



THE UNIVERSITY *of* NORTH CAROLINA  
**GREENSBORO**

# **Educating Kids about Gun Violence (EKG) Evaluation Results Year 1: Sept. 2014-May 2015**

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## **EKG Evaluation Results Year 1: Sept. 2014-May 2015**

The results for the first year of the EKG program are presented in this report. The report is divided into several separate sections for purposes of presenting, interpreting, and understanding the results. Sections are briefly outlined below:

1. Description of the EKG Program
2. Research Methodology
3. Research Sample Description & Baseline Characteristics
  - a. Entire Sample
  - b. Breakdown by School
4. Creation of Factor Scores through Factor Analysis
  - a. Factor Scale Scores for Sample
  - b. Factor Scale Scores by School
5. Student Risk Level Categorization
  - a. Characteristics of High Risk Students
6. EKG Program Impact
  - a. Changes in Attitudes, Beliefs, and Intended Behaviors Over Time
    - i. Pre- and Post-Comparisons
    - ii. Interactions between Student Risk Level and EKG Program Impact
  - b. Longitudinal Outcomes
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    - ii. Interactions between Student Risk Level and Longitudinal Impact
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### **Description of the EKG Program**

The Educating Kids about Gun Violence (EKG) program is part of the Fayetteville Police Department's Operation Ceasefire initiative. The EKG program began in 2014 and is designed to teach kids about gun and gang violence and prepare them for healthy decision-making. The program is taught by Fayetteville Police Department officers to youth in all 7th and 9th grade health classes in the Cumberland County School System, representing a unique partnership between law enforcement and the schools. By the end of the 2014-2015 school year, the Department will have reached over 8600 students county-wide with its gun and gang violence prevention and education message.

The EKG program uses a video called "Decision Points" (which was created and produced in Fayetteville, NC) featuring a number of scenarios involving a young male who is faced with various decision points about gun and gang violence. The video exposes the classroom participants to the potential consequences of poor decision-making about guns and gangs. Classroom participants then discuss decision-making and how the

young male in the video could have made better decisions along the way to prevent the negative consequences he experienced in the video.

## **Research Methodology**

The researchers designed a data collection instrument in the form of a self-report survey to assess student participant attitudes, behaviors, and cognitions about gun violence, gangs, and decision-making. Two versions of the survey were created; one was a pre-test to be completed before the student was exposed to the EKG program and to capture baseline levels of attitudes, behaviors, and cognitions; the other was a post-test to be immediately completed after the student finished the EKG program. Many of the items were the same, but some were specific to aspects of the video shown during the EKG program. EKG FPD officer instructors were responsible for passing out paper-and-pencil based pre- and post-test surveys to students and collecting them after. The surveys were then provided to the researchers for data entry and analysis.

### **Pre- and Post-Survey Development**

The survey design was informed by review of the Marion County (IN) Prosecutor's Office Educating Kids about Gun Violence (EKG) Program. Some items were taken from the Marion County EKG surveys and were modified as needed to better fit the scope of FPD's EKG program. Other items were created by the researchers to assess variables we were most interested in. The goal in survey design was to be succinct, grade-level friendly, and to make an effort to get the most information possible from students during the limited amount of time available for students to respond to survey items. Two rounds of revisions were made to the surveys during the first year to get to the final 15 pre-survey items and 15 post-survey items. Decisions to revise items were based in part on EKG instructor feedback from classroom experiences. For example, there was one initial item for which it was common for students to raise their hand to question the meaning of the item ("I often act on the spur of the moment without stopping to think"). This item was later omitted because students found it difficult to understand. EKG instructors also provided feedback that it was taking a long time for students to complete the surveys. Therefore, students were unable to answer all the questions on the surveys in the time allotted and therefore some items needed to be omitted to save time. Using data analysis results from completed surveys, a decision was made that if an item was highly correlated with another item and upon review of the content of the items, it appeared that the content was very similar then one of the two similar items was omitted.

The final pre- and post-surveys are provided in Appendices A & B. In addition to the items described above, the pre-survey also included basic demographic information and items to gather information about current gang involvement and experiences with guns and gun violence. Pre- and post-surveys were matched based on student identification numbers only. Students were told not to put their names on the surveys to ensure anonymity and thereby encourage more truthful responding.

### **Longitudinal Survey Development**

Toward the end of the first semester of the first year, we learned we had an opportunity to capture longitudinal data from EKG participants approximately 3 months after they completed the EKG program. The longitudinal survey included 9 items with an emphasis on attitudes and intended behaviors which could be

assessed again and in a similar manner as they were at baseline in the pre-survey and in the post-survey after EKG program completion. Again, longitudinal surveys were matched by ID number where possible to the student's ID on the pre- and post-surveys. In some cases, matching was not possible, meaning a student's longitudinal data could not be paired with their data gathered at the time they were participating in the EKG program. The longitudinal survey is provided in Appendix C. The longitudinal paper-and-pencil based surveys were distributed to students and collected upon completion by their health classroom teacher. The surveys were then given to FPD and then given to the researchers for data entry and analysis.

## **Research Sample Description & Baseline Characteristics**

In reporting and interpreting research findings, it is important to describe the characteristics of the sample of individuals who participated in the research. A general demographic breakdown of EKG student participants is provided below along with the sample's experiences related to gangs and gun violence as assessed in the pre-EKG survey.

### **General Sample Description**

Data from 6562 students were entered for final analysis for Year 1 (note that not all 6562 students provided data for each point below; in other words, students did not have to answer any questions on the surveys that they did not want to):

- 3045 7<sup>th</sup> graders (46.2%); 3529 9<sup>th</sup> graders (53.6%); 14 had no grade level and were from youth detention facilities (.2%)
- 3075 males (49.8%); 3098 females (50.2%)
- 2337 Black/African American (37.5%); 1633 White/Caucasian (26.2%); 1178 Other (18.9%); 576 Hispanic/Latino (9.2%); 296 Native American (4.7%); 156 Asian/Asian American (2.5%); 58 Native Hawaiian/Pacific Islander (.9%) (where race was provided)
- 97 (1.6%) identified as a member of a street gang (373 students did not respond)
- 182 (3.0%) would consider joining a gang
- 720 (11.6%) have been threatened with a gun or shot at
- 2756 (44.7%) have had a close family member or friend shot with a gun
- 156 (2.5%) have threatened someone with a gun or shot at someone

The breakdown of number of respondents from each school is presented in the table below. Students from JBHS had the most participants of all the schools, representing 7.5% of the total sample.

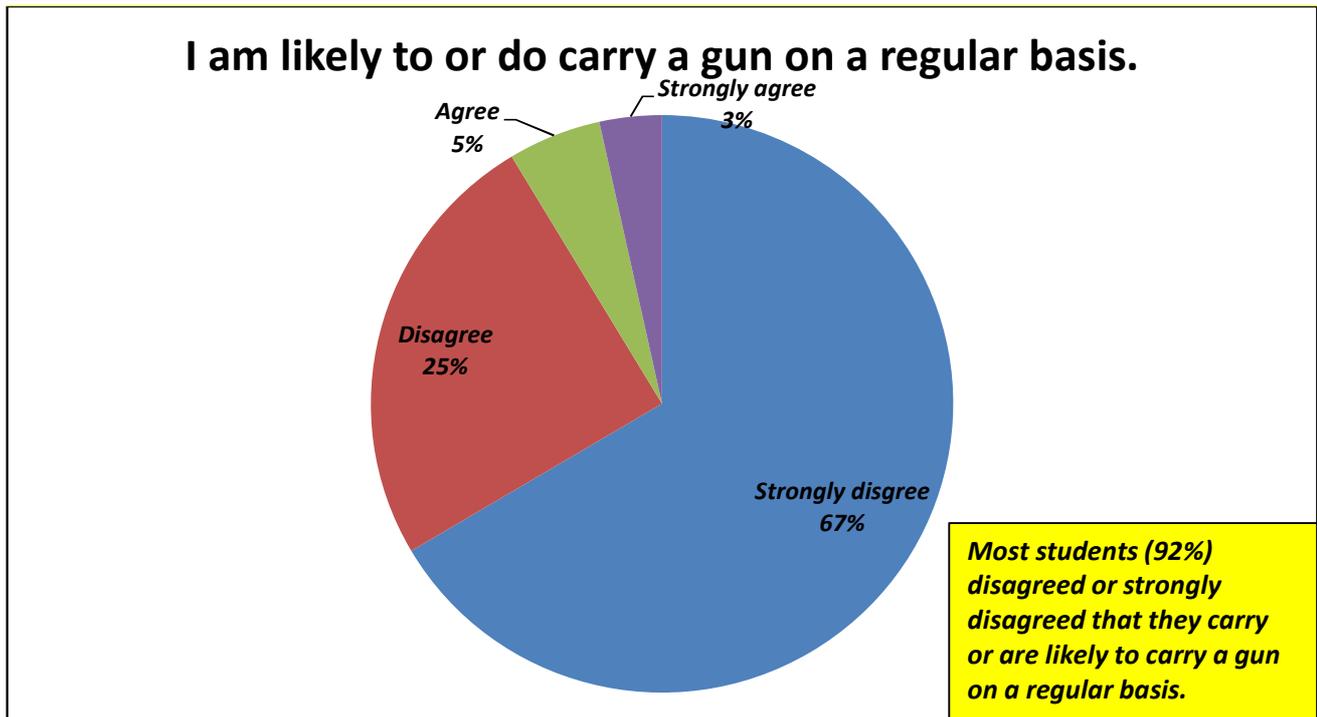
**Breakdown of EKG Respondents from Each School**

		Frequency	Percent
Valid	ACMS	75	1.1
	CCEC	73	1.1
	CFHS	400	6.1
	DBHS	249	3.8
	DBMS	278	4.2
	EESHS	267	4.1
	GCHS	280	4.3
	GCMS	267	4.1
	HHLSHS	43	.7
	HMMS	194	3.0
	JBHS	497	7.6
	JDC	14	.2
	JGMS	203	3.1
	LCMS	176	2.7
	LNJMS	113	1.7
	MAMS	203	3.1
	MHCHS	89	1.4
	MWMS	290	4.4
	NCIMS	145	2.2
	PFHS	366	5.6
	PFMS	219	3.3
	PJMS	21	.3
	RRCHS	59	.9
	RRCMS	72	1.1
	RSHS	48	.7
	SFCMS	182	2.8
	SFHS	422	6.4
	SLMS	171	2.6
	SVHS	285	4.3
	SVMS	215	3.3
	TSHS	185	2.8
	WOHS	266	4.1
	WOMS	195	3.0
	Total	6562	100.0

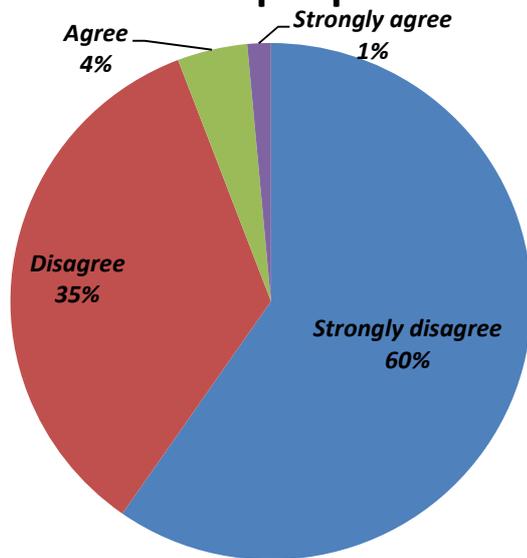
Pre-Survey Attitudes, Beliefs, and Behaviors

The following graphics provide a general overview of how students in the entire sample of Year 1 EKG participants responded to the items on the pre-survey questionnaire about attitudes toward guns/violence, prosocial problem-solving/decision-making, and self-efficacy to resist peer pressure. These data provide a general baseline of where students are in terms of gun and gang attitudes, beliefs, and behaviors in 7<sup>th</sup> and 9<sup>th</sup> grade health classrooms in Cumberland County Schools. The following graphs show the percentages of responses given to each item. The possible responses to each item were: strongly disagree, disagree, agree, and strongly agree.

Items Pertaining to Guns/violence

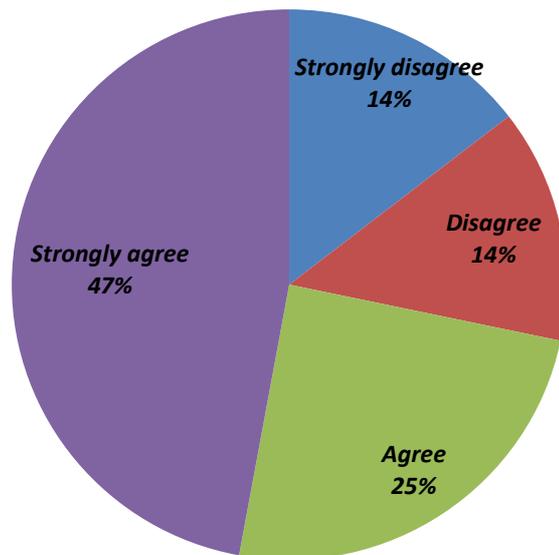


## Carrying a gun is a good way to get respect from other people.



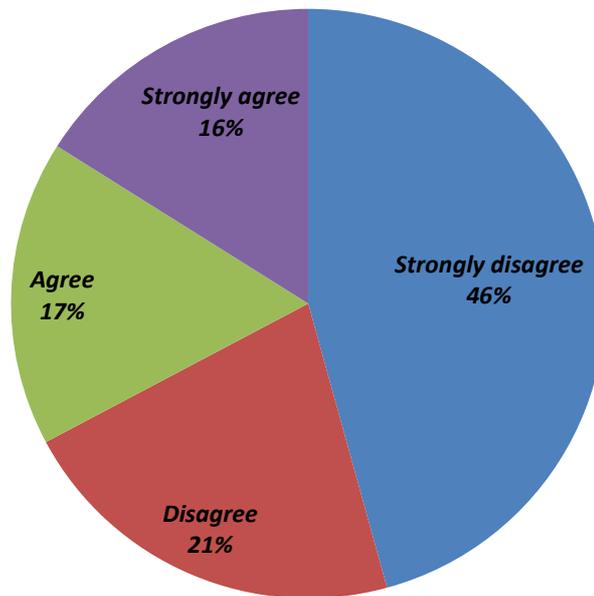
*Most students (95%) disagreed or strongly disagreed that carrying a gun is a good way to get respect.*

## It is illegal for me to carry a gun.



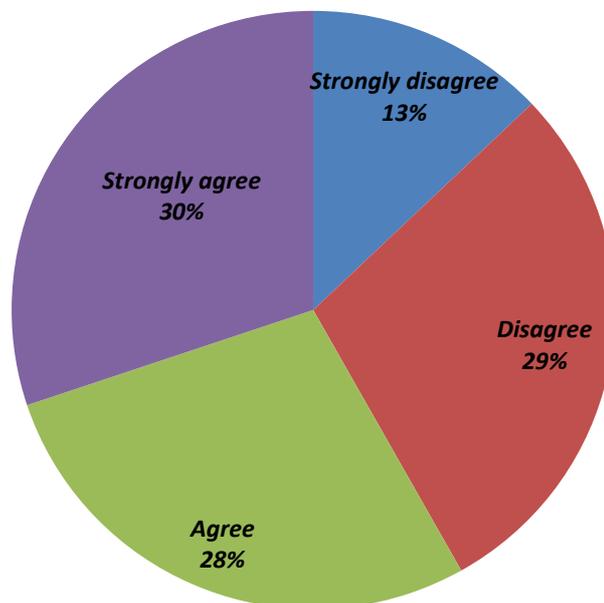
*While most students (72%) knew that carrying a gun is illegal, there appears to be a need for students to learn this fact evidenced by the 28% who disagreed or strongly disagreed with this fact.*

**The stuff I get into may someday put me in prison.**



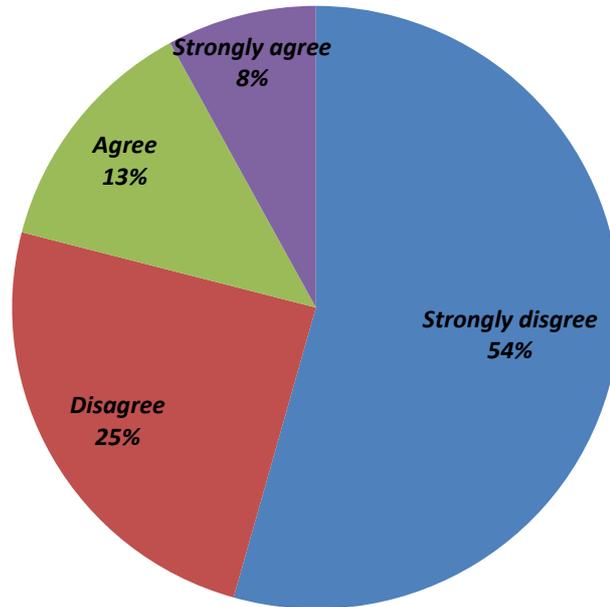
*Nearly a quarter (23%) of students agreed or strongly agreed that the activities they are involved in may lead to prison, suggesting that a rather large sub-sample of students are at-risk for criminal behavior.*

**If one of my close friends started carrying a gun, I would no longer hang out with them.**



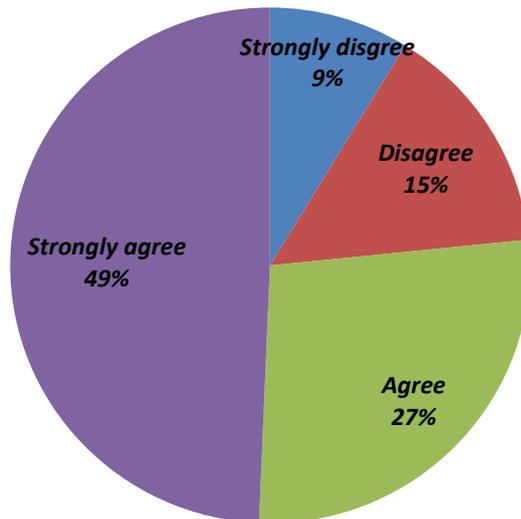
*58% of students agreed or strongly agreed that they would stop associating with a friend who started carrying a gun. 42% who disagreed or strongly disagreed may be putting themselves at risk by continuing to associate with negative peer influences, thereby indicating a need to educate students about the risks of negative peer influences.*

### It would be easy for me to get a gun if I wanted one.



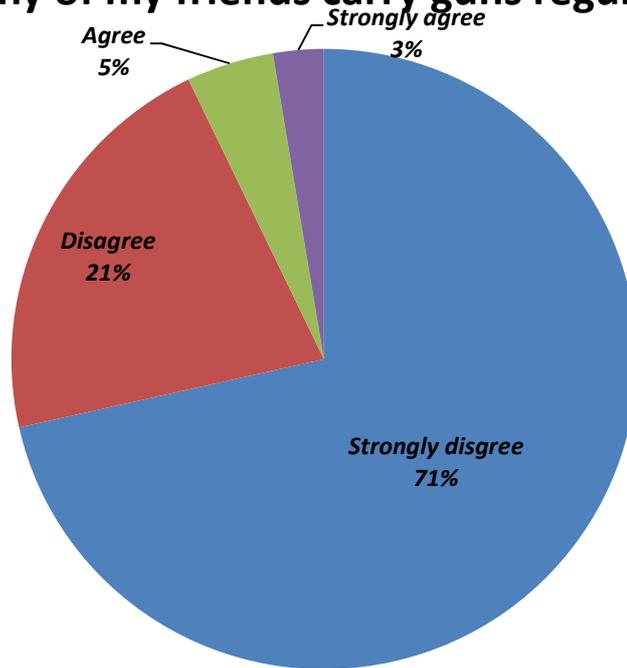
*21% of students agreed or strongly agreed that it would be easy to get a gun if they wanted one. This is a potential risk factor for future violence or even suicide. Students need to be educated on potential dangers of gun carrying if not handled responsibly. Access to guns may need to be addressed at the community level.*

### Carrying a gun is dangerous.



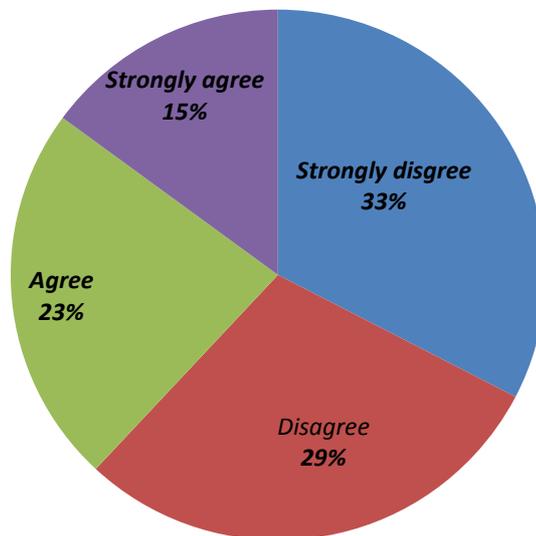
*76% of students agreed or strongly agreed that carrying a gun is dangerous.*

### Many of my friends carry guns regularly.



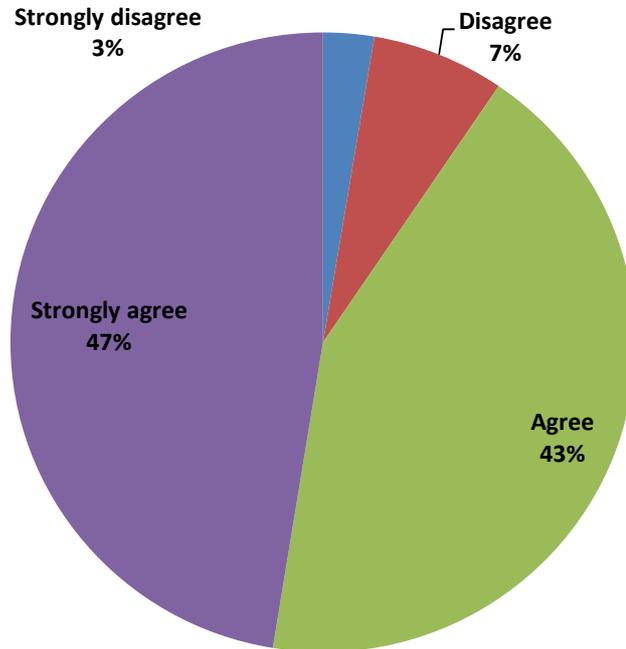
**Most students (92%) disagreed or strongly disagreed that many of their friends carry guns regularly.**

