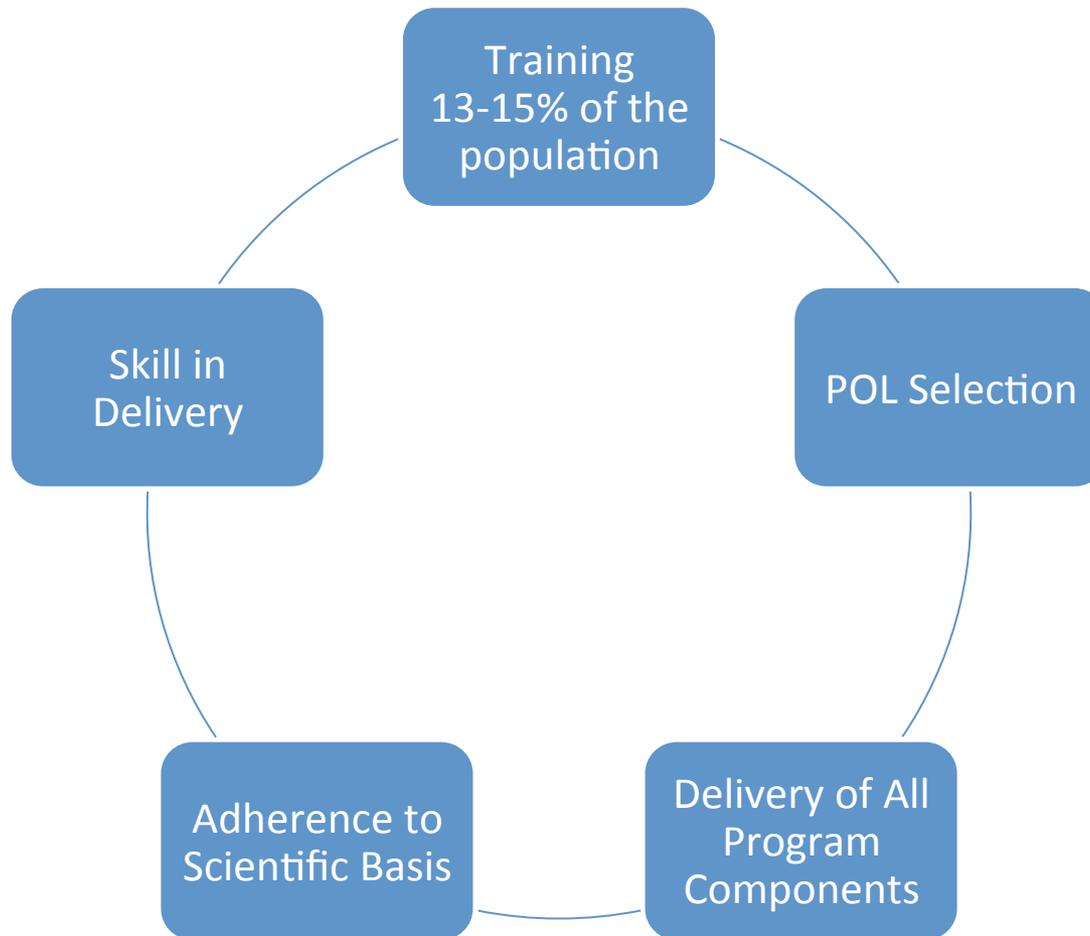
FIDELITY

ADAPTABILITY

ESSENTIAL PROGRAM ELEMENTS

Importance of Fidelity

- Green Dot Components



Fidelity Assessment

- Fidelity to Curriculum
 - Audio recordings of EACH training or speech given in an intervention schools
 - Data collected as speeches are given
 - Periodic download of data to be analyzed by multiple reviewers
- Debriefing logs
 - data on details/problems/ successes in trainings
 - Logs completed 24-48 hours after each speech or training

Measure Impact



Evolution of the Curriculum

The shift from Green Dot 1.0 to Green Dot 2.0 created challenges for new and veteran prevention educators

- Which version to use
- Peer to peer practice and support
- Maintenance of a training protocol for post Green Dot Institute curriculum practice

