

Reducing Teen Dating Abuse: Evaluation of a Pilot Curriculum for Teenagers



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Intimate partner violence (IPV) is a common social problem in America that regularly inflicts physical injury, psychological distress and economic hardship upon its victims, their families and children. In the past several decades, numerous initiatives have been launched to reduce the incidence and severity of IPV, ranging from public education campaigns to changes in criminal statutes and police department policies. Included among these efforts has been a focus on teen dating abuse – that is, on informing young people about the nature of IPV and ways to avoid becoming perpetrators or victims. One avenue for delivering this information is via presentations to high school students in regularly scheduled or special classes.

BLOOM is a project of the Purple Ribbon Council, DBA gopurple.org, a non-profit 501©(3) organization that seeks to increase teenagers' understanding of the root causes of teen dating abuse and to increase their knowledge of and skills for building healthy relationships. During 2014, it developed a curriculum for delivery to middle and high school students in the Phoenix, Arizona area in a series of daily classes over the course of seven school days. Between September 2014 and May 2015, the classes were given to a total of 1,966 students in grades 7 through 12.

From the beginning, GoPurple.org sought a way to evaluate the impact, if any, of its curriculum on students' knowledge of and attitudes toward teen dating abuse. In collaboration with Morrison Institute, it chose to monitor and measure the responses of approximately 700 students to determine whether an impact could be detected.

This report contains the results of that evaluation.

To determine whether a detectable impact occurred upon the knowledge/attitudes of this group of students, a pre-post paired change design was used. On several occasions between November 2014 and March 2015, students at Deer Valley High School, Camelback High School, Western School of Science and Technology and Desert Pointe Academy – all located in the Phoenix, Arizona area – filled out a 22-question survey (the "pre-test," see Appendix 1)





in which they indicated their level of agreement with a series of statements regarding teen dating abuse. This was done using i>Clicker technology, which allowed the students to respond confidentially and enabled their teachers to keep track of individual students' responses. Students then took classes in the BLOOM curriculum (see Appendix 2) daily for seven days; the classes were designed and presented by BLOOM to inform students about various aspects of teen dating abuse.

About two weeks later, the same students re-took the same survey, containing the same set of questions (the "post-test"). Each student's answers to each question on both tests were linked via the i>Clicker system so that a difference score for each student could be calculated. The difference score for question 1, for example, is the pre-test answer for question 1 minus the post-test answer for question 1.

The statistical test of whether students, on average, changed their opinions was conducted using a paired t-test (see Appendix 3). This test involves taking the average difference across all students for each question, then statistically testing whether that average is different than zero (zero indicating no change). The test also indicates whether those changes that did occur could have been due simply to chance rather than any effect of the curriculum.

The results are calculated in terms of how likely it is that the observed changes were due to chance, and are presented as stars. One star (*) indicates that the probability of the difference occurring by chance is less than 5 percent (the most commonly used probability level), ** indicates that the probability of the difference occurring by chance is less than 1 percent, and *** indicates that the probability of the difference occurring by chance is less than 0.1 percent.

In order to gauge the magnitude of these effects, the differences were transformed into effect sizes. For each question, this transformation takes the mean difference and divides it by the pre-test standard deviation. This allows for a common benchmark for each question, and illustrates changes in mean responses in units of standard deviation. Typically, effect sizes of 0.1 to 0.3 are considered small, 0.3 to .0.5 are medium, and 0.5 and above are large.

The table below presents the raw data. "N" counts the number of students who responded to each question on both the pre-test and the post-test. The next two columns contain the coded average responses to each question; the higher the number, the closer the response is to the "right" view as taught in the BLOOM curriculum. The next column shows the difference between the average responses given on the two survey rounds. Next is the standard error of the difference, the effect size, and the indications of statistical significance according to the t-test.