### Members of gangs always have each other's backs and stand up for one another.



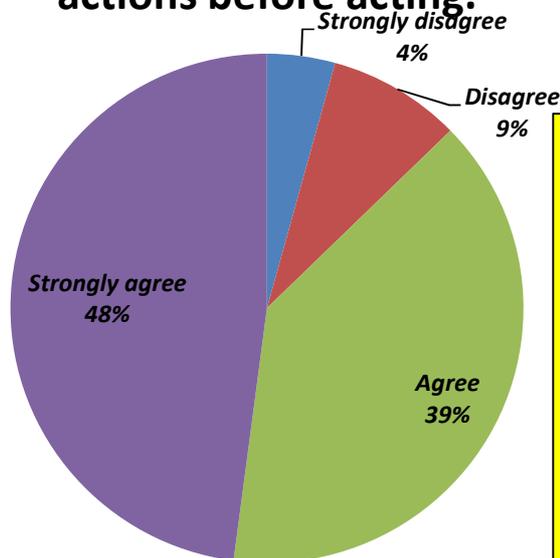
**A large minority (38%) agreed or strongly agreed with the belief that gang members always have each other's backs, indicating that gang culture and prevailing myths about gangs are content areas in which students need education.**

### The best way to solve an argument is to talk things out, even if it takes an hour or two.



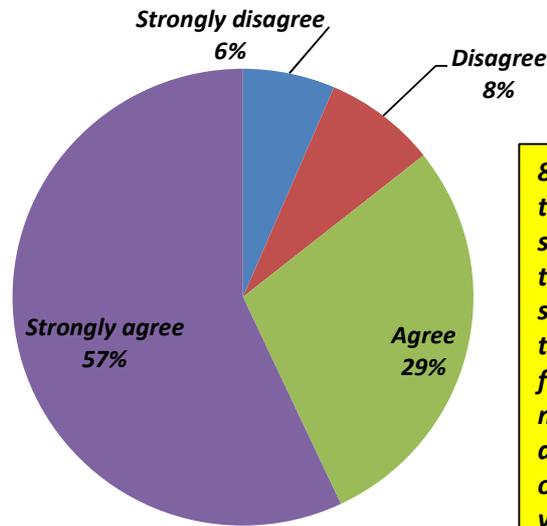
**Most students (90%) agreed or strongly agreed that the best way to solve an argument is to talk things out.**

### I need to think more about the consequences of my actions before acting.



**87% of students agreed or strongly agreed that they need to think more about consequences of actions before acting. The other 13% of the sample may need to further explore this concept and receive guidance on how to develop skills to do so. For example, use of cognitive-behavioral interventions may be helpful.**

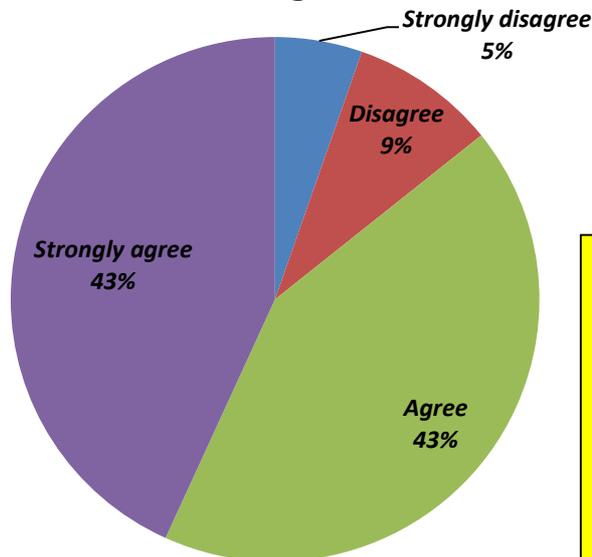
**If something is bothering me, I feel I have a trusted person I can talk to.**



**86% of students agreed that they have someone to talk to if something is bothering them. Unfortunately, 14% of students do not feel that they have this protective factor available, which may make them vulnerable to any number of negative outcomes including violence, mental health, or substance use issues.**

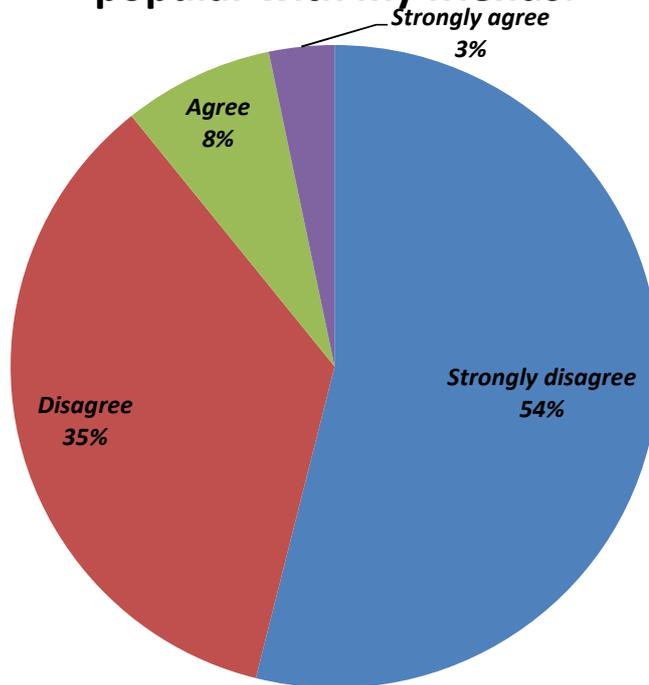
Items Pertaining to Self-efficacy to Resist Peer pressure

**I feel like I know what to do to resist pressure from friends to do something I do not want to do.**



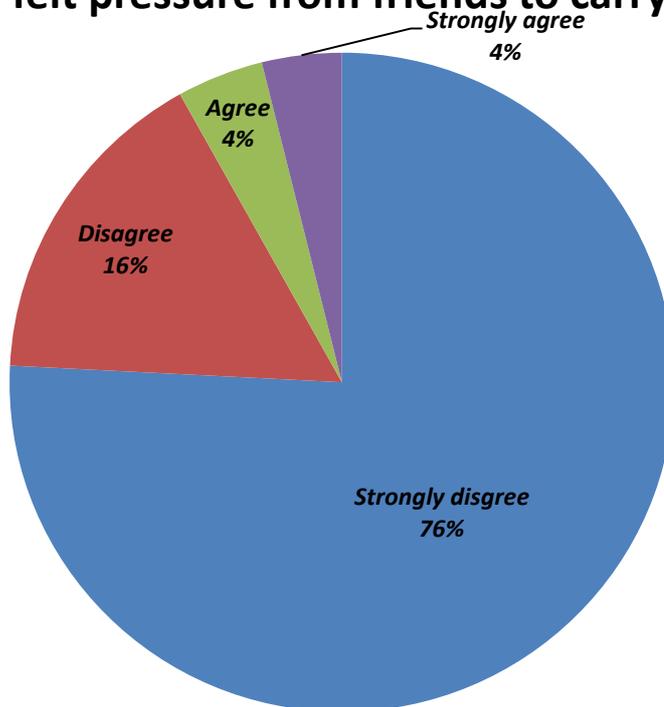
**86% of students agreed or strongly agreed that they feel they know how to resist peer pressure, but the other 14% of the sample may need further guidance in developing skills related to resisting peer pressure.**

## I have to be willing to break some rules if I want to be popular with my friends.



**89% of students disagreed or strongly disagreed that they feel they need to break rules to be popular. The other 11% of the sample may be at risk for trouble due to a perceived need to fit in or conform to expectations of negative peer influences.**

## I have felt pressure from friends to carry a gun.



**Most respondents (92%) have not felt pressure from friends to carry a gun. Fortunately for students in this sample, the peer pressure they have felt does not appear to be heavily related to gun carrying. However, 8% of the sample is potentially at-risk for future violence due to peer associations.**

*Gang Involvement and Experience with Gun Violence: Breakdown by School*

The following tables show how students at each school answered the pre-survey questions about gang involvement and experiences with gun violence. Each table represents a different question item from the pre-survey. The rows within the table show how students within each school answered the question. The table includes both the raw counts for student responses and the percentages of student responses within each school. Schools are listed in alphabetical order by row in each table.

**Are you a member of a street gang?**

		Are you a member of a street gang?		Total	
		yes	no		
School	ACMS	Count	4	64	68
		% within School	5.9%	94.1%	100.0%
	CCEC	Count	0	73	73
		% within School	.0%	100.0%	100.0%
	CFHS	Count	6	381	387
		% within School	1.6%	98.4%	100.0%
	DBHS	Count	4	236	240
		% within School	1.7%	98.3%	100.0%
	DBMS	Count	2	263	265
		% within School	.8%	99.2%	100.0%
	EESHS	Count	8	246	254
		% within School	3.1%	96.9%	100.0%
	GCHS	Count	1	264	265
		% within School	.4%	99.6%	100.0%
	GCMS	Count	3	247	250
		% within School	1.2%	98.8%	100.0%
	HHLSHS	Count	0	42	42
		% within School	.0%	100.0%	100.0%
	HMMS	Count	2	188	190
		% within School	1.1%	98.9%	100.0%
	JBHS	Count	3	482	485
		% within School	.6%	99.4%	100.0%
	JDC	Count	0	14	14
		% within School	.0%	100.0%	100.0%
	JGMS	Count	2	186	188
		% within School	1.1%	98.9%	100.0%
	LCMS	Count	4	155	159
		% within School	2.5%	97.5%	100.0%

LNJMS	Count	1	103	104
	% within School	1.0%	99.0%	100.0%
MAMS	Count	2	184	186
	% within School	1.1%	98.9%	100.0%
MHCHS	Count	0	88	88
	% within School	.0%	100.0%	100.0%
MWMS	Count	3	280	283
	% within School	1.1%	98.9%	100.0%
NCIMS	Count	1	131	132
	% within School	.8%	99.2%	100.0%
PFHS	Count	9	355	364
	% within School	2.5%	97.5%	100.0%
PFMS	Count	1	208	209
	% within School	.5%	99.5%	100.0%
PJMS	Count	4	13	17
	% within School	23.5%	76.5%	100.0%
RRCHS	Count	0	56	56
	% within School	.0%	100.0%	100.0%
RRCMS	Count	0	63	63
	% within School	.0%	100.0%	100.0%
RSHS	Count	9	33	42
	% within School	21.4%	78.6%	100.0%
SFCMS	Count	1	170	171
	% within School	.6%	99.4%	100.0%
SFHS	Count	7	380	387
	% within School	1.8%	98.2%	100.0%
SLMS	Count	2	145	147
	% within School	1.4%	98.6%	100.0%
SVHS	Count	6	255	261
	% within School	2.3%	97.7%	100.0%
SVMS	Count	1	199	200
	% within School	.5%	99.5%	100.0%
TSHS	Count	2	170	172
	% within School	1.2%	98.8%	100.0%
WOHS	Count	8	245	253
	% within School	3.2%	96.8%	100.0%
WOMS	Count	1	174	175
	% within School	.6%	99.4%	100.0%

Total	Count	97	6093	6190
	% within School	1.6%	98.4%	100.0%

**Has anyone every threatened you with a gun or shot at you?**

		Has anyone every threatened you with a gun or shot at you?		Total	
		yes	no		
School	ACMS	Count	3	65	68
		% within School	4.4%	95.6%	100.0%
	CCEC	Count	14	59	73
		% within School	19.2%	80.8%	100.0%
	CFHS	Count	43	343	386
		% within School	11.1%	88.9%	100.0%
	DBHS	Count	39	202	241
		% within School	16.2%	83.8%	100.0%
	DBMS	Count	26	237	263
		% within School	9.9%	90.1%	100.0%
	EESHS	Count	44	211	255
		% within School	17.3%	82.7%	100.0%
	GCHS	Count	26	239	265
		% within School	9.8%	90.2%	100.0%
	GCMS	Count	25	223	248
		% within School	10.1%	89.9%	100.0%
	HHLSHS	Count	2	40	42
		% within School	4.8%	95.2%	100.0%
	HMMS	Count	19	172	191
		% within School	9.9%	90.1%	100.0%
	JBHS	Count	67	418	485
		% within School	13.8%	86.2%	100.0%
	JDC	Count	4	10	14
		% within School	28.6%	71.4%	100.0%
	JGMS	Count	7	179	186
		% within School	3.8%	96.2%	100.0%
	LCMS	Count	23	134	157
		% within School	14.6%	85.4%	100.0%
	LNJMS	Count	9	98	107
		% within School	8.4%	91.6%	100.0%
	MAMS	Count	16	172	188

	% within School	8.5%	91.5%	100.0%
MHCHS	Count	3	85	88
	% within School	3.4%	96.6%	100.0%
MWMS	Count	27	255	282
	% within School	9.6%	90.4%	100.0%
NCIMS	Count	7	126	133
	% within School	5.3%	94.7%	100.0%
PFHS	Count	41	323	364
	% within School	11.3%	88.7%	100.0%
PFMS	Count	5	204	209
	% within School	2.4%	97.6%	100.0%
PJMS	Count	11	7	18
	% within School	61.1%	38.9%	100.0%
RRCHS	Count	6	50	56
	% within School	10.7%	89.3%	100.0%
RRCMS	Count	5	59	64
	% within School	7.8%	92.2%	100.0%
RSHS	Count	23	22	45
	% within School	51.1%	48.9%	100.0%
SFCMS	Count	11	159	170
	% within School	6.5%	93.5%	100.0%
SFHS	Count	58	329	387
	% within School	15.0%	85.0%	100.0%
SLMS	Count	17	129	146
	% within School	11.6%	88.4%	100.0%
SVHS	Count	46	218	264
	% within School	17.4%	82.6%	100.0%
SVMS	Count	19	181	200
	% within School	9.5%	90.5%	100.0%
TSHS	Count	23	149	172
	% within School	13.4%	86.6%	100.0%
WOHS	Count	38	218	256
	% within School	14.8%	85.2%	100.0%
WOMS	Count	13	164	177
	% within School	7.3%	92.7%	100.0%
Total	Count	720	5480	6200
	% within School	11.6%	88.4%	100.0%

**Have you or a close family or friend ever been shot with a gun?**

			Have you or a close family or friend ever been shot with a gun?		Total
			yes	no	
School	ACMS	Count	29	38	67
		% within School	43.3%	56.7%	100.0%
	CCEC	Count	36	35	71
		% within School	50.7%	49.3%	100.0%
	CFHS	Count	161	225	386
		% within School	41.7%	58.3%	100.0%
	DBHS	Count	125	116	241
		% within School	51.9%	48.1%	100.0%
	DBMS	Count	123	137	260
		% within School	47.3%	52.7%	100.0%
	EESHS	Count	132	123	255
		% within School	51.8%	48.2%	100.0%
	GCHS	Count	102	161	263
		% within School	38.8%	61.2%	100.0%
	GCMS	Count	107	141	248
		% within School	43.1%	56.9%	100.0%
	HHLSHS	Count	15	27	42
		% within School	35.7%	64.3%	100.0%
	HMMS	Count	74	116	190
		% within School	38.9%	61.1%	100.0%
	JBHS	Count	211	272	483
		% within School	43.7%	56.3%	100.0%
	JDC	Count	4	10	14
		% within School	28.6%	71.4%	100.0%
	JGMS	Count	58	127	185
		% within School	31.4%	68.6%	100.0%
	LCMS	Count	75	77	152
		% within School	49.3%	50.7%	100.0%
	LNJMS	Count	57	49	106
		% within School	53.8%	46.2%	100.0%
	MAMS	Count	74	115	189
		% within School	39.2%	60.8%	100.0%
	MHCHS	Count	22	64	86
		% within School	25.6%	74.4%	100.0%

MWMS	Count	126	156	282
	% within School	44.7%	55.3%	100.0%
NCIMS	Count	53	79	132
	% within School	40.2%	59.8%	100.0%
PFHS	Count	171	193	364
	% within School	47.0%	53.0%	100.0%
PFMS	Count	61	144	205
	% within School	29.8%	70.2%	100.0%
PJMS	Count	13	1	14
	% within School	92.9%	7.1%	100.0%
RRCHS	Count	30	26	56
	% within School	53.6%	46.4%	100.0%
RRCMS	Count	28	34	62
	% within School	45.2%	54.8%	100.0%
RSHS	Count	27	17	44
	% within School	61.4%	38.6%	100.0%
SFCMS	Count	69	100	169
	% within School	40.8%	59.2%	100.0%
SFHS	Count	208	181	389
	% within School	53.5%	46.5%	100.0%
SLMS	Count	66	73	139
	% within School	47.5%	52.5%	100.0%
SVHS	Count	130	133	263
	% within School	49.4%	50.6%	100.0%
SVMS	Count	78	119	197
	% within School	39.6%	60.4%	100.0%
TSHS	Count	74	98	172
	% within School	43.0%	57.0%	100.0%
WOHS	Count	131	124	255
	% within School	51.4%	48.6%	100.0%
WOMS	Count	83	92	175
	% within School	47.4%	52.6%	100.0%
Total	Count	2753	3403	6156
	% within School	44.7%	55.3%	100.0%

**Have you ever threatened anyone with a gun or shot at anyone?**

			Have you ever threatened anyone with a gun or shot at anyone?		Total
			yes	no	
School	ACMS	Count	0	68	68
		% within School	.0%	100.0%	100.0%
	CCEC	Count	2	68	70
		% within School	2.9%	97.1%	100.0%
	CFHS	Count	5	382	387
		% within School	1.3%	98.7%	100.0%
	DBHS	Count	14	225	239
		% within School	5.9%	94.1%	100.0%
	DBMS	Count	8	255	263
		% within School	3.0%	97.0%	100.0%
	EESHS	Count	9	243	252
		% within School	3.6%	96.4%	100.0%
	GCHS	Count	10	255	265
		% within School	3.8%	96.2%	100.0%
	GCMS	Count	5	243	248
		% within School	2.0%	98.0%	100.0%
	HHLSHS	Count	1	41	42
		% within School	2.4%	97.6%	100.0%
	HMMS	Count	0	191	191
		% within School	.0%	100.0%	100.0%
	JBHS	Count	10	474	484
		% within School	2.1%	97.9%	100.0%
	JDC	Count	2	12	14
		% within School	14.3%	85.7%	100.0%
	JGMS	Count	4	182	186
		% within School	2.2%	97.8%	100.0%
	LCMS	Count	4	151	155
		% within School	2.6%	97.4%	100.0%
	LNJMS	Count	2	104	106
		% within School	1.9%	98.1%	100.0%
	MAMS	Count	3	186	189
		% within School	1.6%	98.4%	100.0%
	MHCHS	Count	0	88	88
		% within School	.0%	100.0%	100.0%

MWMS	Count	6	277	283
	% within School	2.1%	97.9%	100.0%
NCIMS	Count	1	132	133
	% within School	.8%	99.2%	100.0%
PFHS	Count	14	350	364
	% within School	3.8%	96.2%	100.0%
PFMS	Count	1	205	206
	% within School	.5%	99.5%	100.0%
PJMS	Count	4	14	18
	% within School	22.2%	77.8%	100.0%
RRCHS	Count	2	54	56
	% within School	3.6%	96.4%	100.0%
RRCMS	Count	0	64	64
	% within School	.0%	100.0%	100.0%
RSHS	Count	10	35	45
	% within School	22.2%	77.8%	100.0%
SFCMS	Count	1	170	171
	% within School	.6%	99.4%	100.0%
SFHS	Count	12	376	388
	% within School	3.1%	96.9%	100.0%
SLMS	Count	1	143	144
	% within School	.7%	99.3%	100.0%
SVHS	Count	7	256	263
	% within School	2.7%	97.3%	100.0%
SVMS	Count	2	196	198
	% within School	1.0%	99.0%	100.0%
TSHS	Count	3	168	171
	% within School	1.8%	98.2%	100.0%
WOHS	Count	11	243	254
	% within School	4.3%	95.7%	100.0%
WOMS	Count	2	175	177
	% within School	1.1%	98.9%	100.0%
Total	Count	156	6026	6182
	% within School	2.5%	97.5%	100.0%

## **Creation of Factor Scores through Factor Analysis**

With survey data, a factor analysis can be helpful for data analysis and interpretation. A factor analysis is a data analysis method that will identify factors within a set of survey items. Factors are a set of items that cluster together. Essentially, a factor analysis allows us to determine whether there are meaningful clusters of items which can be analyzed collectively to simplify data interpretation and give more meaning to the data than simply looking at individual survey items alone. Once a factor (or cluster of items) is identified through a factor analysis, an overview of the item content allows us to determine the underlying construct that the set of items within each cluster appears to be measuring. The factors emerging from the pre- and post-survey factor analysis are reported below. The items within each factor were then summed to create a cumulative factor scale score for each factor for each respondent. The cumulative factor scores can then be used in later data analysis for a more robust view of larger constructs allowing for more meaningful interpretation of the data. Examination of the larger constructs provided by factor scale scores is more advantageous than examination of individual items separately. In other words, having multiple data points from which to draw a conclusion about one's attitudes on a particular issue (in this cases student attitudes toward gun violence, for example) is preferred to having only one data point from which to draw a conclusion about a student's attitude. The factors that emerged from each the pre-test and the post-test are presented below along with the individual survey items that comprised each factor. Please note that the names given to each factor are researcher-created and based upon the researcher's review of the items in each factor and the construct that appears to be measured by the items that make up each factor.

### **Pre-Test Factors and Items**

Factor 1: Risk Factors (including acceptance of high risk gun attitudes and endorsement of high risk behaviors; a higher cumulative score on this factor would mean that a student has more risk factors for violence)

1. Carrying a gun is a good way to get respect from other people.
2. I have to be willing to break some rules if I want to be popular with my friends.
3. It would be easy for me to get a gun if I wanted one.
4. Many of my friends carry guns regularly.
5. I have felt pressure from friends to carry a gun.
6. The stuff I get into may someday put me in prison.
7. Members of gangs always have each other's backs and stand up for one another.

Factor 2: Negative attitudes About Gun Carrying (a higher cumulative score on this factor would mean that a student holds more negative attitudes toward carrying guns)

1. It is illegal for me to carry a gun.
2. If one of my close friends started carrying a gun, I would no longer hang out with them.
3. Carrying a gun is dangerous.
4. I am likely to or do carry a gun on a regular basis. (reverse scored)

Factor 3: Protective Factors (a higher cumulative score on this factor would mean that a student has more protective against involvement with violence)

1. I need to think more about the consequences of my actions before acting.
2. The best way to solve an argument is to talk things out, event it takes an hour or two.
3. If something is bothering me, I feel like I have a trusted person I can talk to.

Factor 4: Perceived self-efficacy to resist peer pressure (a higher cumulative score on this factor, which is comprised of only item, would mean that student has higher perceived self-efficacy to resist peer pressure)

1. I feel like I know what to do to resist pressure from friends to do something I do not want to do.

Post-Test Factors and Items

Factor 1: Direct Program Impact (a higher cumulative score on this factor would mean that a student reported a greater positive impact from the program)

1. After this program, I feel like I will be able to make better decisions in my life.
2. After this program, I feel like I know more about the dangers of having a gun.
3. After this program, I learned that I need to think more about the consequences of my actions before acting.
4. The best way to solve an argument is to talk things out, even if it takes an hour or two.