Contact Information



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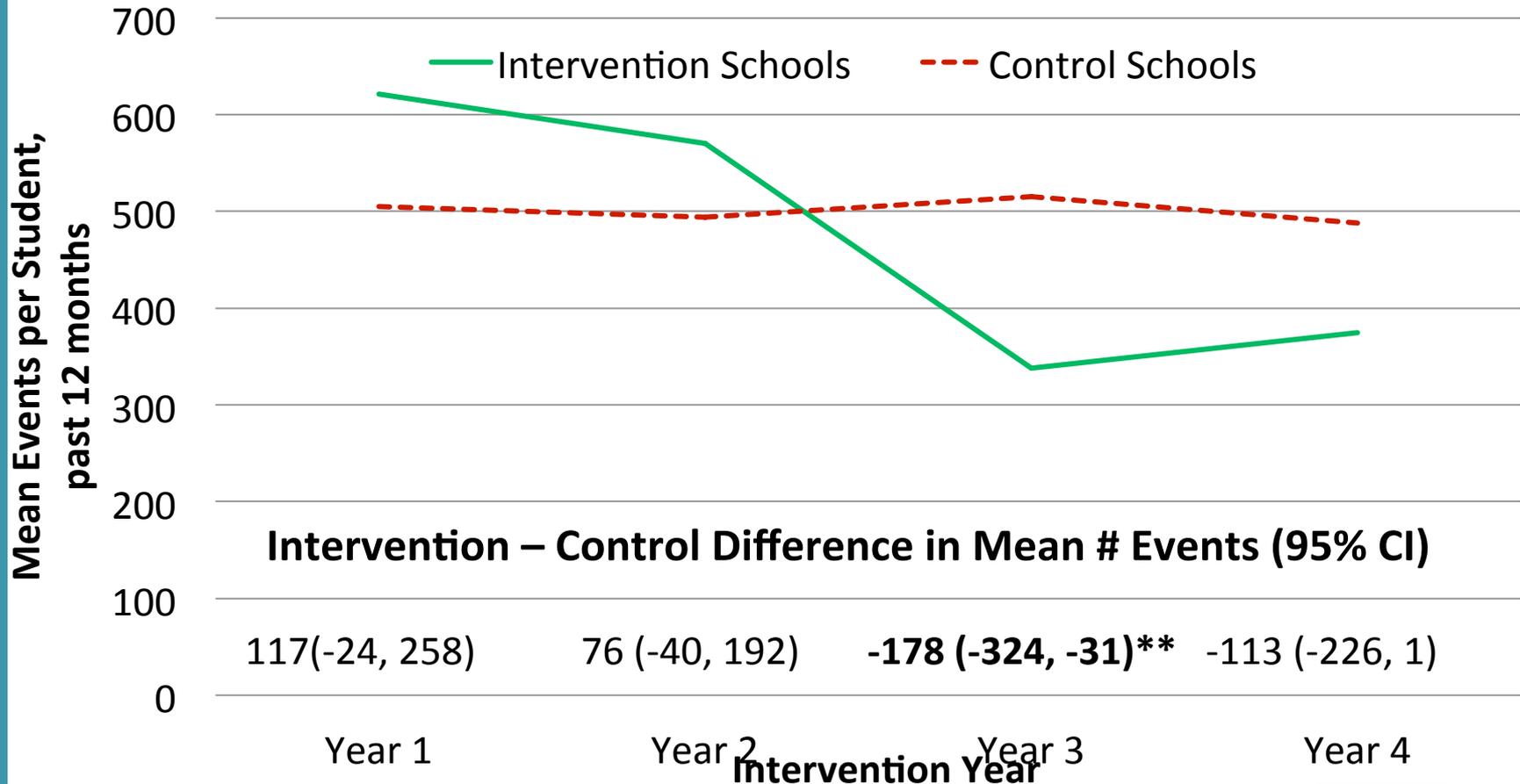