Question	Ν	Pre Test Mean	Post Test Mean	Difference (Post–Pre)	Standard Error of the Difference	Effect Size	Sig Level
1	720	1.967	2.136	0.169	(0.038)	0.185	***
2	675	2.547	2.566	0.019	(0.046)	0.019	
3	709	2.984	3.083	0.099	(0.038)	0.118	**
4	702	3.399	3.292	-0.107	(0.038)	-0.119	**
5	693	2.506	2.811	0.304	(0.042)	0.351	***
6	717	1.576	1.678	0.102	(0.042)	0.113	*
7	700	2.744	2.989	0.244	(0.043)	0.277	***
8	692	2.942	2.899	-0.043	(0.038)	-0.046	
9	714	2.853	2.964	0.111	(0.037)	0.128	**
10	732	3.019	2.958	-0.061	(0.040)	-0.069	
11	689	2.716	3.104	0.389	(0.039)	0.471	***
12	700	2.494	2.724	0.230	(0.035)	0.292	***
13	712	3.358	3.385	0.027	(0.038)	0.031	
14	730	3.358	3.374	0.016	(0.039)	0.022	
15	694	3.144	3.308	0.164	(0.041)	0.207	***
16	723	3.408	3.480	0.072	(0.035)	0.098	*
17	689	2.495	2.743	0.248	(0.034)	0.307	***
18	673	3.080	3.187	0.107	(0.041)	0.134	*
19	699	2.501	2.838	0.338	(0.045)	0.360	***
20	703	2.906	3.208	0.302	(0.039)	0.412	***
21	695	2.682	2.836	0.154	(0.040)	0.192	***
22	687	2.726	2.920	0.194	(0.040)	0.223	***

A statistically significant shift was detected in the responses to 17 of the 22 statements. In all of these instances but one, students' answers shifted from pre-test to post-test in the "right" direction – i.e., in keeping with the information provided in the BLOOM curriculum. For statement 4, however, which concerned dating abuse in lesbian, gay, bisexual and transgender relationships, the students' responses shifted in the "wrong" direction, i.e., away from the content of the BLOOM curriculum. In 11 of the 22 statements, the degree of significance was especially strong. No significant difference between pre-test and post-test answers was detected in responses to 5 of the 22 statements, including two additional responses that registered minus values.

The results of this analysis support the thesis that the BLOOM curriculum did have a positive impact on these students' knowledge of and attitudes toward teen dating abuse, and thus could be a useful instrument in reducing the incidence and severity of this serious social ill.



Appendix 1. The Survey Instrument

Stars indicate the degree of statistical significance, if any, in differences in the mean answers to each question between the first and second tests. No stars means that no significant difference was noted. One star indicates that the probability of the difference occurring by chance is less than 5 percent; two stars indicates that that the probability of the difference occurring by chance is less than 1 percent; three stars indicates that the probability of the difference difference occurring by chance is less than 1 percent; three stars indicates that the probability of the difference difference occurring by chance is less than 0.1 percent.

- "Teen dating abuse" is most accurately defined as physical violence by a teen against his/her dating partner. ★★★
- 2. Dating abuse is a serious problem among my peers.
- 3. It's normal to get angry when your partner spends time with his or her friends instead of you.★★
- Teen dating abuse in lesbian, gay, bisexual and transgender relationships is different from abuse among straight partners.★★
- In an abusive relationship, the most likely time for violence is when one partner breaks it off. ★★★
- 6. I myself have never done anything that could be called dating abuse.★
- 7. It's easy for a teen experiencing dating abuse to end it by breaking off the relationship. ★★★
- 8. Most dating abuse happens because one partner loves the other too much.
- Pressuring a partner to do something they don't want to do is not abusive if he/she ends up enjoying it.★★
- 10. You should talk to a victim about abuse even if it will embarrass him/her.
- It is abusive behavior if someone repeatedly checks their dating partner's phone, email or social media accounts. ★★★



Class Hour/Period: 1 (2) 3 4 5 6 7 8 Dear Meagan Nour Teacher's Name) Thank you for the BLOOM program, it... has really taught me a lot of great things I didn't know before. My mim was a victim of domestic violence and now that cycle of it all makes sense.

