



**Health  
Rocks!**<sup>®</sup>

## 2017-2018 Alabama Data & Evaluation Summary

*Health Rocks!® Intermediate Level Curriculum Training*





## 2017-2018 Alabama Urban 4-H Health Rocks!® Overview of Program Total Reach and Evaluation Design

In the 2017-2018 grant cycle, Health Rocks! was implemented in Alabama, Georgia, Illinois, North Carolina, Pennsylvania, Tennessee, Virginia, Washington, and West Virginia.

A questionnaire with retrospective measures was used to assess participants' self-reported increase in knowledge, skills and potential for positive behaviors after participating in the program. The retrospective survey (post-then-pre method), measured program impact by asking participants to report on their level of knowledge, skills and assets after the program and then to report, as best they can recall, the same indices prior to their participation in Health Rocks! The survey was comprised of 13 items, each with a 4-point response scale; as well as demographic items.

Demographic descriptions of participants are displayed by gender, race, ethnicity, grade, and residency in this report. Program outcomes are reported here through percentage changes and paired t-tests between participants' pre and post responses. Analysis of variance (ANOVA) with post-hoc comparisons when applicable was performed to test possible variations in survey subscales across various demographic factors.

### A Sketch of 2017-2018 Alabama Youth Participants

A total of 3,698 youth completed 10 hours or more training in Health Rocks! Of that total, 53.3% were girls and 46.7% were boys.

Youth participants ranged in grade levels (from 1st grade to 12th grade). The majority of youth were in elementary school (50.6%), followed by middle school (39.8%) and high school (9.5%).

The majority of youth participants reported their residence as urban (81.3%) (population above 50,000), followed by suburban (15.1%) (population between 10,000 and 50,000) and rural (3.6%) (population less than 10,000).

## Training Evaluation Data for Alabama<sup>1</sup>

Percentage and Percentage Change

### Knowledge about Smoking and Other Drug Use

After participating in the program, eight out of ten youth participants know that people who smoke or do drugs can have serious physical health (e.g. die from lung cancer), cognitive (e.g. have illusions), and relational consequences (e.g. ruin relationship with family and friends).

**Table 1.1: Percentages of Youth Who Reported “Agree” or “Strongly Agree”**

| Knowledge   | %After | %Before |
|---|--------|---------|
| <i>Once you start smoking, it is hard to stop.</i>                                  | 93.1   | 84.7    |
| <i>Using drugs can ruin my relationships with my family and friends.</i>            | 92.7   | 83.5    |
| <i>People who use drugs sometimes see or hear things that are not really there.</i> | 89.2   | 78.0    |
| <i>People who smoke can die from lung cancer.</i>                                   | 95.5   | 89.0    |

### Skills in Managing Stress, Dealing with Peer Pressure and Making Positive Decisions

Eight out of ten youth participants disapproved of engaging in risky behaviors related to substance use. Most of them reported intent to avoid underage tobacco use, and positive health-related behavior change. They expressed confidence that they would be able to say “no” if other people, such as their friends or peers, offered them drugs. They would not choose drinking or smoking to deal with stress. In addition, nine out of ten of youth participants were confident that they would be able to deal with stress by using stress management skills, such as talking about their problems with someone they trust.

**Table 1.2: Percentages of Youth Who Reported “Agree” or “Strongly Agree”**

| Skills  | %After | %Before |
|---|--------|---------|
| <i>If a friend wanted to try drugs, I can talk them out of it.</i>            | 88.7   | 79.2    |
| <i>When I feel stressed, I am able to talk about it with people I trust.</i>  | 90.9   | 81.1    |
| <i>I am able to say “no” if others offered me cigarettes.</i>                 | 95.7   | 88.8    |
| <i>I do not have to drink or smoke even if some other young people do it.</i> | 95.9   | 89.6    |

<sup>1</sup> Results are based on 3,211 surveys returned by participants.

## Other Assets

After participating in the program, over 95% of youth participants demonstrated social competency, volunteerism, self-confidence and strong values. An overwhelming majority showed intent to pursue healthy behavior/avoid risky behavior.