ADDITIONAL VIOLENCE OUTCOMES

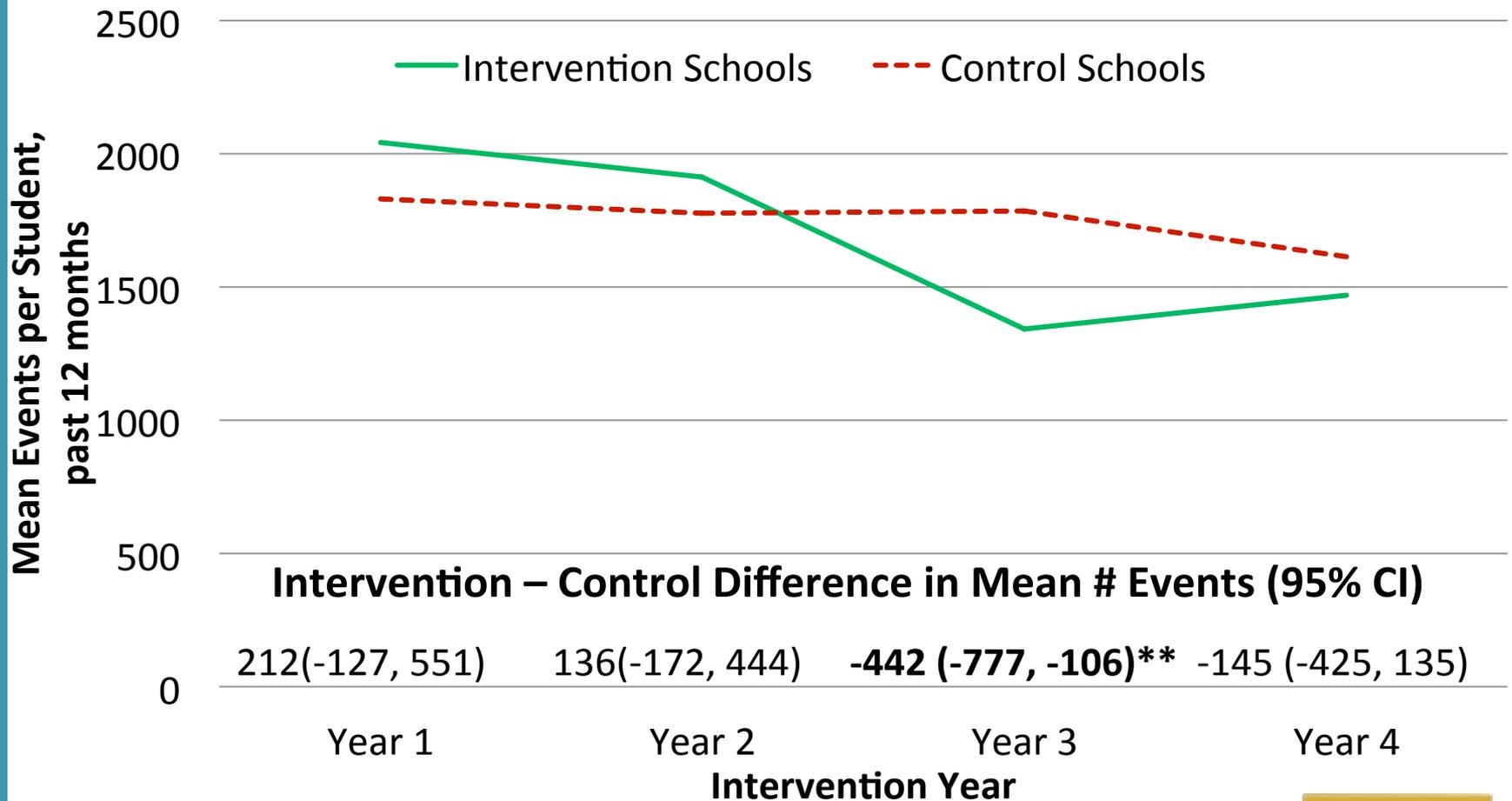
Green Dot Across the Bluegrass (ITT analyses)

Sexual Harassment Perpetration (School-Level)



Intervention x Time: F test = 6.29; p=.0008

Sexual Harassment Victimization (School-Level)



Intervention x Time: F test = 7.43; p=.0002



STALKING

Stalking

- **Victimization**

1. You were followed, spied on or monitored using computer software, cameras, listening tools or global positioning system (GPS)?
2. Someone showed up at your home, school or work or waited for you when you did not want them to?
3. You received unwanted phone calls, gifts, emails, text messages, or notes/pictures posted on social networking sites for example, Facebook, MySpace or Twitter?