Factor 2: Risk Factors (including acceptance of high risk gun attitudes and endorsement of high risk behaviors; a higher cumulative score on this factor would mean that a student has more risk factors)

1. I feel like Jamari's boys will have his back and stand up for him even after he goes to jail for the shooting.
2. Jamari made a good decision when accepted the gun from his friends.
3. Jamari got respect from other people by carrying a gun.
4. I have to be willing to break some rules if I want to be popular with my friends.
5. I sometimes feel like violence is my only way to deal with problems.

Factor 3: Attitudes About Gun Carrying (a higher cumulative score on this factor would mean that a student holds less favorable attitudes toward carrying guns)

1. It is illegal for me to carry a gun.
2. If one of my close friends started carrying a gun, I would no longer hang out with them.
3. Carrying a gun is dangerous.

Factor 4: Perceived Efficacy to Make Good Decisions/Understanding of Consequences (a higher cumulative score on this factor would mean that a student has greater understanding of the consequences of actions)

1. Jamari could have made better decisions throughout the video to avoid shooting his sister and going to jail.
2. Being a member of a gang makes it more likely that someone would get in trouble at school or with police.
3. I feel like I know what to do to resist pressure from friends to something I do not want to do.

Creation of Factor Scale Scores

The items within each factor were summed together to create a factor scale score. The following table provides the average factor scale scores, also called the "mean", for students in the overall sample. For a student's factor score to be calculated, a respondent had to have responded to each item that comprises the factor. The total number of students who answered all items for each factor is found in the column labeled, "N". The minimum score and maximum scores for each factor are reported next. The mean (or average) score for each factor is reported next followed by the standard deviation for each factor score.

**Descriptive Statistics for Factor Scale Scores**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor 1: Risk Factors	5883	7.00	28.00	11.7899	3.27760
Pre Factor 2: Negative Attitudes About Gun Carrying	5969	4.00	16.00	12.5254	2.51824
Pre Factor 3: Protective Factors	5978	3.00	12.00	10.0360	1.64364
Pre Factor 4: Resisting Peer Pressure	6088	1.00	4.00	3.2362	.82394
Post Factor 1: Direct Program Impact	5502	4.00	16.00	13.9331	2.25865
Post Factor 2: Risk Factors	5509	5.00	20.00	7.6061	2.38692
Post Factor 3: Negative Attitudes About Gun Carrying	5534	3.00	12.00	9.4256	2.19074
Post Factor 4: Efficacy to Make Good Decisions/Understand Consequences	5516	3.00	12.00	10.5587	1.54697

**Factor Scale Score Trends by School**

Examination of the larger constructs provided by the factor scale scores is more advantageous than examination of individual items separately. In other words, having multiple data points from which to draw a conclusion about one's attitudes on a particular issue is preferred to having only one data point (or one individual survey item) from which to draw a conclusion. Each table below represents a different school. The rows in each table identify for each factor the number of students for which a factor scale score could be created ("N"), the minimum and maximum scores of students in that school on that particular factor, and the average (or "mean") score of students in that school for that factors along with the standard deviation. The tables appear in alphabetical order based on school name. There is a separate table for each school. The school name for each table appears directly underneath the table.

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	62	7.00	18.00	12.7097	2.85948
Pre Factor Score: Negative Attitudes about Gun Carrying	64	7.00	16.00	12.3281	2.55141
Pre Factor Score: Protective Factors	64	5.00	12.00	10.0781	1.56656
Pre Factor Score: Efficacy to Resist Peer Pressure	65	1.00	4.00	3.0923	.74421
Post Factor Score: Positive Direct Program Impact	65	8.00	16.00	13.9538	1.92379
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	66	5.00	18.00	8.4394	2.53668
Post Factor Score: Negative Attitudes about Gun Carrying	63	6.00	12.00	9.8095	1.78576
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	65	7.00	12.00	10.5077	1.30052
Valid N (listwise)	53				

a. School = ACMS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	70	7.00	17.00	10.7857	2.55883
Pre Factor Score: Negative Attitudes about Gun Carrying	71	7.00	16.00	12.6620	2.02092
Pre Factor Score: Protective Factors	70	7.00	12.00	10.0857	1.34857
Pre Factor Score: Efficacy to Resist Peer Pressure	71	1.00	4.00	3.3099	.80341
Post Factor Score: Positive Direct Program Impact	70	10.00	16.00	14.2143	1.83282
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	70	5.00	13.00	7.4857	2.30150
Post Factor Score: Negative Attitudes about Gun Carrying	70	3.00	12.00	9.6714	2.18507
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	70	7.00	12.00	10.9143	1.24810
Valid N (listwise)	66				

a. School = CCEC

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	222	7.00	25.00	12.5631	3.22926
Pre Factor Score: Negative Attitudes about Gun Carrying	230	4.00	16.00	11.7261	2.36028
Pre Factor Score: Protective Factors	230	3.00	12.00	9.4478	1.72684
Pre Factor Score: Efficacy to Resist Peer Pressure	231	1.00	4.00	3.2165	.84744
Post Factor Score: Positive Direct Program Impact	217	4.00	16.00	13.2120	2.57683
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	221	5.00	16.00	8.0950	2.39602
Post Factor Score: Negative Attitudes about Gun Carrying	219	3.00	12.00	8.7032	2.13287
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	221	3.00	12.00	10.1719	1.89912
Valid N (listwise)	194				

a. School = DBHS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	226	7.00	24.00	12.1018	3.10888
Pre Factor Score: Negative Attitudes about Gun Carrying	232	5.00	16.00	12.8836	2.60358
Pre Factor Score: Protective Factors	230	4.00	12.00	10.0435	1.73780
Pre Factor Score: Efficacy to Resist Peer Pressure	237	1.00	4.00	2.9620	1.01818
Post Factor Score: Positive Direct Program Impact	212	5.00	16.00	14.0849	2.08182
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	211	5.00	16.00	7.7204	2.42850
Post Factor Score: Negative Attitudes about Gun Carrying	218	3.00	12.00	9.7936	2.10520
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	208	3.00	12.00	10.1058	1.73856
Valid N (listwise)	177				

a. School = DBMS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	235	7.00	24.00	12.2426	3.45989
Pre Factor Score: Negative Attitudes about Gun Carrying	243	5.00	16.00	11.9877	2.44693
Pre Factor Score: Protective Factors	239	4.00	12.00	9.8954	1.70070
Pre Factor Score: Efficacy to Resist Peer Pressure	251	1.00	4.00	3.2470	.82628
Post Factor Score: Positive Direct Program Impact	227	6.00	16.00	13.6476	2.39081
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	229	5.00	17.00	7.7817	2.33873
Post Factor Score: Negative Attitudes about Gun Carrying	229	3.00	12.00	8.9214	2.26587
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	228	6.00	12.00	10.5965	1.48543
Valid N (listwise)	198				

a. School = EESHHS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	259	7.00	23.00	11.6525	3.12202
Pre Factor Score: Negative Attitudes about Gun Carrying	261	4.00	16.00	12.3333	2.49152
Pre Factor Score: Protective Factors	262	3.00	12.00	10.1221	1.64479
Pre Factor Score: Efficacy to Resist Peer Pressure	266	1.00	4.00	3.2519	.82901
Post Factor Score: Positive Direct Program Impact	239	5.00	16.00	13.8703	2.34340
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	239	5.00	16.00	7.6611	2.54996
Post Factor Score: Negative Attitudes about Gun Carrying	238	3.00	12.00	9.2605	2.28539
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	240	5.00	12.00	10.5792	1.68242
Valid N (listwise)	216				

a. School = GCHS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	233	7.00	22.00	11.5837	3.07564
Pre Factor Score: Negative Attitudes about Gun Carrying	236	4.00	16.00	12.7331	2.51310
Pre Factor Score: Protective Factors	238	3.00	12.00	10.1849	1.56149
Pre Factor Score: Efficacy to Resist Peer Pressure	244	1.00	4.00	3.1926	.83135
Post Factor Score: Positive Direct Program Impact	205	7.00	16.00	14.2634	2.09080
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	208	5.00	18.00	7.4038	2.41581
Post Factor Score: Negative Attitudes about Gun Carrying	209	3.00	12.00	9.9187	2.16575
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	208	5.00	12.00	10.5577	1.69584
Valid N (listwise)	175				

a. School = GCMS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	35	7.00	16.00	10.4286	2.64893
Pre Factor Score: Negative Attitudes about Gun Carrying	35	6.00	16.00	12.3714	2.47441
Pre Factor Score: Protective Factors	36	4.00	12.00	9.8889	1.99682
Pre Factor Score: Efficacy to Resist Peer Pressure	36	1.00	4.00	3.3333	.82808
Post Factor Score: Positive Direct Program Impact	39	7.00	16.00	13.9231	2.41034
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	38	5.00	14.00	7.4211	2.08769
Post Factor Score: Negative Attitudes about Gun Carrying	40	3.00	12.00	8.9750	2.44412
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	39	6.00	12.00	10.4103	1.61763
Valid N (listwise)	32				

a. School = HHLSHS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	191	7.00	22.00	11.2565	2.90592
Pre Factor Score: Negative Attitudes about Gun Carrying	192	6.00	16.00	13.0417	2.43412
Pre Factor Score: Protective Factors	193	5.00	12.00	10.0518	1.60644
Pre Factor Score: Efficacy to Resist Peer Pressure	193	1.00	4.00	3.1917	.79683
Post Factor Score: Positive Direct Program Impact	186	4.00	16.00	14.2204	2.39138
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	188	5.00	16.00	7.2766	2.25822
Post Factor Score: Negative Attitudes about Gun Carrying	188	3.00	12.00	9.5106	2.36392
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	189	6.00	12.00	10.7513	1.39397
Valid N (listwise)	180				

a. School = HMMS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	474	7.00	25.00	11.4262	3.05133
Pre Factor Score: Negative Attitudes about Gun Carrying	473	4.00	16.00	12.3531	2.51438
Pre Factor Score: Protective Factors	474	3.00	12.00	10.1414	1.53158
Pre Factor Score: Efficacy to Resist Peer Pressure	478	1.00	4.00	3.4059	.69930
Post Factor Score: Positive Direct Program Impact	461	4.00	16.00	13.9805	2.29405
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	462	5.00	20.00	7.2900	2.13286
Post Factor Score: Negative Attitudes about Gun Carrying	462	3.00	12.00	9.2922	2.22369
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	460	3.00	12.00	10.7413	1.47323
Valid N (listwise)	433				

a. School = JBHS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	14	7.00	19.00	15.4286	3.95580
Pre Factor Score: Negative Attitudes about Gun Carrying	12	9.00	16.00	11.6667	2.22928
Pre Factor Score: Protective Factors	14	6.00	12.00	9.5714	2.06488
Pre Factor Score: Efficacy to Resist Peer Pressure	14	2.00	4.00	3.4286	.75593
Post Factor Score: Positive Direct Program Impact	14	12.00	16.00	14.1429	1.29241
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	14	6.00	10.00	9.0000	1.35873
Post Factor Score: Negative Attitudes about Gun Carrying	14	7.00	12.00	8.8571	1.70326
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	14	7.00	12.00	10.0000	1.56893
Valid N (listwise)	12				

a. School = JDC

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	182	7.00	25.00	10.7308	3.26357
Pre Factor Score: Negative Attitudes about Gun Carrying	181	6.00	16.00	13.1492	2.60232
Pre Factor Score: Protective Factors	179	3.00	12.00	10.2514	1.71524
Pre Factor Score: Efficacy to Resist Peer Pressure	186	1.00	4.00	3.3280	.81537
Post Factor Score: Positive Direct Program Impact	156	4.00	16.00	14.3974	2.01504
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	155	5.00	20.00	7.1548	2.65590
Post Factor Score: Negative Attitudes about Gun Carrying	155	3.00	12.00	10.0516	2.24127
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	156	7.00	12.00	10.5962	1.40863
Valid N (listwise)	135				

a. School = JGMS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	144	7.00	28.00	12.6458	3.82204
Pre Factor Score: Negative Attitudes about Gun Carrying	153	5.00	16.00	12.5686	2.58479
Pre Factor Score: Protective Factors	153	4.00	12.00	9.7124	1.78323
Pre Factor Score: Efficacy to Resist Peer Pressure	153	1.00	4.00	3.1961	.96012
Post Factor Score: Positive Direct Program Impact	130	4.00	16.00	13.5846	2.51132
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	133	5.00	20.00	8.7895	3.18865
Post Factor Score: Negative Attitudes about Gun Carrying	129	3.00	12.00	9.2791	2.20077
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	133	6.00	12.00	10.2180	1.66214
Valid N (listwise)	105				

a. School = LCMS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	84	7.00	22.00	12.0357	3.21310
Pre Factor Score: Negative Attitudes about Gun Carrying	86	7.00	16.00	13.0581	2.57296
Pre Factor Score: Protective Factors	88	5.00	12.00	9.8977	1.72899
Pre Factor Score: Efficacy to Resist Peer Pressure	89	1.00	4.00	3.1461	.77680
Post Factor Score: Positive Direct Program Impact	96	5.00	16.00	14.0521	2.03325
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	99	5.00	13.00	7.7778	2.03317
Post Factor Score: Negative Attitudes about Gun Carrying	100	3.00	12.00	9.3600	2.23616
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	99	5.00	12.00	10.2121	1.60530
Valid N (listwise)	75				

a. School = LNJMS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	183	7.00	23.00	11.1967	3.17348
Pre Factor Score: Negative Attitudes about Gun Carrying	186	7.00	16.00	12.9301	2.51921
Pre Factor Score: Protective Factors	181	3.00	12.00	10.1271	1.68668
Pre Factor Score: Efficacy to Resist Peer Pressure	188	1.00	4.00	3.3032	.83927
Post Factor Score: Positive Direct Program Impact	175	8.00	16.00	14.3143	1.94126
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	177	5.00	19.00	7.3729	2.38293
Post Factor Score: Negative Attitudes about Gun Carrying	178	4.00	12.00	9.7697	2.10938
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	175	6.00	12.00	10.5029	1.60414
Valid N (listwise)	151				

a. School = MAMS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	82	7.00	20.00	11.0610	2.58365
Pre Factor Score: Negative Attitudes about Gun Carrying	83	7.00	16.00	12.3133	2.33702
Pre Factor Score: Protective Factors	85	4.00	12.00	9.7529	1.56529
Pre Factor Score: Efficacy to Resist Peer Pressure	86	2.00	4.00	3.3837	.57739
Post Factor Score: Positive Direct Program Impact	88	4.00	16.00	13.5568	2.21727
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	87	5.00	12.00	7.4138	1.93229
Post Factor Score: Negative Attitudes about Gun Carrying	87	3.00	12.00	9.2529	2.14161
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	88	7.00	12.00	10.6591	1.21188
Valid N (listwise)	80				

a. School = MHCHS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	269	7.00	22.00	11.5279	3.20159
Pre Factor Score: Negative Attitudes about Gun Carrying	272	5.00	16.00	12.7684	2.81562
Pre Factor Score: Protective Factors	274	3.00	12.00	10.3796	1.54366
Pre Factor Score: Efficacy to Resist Peer Pressure	278	1.00	4.00	3.2410	.80802
Post Factor Score: Positive Direct Program Impact	199	8.00	16.00	14.5578	1.85468
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	198	5.00	15.00	7.1717	2.18690
Post Factor Score: Negative Attitudes about Gun Carrying	203	3.00	12.00	9.8571	2.11414
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	200	3.00	12.00	10.7500	1.60636
Valid N (listwise)	182				

a. School = MWMS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	129	7.00	22.00	11.3953	3.02443
Pre Factor Score: Negative Attitudes about Gun Carrying	128	6.00	16.00	12.6719	2.72957
Pre Factor Score: Protective Factors	129	3.00	12.00	10.2248	1.76883
Pre Factor Score: Efficacy to Resist Peer Pressure	132	1.00	4.00	3.1970	.89476
Post Factor Score: Positive Direct Program Impact	134	6.00	16.00	13.9701	2.13788
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	134	5.00	15.00	7.8507	2.24616
Post Factor Score: Negative Attitudes about Gun Carrying	135	4.00	12.00	9.2963	2.26615
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	134	6.00	12.00	10.3731	1.41778
Valid N (listwise)	119				

a. School = NCIMS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	357	7.00	25.00	12.1597	3.45269
Pre Factor Score: Negative Attitudes about Gun Carrying	361	4.00	16.00	12.3435	2.33417
Pre Factor Score: Protective Factors	364	3.00	12.00	9.9533	1.62301
Pre Factor Score: Efficacy to Resist Peer Pressure	365	1.00	4.00	3.2466	.79457
Post Factor Score: Positive Direct Program Impact	356	6.00	16.00	13.5871	2.28547
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	353	5.00	20.00	7.5637	2.49819
Post Factor Score: Negative Attitudes about Gun Carrying	356	3.00	12.00	9.3511	2.12239
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	355	3.00	12.00	10.6817	1.47582
Valid N (listwise)	337				

a. School = PFHS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	196	7.00	21.00	11.0102	2.93693
Pre Factor Score: Negative Attitudes about Gun Carrying	200	7.00	16.00	12.9050	2.38630
Pre Factor Score: Protective Factors	201	4.00	12.00	10.1791	1.43449
Pre Factor Score: Efficacy to Resist Peer Pressure	207	1.00	4.00	3.2560	.79875
Post Factor Score: Positive Direct Program Impact	156	4.00	16.00	13.9295	2.20004
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	157	5.00	16.00	7.6369	2.12480
Post Factor Score: Negative Attitudes about Gun Carrying	157	4.00	12.00	9.5096	2.16208
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	156	6.00	12.00	10.5513	1.40641
Valid N (listwise)	142				

a. School = PFMS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	16	7.00	25.00	15.5000	4.58984
Pre Factor Score: Negative Attitudes about Gun Carrying	15	7.00	14.00	11.3333	2.05866
Pre Factor Score: Protective Factors	17	4.00	12.00	8.0000	2.17945
Pre Factor Score: Efficacy to Resist Peer Pressure	16	1.00	4.00	2.5000	1.03280
Post Factor Score: Positive Direct Program Impact	3	12.00	14.00	13.0000	1.00000
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	3	7.00	15.00	10.6667	4.04145
Post Factor Score: Negative Attitudes about Gun Carrying	3	6.00	10.00	7.6667	2.08167
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	3	6.00	10.00	8.3333	2.08167
Valid N (listwise)	2				

a. School = PJMS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	54	7.00	20.00	12.7407	3.16338
Pre Factor Score: Negative Attitudes about Gun Carrying	55	7.00	16.00	12.1091	2.71943
Pre Factor Score: Protective Factors	55	6.00	12.00	9.6909	1.48913
Pre Factor Score: Efficacy to Resist Peer Pressure	56	1.00	4.00	3.3929	.80178
Post Factor Score: Postive Direct Program Impact	52	6.00	16.00	13.4808	2.58571
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	52	5.00	15.00	8.0385	2.44116
Post Factor Score: Negative Attitudes about Gun Carrying	51	3.00	12.00	9.0196	2.14000
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	52	6.00	12.00	10.5577	1.46077
Valid N (listwise)	47				

a. School = RRCHS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	62	7.00	18.00	11.1613	2.85263
Pre Factor Score: Negative Attitudes about Gun Carrying	62	4.00	16.00	12.1452	2.77487
Pre Factor Score: Protective Factors	64	4.00	12.00	9.8750	1.88982
Pre Factor Score: Efficacy to Resist Peer Pressure	63	1.00	4.00	3.3492	.67582
Post Factor Score: Positive Direct Program Impact	63	6.00	16.00	13.6508	2.29416
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	65	5.00	13.00	7.5385	1.77726
Post Factor Score: Negative Attitudes about Gun Carrying	65	3.00	12.00	9.3231	2.15861
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	63	7.00	12.00	10.6667	1.23131
Valid N (listwise)	52				

a. School = RRCMS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	44	7.00	22.00	15.7727	3.30513
Pre Factor Score: Negative Attitudes about Gun Carrying	46	4.00	15.00	10.8043	2.63835
Pre Factor Score: Protective Factors	46	5.00	12.00	8.9348	1.52610
Pre Factor Score: Efficacy to Resist Peer Pressure	46	1.00	4.00	3.1087	.76676
Post Factor Score: Positive Direct Program Impact	39	4.00	15.00	11.5641	2.52143
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	39	5.00	15.00	9.4103	2.48911
Post Factor Score: Negative Attitudes about Gun Carrying	38	3.00	12.00	7.9474	2.03944
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	39	3.00	12.00	9.6410	2.01947
Valid N (listwise)	35				

a. School = RSHS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	169	7.00	22.00	10.8521	2.91068
Pre Factor Score: Negative Attitudes about Gun Carrying	169	6.00	16.00	13.1716	2.59122
Pre Factor Score: Protective Factors	171	5.00	12.00	10.5146	1.40318
Pre Factor Score: Efficacy to Resist Peer Pressure	171	1.00	4.00	3.2749	.84045
Post Factor Score: Positive Direct Program Impact	155	8.00	16.00	14.8903	1.56491
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	155	5.00	13.00	7.2065	1.94968
Post Factor Score: Negative Attitudes about Gun Carrying	156	5.00	12.00	10.1603	1.84390
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	154	6.00	12.00	11.0000	1.20457
Valid N (listwise)	138				

a. School = SFCMS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	367	7.00	25.00	11.9537	3.43726
Pre Factor Score: Negative Attitudes about Gun Carrying	369	4.00	16.00	12.4201	2.45829
Pre Factor Score: Protective Factors	375	3.00	12.00	10.1893	1.54397
Pre Factor Score: Efficacy to Resist Peer Pressure	380	1.00	4.00	3.2868	.81499
Post Factor Score: Positive Direct Program Impact	344	6.00	16.00	13.9797	2.28754
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	344	5.00	19.00	7.2297	2.10985
Post Factor Score: Negative Attitudes about Gun Carrying	342	3.00	12.00	9.4678	2.13142
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	343	3.00	12.00	10.6356	1.49213
Valid N (listwise)	307				

a. School = SFHS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	114	7.00	28.00	12.1579	3.38811
Pre Factor Score: Negative Attitudes about Gun Carrying	119	7.00	16.00	12.9244	2.40818
Pre Factor Score: Protective Factors	122	4.00	12.00	9.8361	1.70735
Pre Factor Score: Efficacy to Resist Peer Pressure	127	1.00	4.00	3.0709	.93589
Post Factor Score: Positive Direct Program Impact	117	5.00	16.00	14.0855	2.23827
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	117	5.00	20.00	8.0256	2.44407
Post Factor Score: Negative Attitudes about Gun Carrying	121	4.00	12.00	9.6612	2.12349
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	118	6.00	12.00	10.4068	1.53165
Valid N (listwise)	83				

