Evaluation of the Youth Build USA Pilot Study of Love Smarts

Preliminary Survey Results

Evaluator: Jennifer Kerpelman, Ph. D., Auburn University

April 15, 2009

Executive Summary

Evaluation of the Youth Build USA Love Smarts pilot project showed that the Love Smarts participants improved in their attitudes, knowledge and perceived skills associated with healthy relationships. Participants showed increases in: perceived knowledge gained across the different topics addressed in the curriculum (more than doubled from pre to post program), healthy attitudes about sexual behavior, knowledge about healthy relationship building, perceived conflict management and assertiveness skills, and relationship assessment skills. They also showed decreases in endorsement of aggression in relationships. Among those currently in dating relationships, behaviors within their relationships also were assessed, but did not show mean level changes from pre to post program. However, for participants who reported less than optimal relationship behaviors before the program, increases in healthy behaviors as much as 20% were seen for this group following the Love Smarts Program. The control group showed very few changes from pre to post survey, but was too small to compare directly with the Love smarts group. Overall, the results suggest that the Love Smarts program is effective in facilitating understanding of healthy relationship beliefs and processes.

Evaluation of Love Smarts: Description of the Sample

A total of 222 Love Smarts participants and 39 Control participants returned completed pre-surveys. Of these participants, 152 Love Smarts and 30 Control participants also returned completed post-surveys. This evaluation report focuses on the participants who returned both pre- and post-surveys. The Love Smarts participants who did (n=152) and did not (n=70) complete post-surveys were compared on age, race, gender, and amount of schooling prior to starting the Youth Build program; no differences were found.

Table 1: Age, Gender and Race/Ethnicity

	Love Smarts Group	*Control Group*
Age	18.7 (1.9)	18.9 (2.5)
Gender	56% male/39% female	64% male/28% female
Race/Ethnicity		
African American	36%	46%
European American	13%	22%
Hispanic/Latino	39%	20%
Other ethnicities	12%	12%

Participants in both groups ranged in age from 16-24; they were similar in their mean ages. Both group contained more male than female participants (5% in the Love Smarts group and 7% in the control group did not report their gender). A chi square test (p < .01) indicated that the Love Smarts and control groups differed in their racial composition. The Love Smarts group contained a larger percentage of African American and European American participants; the control group contained a larger percentage of Hispanic/Latino participants.

Table 2: Education

	Love Smarts Group	Control Group
Education Completed Prior to Youth Build		
$<8^{th}$	15%	7%
8th	6%	3%
9th	24%	26%
10th	30%	45%
11th	20%	16%
12th	5%	3%
Education Expected		
<High School	3%	0%
High School	11%	10%
Trade/Voc.	19%	29%
Community Col.	23%	19%
4-year College	34%	36%
Graduate School	9%	6%
no response	1%	0%

The Love Smarts and Control groups were relatively similar in their education completed prior to beginning the Youth Build program. The students' anticipated educational attainments also appeared similar. The majority expected some education post high school.

Table 3: Relationship/Family Status

	Love Smarts Group	Control Group
Relationship Status		
Not dating	37%	32%
Casually Dating	20%	16%
Seriously Dating	28%	39%
Engaged	10%	0%
Married	3%	3%
Cohabiting	2%	10%
Parental Status		
Expecting child	16%	6%
One child	19%	19%
Two children	3%	0%
Three children	1%	0%
Partner has children	15%	3%
Caring for other children	9%	16%

Table Continues

Table 3 (contd.)