- **Perpetration**

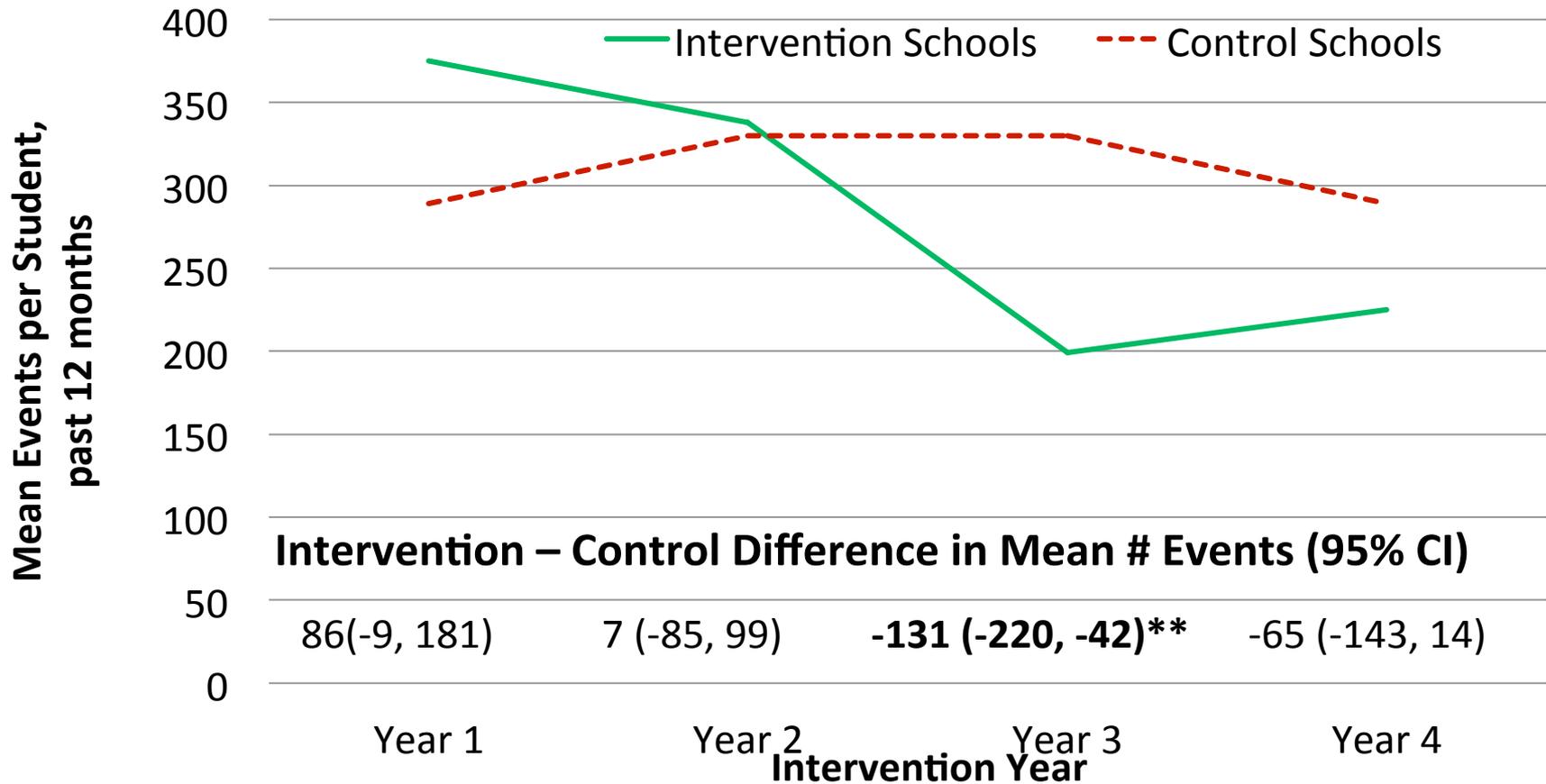
1. Followed, spied on or observed someone using computer software, cameras, listening tools or global positioning system (GPS)?
2. Showed up at someone's home, school or work or waited for them when they asked you not to?