a. School = SLMS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	257	7.00	24.00	12.0739	3.20254
Pre Factor Score: Negative Attitudes about Gun Carrying	257	4.00	16.00	12.3969	2.38936
Pre Factor Score: Protective Factors	256	5.00	12.00	10.0117	1.53005
Pre Factor Score: Efficacy to Resist Peer Pressure	264	1.00	4.00	3.1856	.82707
Post Factor Score: Positive Direct Program Impact	257	4.00	16.00	13.5953	2.44463
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	253	5.00	20.00	7.8300	2.52109
Post Factor Score: Negative Attitudes about Gun Carrying	256	3.00	12.00	9.2617	2.24872
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	256	3.00	12.00	10.4531	1.57360
Valid N (listwise)	225				

a. School = SVHS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	189	7.00	21.00	12.1376	3.18442
Pre Factor Score: Negative Attitudes about Gun Carrying	194	6.00	16.00	12.6804	2.54716
Pre Factor Score: Protective Factors	190	3.00	12.00	9.7211	1.92205
Pre Factor Score: Efficacy to Resist Peer Pressure	195	1.00	4.00	3.0359	.89888
Post Factor Score: Positive Direct Program Impact	184	4.00	16.00	13.7880	2.49889
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	186	5.00	16.00	7.5645	2.23936
Post Factor Score: Negative Attitudes about Gun Carrying	186	3.00	12.00	9.5161	2.29270
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	186	3.00	12.00	10.2796	1.74830
Valid N (listwise)	159				

a. School = SVMS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	164	7.00	20.00	11.3720	3.08600
Pre Factor Score: Negative Attitudes about Gun Carrying	169	4.00	16.00	12.4852	2.48593
Pre Factor Score: Protective Factors	165	4.00	12.00	9.7515	1.60565
Pre Factor Score: Efficacy to Resist Peer Pressure	170	1.00	4.00	3.3529	.79504
Post Factor Score: Positive Direct Program Impact	107	6.00	16.00	13.3458	2.33958
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	109	5.00	16.00	7.8716	2.53165
Post Factor Score: Negative Attitudes about Gun Carrying	110	3.00	12.00	9.0727	2.27354
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	110	5.00	12.00	10.2636	1.75404
Valid N (listwise)	91				

a. School = TSHS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	241	7.00	28.00	12.3776	3.82788
Pre Factor Score: Negative Attitudes about Gun Carrying	247	6.00	16.00	12.1741	2.48042
Pre Factor Score: Protective Factors	246	4.00	12.00	9.8780	1.67374
Pre Factor Score: Efficacy to Resist Peer Pressure	248	1.00	4.00	3.2621	.79971
Post Factor Score: Positive Direct Program Impact	226	4.00	16.00	13.8142	2.28249
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	217	5.00	20.00	8.0276	2.80363
Post Factor Score: Negative Attitudes about Gun Carrying	228	3.00	12.00	9.1228	2.20188
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	226	6.00	12.00	10.5796	1.50121
Valid N (listwise)	198				

a. School = WOHS

**Descriptive Statistics<sup>a</sup>**

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Factor Score: Risk Factors	159	7.00	21.00	11.4969	2.83485
Pre Factor Score: Negative Attitudes about Gun Carrying	163	4.00	16.00	12.9080	2.54056
Pre Factor Score: Protective Factors	164	3.00	12.00	10.0976	1.65866
Pre Factor Score: Efficacy to Resist Peer Pressure	170	1.00	4.00	3.0765	.84966
Post Factor Score: Positive Direct Program Impact	134	7.00	16.00	13.9925	2.19533
Post Factor Score: Acceptance of Risky Attitudes/Behaviors	135	5.00	14.00	7.6741	2.15042
Post Factor Score: Negative Attitudes about Gun Carrying	135	3.00	12.00	9.6741	1.97684
Post Factor Score: Efficacy to Make Decisions/Understand Consequences	133	6.00	12.00	10.5489	1.41135
Valid N (listwise)	110				

a. School = WOMS

## **EKG Program Impact**

In the previous two sections, we have fully described the sample of students who participated in the EKG program in Year 1. Now we will begin to report findings which will demonstrate the actual impact of the EKG program on the student participants. To review, students were given a survey questionnaire before exposure to the EKG training program and again after exposure to the EKG training program to assess their attitudes, behaviors, and cognitions about guns, gangs, violence, and decision-making.

### *Changes Over Time*

Data analyses were conducted to look for changes over time from pre- to post-survey where possible for student participants. The pre- and post-surveys were compared to assess for any attitudinal, behavioral, and/or cognitive shifts that may be attributed to the EKG training program. Paired samples t-tests were used to analyze the pre- and post-survey data. Results of paired samples t-test provide an associated *p-value* which is used to determine whether the pre- to post-change in attitude, behavior, or cognition we are analyzing is *statistically significant*. A statistically significant *p-value* of  $\leq .05$  means that the change that we see from pre- to post-test is unlikely to have occurred due to chance alone and can therefore be attributed to the EKG program intervention.

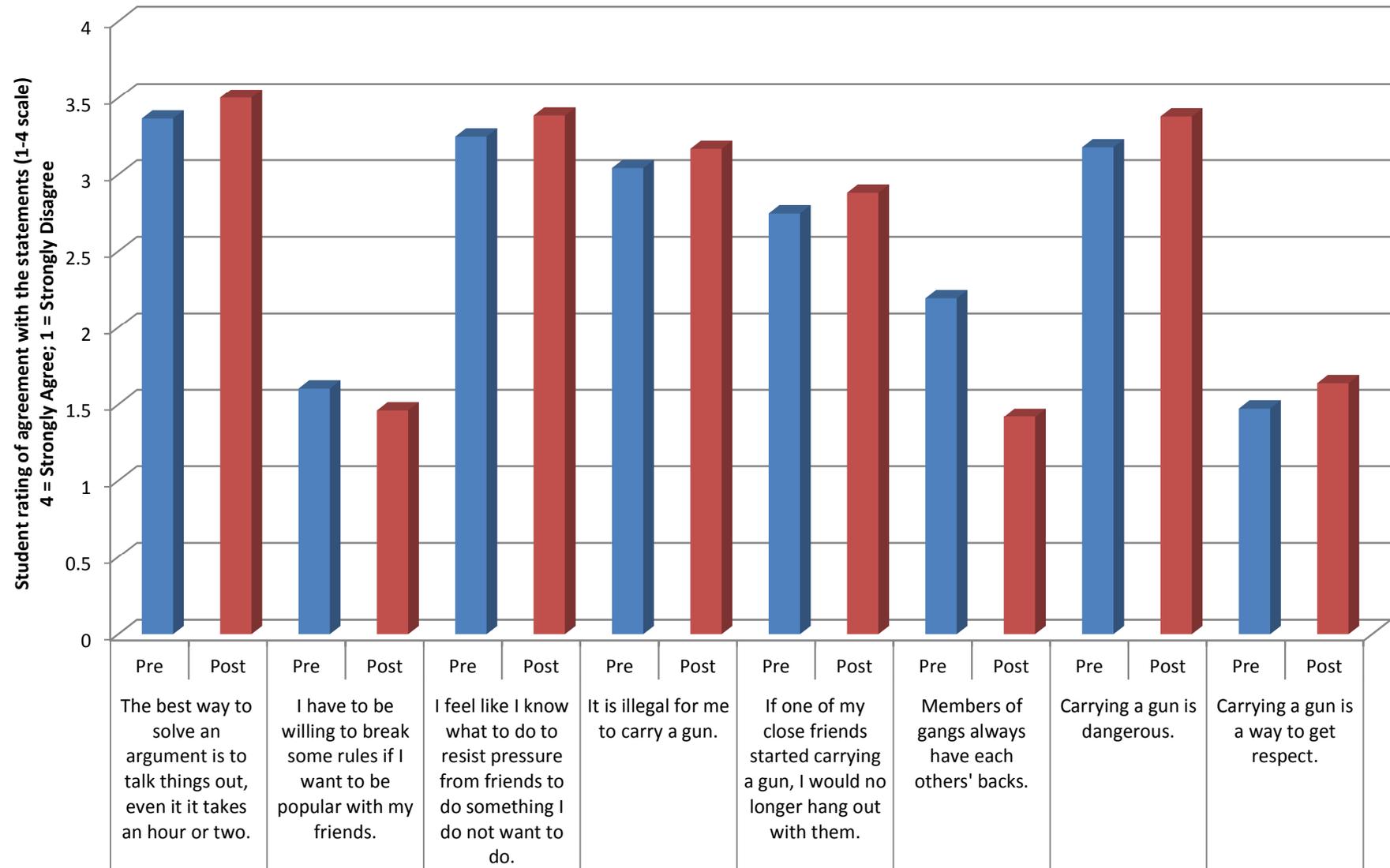
Students showed statistically significant ( $p \leq .05$ ) attitudinal/cognitive and intended behavioral shifts in the desired direction from pre- to post-survey, indicating that exposure to the EKG training program was successful in leading to student attitudinal, behavioral, and cognitive changes. Specifically, students reported the following shifts after exposure to the EKG training based on their pre- and post-survey data. All differences from pre-to-post were statistically significant at the  $p < .001$  level. After the EKG program as compared to before, students:

- Were more likely to know that it would be illegal for them carry a gun.
- Agreed more that the best way to solve arguments was to talk things out.
- Felt more strongly that they knew what to do resist peer pressure.
- Were less likely to agree that they had to be willing to break rules to fit in with their peers.
- Were more likely to stop hanging out with a friend known to carry a gun.
- Were more likely to agree that carrying a gun is dangerous.
- Were likely to debunk the myth that gang members stand up for each other. Specifically, after the video, students were less likely to feel that Jamari's gang would have his back after going to prison even though before the video, students were more likely to feel that gangs in general have each other's backs.

All of the above trends in the data are presented in the graphic on the next page.

Interestingly, there was a significant trend upward in agreement between the pre-test question, "Carrying a gun is a good way to get respect from other people", where the average agreement rating was 1.47 on a 4-point scale and the post-test question, "Jamari got respect from other people by carrying a gun", where the average agreement rating was significantly higher at 1.63 on a 4-point scale,  $t(5307) = -12.40$ ,  $p < .001$ . So, while students in general were more likely to disagree that carrying a gun is a way to get respect, they were more likely to agree that in the specific situation of Jamari, he was able to get respect by carrying a gun. For further elaboration on this finding, see the section comparing high vs. low risk students. It was the low risk students driving this upward trend. Maybe a point to consider for EKG instructors in their lesson planning is a discussion with students about how students are defining "respect." Instructors may ask students: "Was Jamari respected or was he feared because he had the gun?" Further students may consider the idea of how long Jamari's perceived respect or fear lasted due to him having the gun? Jamari's control of others through the fear elicited by his gun was very short-lived and certainly not worth the long-term consequences.

## Changes in student attitudes, beliefs, and expected behaviors as impacted by the EKG program: Pre- vs. post-survey assessment



Among all the factors that were identified and explained in the previous section, two factors were able to be analyzed for pre- to post-survey differences because the items that comprised the factors were the same or similar enough on both the pre- and post-surveys. A pre-factor and post-factor score was created using the items that were the same across the pre- and post-surveys for “Risk Factors” and “Negative Attitudes About Gun Carrying.” A paired-samples t-test was conducted for each factor scale score to see if there were changes from pre-to-post survey for student factor scores. The average scores for the pre- and post-factor scores are reported in the table below.

**Factor Scale Scores Pre- vs. Post-EKG Program**

		Mean	N	Std. Deviation
Pair 1	Pre Factor: Risk Factors	5.2632	5130	1.65561
	Post Factor: Risk Factors	4.5080	5130	1.57667
Pair 2	Pre Factor: Negative Attitudes About Gun Carrying	8.9714	5137	2.17653
	Post Factor: Negative Attitudes About Gun Carrying	9.4345	5137	2.18917

The difference from pre- to post-test in the factor scale scores was statistically significant for both factors and in the desired direction,  $p < .001$ . Specifically, the average score for acceptance of risky attitudes and behavior (Risk Factors) decreased from 5.26 on the pre-survey to 4.51 on the post-survey. The average score for negative attitudes about gun carrying increased from 8.97 on the pre-survey to 9.43 on the post-survey, indicating that students became less accepting of attitudes related to gun carrying after the EKG program.

High Risk vs. Low Risk Students

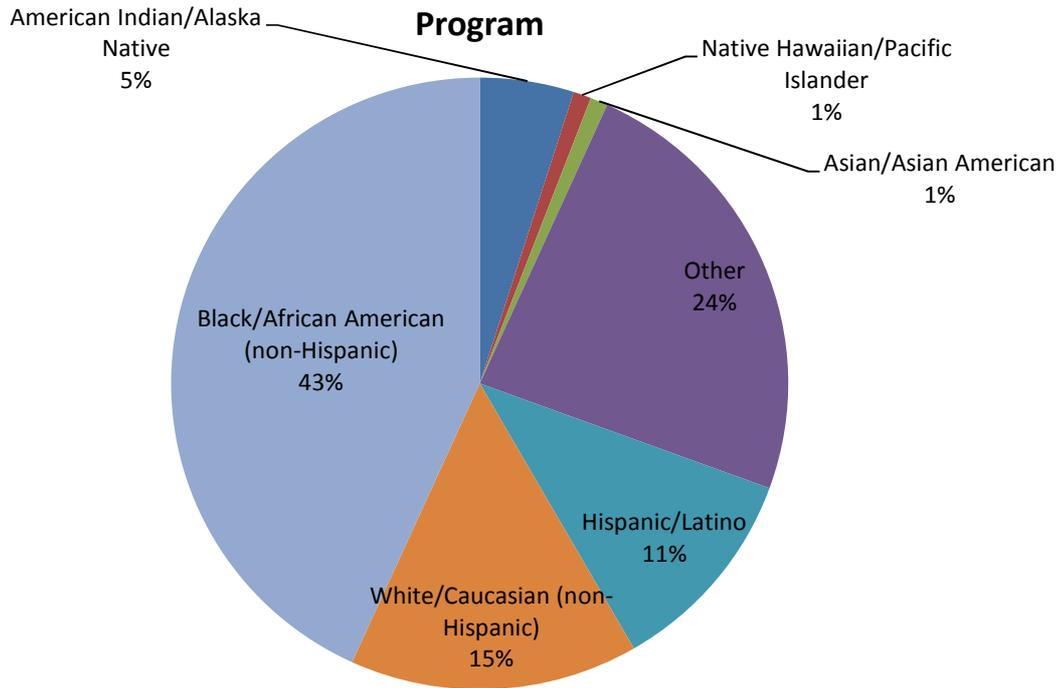
To further drill down the impact of the EKG program, the researchers believed it would be important to examine trends for the students at most risk for involvement with future gang/gun violence to see if high risk students were impacted differently by the EKG program than lower risk students. Using the pre-survey Risk Factors scale score described previously, students were categorized as either “High Risk”, meaning that they scored approximately two standard deviations above the mean on the Risk Factors scale (score of 18 or greater) or “Low Risk”, meaning that they scored approximately one standard deviation below the mean on the Risk Factors scale (score of 9 or less). The “Average Risk” students were those who scored above 9 and below 18 on the Risk Factors scale.

High Risk Student Characteristics

327 EKG student participants were characterized as “High Risk” based on their Risk Factors scale score (score of 18 or greater) on the pre-survey questionnaire.

- 62.5% were 9<sup>th</sup> graders; 37.5% were 7<sup>th</sup> graders
- 65.6% were male; 34.4% were female
- 13.2% identified as street gang members
- 17.7% said they would consider joining a gang
- 38.3% said they have been threatened or shot at with a gun
- 68.3% said either they or a close family member or friend had been shot with a gun
- 14% said they had threatened or shot at someone with a gun
- The racial composition of high risk EKG participants is provided in the graphic below. The largest racial category of high risk EKG participants was Black/African American (43%).

### Racial Composition of High Risk Students Participating in the EKG Program



The top schools that high risk students attended are presented in the table below. The six schools with the most high risk student representation are highlighted in yellow. At least 5% of all high risk students came from these six schools: CFHS (6.1% of all high risk students), DBHS (5.2% of all high risk students), JBHS (6.4% of all high risk students), and PFHS (9.5% of all high risk students), SFHS (8.0% of all high risk students), and WOHS (7.3% of all high risk students).

**Schools Attended by High Risk EKG Participants**

		Frequency	Percent
Valid	ACMS	4	1.2
	CFHS	20	6.1
	DBHS	17	5.2
	DBMS	10	3.1
	EESHS	15	4.6
	GCHS	11	3.4
	GCMS	8	2.4
	HMMS	6	1.8
	JBHS	21	6.4
	JDC	4	1.2
	JGMS	6	1.8
	LCMS	16	4.9
	LNJMS	7	2.1
	MAMS	8	2.4
	MHCHS	1	.3
	MWMS	12	3.7
	NCIMS	6	1.8
	PFHS	31	9.5
	PFMS	4	1.2
	PJMS	4	1.2
	RRCHS	4	1.2
	RRCMS	3	.9
	RSHS	15	4.6
	SFCMS	6	1.8
	SFHS	26	8.0
	SLMS	5	1.5
	SVHS	13	4.0
	SVMS	11	3.4
	TSHS	4	1.2
	WOHS	24	7.3
	WOMS	5	1.5
	Total	327	100.0

There were 121 high risk middle school participants and 202 high risk high school participants. The top middle schools attended by high risk students are highlighted in yellow in the table below. At least 8% of high risk middle school students came from these schools: DBMS (8.3% of all high risk middle school students), LCMS (13.2% of all high risk middle school students), MWMS (9.9% of all high risk middle school students), and SVMS (9.1% of all high risk middle school students).

**Schools Attended by High Risk Middle School EKG Participants**

		Frequency	Percent
Valid	ACMS	4	3.3
	<b>DBMS</b>	<b>10</b>	<b>8.3</b>
	GCMS	8	6.6
	HMMS	6	5.0
	JGMS	6	5.0
	<b>LCMS</b>	<b>16</b>	<b>13.2</b>
	LNJMS	7	5.8
	MAMS	8	6.6
	<b>MWMS</b>	<b>12</b>	<b>9.9</b>
	NCIMS	6	5.0
	PFMS	4	3.3
	PJMS	4	3.3
	RRCMS	3	2.5
	SFCMS	6	5.0
	SLMS	5	4.1
	<b>SVMS</b>	<b>11</b>	<b>9.1</b>
	WOMS	5	4.1
	Total	121	100.0

The top high schools attended by high risk students are highlighted in yellow in the table below. At least 10% of high risk high school students came from these schools: JBHS (10.4% of all high risk high school students), PFHS (15.3% of all high risk high school students), SFHS (12.9% of all high risk high school students), and WOHS (11.9% of all high risk high school students).

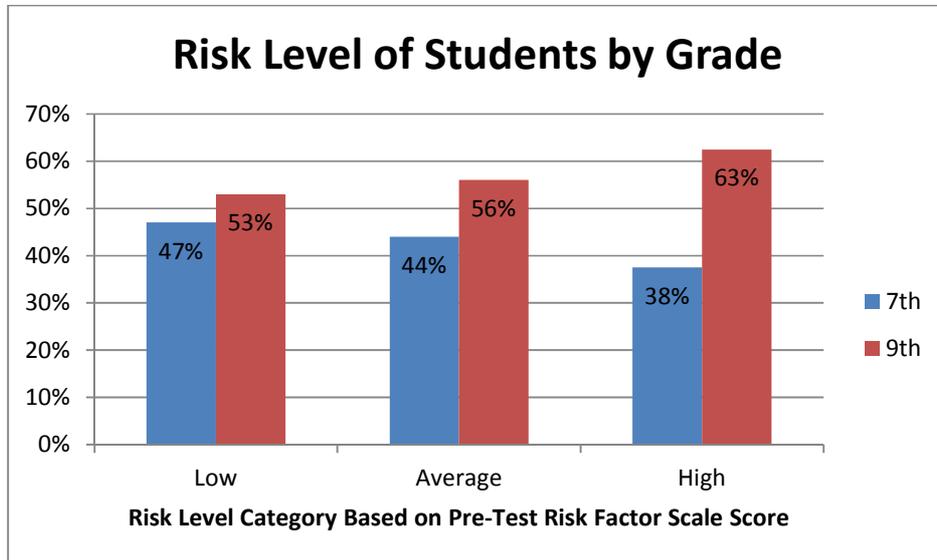
**Schools Attended by High Risk High School EKG Participants**

	Frequency	Percent
Valid CFHS	20	9.9
DBHS	17	8.4
EESHS	15	7.4
GCHS	11	5.4
<b>JBHS</b>	<b>21</b>	<b>10.4</b>
MHCHS	1	.5
<b>PFHS</b>	<b>31</b>	<b>15.3</b>
RRCHS	4	2.0
RSHS	15	7.4
<b>SFHS</b>	<b>26</b>	<b>12.9</b>
SVHS	13	6.4
TSHS	4	2.0
<b>WOHS</b>	<b>24</b>	<b>11.9</b>
Total	202	100.0

The graphics that appear on the following pages show how students at each risk level compared in terms of demographics and pre-survey experiences with gangs and guns. Chi-square tests were used to determine whether significant differences existed between the high, low, and average risk students on each of the characteristics. Not surprisingly, statistically significant differences were found between the three risk levels on all characteristics examined at the  $p < .05$  level.

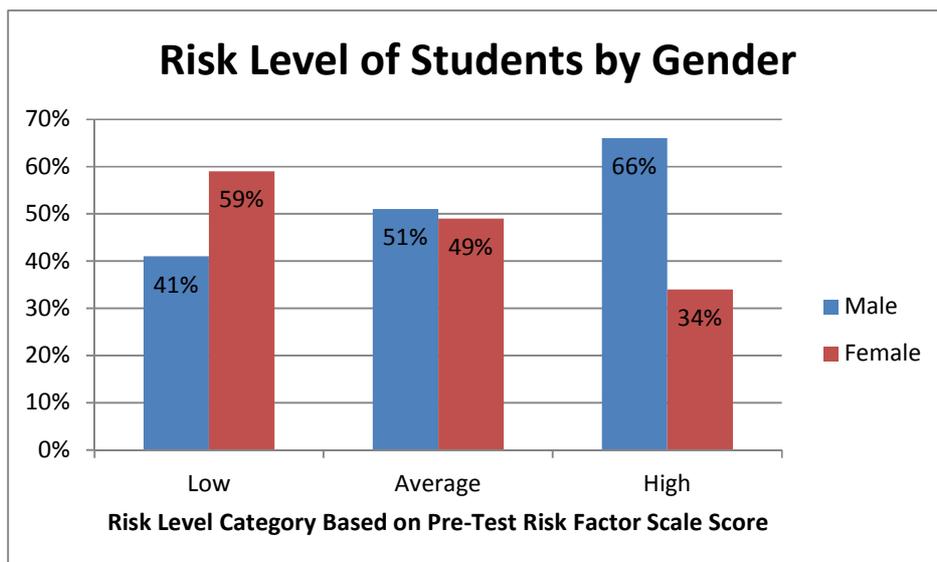
Grade Level

High risk students were significantly older (as determined by grade level) than students categorized as low or average risk. Low risk students were significantly younger (as determined by grade level) than students categorized as average or high risk,  $\chi^2(2, N = 5845) = 10.27, p = .006$ .