**Table 1.3: Percentages of Youth Who Reported “Agree” or “Strongly Agree”**

| Assets   | %After | %Before |
|--|--------|---------|
| <i>It is important for me to stay focused on learning at school.</i>             | 95.7   | 90.3    |
| <i>I need to think about how my choices will affect my future.</i>               | 95.7   | 89.2    |
| <i>I have goals for myself.</i>  | 95.4   | 89.7    |
| <i>I feel good about myself.</i>   | 95.3   | 89.8    |
| <i>I would help other kids like me to stay away from alcohol or other drugs.</i> | 95.6   | 89.0    |

## Percentage Change for all 13 Indicators

Alabama participants reported consistent increase in knowledge about smoking, drinking and other drug use after training. Health Rocks! training help youth learn skills in dealing with peer pressure and stress, in making good decisions, and improve their self-values.

**Table 1.4: Percentage Change After Training.**

| Items   | %After | %Before | %Change |
|---|--------|---------|---------|
| <i>Once you start smoking, it is hard to stop.</i>                                  | 93.1   | 84.7    | 8.4     |
| <i>Using drugs can ruin my relationships with my family and friends.</i>            | 92.7   | 83.5    | 9.2     |
| <i>People who use drugs sometimes see or hear things that are not really there.</i> | 89.2   | 78.0    | 11.2    |
| <i>People who smoke can die from lung cancer.</i>                                   | 95.5   | 89.0    | 6.5     |
| <i>If a friend wanted to try drugs, I can talk them out of it.</i>                  | 88.7   | 79.2    | 9.5     |
| <i>When I feel stressed, I am able to talk about it with people I trust.</i>        | 90.9   | 81.1    | 9.8     |
| <i>I am able to say “no” if others offered me cigarettes.</i>                       | 95.7   | 88.8    | 6.9     |
| <i>I do not have to drink or smoke even if some other young people do it.</i>       | 95.9   | 89.6    | 6.3     |
| <i>It is important for me to stay focused on learning at school.</i>                | 95.7   | 90.3    | 5.4     |
| <i>I need to think about how my choices will affect my future.</i>                  | 95.7   | 89.2    | 6.5     |
| <i>I have goals for myself.</i>   | 95.4   | 89.7    | 5.7     |
| <i>I feel good about myself.</i>  | 95.3   | 89.8    | 5.5     |
| <i>I would help other kids like me to stay away from alcohol or other drugs.</i>    | 95.6   | 89.0    | 6.6     |

## Pre-Post Comparison Average Scores (Means) on Sub-Scales

Of Knowledge, Skills and Other Assets

Youth participants reported consistent increase on all items throughout the training.

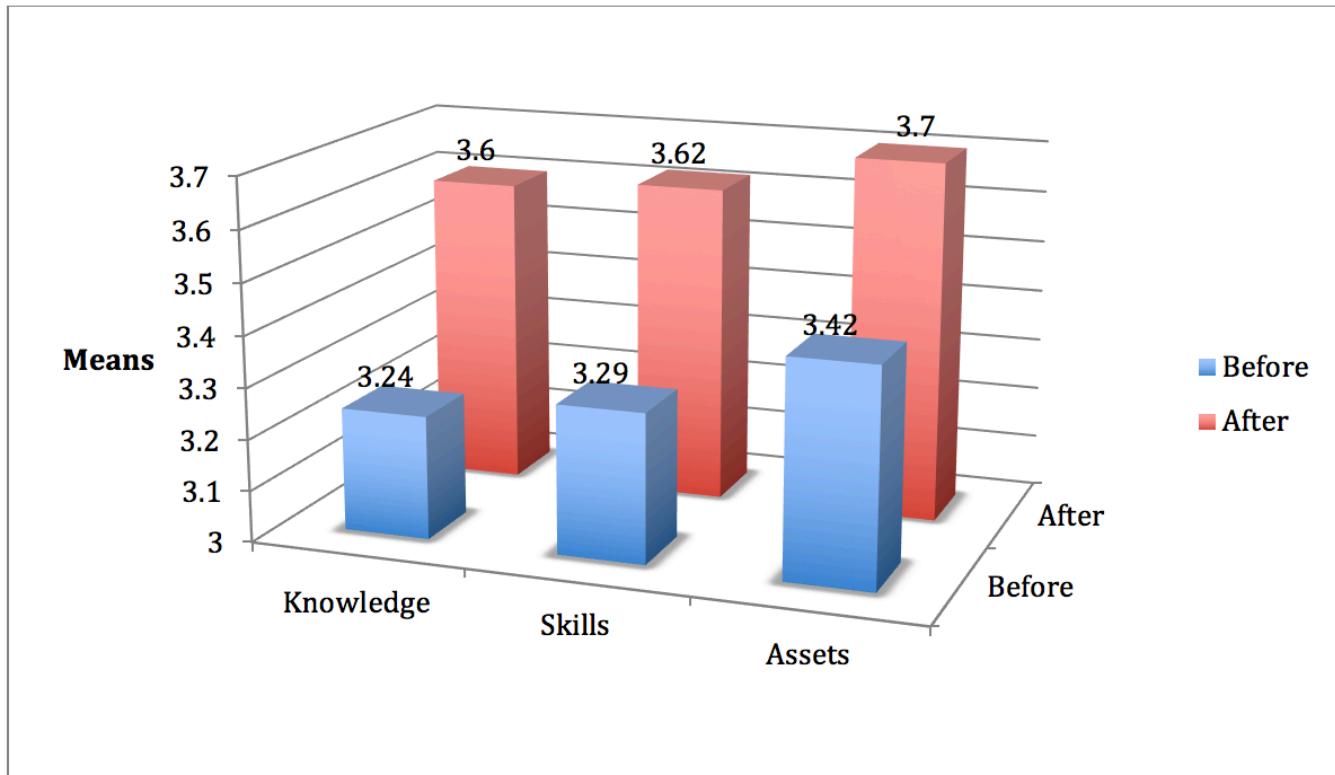
**Table 2.1: Repeated Measures t-tests and Means & Standard Deviations for Each Item After & Before Training**