3. Sent unwanted gifts, emails, text messages, phone calls, notes or pictures posted on social networking sites for example, Facebook, MySpace or twitter?

Response Options: # times in past 12 months: 0,1-2, 3-5, 6-9, 10+



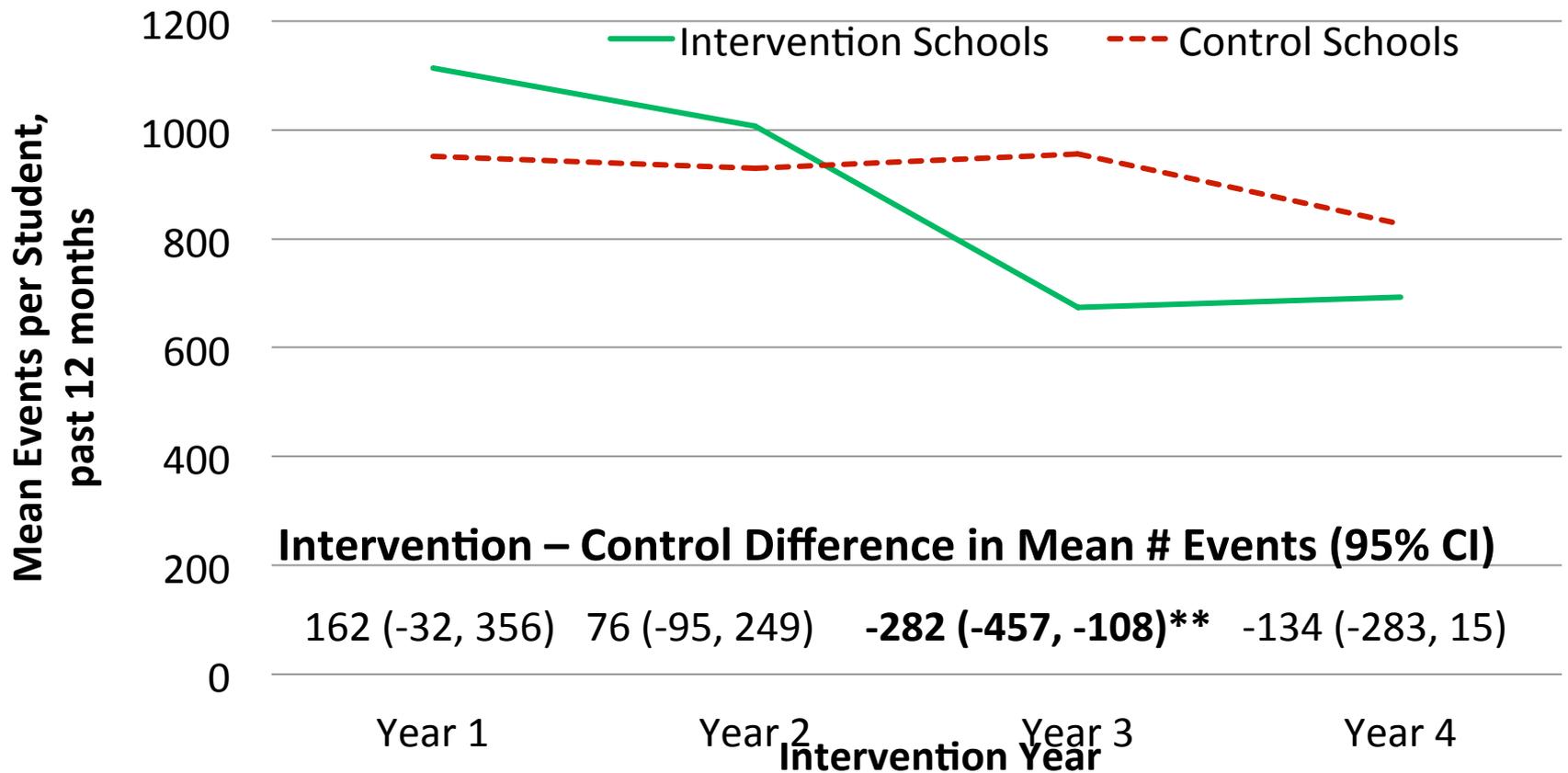
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Stalking Perpetration (School-Level)