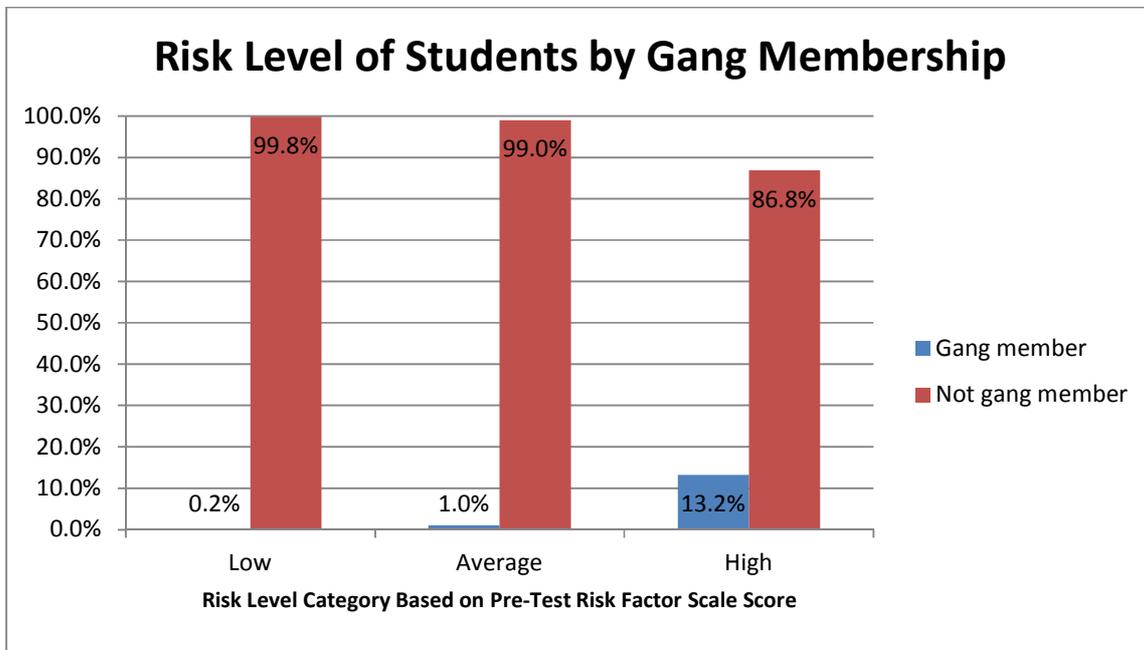
Gender

High risk students were more likely to be male than either average or low risk students. Low risk students were more likely than average or high risk students to be female,  $\chi^2(2, N = 5759) = 79.17, p < .001$ .



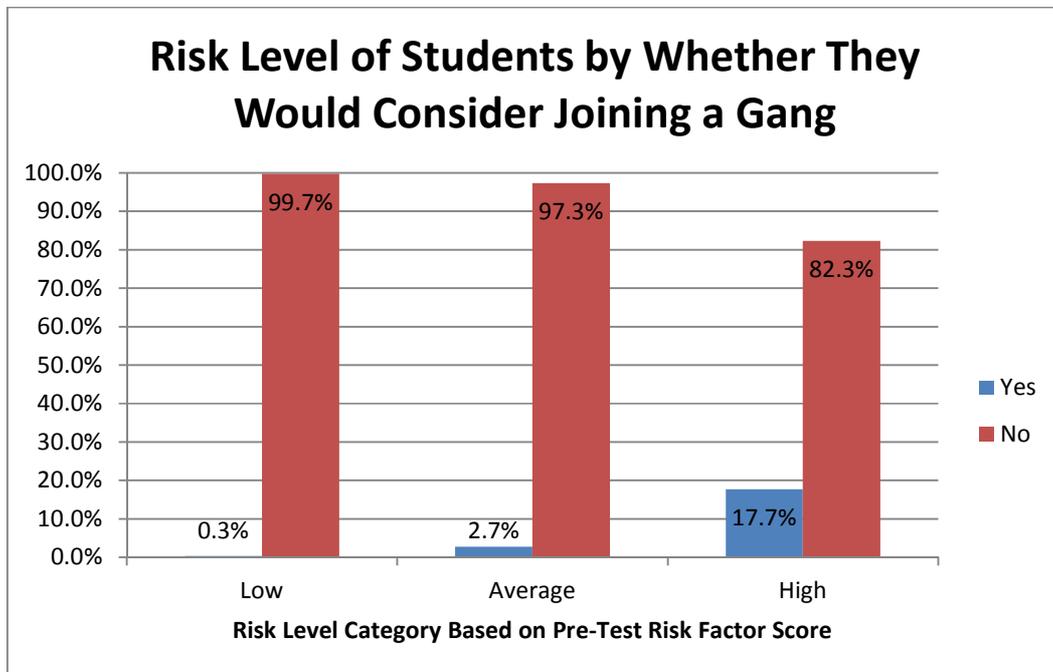
Gang Membership

High risk students were more likely to identify as street gang members than low or average risk students, while low risk and average risk students were less likely than high risk students to identify as street gang members,  $\chi^2(2, N = 5806) = 332.74, p < .001$ . 13% of high risk students identified as gang members as compared to only 1% of average risk and nearly 0% of low risk students.



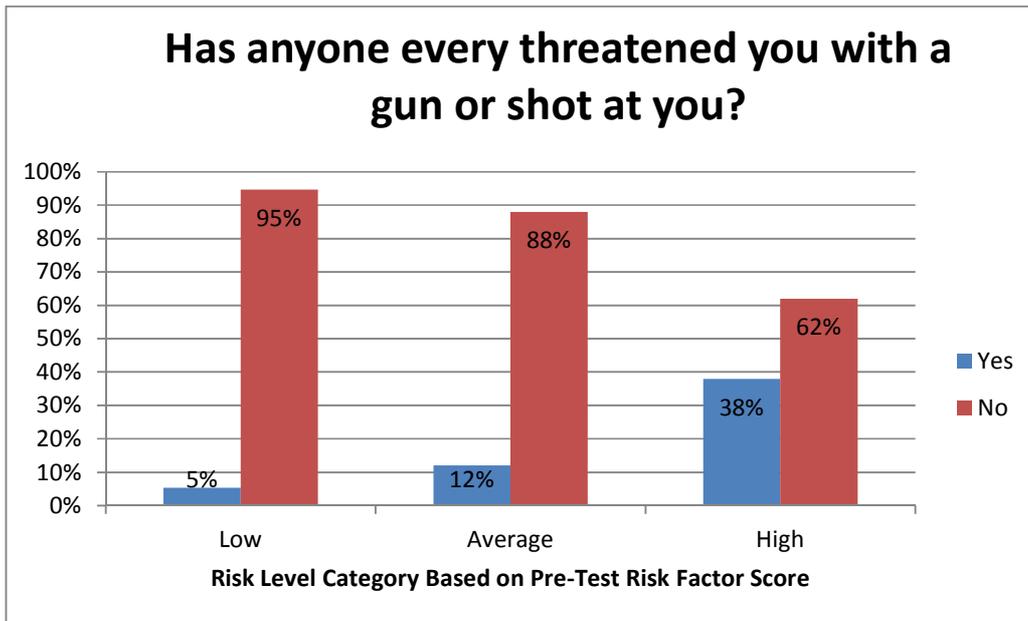
Consider Joining a Gang

High risk students were more likely to consider joining a gang than low or average risk students. Low risk students were less likely to consider joining a gang than average or high risk students,  $\chi^2(2, N = 5628) = 256.84, p < .001$ . Nearly 18% of high risk students stated that they would consider joining a gang compared to only 3% of average risk and nearly 0% of low risk students.



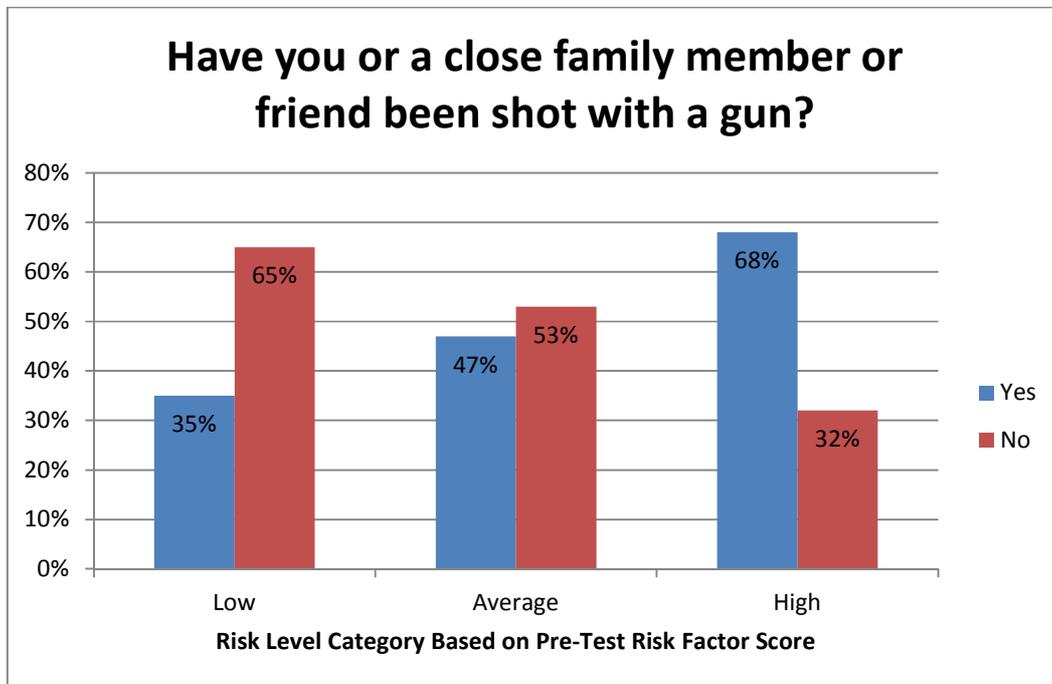
Been Threatened with a Gun or Shot At

High risk students were more likely to report that they have been threatened with or shot with a gun than students in the average or low risk categories. Students in the low risk category were less likely than students in the average or high risk categories to report having been threatened or shot at with a gun,  $\chi^2(2, N = 5818) = 280.15, p < .001$ . 38% of high risk students had been threatened with a gun or shot at as compared to only 12% of average risk and 5% of low risk students.



Been Shot or Had a Close Family Member or Friend Shot

High risk students were more likely than average or low risk students to report that have been shot or had a close family member or friend shot. Low risk students were less likely than high or average risk students to report the same,  $\chi^2(2, N = 5783) = 131.92, p < .001$ . 68% of high risk students had been shot or had a close family member or friend shot as compared to 47% of average risk and 35% of low risk students.



Overall the differences in characteristics of the high risk students as compared to the average and low risk students indicate that our Risk Factor scale score as assessed by the 7-items on the pre-survey does a good job differentiating in a meaningful way the students who have lived experiences that we might predict would be associated with higher risk attitudes and beliefs about guns, gangs, and violence and that may make them more susceptible to engaging in violent behaviors. These high risk students are most in need of an intervention. If we can further examine the EKG program’s impact on these high risk students specifically, we can determine whether the most at-risk students are experiencing the same desired changes in attitudes and beliefs about gangs and guns and perceived self-efficacy in decision-making and resisting peer pressure as their counterparts who are at low or only average risk for involvement with future gang/gun violence.

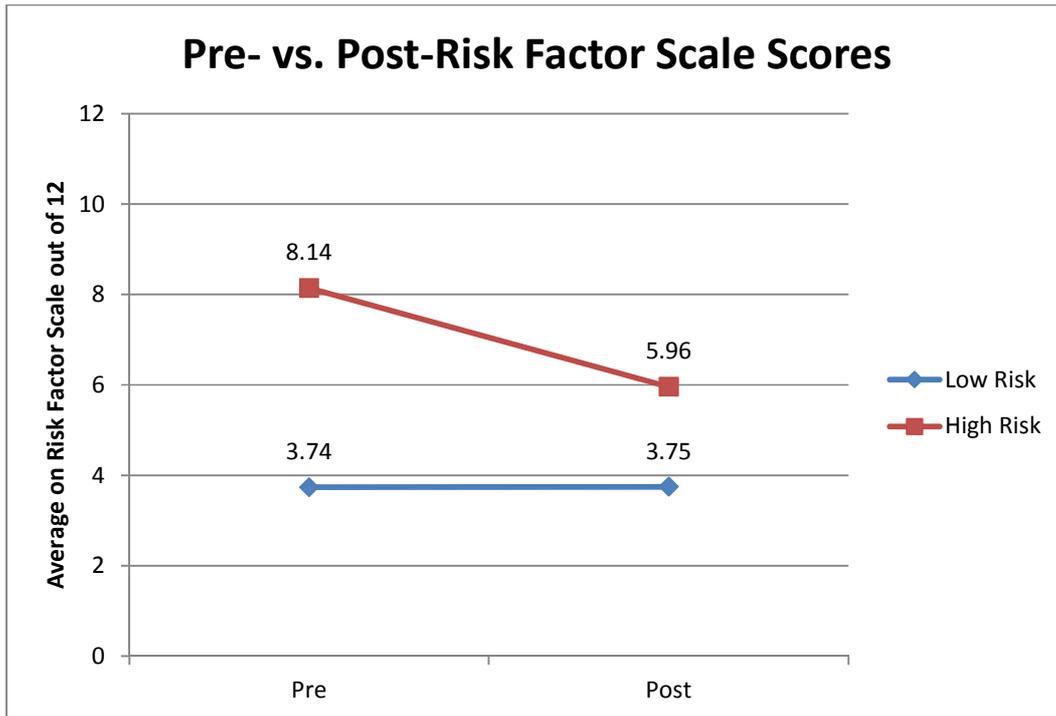
Interaction between Risk Level and Impact of the EKG Program

Simply put, an interaction tells us that the level of change we see in one outcome (in this case the change we see from pre- to post-survey on items of interest) depends on the level of another variable (in this case the level of risk that students have coming into the EKG program based on their Risk Factor scale score on the pre-survey). So, if the effect of the EKG program (as measured by student survey responses) is greater among students who are at higher risk than among students who are at lower risk, we would say that there is an interaction between the EKG program’s impact and student risk level. This is another way of saying that the effect of the EKG program is different depending on a student’s level of risk. There are statistical methods that can determine whether an interaction exists. The results that follow will

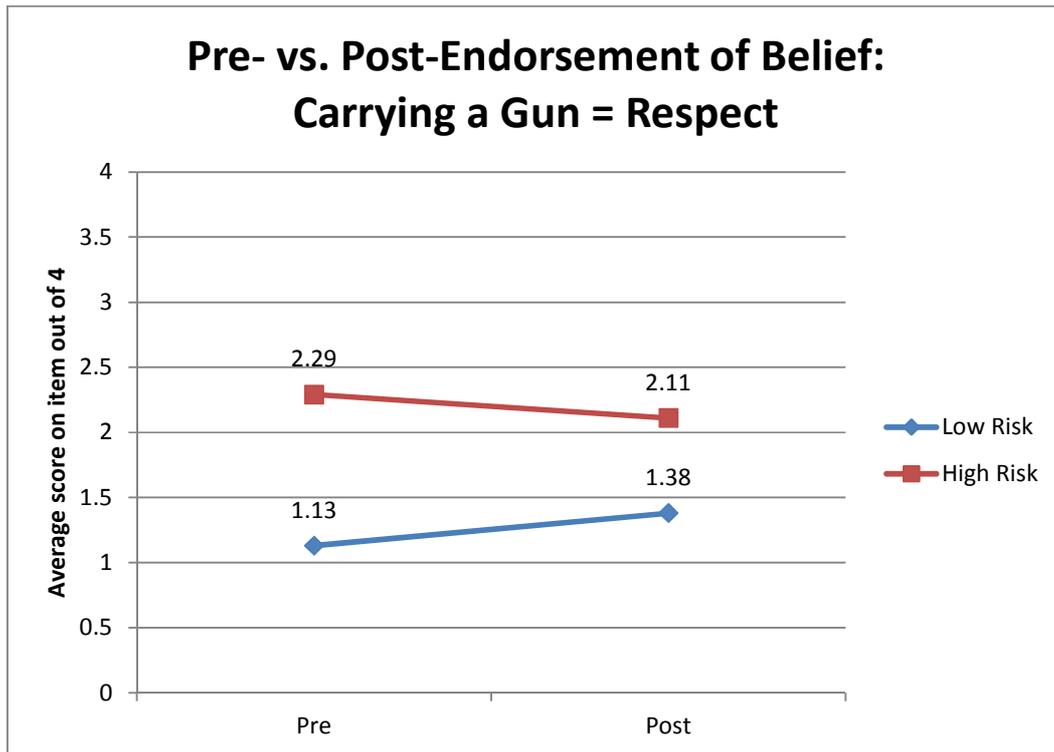
indicate whether there was an interaction between EKG and student risk level. The following pre- vs. post-survey items were examined for interactions and only those where a statistically significant interaction was found are represented in the graphics that follow.

- Risk Factor scale score for pre- vs. post-survey consisting of the sum of three individual items: 1) gang members always have each other's backs + 2) carrying a gun gets respect + 3) have to be willing to break rules to be popular,  $F(1, 1567) = 536.77, p < .001$ 
  - Significant interaction, meaning that the level of change from pre- to post- test in the Risk Factor score depended upon the student's risk level. Graph and more detailed explanation to follow.
- Negative Gun Carrying Attitudes scale score on pre- vs. post-survey consisting of the sum of three individual items: 1) it is illegal to carry a gun + 2) if a close friend started carrying a gun, no longer hang out + 3) carrying a gun is dangerous,  $F(1, 1556) = .552, p = .458$ 
  - No significant interaction, meaning that the increase in negative attitudes toward carrying guns from pre- to post-survey was the same regardless of a student's level of risk. Basically all students, regardless of their pre-existing risk level became more negative toward gun carrying after the EKG program.
- The best way to solve an argument is to talk it out,  $F(1, 1568) = .591, p = .442$ 
  - No significant interaction, meaning that the increase in agreement with this item from pre- to post-test was the same regardless of a student's level of risk. Basically all students, regardless of their pre-existing risk level agreed more with this item after the EKG program.
- Carrying a gun is a way to get respect as assessed using pre-survey item: "Carrying a gun is a good way to get respect from other people" vs. post-survey item: "Jamari got respect from other people by carrying a gun",  $F(1, 1575) = 53.72, p < .001$ 
  - Significant interaction, meaning that the level of change from pre- to post-survey in the belief that gun carrying is a way to get respect depended upon the student's risk level. Graph and more detailed explanation to follow.
- Perceived self-efficacy to resist peer pressure,  $F(1, 1563) = .004, p = .951$ 
  - No significant interaction, meaning that the increase in agreement with this item from pre- to post-survey was the same regardless of a student's level of risk. Basically all students, regardless of their pre-existing risk level agreed more with this item after the EKG program.
- Have to be willing to break some rules if I want to be popular,  $F(1, 1575) = 96.99, p < .001$ 
  - Significant interaction, meaning that the level of change from pre- to post-survey in the agreement with this item depended upon the student's risk level. Graph and more detailed explanation to follow.
- It is illegal for me to carry a gun,  $F(1, 1571) = 1.08, p = .299$ 
  - No significant interaction, meaning that the increase in agreement with this item from pre- to post-survey was the same regardless of a student's level of risk. Basically all students, regardless of their pre-existing risk level agreed more with this item after the EKG program.
- Need to think more about consequences before acting,  $F(1, 1564) = 12.19, p < .001$ 
  - Significant interaction, meaning that the level of change from pre- to post-survey in the agreement with this item depended upon the student's risk level. Graph and more detailed explanation to follow.
- If a close friend started carrying a gun, I would no longer hang out with them,  $F(1, 1566) = 4.31, p = .038$ 
  - Significant interaction, meaning that the level of change from pre- to post-survey in the agreement with this item depended upon the student's risk level. Graph and more detailed explanation to follow.
- Carrying a gun is dangerous,  $F(1, 1572) = .483, p = .487$

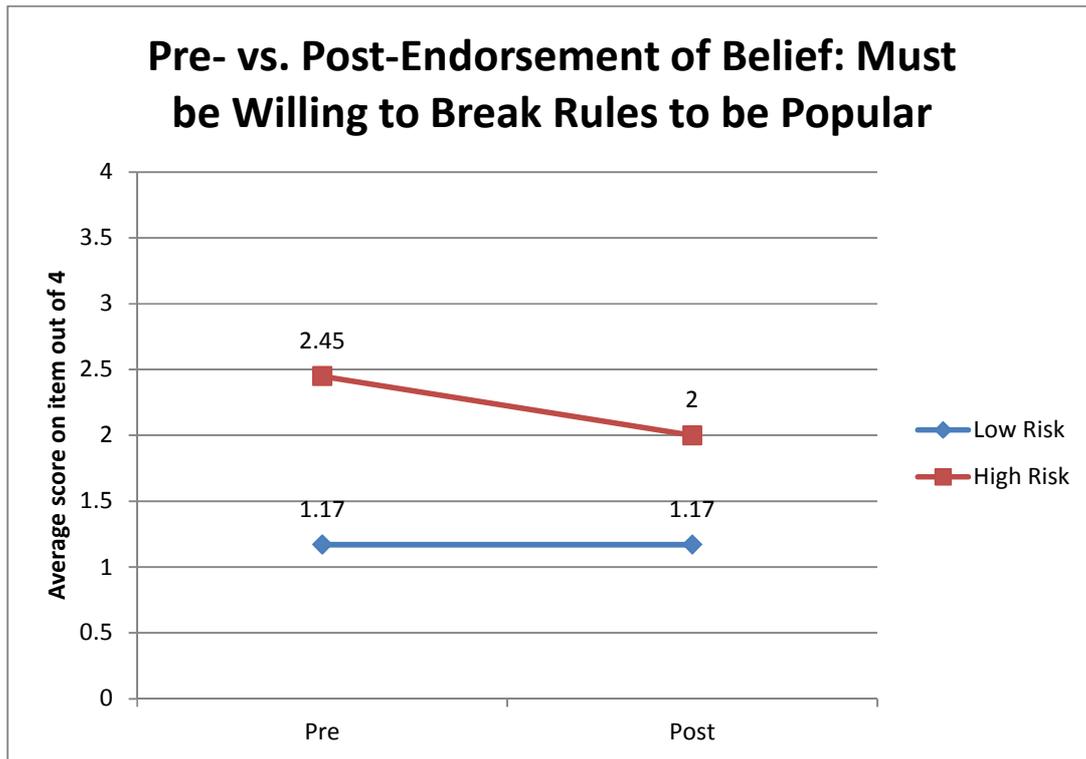
- No significant interaction, meaning that the increase in agreement with this item from pre- to post-survey was the same regardless of a student’s level of risk. Basically all students, regardless of their pre-existing risk level agreed more with this item after the EKG program.
- Gang members have each other’s backs as assessed using pre-survey item: “Members of gangs always each other’s backs and stand up for one another” and post-survey item: “I feel like Jamari’s boys will have his back and stand up for him even after he goes to jail for the shooting”,  $F(1, 1575) = 534.36, p < .001$ 
  - Significant interaction, meaning that the level of change from pre- to post-survey in the agreement with this item depended upon the student’s risk level. Graph and more detailed explanation to follow.