| ITEMS  | After Training |     | Before Training |     | T        | N    |
|--|----------------|-----|-----------------|-----|----------|------|
|  | M              | SD  | M               | SD  |          |      |
| Once you start smoking, it is hard to stop.                                  | 3.62           | .70 | 3.25            | .86 | 21.17*** | 2955 |
| Using drugs can ruin my relationships with my family and friends.            | 3.60           | .69 | 3.24            | .85 | 22.41*** | 2931 |
| People who use drugs sometimes see or hear things that are not really there. | 3.45           | .76 | 3.08            | .88 | 21.10*** | 2936 |
| People who smoke can die from lung cancer.                                   | 3.71           | .61 | 3.40            | .78 | 19.78*** | 2912 |
| If a friend wanted to try drugs, I can talk them out of it.                  | 3.45           | .79 | 3.12            | .88 | 18.91*** | 2922 |
| When I feel stressed I am able to talk about it with people I trust.         | 3.52           | .75 | 3.17            | .87 | 21.20*** | 2921 |
| I am able to say "no" if others offered me cigarettes.                       | 3.74           | .59 | 3.45            | .80 | 19.56*** | 2918 |
| I do not have to drink or smoke even if some other young people do it.       | 3.73           | .59 | 3.44            | .80 | 19.50*** | 2922 |
| It is important for me to stay focused on learning at school.                | 3.73           | .60 | 3.47            | .78 | 18.50*** | 2929 |
| I need to think about how my choices will affect my future.                  | 3.69           | .60 | 3.38            | .77 | 20.37*** | 2926 |
| I have goals for myself.   | 3.69           | .62 | 3.42            | .77 | 18.88*** | 2915 |
| I feel good about myself.  | 3.67           | .63 | 3.41            | .77 | 17.54*** | 2893 |
| I would help other kids like me to stay away from alcohol or other drugs.    | 3.70           | .61 | 3.41            | .79 | 19.66*** | 2922 |
| SUBSCALES  |                |     |                 |     |          |      |
| Knowledge  | 3.60           | .51 | 3.24            | .64 | 27.06*** | 2812 |
| Skills   | 3.62           | .50 | 3.29            | .64 | 24.89*** | 2814 |
| Assets   | 3.70           | .47 | 3.42            | .62 | 22.91*** | 2789 |

Note: 1) Repeated measures t-test was used; \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$   
 2) SD – Standard Deviation (average differences from the mean)  
 3) Response range was 1- 4 with 4 = strongly agree and 1 = strongly disagree, higher numbers reflect higher scores

Youth participants reported consistent increase in knowledge, skills, & assets throughout the training.