Intervention x Time: F test = 4.48; p=.006

Stalking Victimization (School-Level)



Intervention x Time: F test = 7.98; p=.0001



PSYCHOLOGICAL + PHYSICAL DATING VIOLENCE

Psychological + Physical Dating Violence

- **Victimization**

1. Tried to control you by always checking up on you, telling you who your friends could be, or telling you what you could do and when?
2. Damaged something that was important to you on purpose?
3. Shouted, yelled, insulted or swore at you?
4. Threatened to hit, slap, or physically hurt you?
5. Hit, slapped, or physically hurt you on purpose?

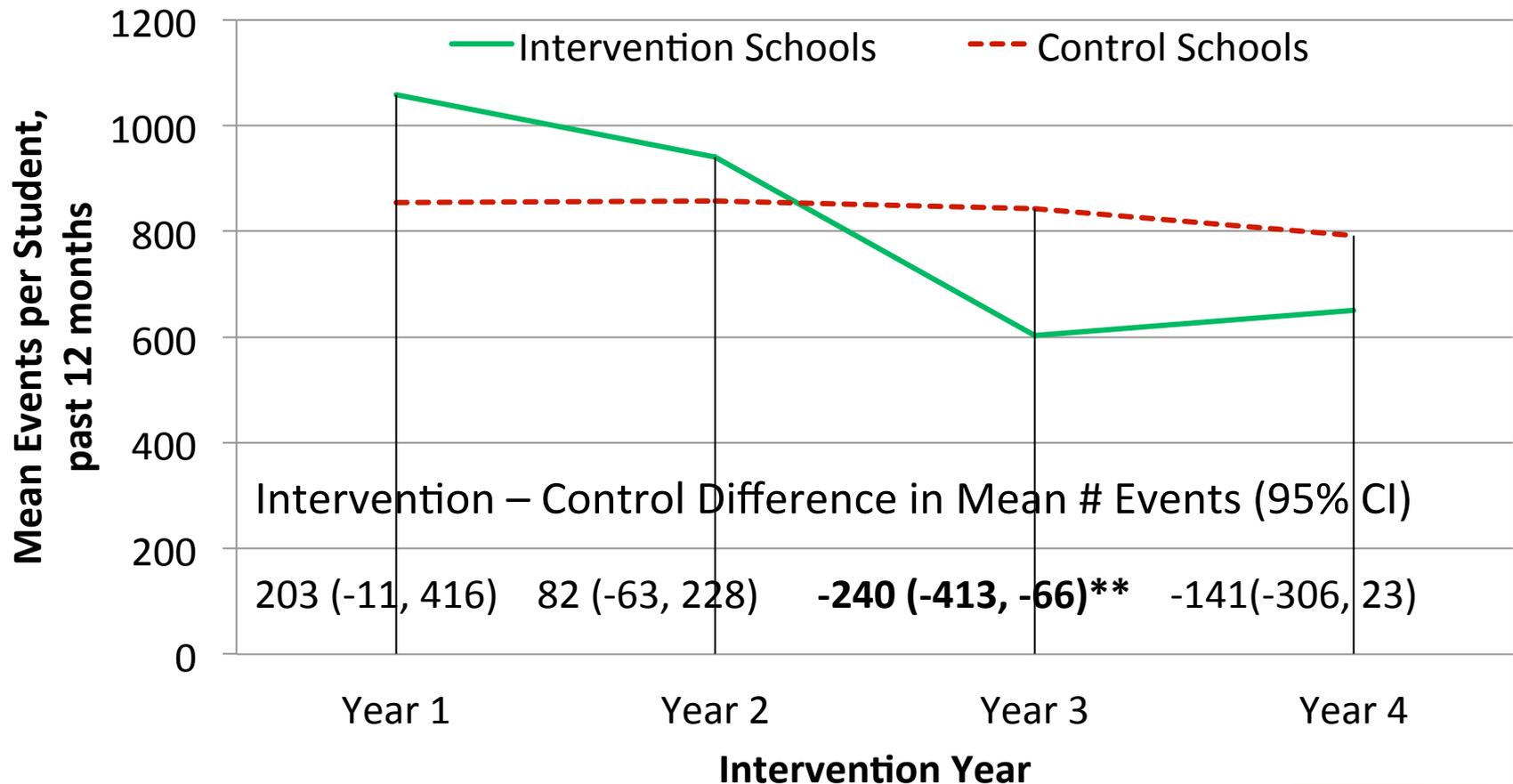
- **Perpetration**

1. Try to control a current or previous girlfriend or boyfriend by always checking up on them, telling them who their friends could be, or telling them what they could do and when?
2. Damage something on purpose that was important to a boyfriend or girlfriend?
3. Shout, yell, insult or swear at a current or previous girlfriend or boyfriend?
4. Threaten to hurt a current or previous boyfriend or girlfriend?
5. Hit, slap, or physically hurt a current or previous boyfriend or girlfriend on purpose?