	Love Smarts Group	Control Group
Residential Status –live with:		
Both parents	11%	19%
One parent	42%	36%
Parent and Stepparent	9%	23%
Grandparent(s)	7%	7%
Partner/Spouse	12%	7%
Alone	14%	3%
Other	5%	5%

The relationship status for both the Love Smarts and Control groups indicated that about a third were not currently in dating relationships, but approximately half were either in casual or serious dating relationships. An additional small percentage was either married or cohabiting. A noteworthy minority of the Youth Build students, especially in the Love Smarts group, was expecting a child or currently caring for a child. Responses to the question about residential status indicated, for both groups, that a substantial portion of the youth lived with one of their biological/adoptive parents (single parent family household). The rest of the students were living in a wide range of family structures.
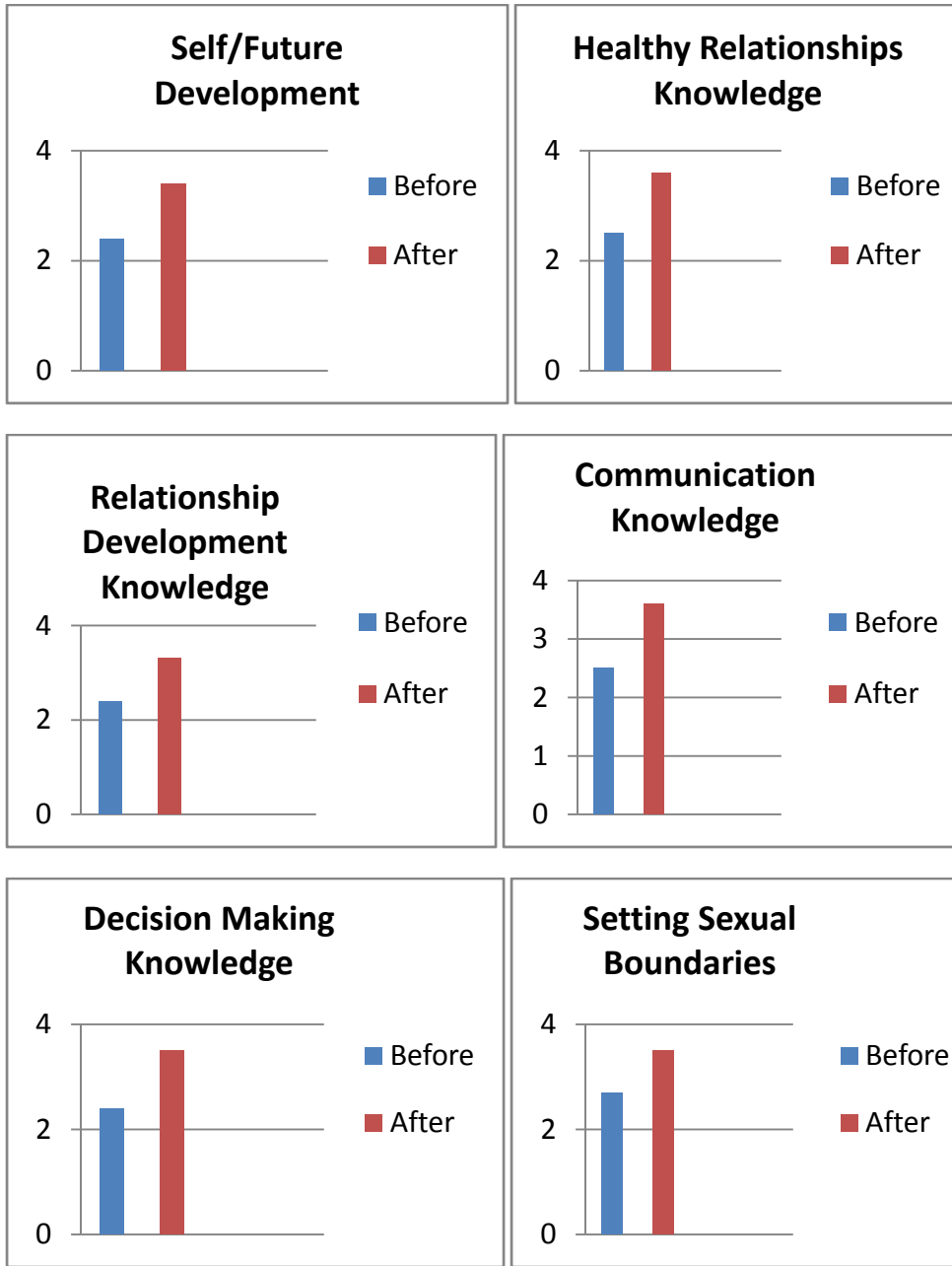
Evaluation of Love Smarts: Post-Test with Retrospective Pre-Test Measure of Change