- 12. A dating partner shows how much they care by wanting to be with you all the time. $\star\star$
- 13. Putting up with minor abuse from your partner, like name-calling or put-downs, is better than not having a dating partner at all.
- 14. If someone I knew was abusive to his/her partner, I would try to stop it.
- If you really love your partner, you'll do what he/she asks even if it makes you uncomfortable. ★★★
- 16. It's OK to post an embarrassing comment or image about your ex-partner as long as it's obviously meant as a joke. ★
- 17. When a dating partner gets jealous, it is a sign that they really care. $\star \star \star$
- 18. A good girlfriend does not have to let her boyfriend control their relationship. **★**
- 19. Popular culture such as music, movies and advertising often sends the message that some dating abuse is OK. ★★★
- 20. If a friend or peer were the victim of an abusive relationship, I'd know how to help or where to send them for help. ★★★
- 21. Issues of abuse between dating partners can best be settled by the partners alone. ***
- 22. There's nothing I myself can do to reduce the amount of dating abuse in society. $\star \star \star$





Appendix 2. Demographics of Respondents

Gender

Male 52% Female 48%

Race/Ethnicity

White, non-Hispanic	30%	
African American/Black	17%	
Hispanic/Latina/Latino		
American Indian/Alaskan Native	18%	

Grade

8	7%
9	75%
10	10%
11	4%
12	4%

Age

14	35%
15	49%
16	9%
17	4%
18	4%





Appendix 3. BLOOM Curriculum

- Dose 1: Define It: What is Teen Dating Abuse
- Dose 2: Loves Me Not: When to Break Up + Safety Planning
- Dose 3: Norms vs. Exceptions: Deconstructing Media Influenced Gender Norms
- Dose 4: Why Does It Happen? Understanding & Preventing the Root Causes
- Dose 5: Just BLOOM It! Boosting Self-Esteem and Your Capacity to BLOOM
- Dose 6: Just BLOOM It! Communication, Negotiation & Respect
- Dose 7: Just BLOOM It! Better Bystanders for Social Change





Appendix 4. Details of the Paired Test

For each student, we have two scores for each question. The "pre-test" score is denoted as x and the "post-test" score is denoted as y. The difference between the two scores is denoted as d.

d, = y, -x

Thus, we are interested in testing whether the average *d* is different than zero.

$$H_{\rm O}: \overline{d} = 0$$
$$H_{\rm A}: \overline{d} \neq 0$$

Using the standard deviation of the differences divided by the sample size we can estimate a standard error of the difference.

$$SE(\overline{d}) = 0 \frac{SD_d}{N}$$

And the test is the mean difference divided by the standard error.

$$t = 0 \ \frac{\overline{d}}{SE(d)}$$

This test is then evaluated against the t-distribution (which is different for different sample sizes). If the probability of a value of t is less than 0.05, then the test is statistically significant.





Notes

¹ See Black, Michele C., et.al. (2011) "The National Intimate Partner and Sexual Violence Survey: 2010" Summary Report, National Center for Injury Prevention and Control, Centers For Disease Control and Prevention; or Catalano, Shannan (2012) "Intimate partner Violence, 1993-2010," *U.S. Bureau of Justice Statistics Special Report*

² For a summary, see Barner, John R. and Michelle Mohr Carney (2011) "Interventions for Intimate Partner Violence: A Historical Review," *Journal of Family Violence:* 26

³ "Physical Dating Violence Among High School Students -- United States, 2003," U.S. Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report, May 19, 2006; <u>http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5519a3.htm</u>; Davis A., (2008) "Interpersonal and physical dating violence among teens," *The National Council on Crime and Delinquency Focus* http://www.nccdglobal.org/sites/default/files/publication_pdf/focus-dating-violence.pdf

⁴ Wright, D. B. (1996) Understanding statistics: An introduction for the social sciences, Sage

⁵ Cohen, Jacob (1992) "A power primer," *Psychological Bulletin* 112.1: 155

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