Response Options: # times in past 12 months: 0,1-2, 3-5, 6-9, 10+

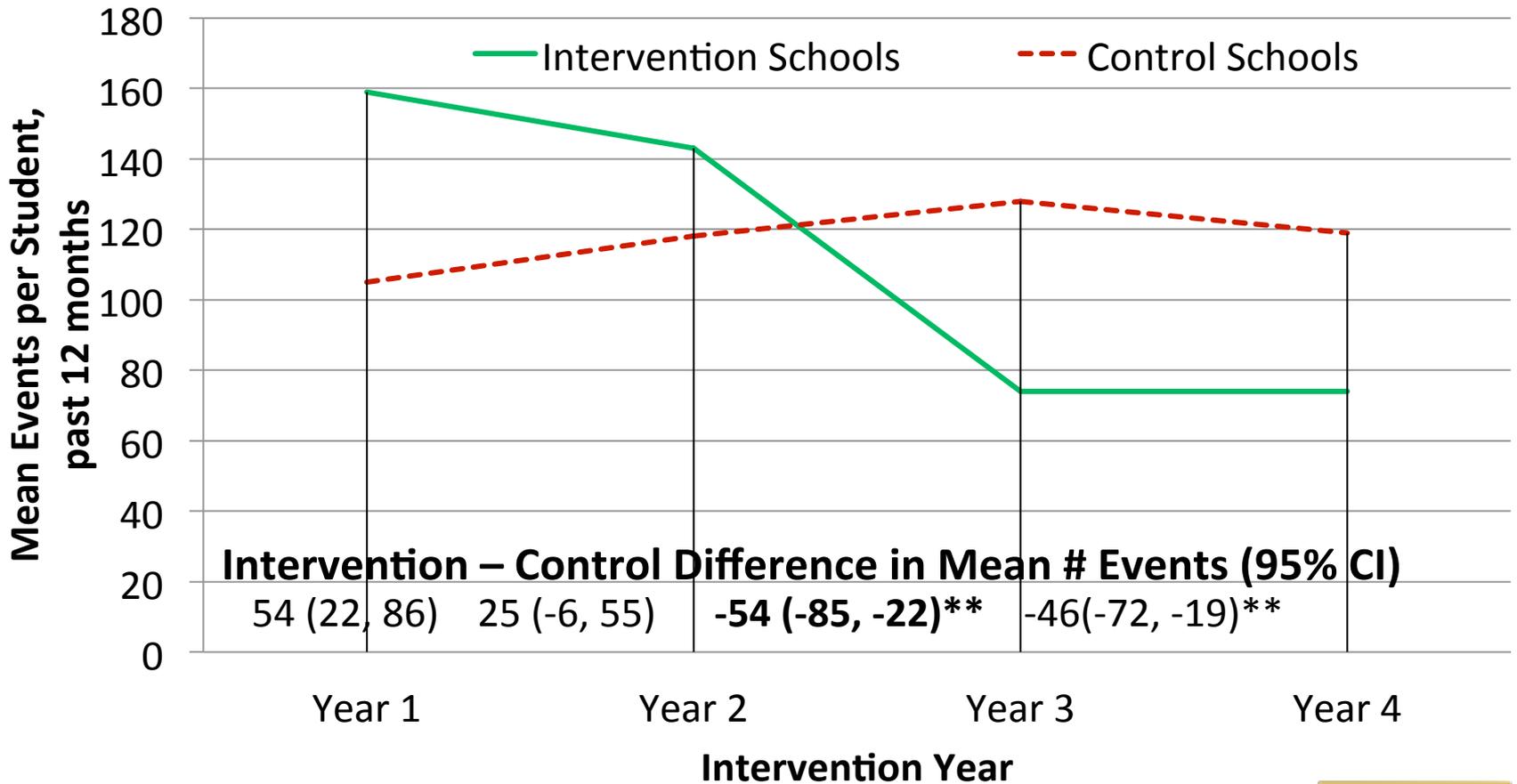


Psychological Dating Violence Perpetration (School-Level)



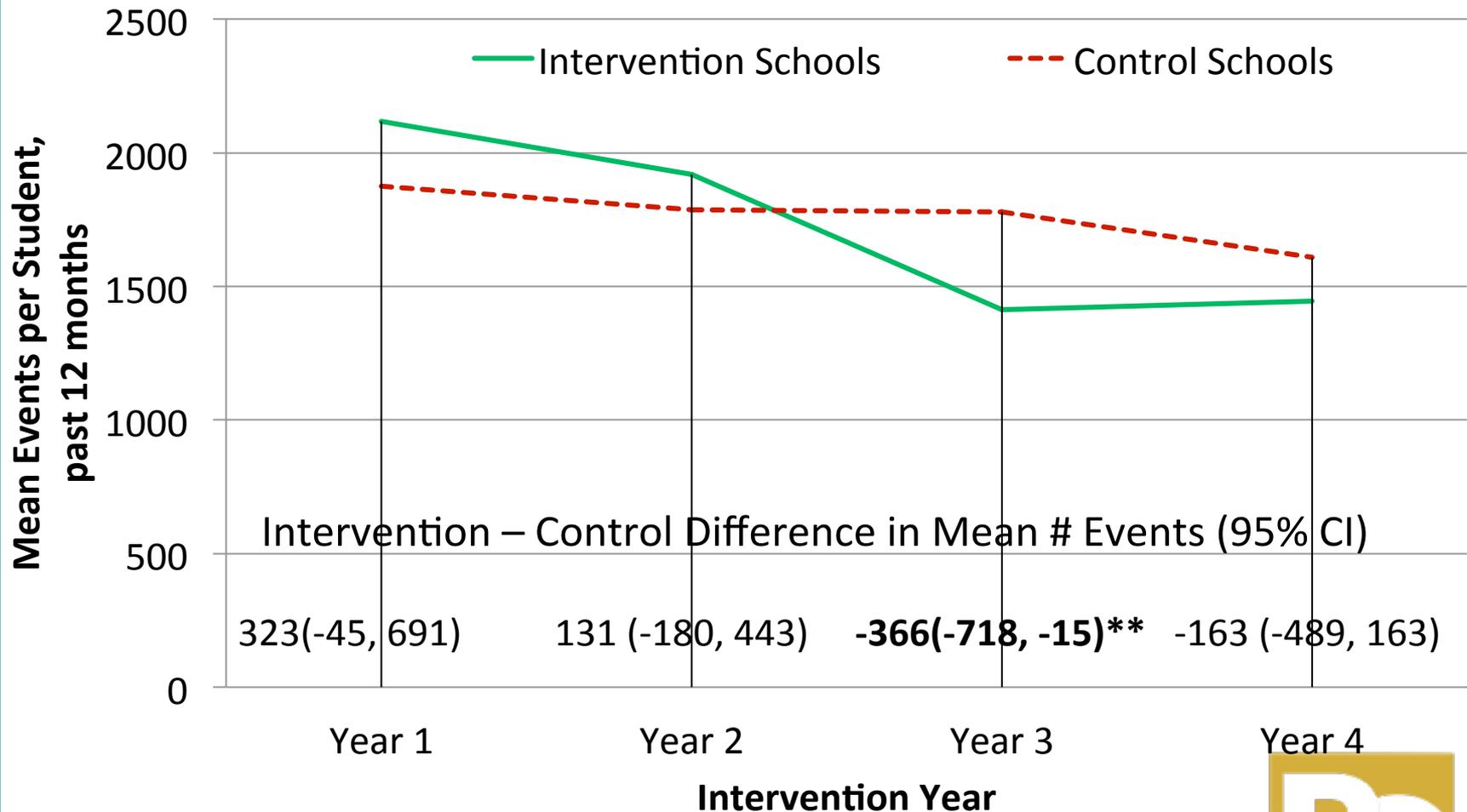
Intervention x Time: F test = 6.06; p=.001