The Love Smarts participants completed a post-test with retrospective pre-test that had them assess their knowledge about different topics covered in the Love Smarts Curriculum, BEFORE having the course and AFTER having the course. This approach is useful for ascertaining participant perceptions of the knowledge they have gained as a result of taking the course. This form of self-report measure avoids pretest sensitivity and response shift bias that may result from pretest overestimation or underestimation (Pratt, McGuigan, & Katzev, 2000). Participation in the program may shift participants' frame of knowledge about what they knew before receiving the program that would not have been captured using the traditional pre/post evaluation method. Thus, traditional methods alone may fail to capture the change that has occurred as the result of an intervention.

When the set of **BEFORE** responses were examined, it was found that **34%** said their **knowledge was good to excellent** across topic areas addressed. Examination of the **AFTER** responses showed that **86%** said their **knowledge was good to excellent** across topic areas. Thus, **perceived knowledge more than doubled** from pre to post program. The graphs on the next page show the statistically significant mean changes in participants' perceived knowledge using a 4-point scale indicating that knowledge was (is): 1=poor, 2=fair, 3=good, 4=excellent. As can be seen in the graphs, participants, on average, believed their knowledge "before" Love Smarts was between fair and good, and "after" Love Smarts their knowledge was between was between good and excellent.

Pratt, C., McGuigan, W., & Katzev, A. 2000. Measuring program outcomes using retrospective pre-test methodology. *American Journal of Evaluation, 21*, 341-350.

Self/Future Development

Healthy Relationships Knowledge

Relationship Development Knowledge

Communication Knowledge

Decision Making Knowledge

Setting Sexual Boundaries

All of the above graphs depict a consistent pattern observed in Love Smarts participants' perceived gains in knowledge. Across all areas assessed (each area is assessed by multiple items), the participants indicated that they knew significantly less before the Love Smarts program, and significantly more after the program as a result of receiving the Love Smarts program.

Evaluation of Love Smarts: Pre and Post Assessment of Knowledge, Attitudes, Skills and Behaviors

True pre/post measures also were administered. The pre and post surveys used standard measures to assess knowledge, skills, attitudes and behaviors relevant to romantic/close relationships. The measures assessing relationship behaviors were answered only by those currently in dating relationships; the rest of the items were answered by all participants.

Areas addressed in the evaluation analyses included: relationship aggression, the role of sex in relationships, building healthy relationships, conflict management, appropriate assertiveness, and general relationship skill. Behaviors occurring within couple relationships that were assessed include: being able to turn to the partner for support, verbal , physical and emotional aggression, communication, and positive efforts occurring between the partners to support their relationship (see Table 4 for an example item for each scale and internal consistency of each measure).

Table 4. Example items and Internal Consistency of Scales Used

Scale	Example Item	Internal Consistency
Endorsement of Aggression	*"I think pushing, grabbing, or shoving a partner can be a good way to end a conflict."*	$\alpha=.72$
Healthy Attitudes about Sexual Behavior	*"In future relationships I intend to wait to have sex until after I really get to know the person."*	$\alpha=.71$
Knowledge about Healthy Relationship Building	"*I know about the other kinds of connections that build intimacy aside from sex."*	$\alpha=.74$
Conflict Management	*"When having a conflict with a partner or close friend, I really listen to his or her complaints and do not try to "read" his or her mind. "*	$\alpha=.78$
Appropriate Assertiveness (standing up for self)	**"***I am able to tell a partner or close friend I don't like a certain way she/he has been treating me*."	$\alpha=.76$
Relationship Assessment Skills	"*I am confident I can know if a relationship I am in is worth it or not."*	$\alpha=.65$

Table Continues

Table 4 (contd.)