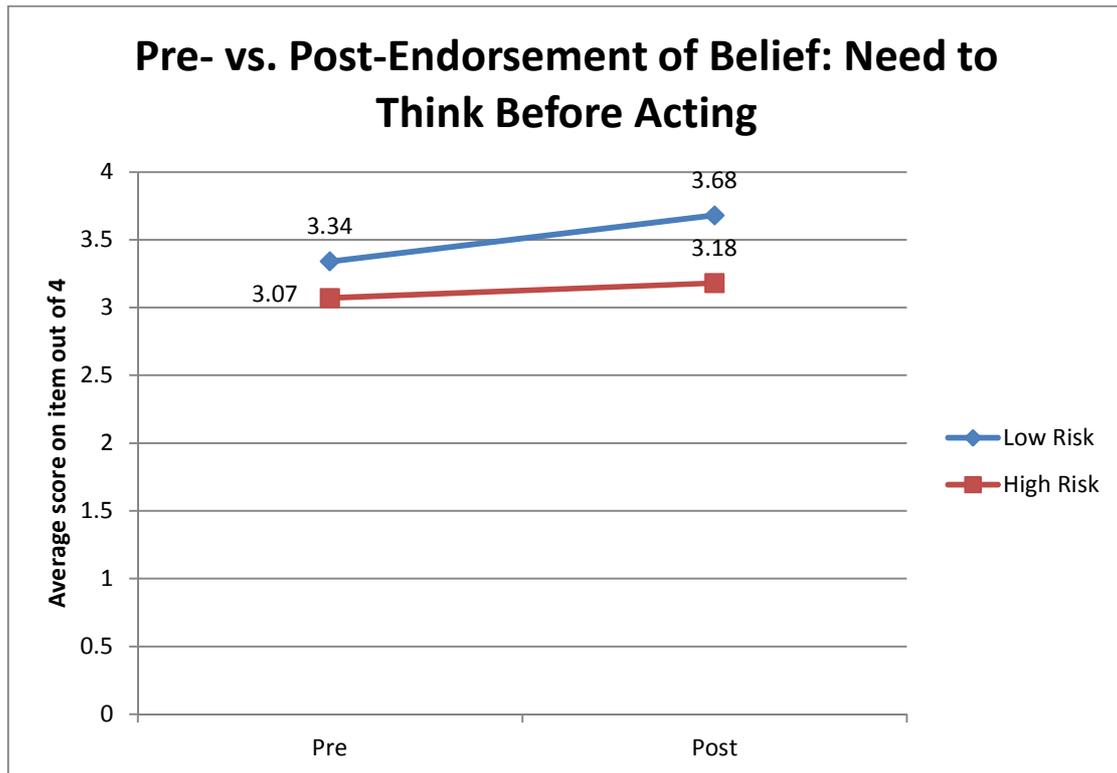
- High risk student showed a significant decrease in scores on the Risk Factor scale from pre-survey (average = 8.14) to post-survey (average = 5.96). Low risk students did not show any significant change in Risk Factor scale scores from pre-survey (average = 3.74) to post-survey (average = 3.75). This finding indicates that the EKG program’s impact in terms of affecting Risk Factor beliefs that are pro-gun and pro-gang are greatest for and specific to students in most need of an intervention—the high risk students.



- Both high and low risk students showed change in level of agreement with this belief from pre-survey to post-survey. However, the direction of the change was different for high risk and low risk students. Specifically, after the EKG program, high risk students were less likely to agree that carrying gun a is a way to get respect (though keep in mind that the item used to measure this belief on the post-survey was worded such that students were asked if they believed that Jamari got respect by carrying a gun). Low risk students, on the other hand, were more likely to agree that carrying a gun is a way to get respect. As noted in the previous section, maybe a point to consider for EKG instructors in their lesson planning is a discussion with students about how students are defining “respect.” Instructors may ask students: “Was Jamari respected or was he feared because he had the gun?” Further students may consider the idea of how long Jamari’s perceived respect or fear lasted due to him having the gun? Jamari’s control of others through the fear elicited by his gun was very short-lived and certainly not worth the long-term consequences.

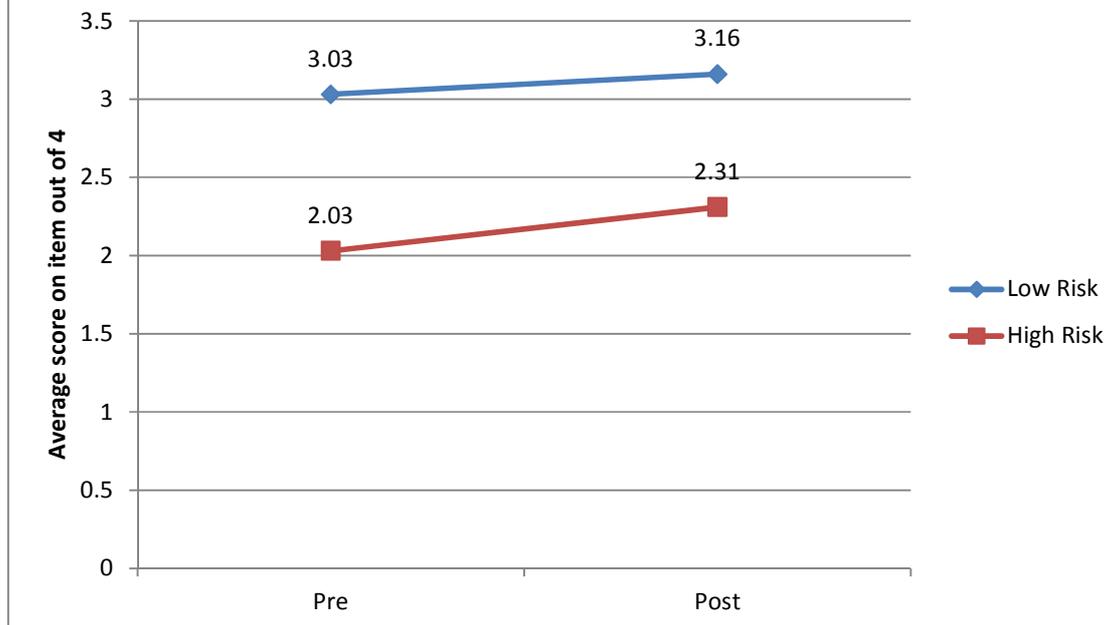


- Low risk students showed no significant change in agreement with this belief, while high risk students disagreed significantly more with this belief after EKG. Again, the EKG program appears to be impacting the students most in need of an intervention—the high risk students.

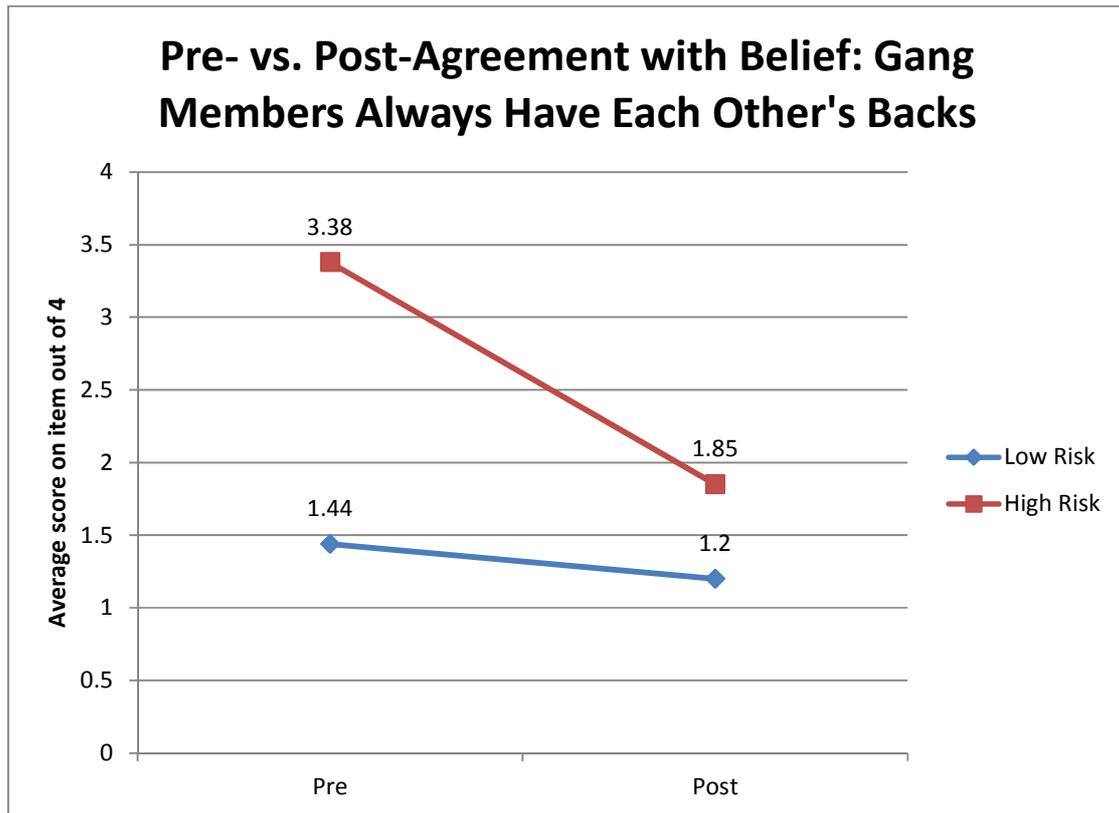


- High risk students showed only a minor change over time in agreement with this belief, while low risk students showed significant change in the desired direction after EKG. For this particular item, the students most in need of an intervention—the high risk students—did not show a significant desired change in belief from baseline (or pre-survey) to after EKG completion (or post-survey).

### Pre- vs. Post-Agreement with Intended Behavior: If a close friend started carrying a gun, I would no longer hang out with them



- The low risk students showed little change in agreement with this statement from pre-survey to post-survey, while the high risk students showed a significant change in the desired direction. High risk students agreed that they would be more willing to stop hanging out with a friend that started carrying a gun after the EKG program as compared to before the EKG program.



- Low risk students showed no significant change in agreement with this statement from pre- to post-survey, but high risk students showed a significant change in the desired direction from pre- to post-survey. Specifically, high risk students were less likely to agree that gang members have each other's backs after the EKG program (post-survey) as compared to what they believed at baseline (pre-survey).

Positive Direct Program Impact & Efficacy to Make Decisions/Understand Consequences Scores

There were two factor scales on the post-survey that did not have a direct comparison on the pre-survey, but which could be used to determine whether there was a significant difference between average scale scores for high risk vs. low risk students. The low risk students scored significantly higher on average on the Positive Direct Program Impact scale (average = 14.58) from the post-survey than did the high risk students (average = 12.19),  $t(1561) = 16.07, p < .001$ . This means that low risk students as compared to high risk students felt that because of the EKG program that they were better able to make good decisions, were more knowledgeable about the dangers of guns, were more likely to agree that they learned that they need to think more about consequences of their actions, and were more likely to support the belief that the best way to solve arguments is to talk things out. Also, the low risk students scored higher on the Efficacy to Make Decisions/Understand Consequences scale (average = 11.02) than high risk students (average = 9.56),  $t(1562) = 11.73, p < .001$ . This means that after the EKG program, low risk students were more likely than high risk students to agree that Jamari could have made better decisions throughout the video, that being a member of a gang makes it more likely that someone would get in trouble at school or with police, and that they feel like they know what to do to resist peer pressure.

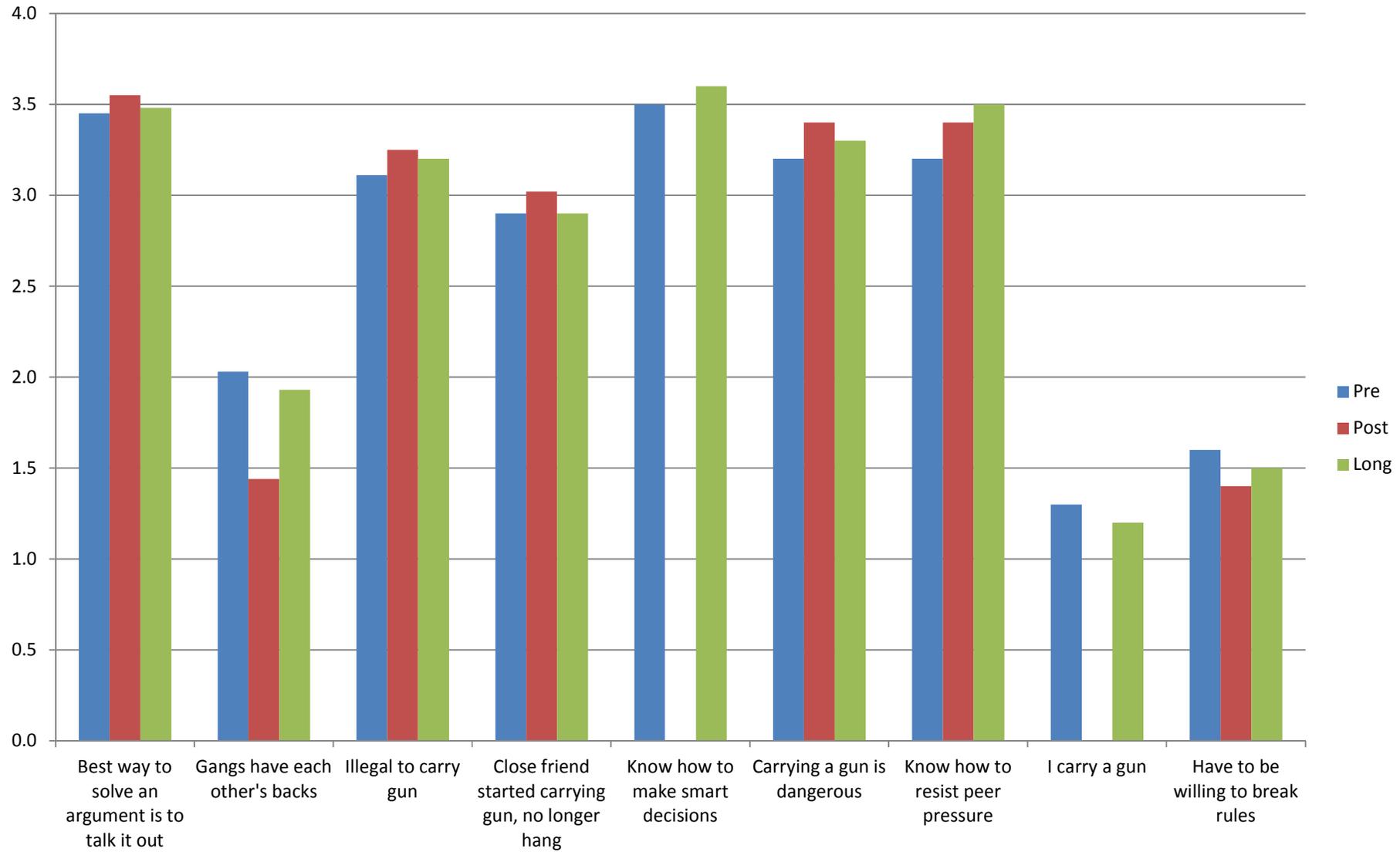
### Longitudinal Outcomes

A 9-item longitudinal follow-up survey was given to EKG student respondents approximately three months after students completed the EKG program. The purpose of the longitudinal survey was to determine whether the changes in attitudes and intended behaviors were retained over time. To examine longitudinal retention, we compared the students' post-survey item scores to scores on the longitudinal survey items. If students retained the same level of attitude change on the longitudinal survey that they had on the post-survey, then we can say that students retained the effect. In other words, statistically we would hope to see no significant difference between post-survey and longitudinal survey items scores. The p-value would be greater than .05.

In the event that students do not retain the same level of attitude or behavioral change from post-survey to longitudinal survey, we may expect to still see a significant difference between student incoming baseline attitudes as measured using the pre-survey as compared to the longitudinal survey. Thus, we can compare the longitudinal survey items scores to the pre-survey item scores for students. When comparing the pre-survey item scores to the longitudinal survey item scores, we would hope to see a statistically significant difference with a p-value of less than or equal to .05.

The bars in the graphic below show the average scores for each item on the pre (blue bar), post (red bar), and longitudinal (green bar) surveys. The red line in the middle is the post-survey score which, in most cases, is the highest/lowest of the three bars and demonstrates that students showed an increase/decrease in attitude or intended behavior in the desired direction as compared to where they were when they began the EKG program (the blue line). The green line shows how well the students retained the level of attitude/intended behavioral change as assessed on the longitudinal follow-up survey. In most cases, the green line drops below or rises above the initial change level seen in the red line (meaning that the effects of the EKG program did not last as strongly from the time that students completed the EKG program to the point of longitudinal follow-up). However, in most cases, the green line does not fall all the way back down or rise back to the level where students were at baseline (the blue line), meaning that some level of attitude or intended behavioral change still persisted at the longitudinal follow-up period. Please note that two items were not included in the post-survey and therefore no result are reported for the post-survey for those two items (i.e., no red line will be included). The two items were: 1) I feel like I know how to make smart decisions and 2) I do carry or am likely to carry a gun on a regular basis.

## Average Item Scores for EKG Participants on the Pre, Post, and Longitudinal Surveys



For the item: “The best way to solve an argument is to talk things out”, students retained the same level of attitude/intended behavioral change from post-survey to the longitudinal follow-up. This means that this particular item was “sticky” for the students and that change was persistent over time. The change in score from post-survey to longitudinal survey was NOT statistically significant ( $p = .078$ ), meaning that the level of the desired attitude change stayed the same.

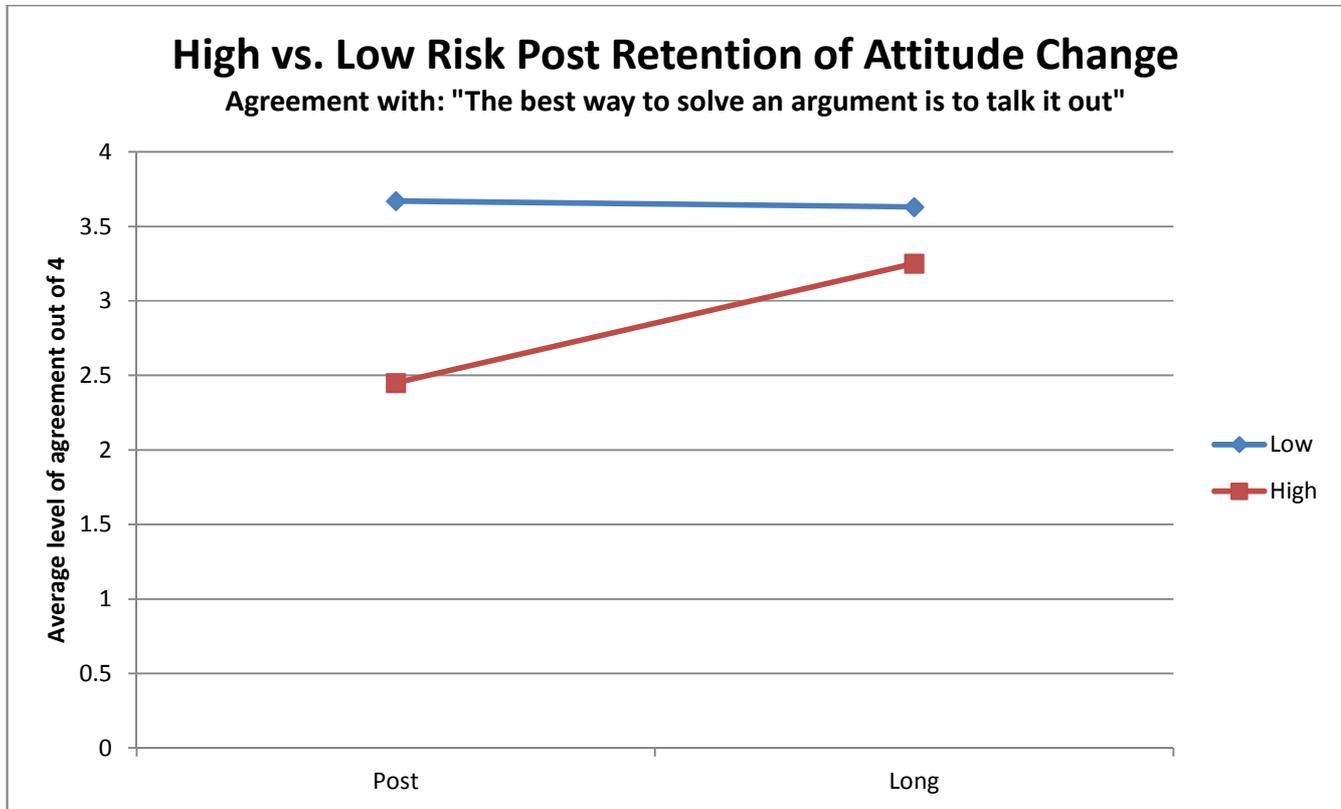
For the rest of the items analyzed, there was statistically significant change in attitude/intended behavior from post-survey to longitudinal follow-up meaning that students did not retain the same level of impact as seen immediately following the EKG program on the post-survey. To determine if the longitudinal level of change was statistically and significantly different from baseline, student pre-survey scores were compared to the longitudinal scores. If the change was statistically significant at the  $p \leq .05$  level, then the score at longitudinal follow-up would be significantly different from the score of the student as assessed at baseline (or pre-test), indicating that some level of impact still persisted even though it was not as great as initially seen immediately following the EKG program (on the post-survey).