Physical Dating Violence Perpetration (School-Level)



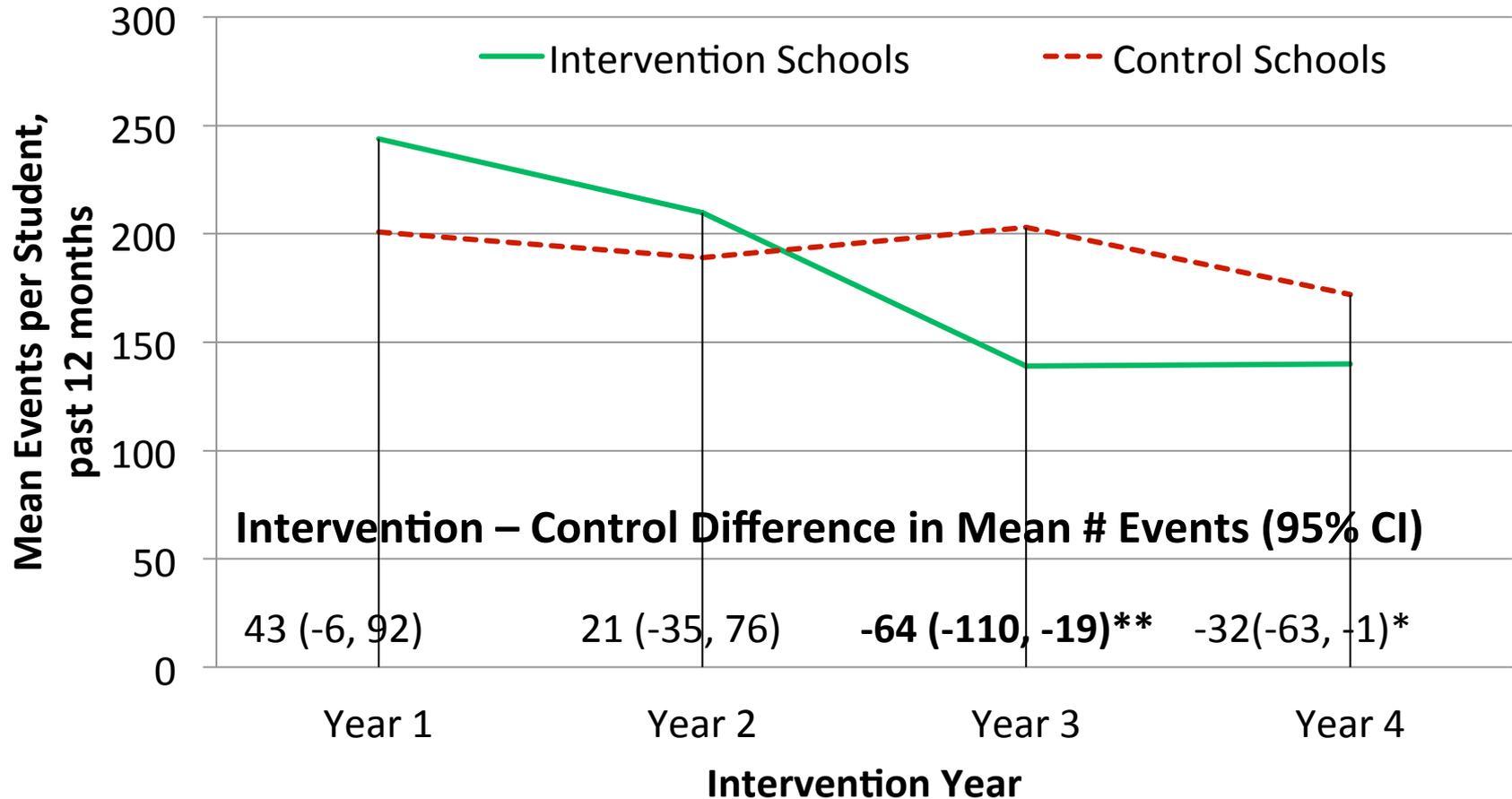
Intervention x Time: F test = 11.19; $p < .0001$

Psychological Dating Violence Victimization (School-Level)



Intervention x Time: F test = 5.35; p=.002

Physical Dating Violence Victimization (School-Level)



Intervention x Time: F test = 6.20; p=.0008