Scale	Example Item	Internal Consistency
Partner Support	*To what extent can you count on your partner to help with a problem?*	*α=.87*
Verbal Aggression	*"I insulted or swore at him or her"*	*α=.80*
Physical Aggression	*"I slapped, pushed, grabbed or shoved him or her."*	*α=.82*
Emotional Aggression	*"I threatened to break up with my partner to get him or her to do what I wanted."*	*α=.75*
Positive Relationship Efforts	*"I made a point to say nice things to my partner."*	*α=.77*
Communication	*"I am very satisfied with how my partner and I talk with each other."*	*α=.70*

Scale reliabilities ranged from .65 to .87, with only one reliability score less than .70 (it is desirable to have reliability scores that are .70 and greater).

Prior to conducting the analyses, outliers (those whose responses were extremely different from the group) were removed as were responses that suggested the respondent was not taking the survey seriously. These adjustments were necessary to obtain evaluation results that reflected the experiences of the majority of participants in the group. With a small sample size, removing outliers and problem surveys is particularly important; a small number of such surveys can dramatically change the results. Finally, all repeated measures tests are 1-tailed since the direction of effects was hypothesized for all changes. That is, it was hypothesized that Love Smarts participants would increase positive knowledge, attitudes, skills and behaviors, and decrease negative attitudes and behaviors.

It would have been desirable to use repeated measures analysis of variance (RANOVA) to compare the Love Smarts and Control groups directly. However, such procedures are sensitive to sample size and to the imbalance in size between the two groups being compared. For the current evaluation, the small size of the control group (N=30 who completed pre and post surveys) and the imbalance in size between the control and Love Smarts groups (Love Smarts N=152 who completed pre and post surveys), meant the results of the RANOVA could not be interpreted with confidence. Therefore, separate analyses (paired t-tests) were conducted with the Love Smarts and the control groups to determine whether either group showed change from Time 1 (pre-survey) to Time 2 (post-survey). The groups also were compared using independent samples t-tests on their Time 1 data to determine whether they differed on any of the variables prior to the Love Smarts group receiving the program. Only one variable showed a different at Time 1 (this is discussed later when the results are presented).