- Member of gangs have each other’s backs
  - For this item, students did not retain the same level of disagreement at longitudinal follow-up as they had on the post-survey. However, their level of disagreement at longitudinal follow-up was still statistically significantly different from where the level of disagreement was at baseline (or pre-survey),  $p = .008$ . This means that even though the students did not retain the same level of attitude change longitudinally as they had immediately after the EKG program, they still retained a level of desired attitude change at longitudinal follow-up that was different from where they were at baseline.
- It is illegal for me to carry a gun
  - For this item, students did not retain the same level of agreement at longitudinal follow-up as they had on the post-survey. Further, their level of agreement at longitudinal follow-up was not statistically significantly different from where the level of agreement was at baseline (or pre-survey),  $p = .264$ . This means students did not retain the same level of attitude change longitudinally as they had immediately after the EKG program, nor was their level of attitude change at longitudinal follow-up different from where they were at baseline.
- If a close friend started carrying a gun, I would no longer hang out with them
  - For this item, students did not retain the same level of agreement at longitudinal follow-up as they had at post-test. Further, their level of agreement at longitudinal follow-up was not statistically significantly different from where the level of agreement was at baseline (or pre-survey),  $p = .537$ . This means students did not retain the same level of intended behavioral change longitudinally as they had immediately after the EKG program, nor was their level of intended behavioral change at longitudinal follow-up different from where they were at baseline.
- Carrying a gun is dangerous
  - For this item, students did not retain the same level of agreement at longitudinal follow-up as they had on the post-survey. However, their level of agreement at longitudinal follow-up was still statistically significantly different from where the level of disagreement was at baseline (or pre-test),  $p = .002$ . This means that even though the students did not retain the same level of attitude change longitudinally as they had immediately after the EKG program, they still retained a level of desired attitude change that was different from where they were at baseline.

- I feel like I know how to resist peer pressure
  - For this item, students did not retain the same level of agreement at longitudinal follow-up as they had on the post-survey. However, their level of agreement at longitudinal follow-up was still statistically significantly different from where the level of disagreement was at baseline (or pre-survey),  $p < .001$ . This means that even though the students did not retain the same level of attitude change longitudinally as they had immediately after the EKG program, they still retained a level of desired attitude change at longitudinal follow-up that was different from where they were at baseline.
- I have to be willing to break some rules to be popular
  - For this item, students did not retain the same level of agreement at longitudinal follow-up as they had on the post-survey. Further, their level of agreement at longitudinal follow-up was not statistically significantly different from where the level of agreement was at baseline (or pre-survey),  $p = .264$ . This means students did not retain the same level of attitude change longitudinally as they had immediately after the EKG program, nor was their level of attitude change at longitudinal follow-up different from where they were at baseline.
- I know how to make smart decisions
  - For this item, there was no post-survey comparison score available. However, the longitudinal change for this item from pre-survey was in the desired direction and was statistically significant,  $p = .002$ .
- I am likely to or do carry a gun on a regular basis
  - For this item, there was no post-survey comparison score available. However, the longitudinal change for this item from the pre-survey was in the desired direction and was statistically significant,  $p < .001$ .

Like with the results reported previously, we were interested in understanding the longitudinal retention of EKG's impact on the high risk students specifically as the high risk students are the students who are most vulnerable to potential violence and involvement with gangs/guns.

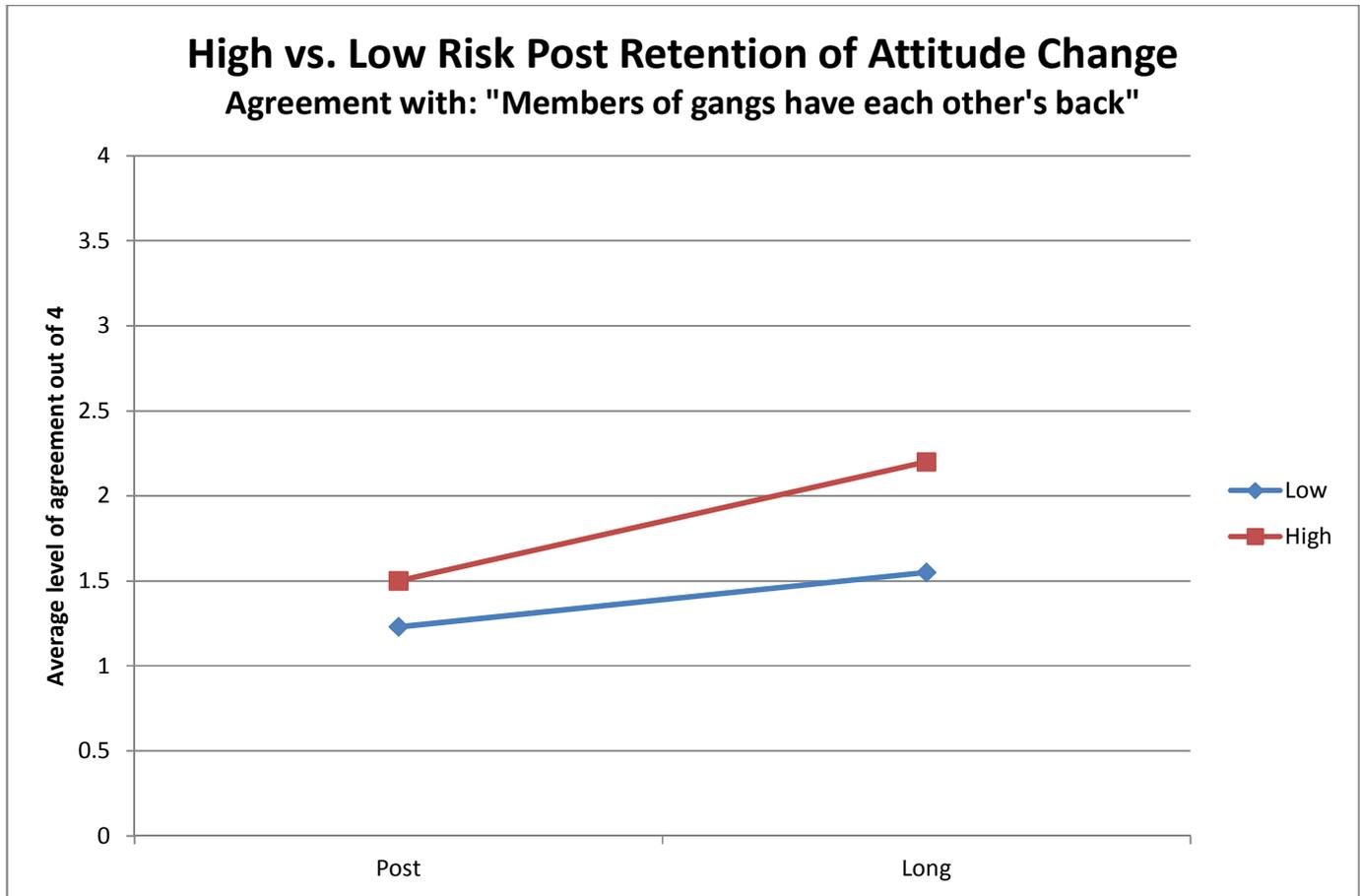
The best way to solve a problem is to talk it out



- Results revealed a statistically significant interaction,  $F(1, 198) = 19.80, p < .001$ . The high risk students agreed more with this statement at longitudinal follow up than they did on the post-survey immediately following the EKG program. Thus, the attitude strengthened over time for high risk students. For low risk students, there was no significant change in agreement with this item from post-survey to longitudinal follow-up.

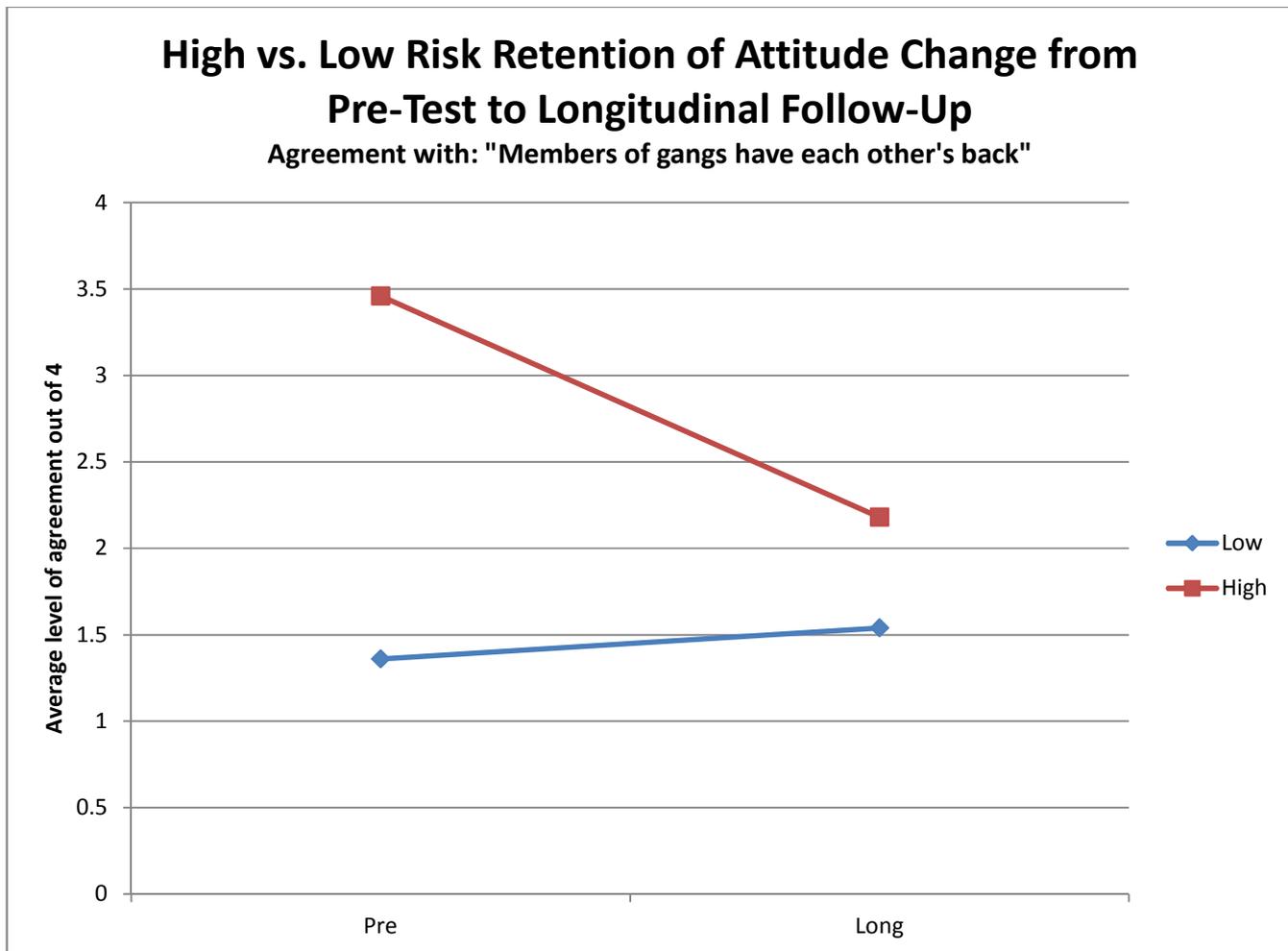
Gang members have each other's backs

Note that the item on the post-survey to measure this belief was: "I feel like Jamari's boys will have his back and stand up for him even after he goes to jail." On the pre-survey and longitudinal survey, the item was worded: "Members of gangs always have each other's back and stand up for one another."



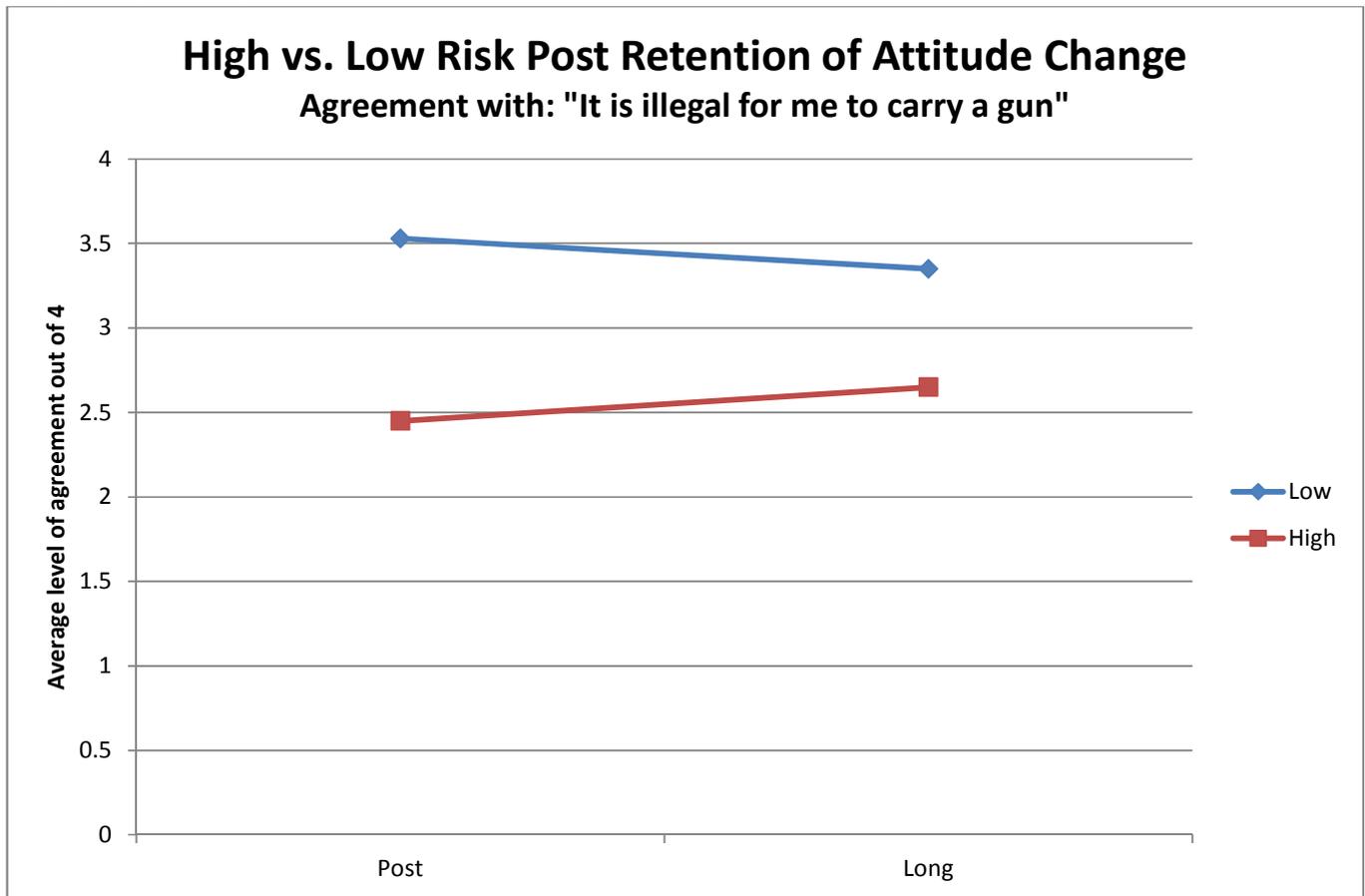
- Results revealed a statistically significant interaction,  $F(1, 196) = 3.77, p = .054$ . The high risk students agreed more with this statement at longitudinal follow up than they did on the post-survey immediately following the EKG program. Thus, the attitude strengthened over time (which is not a desired outcome) for high risk students. For low risk students, they agreed more with the statement from post-survey to longitudinal follow-up, though the level of the increase in agreement was not as great as for the high risk students. *Note the above statement about the difference in the wording of the items from post-survey to longitudinal survey.*

To directly compare like-worded items, we compared longitudinal survey data to pre-survey data for the item, "Members of gangs always have each other's backs."



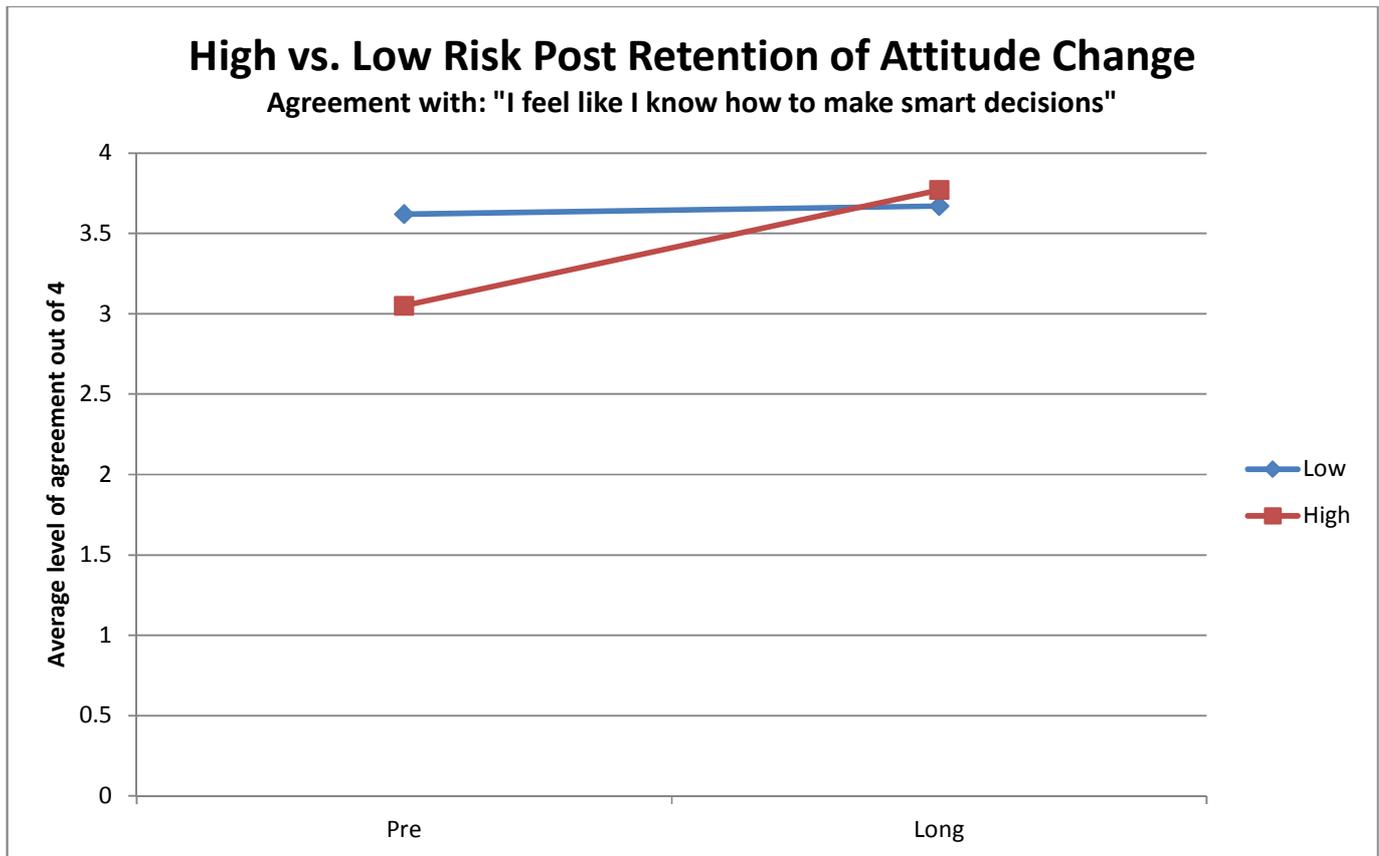
- Results revealed a statistically significant interaction,  $F(1, 235) = 62.65, p < .001$ . The high risk students agreed less with this statement at longitudinal follow up than they did on the post-survey. Thus, the belief in gang members having each other's back weakened over time for the high risk students (a desired outcome). For low risk students, however, there was a different trend. The belief in gang members having each other's back strengthened slightly over time for low risk students (an undesired outcome), though the level of strength in this belief for low risk students at the highest point (1.54) came nowhere close to the level of high risk students at baseline (3.46).

Carrying a gun is illegal



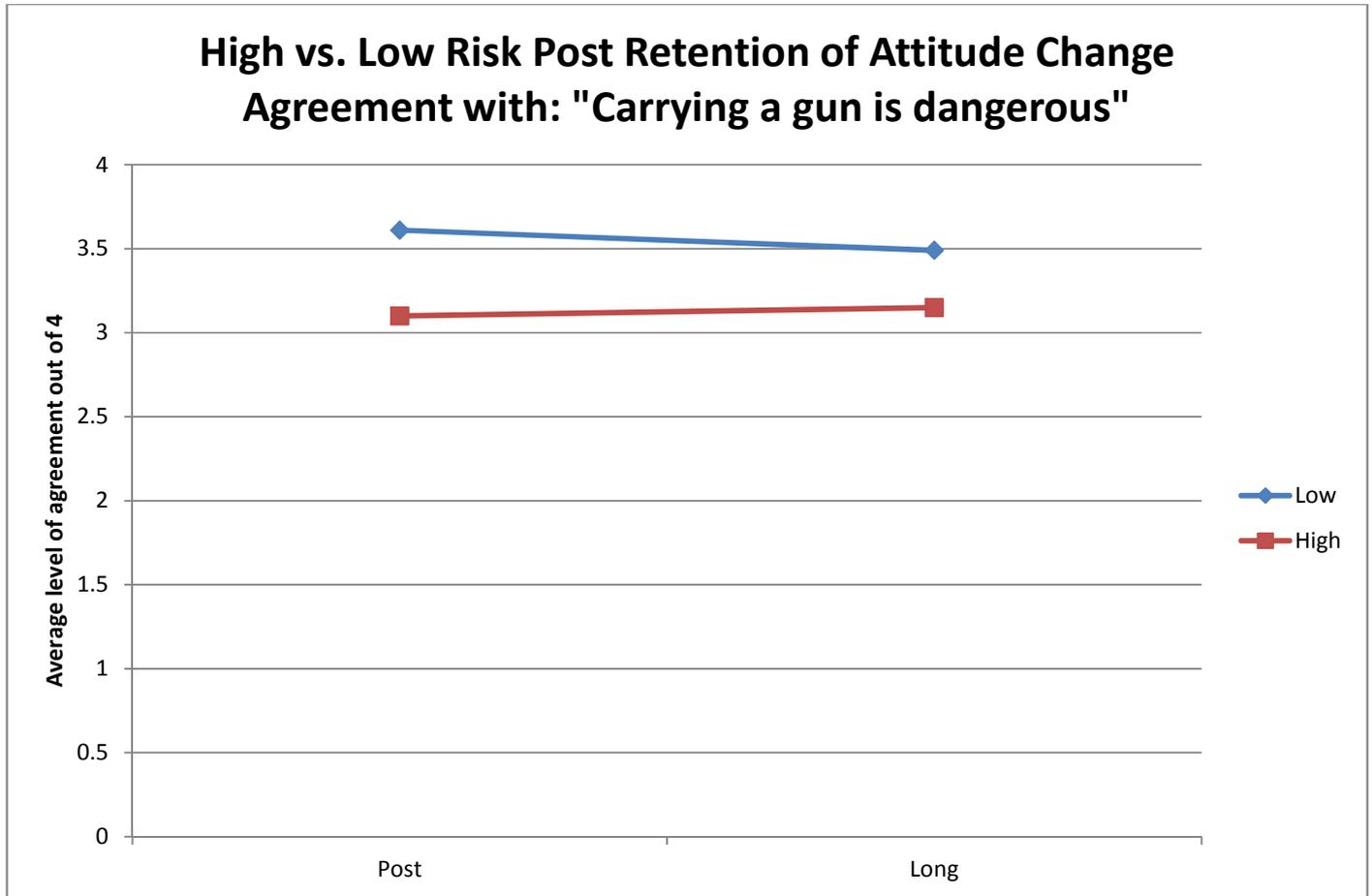
- There was no statistically significant interaction for level of agreement with this item based on student risk level, though the low risk students were less likely to agree at longitudinal follow-up as compared to directly after the EKG program (on the post-survey) that carrying a gun was illegal.