**Figure 2.1: Before and After Comparison of Average Subscale Scores**



## Post-Response Comparison of Average Scores on Sub-Scales of Knowledge, Skills and Other Assets by Gender and Grade Level

### Gender

After the training, girls reported significantly higher levels of knowledge and skills compared to boys.

**Table 3.1: Means & Standard Deviations by Gender for Subscales After Training**

|                                    | Mean | SD  | F        | df      | p-value |
|------------------------------------|------|-----|----------|---------|---------|
| <b>Gender &amp; Mean Knowledge</b> |      |     | 12.67*** | 1, 2983 | .000    |
| Female                             | 3.61 | .49 |          |         |         |
| Male                               | 3.55 | .54 |          |         |         |
| <b>Gender &amp; Mean Skills</b>    |      |     | 8.85**   | 1, 2965 | .003    |
| Female                             | 3.63 | .49 |          |         |         |
| Male                               | 3.57 | .52 |          |         |         |
| <b>Gender &amp; Mean Assets</b>    |      |     | 3.86     | 1, 2928 | .050    |
| Female                             | 3.71 | .47 |          |         |         |
| Male                               | 3.67 | .50 |          |         |         |

*Note: ANOVA (F-test) and post-hoc follow-up were used; \*p < .05, \*\*p < .01, \*\*\*p < .001*

### Grade Level

After the training, middle school youth reported significantly higher rates of knowledge, skills, and assets compared to elementary youth and high school youth.

**Table 3.4: Means & Standard Deviations by Grade for Subscales After Training**

|   | Mean | SD  | F         | df      | p-value |
|---|------|-----|-----------|---------|---------|
| <b>Grade Level &amp; Mean Knowledge</b> |      |     | 109.19*** | 2, 3008 | .000    |
| Elementary School                       | 3.48 | .55 |           |         |         |
| Middle School                           | 3.75 | .40 |           |         |         |
| High School                             | 3.46 | .58 |           |         |         |
| <b>Grade Level &amp; Mean Skills</b>    |      |     | 77.44***  | 2, 2991 | .000    |
| Elementary School                       | 3.53 | .54 |           |         |         |
| Middle School                           | 3.74 | .40 |           |         |         |
| High School                             | 3.44 | .54 |           |         |         |
| <b>Grade Level &amp; Mean Assets</b>    |      |     | 59.18***  | 2, 2953 | .000    |
| Elementary School                       | 3.62 | .54 |           |         |         |
| Middle School                           | 3.81 | .34 |           |         |         |
| High School                             | 3.59 | .54 |           |         |         |

*Note: ANOVA (F-test) and post-hoc follow-up were used; \*p < .05, \*\*p < .01, \*\*\*p < .001;*

## Youth Experiences

### Youth Satisfactory Survey Results

Over 95% of youth participants rated the training as interesting, and over 95% said that they learned a lot during the training.

Over 97% of youth participants said the staff members were friendly, and over 96% said that they actively participated in the training activities.

**Table 4.1: Percent Satisfaction Reported by Youth Participants**

|  | Strongly<br>disagree | Disagree | Agree | Strongly<br>agree |
|--|----------------------|----------|-------|-------------------|
| <i>The training was interesting.</i>                   | 1.5                  | 2.7      | 28.0  | 67.7              |
| <i>The staff members were friendly.</i>                | 0.6                  | 2.1      | 18.3  | 79.0              |
| <i>I learned a lot during the training.</i>            | 1.1                  | 3.2      | 18.7  | 76.9              |
| <i>I actively participated in training activities.</i> | 1.2                  | 2.6      | 22.8  | 73.5              |



## Alabama Extension Urban 4-H Health Rocks!®

State Office

**Dr. Angela Williams**

Office: (256) 372-5713

Email: arw0033@aces.edu

## Health Rocks!® Evaluation Team

**Kathleen Lodi**

University of Nebraska-Lincoln

**Yan (Ruth) Xia**

University of Nebraska-Lincoln

**Maria (Cherry) de Guzman**

University of Nebraska-Lincoln

**Sarah Taylor**

California State University, Long Beach

**Dan Wang**

University of Nebraska-Lincoln

For any questions concerning the data and results, please contact

Dr. Yan Ruth Xia at 402-472-6552 or rxia2@unl.edu

Dr. Maria de Guzman at 402-472-9154 or mguzman2@unl.edu