Attitudes, Knowledge and Perceived Skills

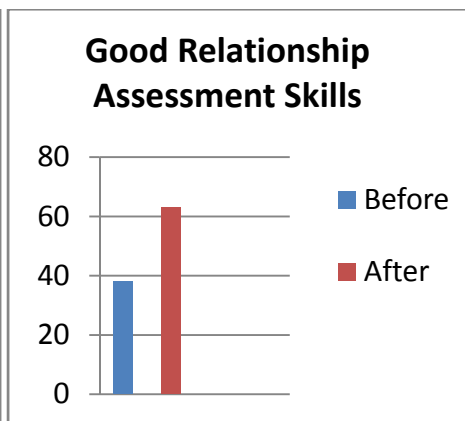Table 5: Love Smarts Pre-Post Comparisons of Relationship Attitudes, Knowledge and Perceived Skills
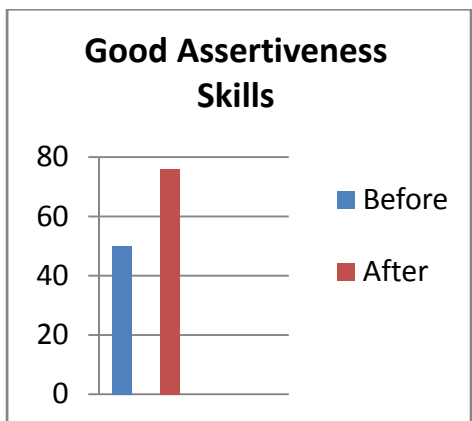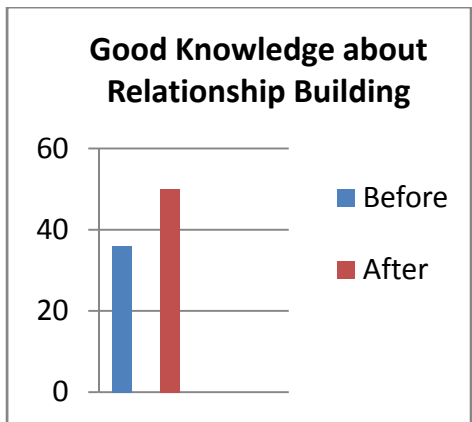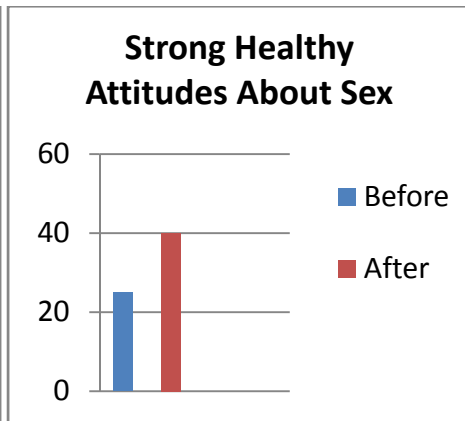
	N	Pre-survey Mean (SD)	Post-survey Mean (SD)
Endorsement of Aggression[a]	131	1.45 (1.13)	1.46 (.84)
	60	**1.99** (.87)	**1.59**** (.82)
Healthy Attitudes about Sexual Behavior[b]	140	3.54 (.75)	3.66* (.79)
	112	**3.43** (.63)	**3.65**** (.71)
Knowledge about Healthy Relationship Building[b]	122	4.20 (.69)	4.21 (.96)
	73	**3.78** (.60)	**4.04**** (.73)
Conflict Management[b]	119	3.72 (.78)	3.90* (.88)
	97	**3.47** (.69)	**3.76***** (.82)
Appropriate Assertiveness[b] **(standing up for self)**	125	3.78 (.78)	3.85 (.91)
	100	**3.53** (.72)	**3.76**** (.84)
Relationship Assessment Skill[c]	130	2.50 (.79)	2.72* (.87)
	108	**2.44** (.69)	**2.83***** (.76)

*p < .05; **p < .01; ***p < .001; [a]5-point scale; lower scores are better; [b]5-point scale; higher scores are better; [c]4-point scale; higher scores are better; *SD= standard deviation. Standard deviations indicate the variability around the mean – smaller SD relative to the size of the mean= less variability.*

Bolded values are for those participants who did not start at the top of the scale for each variable at Time 1 (or at the bottom of the scale for endorsement of aggression). Examination of these individuals is important since those at the highest end of optimal functioning on a scale at Time 1 have no room to change in a positive direction at Time 2, thus their scores will either show no change or decrease at Time 2. However, such negative change or lack of change does not indicate whether the program was effective. Rather, it obscures whether participants who could improve actually did. Participants who score at the optimal end of functioning at Time 1 may already be skilled/knowledgeable in an area or they have overestimated their level of skills/knowledge. The bolded means shown in Table 5 suggest that Love Smarts participants had modest, statistically significant increases in all of the areas assessed: they reduced their endorsement of aggression in relationships, increased their healthy attitudes about sexual behavior, increased their knowledge about how to build healthy relationships, improved their conflict management and assertiveness skills, and increased relationship assessment skills.

Change in Percentages from Before to After the Love Smarts Program

Improvements were observed for those who did not start at the optimal level functioning at the beginning of the program. As seen in the graphs below, those who did not endorse aggression in relationships increased from 21% to 46% (those strongly endorsing aggression dropped from 10% to 2%). In addition, those who strongly agreed with the healthy attitudes about sex increased from 25% to 40%, and those who strongly agreed that they had good about relationship building increased from 36% to 50%. Modest increases were seen for those strongly agreeing that they had good conflict management skills, 50% before to 60% after. Finally, assertiveness skills and relationship assessment skills showed increases in those strongly agreeing increasing from 50% and 38% before, respectively to 76% and 63% after, respectively.