I feel like I know how to make smart decisions



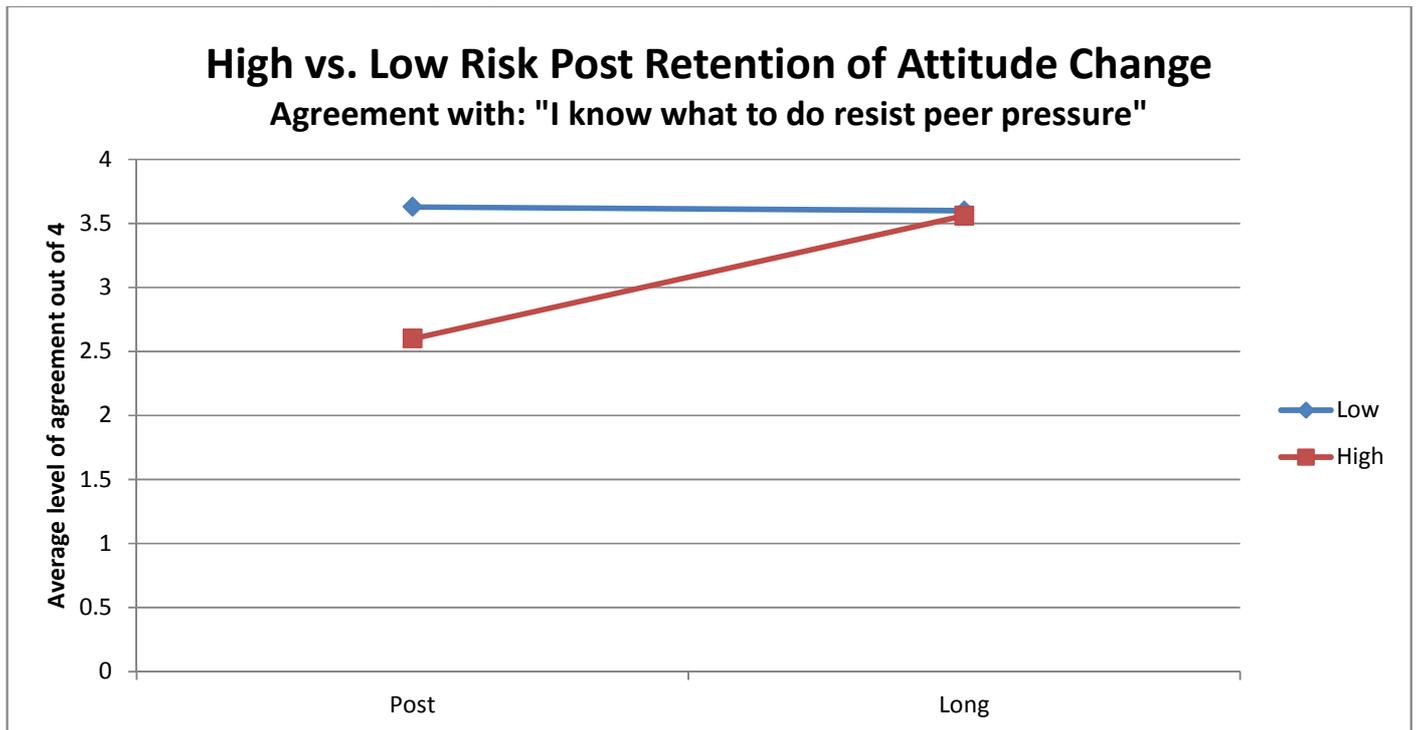
- Note this item was only asked on the pre-survey and longitudinal survey. No post-survey data was available for analysis. Results revealed a statistically significant interaction,  $F(1, 235) = 19.71, p < .001$ . The high risk students agreed more with this statement at longitudinal follow up than they did on the pre-survey. The attitude strengthened over time (which a desired outcome) for high risk students. For low risk students, there was not a statistically significant change in level of agreement with this item. The low risk students had a very high average level of agreement with this statement at baseline.

Carrying a gun is dangerous



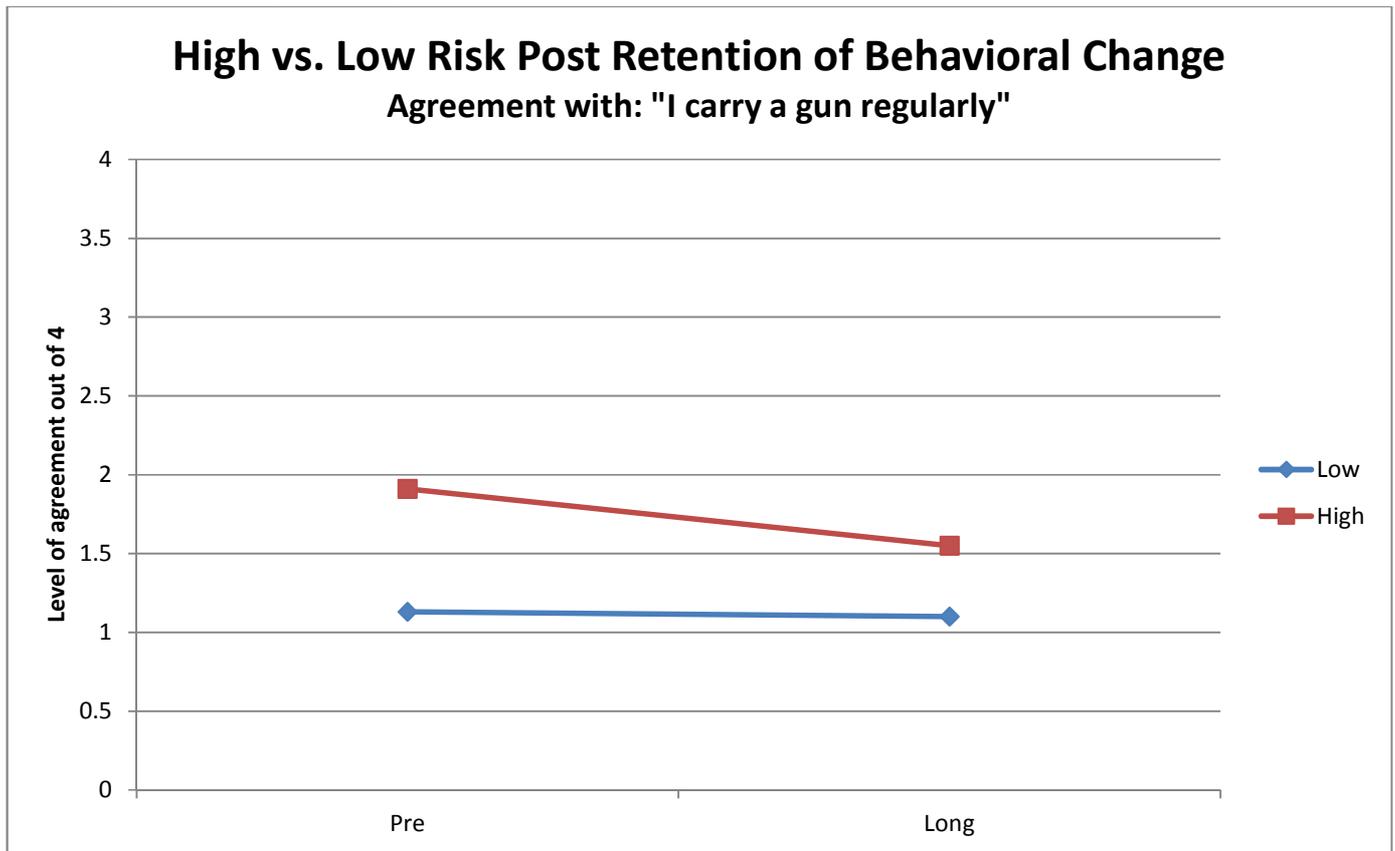
- There was no statistically significant interaction for level of agreement with this item based on student risk level.

I feel like I know what to do to resist peer pressure



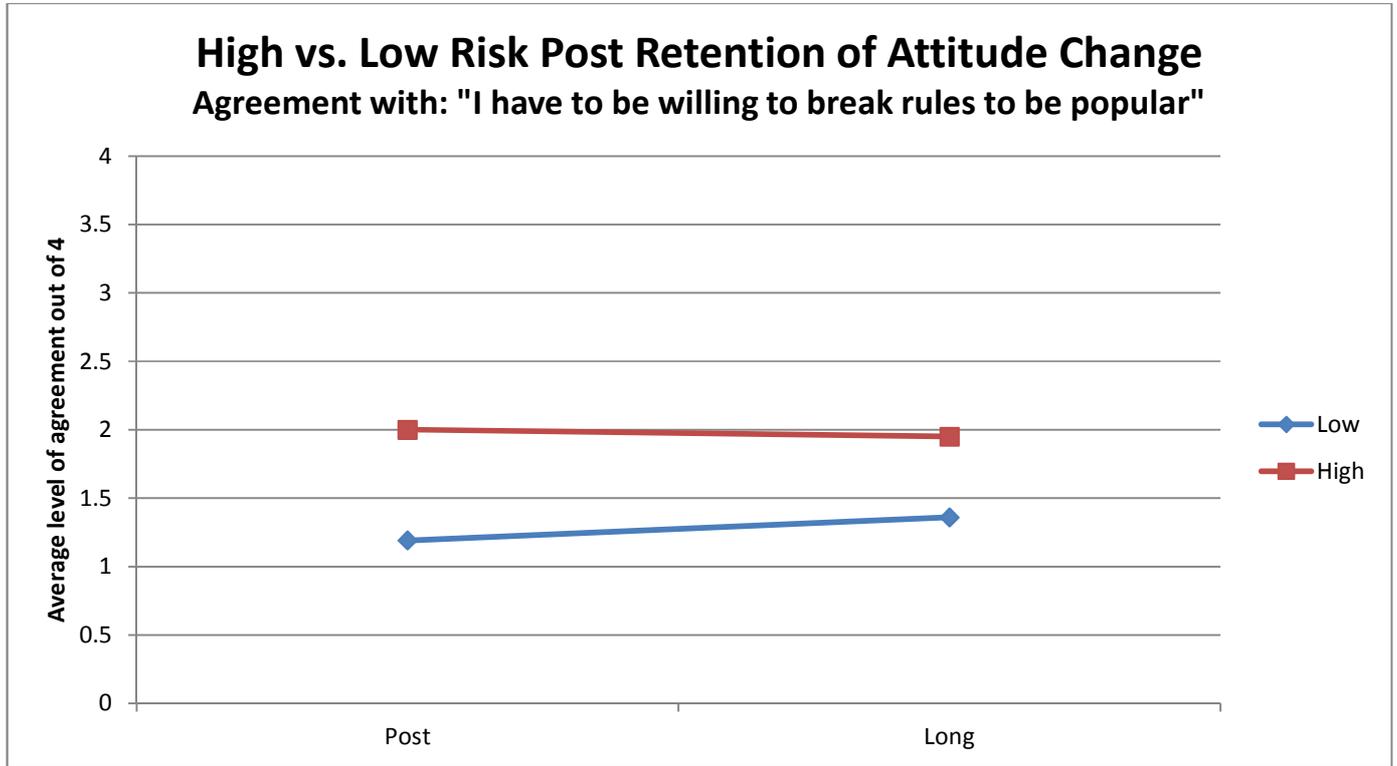
- Results revealed a statistically significant interaction,  $F(1, 196) = 43.33, p < .001$ . The high risk students agreed more with this statement at longitudinal follow up than they did on the post-survey immediately following the EKG program. The attitude strengthened over time for high risk students. For low risk students, there was no significant change in agreement with this item from post-survey to longitudinal follow-up. Again, low risk students had a high average baseline level of agreement with this statement.

*I am likely to or do carry a gun regularly*



- Note this item was only asked on the pre-survey and longitudinal survey. No post-survey data was available for analysis. Results revealed a statistically significant interaction,  $F(1, 236) = 6.32, p = .013$ . The high risk students agreed less with this statement at longitudinal follow-up than they did on the pre-survey. The attitude weakened over time (which a desired outcome) for high risk students. For low risk students, there was not a statistically significant change in level of agreement with this item.

*I have to be willing to break rules to be popular*



- There was no statistically significant interaction for level of agreement with this item based on student risk level, though the low risk students were more likely to agree with the item at longitudinal follow-up than they were on the post-survey immediately following the EKG program.

## **Conclusions and Recommendations**

- The EKG program showed desired effects on participant attitudes, beliefs, and intended behaviors. Specifically, the program is reducing attitudes supportive of violence, gun carrying, and gangs and increasing attitudes toward pro-social decision-making and abilities to think about consequences of actions.
  - Importantly, the EKG program is making an impact on students most in need of an intervention—the high risk students. The impact on high risk students appears to be retained longitudinally for most content areas, and in some cases even strengthened over time for some content areas when comparing the longitudinal data for data at the time of EKG program completion. For example, high risk students showed continued and increased strength in the attitude that the best way to solve an argument is to talk things out, decreased strength in the belief that gang members have each other’s backs, and increased strength in perceived self-efficacy to resist peer pressure. It would be interesting to examine what factors may be leading to the continued increase in pro-social attitudes and continued decrease in undesirable attitudes for high risk students over time.
    - One caveat to note about the longitudinal data is that a student had to present in school on the day that the longitudinal follow-up survey was given. Our students who at highest risk may have been the least likely to maintain regular attendance at school and therefore these students may not have been represented in the longitudinal data used in our analyses. Though keep in mind that students were identified as high risk based on their pre-survey risk factor scores, which had to be greater than or equal to 18 out of 28).
- The longitudinal impact of the program persists in most content areas, though the strength of the effect is not as great as it was immediately after the EKG program for most areas. Even when longitudinal impact was not as strong as the effect immediately following the EKG program, in most areas the retained impact was still greater than where students were at baseline upon entering the EKG program.
  - It would be worthwhile to consider ways to continue to strengthen the EKG program’s longitudinal impact, particularly for content areas where the longitudinal effect seems to wane some over time. Are there ways to work with school officials to ensure that anti-gun and anti-gang messaging is sustained over the school year and across all grade levels, either through booster programs as part of or as an extension of EKG or through some other means? Further, are there programs that can involve parents and the community to further strengthen attitude change? By educating students’ extended networks, it can help reinforce anti-gun and anti-gang messaging by having student social networks also sending the same messages that the received at school. Also, educating the community on issues, such as students’ reported ease of access to firearm and associated negative consequences for youth who have easy access to firearms may be beneficial.
    - One content area where students did not retain attitude change even from where they started at baseline was that is illegal for the student to carry a gun. There appears to be some confusion about this topic and this could be a content area where EKG instructors may want to spend more time, possibly detailing differences in “carrying” guns for hunting or target shooting, laws and regulations about who can “carry” a gun, and other scenarios which help students understand laws and regulations specific to different ways to handle, carry, or possess a gun / firearm.
    - For most items, taking into account the student’s level of risk in interpreting the longitudinal results was important. In other words, the level of sustained or even increased attitude change depended upon the student’s level of risk.



**Appendix A: EKG Pre-Survey**

Please place the last 4 digits of your student number in the blanks below. Do not write your name on this survey.

\_\_\_\_\_

- 1) **What is your gender?**  Male  Female
- 2) **How would you describe yourself?**
- |   |  |
|---|--|
| <input type="checkbox"/> American Indian/Alaska Native    | <input type="checkbox"/> Hispanic/Latino                       |
| <input type="checkbox"/> Native Hawaiian/Pacific Islander | <input type="checkbox"/> White/Caucasian (non-Hispanic)        |
| <input type="checkbox"/> Asian/Asian American             | <input type="checkbox"/> Black/African American (non-Hispanic) |
| <input type="checkbox"/> Other                            |  |
- 3) **Are you a member of a street gang?**  Yes  No  
*If no, would you consider joining a gang?*  Yes  No
- 4) **Has anyone ever threatened you, a family member, or close friend with a firearm or shot at you, a family member, or close friend?**  Yes  No
- 5) **Have you ever threatened anyone with a firearm or shot at anyone?**  Yes  No
- 6) **Has a close friend or family member ever shot themselves with a firearm, either by accident or in an attempt to shoot themselves on purpose?**  Yes  No

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**USING THE SCALE BELOW, RATE HOW MUCH YOU AGREE OR DISAGREE WITH THE STATEMENTS. PUT YOUR RATING IN THE BLANK BEFORE THE STATEMENT:**

- 4 = Strongly Agree**  
**3 = Agree**  
**2 = Disagree**  
**1 = Strongly Disagree**

- \_\_\_ 1) The best way to solve an argument is to talk things out, even if it takes an hour or two.
- \_\_\_ 2) Carrying a firearm is a good way to get respect from other people.
- \_\_\_ 3) I feel like I know what to do to resist pressure from friends to do something I do not want to do.
- \_\_\_ 4) I have to be willing to break some rules if I want to be popular with my friends.
- \_\_\_ 5) It is illegal for me to carry a handgun.
- \_\_\_ 6) I need to think more about how my actions may affect other people before I act.
- \_\_\_ 7) The stuff I get into may someday put me in prison.
- \_\_\_ 8) If one of my close friends started carrying a firearm, I would no longer hang out with them.
- \_\_\_ 9) If something is bothering me, I feel that I have a trusted person I can talk to.
- \_\_\_ 10) I am likely to or do carry a firearm on a regular basis.
- \_\_\_ 11) It would be easy for me to get a firearm if I wanted one.
- \_\_\_ 12) Carrying a firearm is dangerous.
- \_\_\_ 13) Many of my friends carry firearms regularly.
- \_\_\_ 14) I have felt pressure from friends to carry a firearm.
- \_\_\_ 15) Members of gangs always stand up for each other and have each other's backs no matter what.

**Appendix B: EKG Post-Survey**

Please place the last 4 digits of your student number in the blanks below. Do not write your name on this survey.

\_\_\_\_\_

5) What is your gender?  Male  Female

6) How would you describe yourself?

- |   |  |
|---|--|
| <input type="checkbox"/> American Indian/Alaska Native    | <input type="checkbox"/> Hispanic/Latino                       |
| <input type="checkbox"/> Native Hawaiian/Pacific Islander | <input type="checkbox"/> White/Caucasian (non-Hispanic)        |
| <input type="checkbox"/> Asian/Asian American             | <input type="checkbox"/> Black/African American (non-Hispanic) |
| <input type="checkbox"/> Other                            |  |

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**USING THE SCALE BELOW, RATE HOW MUCH YOU AGREE OR DISAGREE WITH THE STATEMENTS. PUT YOUR RATING IN THE BLANK BEFORE THE STATEMENT:**

- 4 = Strongly Agree**  
**3 = Agree**  
**2 = Disagree**  
**1 = Strongly Disagree**

- \_\_\_1) Jamari could have made better decisions throughout the video to avoid shooting his sister and going to jail.  
\_\_\_2) I feel like Jamari's boys will have his back and stand up for him even after he goes to jail for the shooting.  
\_\_\_3) Jamari made a good decision when he accepted the firearm from his friends.  
\_\_\_4) Jamari got respect from other people by carrying a firearm.  
\_\_\_5) The best way to solve an argument is to talk things out, even if it takes an hour or two.  
\_\_\_6) I have to be willing to break some rules if I want to be popular with my friends.  
\_\_\_7) Being a member of a gang makes it more likely that someone would get in trouble at school or with police.  
\_\_\_8) It is illegal for me to carry a handgun.  
\_\_\_9) If one of my close friends started carrying a firearm, I would no longer hang out with them.  
\_\_\_10) Carrying a firearm is dangerous.  
\_\_\_11) I feel like I know what to do to resist pressure from friends to do something I do not want to do.  
\_\_\_12) I sometimes feel that violence is my only way to deal with problems.  
\_\_\_13) After this program, I feel like I will be able to make better decisions in my life.  
\_\_\_14) After this program, I feel like I know more about the dangers of having a firearm.  
\_\_\_15) After this program, I learned that I need to think about how my actions may affect other people before I act.

**Appendix C: EKG Longitudinal Follow-Up Survey**

Please place the 4-digit number *you provided in the original gun violence and decision-making survey* (if you can remember it) in the blanks below. Remember, you could've used the last 4 digits of your phone number to make it easy to remember. Do not write your name on this survey. If you do not remember your original number, please do not write anything in the blanks below.

\_\_\_\_\_

**7) What is your gender?**  Male  Female

**8) How would you describe yourself?**

- |   |  |
|---|--|
| <input type="checkbox"/> American Indian/Alaska Native    | <input type="checkbox"/> Hispanic/Latino                       |
| <input type="checkbox"/> Native Hawaiian/Pacific Islander | <input type="checkbox"/> White/Caucasian (non-Hispanic)        |
| <input type="checkbox"/> Asian/Asian American             | <input type="checkbox"/> Black/African American (non-Hispanic) |
| <input type="checkbox"/> Other                            |  |

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**USING THE SCALE BELOW, RATE HOW MUCH YOU AGREE OR DISAGREE WITH THE STATEMENTS. PUT YOUR RATING IN THE BLANK BEFORE THE STATEMENT:**

- 4 = Strongly Agree**  
**3 = Agree**  
**2 = Disagree**  
**1 = Strongly Disagree**

- \_\_\_1) The best way to solve an argument is to talk things out, even if it takes an hour or two.
- \_\_\_2) Members of gangs always stand up for each other and have each other's backs no matter what.
- \_\_\_3) It is illegal or against the law for me to carry a gun.
- \_\_\_4) If one of my close friends started carrying a gun, I would no longer hang out with them.
- \_\_\_5) I feel like I know how to make smart decisions.
- \_\_\_6) Carrying a gun is dangerous.
- \_\_\_7) I feel like I know what to do to resist pressure from friends to do something I do not want to do.
- \_\_\_8) I carry a gun often or have a gun with me when I go somewhere.
- \_\_\_9) I have to be willing to break some rules if I want to be popular with my friends.