Low Endorsement of Aggression

Before: 21
After: 46

Strong Healthy Attitudes About Sex

Before: 25
After: 40

Good Knowledge about Relationship Building

Before: 36
After: 50

Good Conflict Management Skills

Before: 50
After: 60

Good Assertiveness Skills

Before: 50
After: 76

Good Relationship Assessment Skills

Before: 38
After: 63
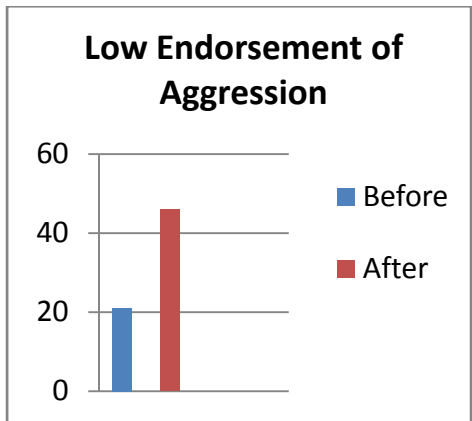
Behaviors within Couple Relationships

Table 6: Love Smarts Pre-Post Comparisons of Relationship Behaviors among those in Relationships

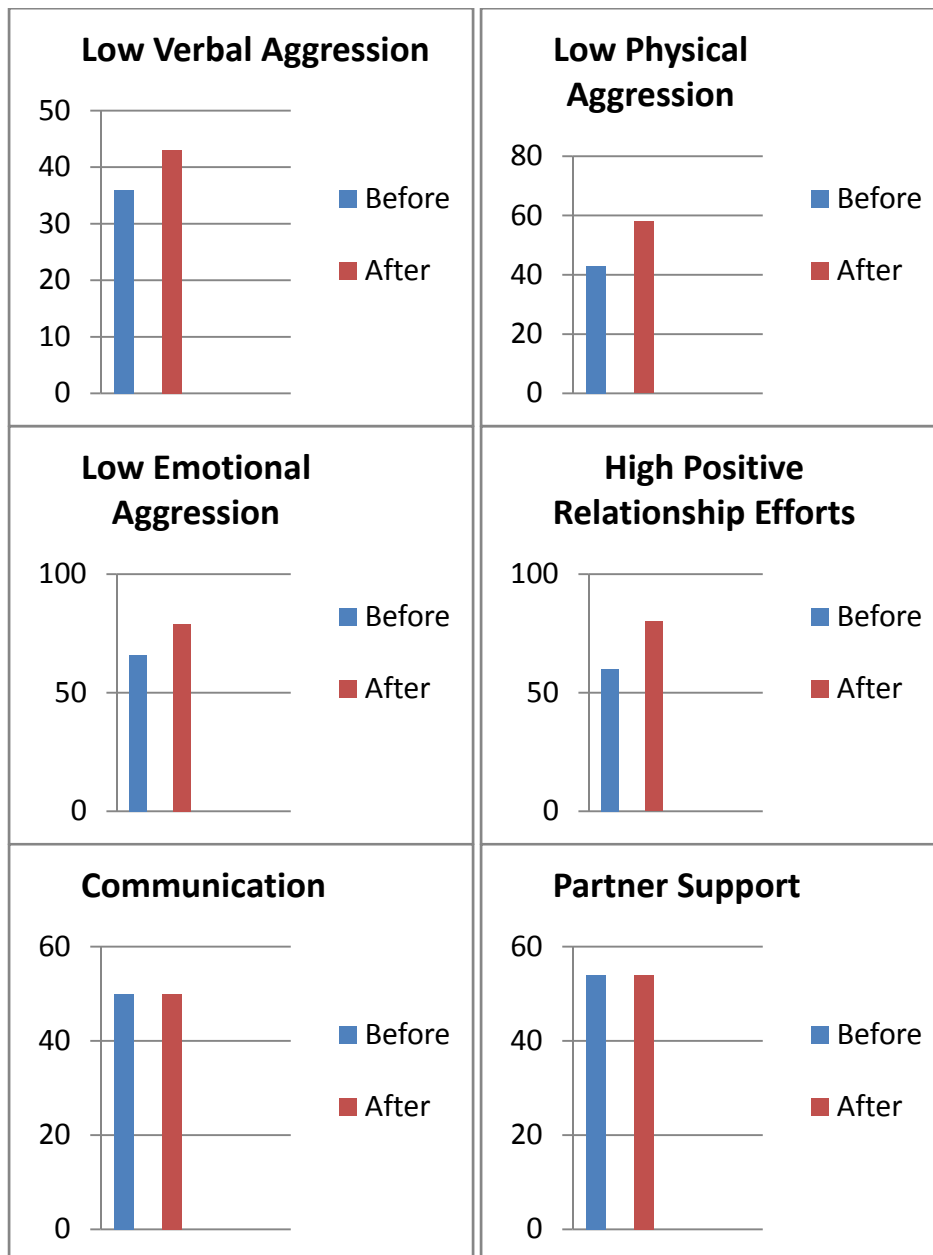|	N	Pre-survey Mean (SD)	Post-survey Mean (SD)
Partner Support[b]	98	3.24	3.16
		(.82)	(.69)
	65	**3.09**	**3.12**
		(.76)	(.67)
Verbal Aggression[a]	96	1.12	1.10
		(.89)	(.84)
	57	**1.32**	**1.16**
		(.84)	(.89)
Physical Aggression[a]	81	.38	.42
		(.67)	(.66)
	15	**1.33**	**.90**
		(1.01)	(1.11)
Emotional Aggression[a]	91	.59	.58
		(.66)	(.66)
	49	**.77**	**.61**
		(.66)	(.70)
Positive Relationship Efforts[a]	98	2.36	2.30
		(.67)	(.60)
	56	**2.21**	**2.27**
		(.63)	(.69)
Communication[c]	98	3.78	3.61
		(1.04)	(1.13)
	82	**3.47**	**3.54**
		(.79)	(1.05)

[a]*Scored on a 0-3 scale (with 0=did not occur in the last month; 1= occurred once in the last month; 2 occurred twice in the last month; 3= occurred three or more times in the last month). Lower scores for the aggression items and higher scores for the positive relationship efforts are better.* [b]*Scored on a 4-point scale (higher scores are better).* [c]*Scored on a 5-point scale (higher scores are better). Bolded values are for those participants who did not start at the bottom of the scale for each of the aggression variables at Time 1 or at the top of the scale for support, relationship efforts and communication. SD= standard deviation. Standard deviations indicate the variability around the mean – smaller SD relative to the size of the mean= less variability.*

None of the behavior variables showed a change from pre to post survey. Part of the reason may be that such behaviors take longer to change and therefore could not be detected with a post-survey immediately following the program. Furthermore, some of the behaviors had a low frequency of occurrence for negative items and high frequency of occurrence for positive items. For example, both verbal aggression (only 16% 2 x month or more) and physical (Only 25% >0 x per month and only 6% 2 x month or more) were low in frequency. Positive relationship efforts were reported to occur, on average more than twice per month.   Finally, since these are "couple" behaviors that are being assessed, but only one member of the couple is receiving the Love Smarts curriculum, such educational efforts may not be enough to change couple interactions. In order for such

behaviors to change, it may be necessary for both partners to receive the Love Smarts lessons, and to have opportunities to practice using better interaction skills with each other.

Change in Percentages from Before to After the Love Smarts Program

Improvement was seen among those who reported some aggression in their relationships, and less than perfect relationship assessment skills, communication, or partner support. What can be seen in the graphs below is that more in this group reported there was lower aggression (less than 1 x month) in their relationships after (43%, 58% and 79% for verbal, physical and emotional aggression, respectively) compared to before (36%, 43%, 66% for verbal, physical and emotional aggression, respectively) the Love Smarts program, and that positive relationship efforts (more than 2 x month) increased from pre (60%) to post (80%) program. Percentages reporting positive communication (50%) or partner support (54%) did not change.

Low Verbal Aggression

Before: 36
After: 43

Low Physical Aggression

Before: 43
After: 58

Low Emotional Aggression

Before: 66
After: 79

High Positive Relationship Efforts

Before: 60
After: 80

Communication

Before: 50
After: 50

Partner Support

Before: 54
After: 54

Control Group Outcomes: Attitudes, Knowledge and Perceived Skills

Table 7: Control Group Pre-Post Comparisons of Relationship Attitudes, Knowledge and Perceived Skills

	N	Pre-survey Mean	Post-survey Mean
Endorsement of Aggression[a]	29	1.57 (.86)	1.47 (.71)
Healthy Attitudes about Sexual Behavior[b]	29	3.32 (.93)	3.40 (.73)
Knowledge about Healthy Relationship Building[b]	30	3.94 (.64)	3.97 (.62)
Conflict Management [b]	30	3.65 (.76)	3.51 (.94)
Appropriate Assertiveness [b] (standing up for self)	30	3.68 (.74)	3.53 (.85)
Relationship Assessment Skills[c]	30	2.22 (.76)	2.61** (.72)

**p < .01; [a]5-point scale; lower scores are better; [b]5-point scale; higher scores are better; [c]4-point scale; higher scores are better; *SD= standard deviation. Standard deviations indicate the variability around the mean – smaller SD relative to the size of the mean= less variability.*

None of the pre to post values was significantly different (i.e., no change), with the exception of Relationship Assessment Skills, which showed an increase from pre to post for the control group.

Control Group Outcomes: Behavior

Table 8: Control Group Pre-Post Comparisons of Relationship Behaviors among those in Relationships

	N	Pre-survey Mean	Post-survey Mean
Partner Support[b]	25	3.03 (.79)	3.08 (.74)
Verbal Aggression[a]	23	1.17 (.80)	.95 (.80)
Physical Aggression[a]	23	.28 (.59)	.22 (.69)
Emotional Aggression[a]	23	.52 (.49)	.37 (.59)
Positive Relationship Efforts[a]	23	1.74 (.78)	2.09* (.76)
Communication[c]	23	3.81 (.87)	3.88 (1.01)

*$p < .05$; [a]*Scored on a 0-3 scale (with 0=did not occur in the last month; 1= occurred once in the last month; 2 occurred twice in the last month; 3= occurred three or more times in the last month). Lower scores for the aggression items and higher scores for the positive relationship efforts are better.* [b]*Scored on a 4-point scale (higher scores are better).* [c]*Scored on a 5-point scale (higher scores are better). Bolded values are for those participants who did not start at the bottom of the scale for each of the aggression variables at Time 1 or at the top of the scale for support, relationship efforts and communication. SD= standard deviation. Standard deviations indicate the variability around the mean – smaller SD relative to the size of the mean= less variability.*

None of the pre to post changes in the behaviors was significant, with the exception of positive relationship efforts which showed an increase for the control group. It is important to note that this is the only variable at Time 1 that showed a difference between the Love Smarts and Control groups. The Love Smarts group started significantly higher (mean =2.30) than the control group did (mean = 1.74) on the positive relationship efforts variable. Thus, the change seen for the control group may be due to the fact that they started quite low on this variable at Time 1 and had more room to change than the Love Smarts group did.

Evaluation of Love Smarts: Conclusions and Recommendations

The results of the analyses of the pre- and post-surveys suggest that the Love Smarts program is effective in helping improve adolescents' and young adults' understanding of relationships and what makes relationships healthy and unhealthy. It also appears that the program enhances perceptions of knowledge and skills and may have potential to influence behavior. However, given the inability to make true comparisons between the Love Smarts and Control groups, strong conclusions about the effectiveness of the program cannot be made. Future evaluation should include a larger control sample, possibly broader assessments of attitudes, knowledge and skills that may change as a result of the program, and the addition of qualitative data that includes participant/teacher interviews or focus groups. Follow up assessments also would be of value.