

Implementation of a Youth Health Survey via the Internet

July 2017



Florida Department of Health
& Florida Department of
Children and Families

Richard Lee Harding
Bryan Higgins
Brenda Clark
Stephanie Richelsen
Bert Rothenbach
Tera Anderson

Outline

- **Objectives of Web-pilot**
- **Sample Design**
- **Methodology test**
- **Paper vs Web Responses**
- **Conclusions**

Purpose of the Electronic Florida Youth Survey (EFYS)

- **Assess the feasibility and interest in conducting web Florida Youth Survey in Florida schools within the county**
- **Conduct Four Methodological Testing**
 1. **Evaluate the Effect of Skip Patterns on Completion Time**
 2. **Evaluate Validation Questions**
 3. **Evaluate Response Option Scale:**
 4. **Evaluate the Using Specific Drug Names in Prescription Drug Questions**
- **Evaluate differences between student responses using web FYS vs Paper-and-Pencil**

EFYS Sample



EFYS Sample

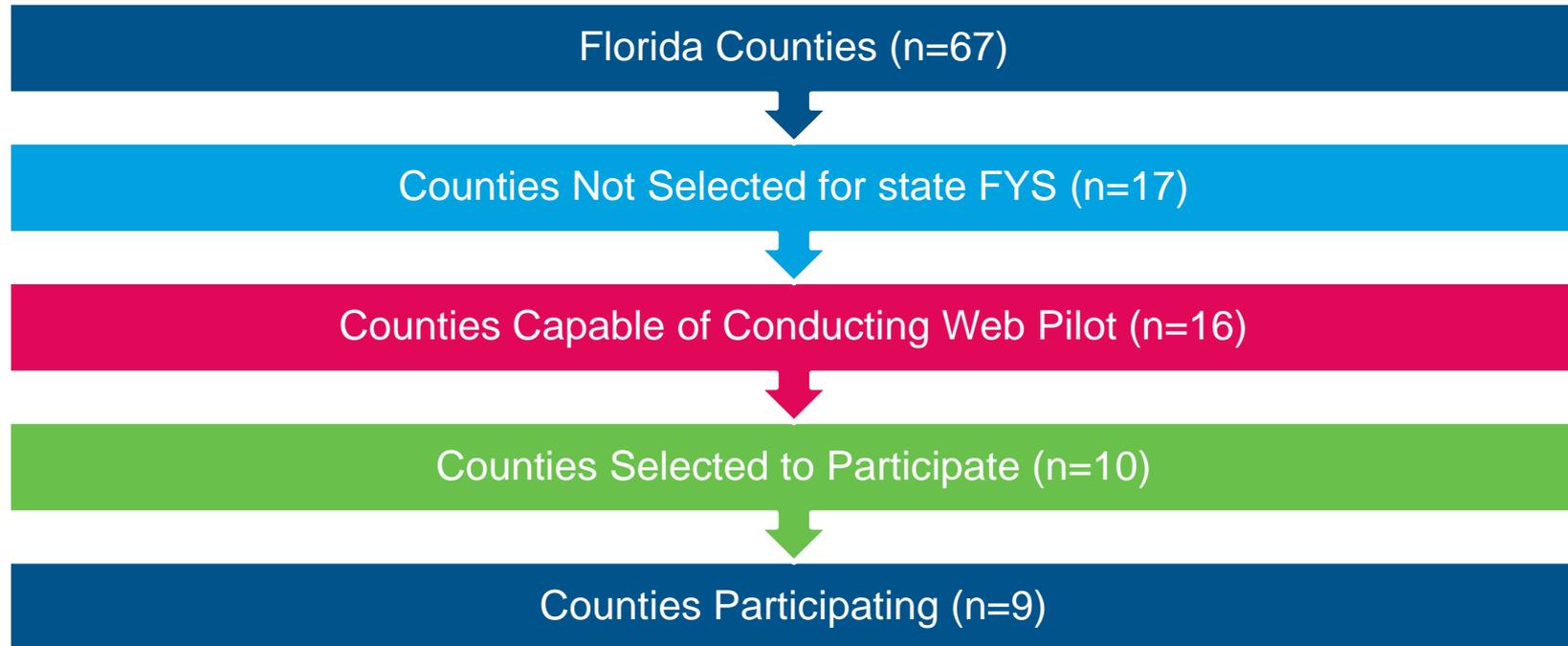
Florida Counties (n=67)



Counties Not Selected for state FYS (n=17)

- **The 17 Counties not in the FYS were classified into four categories based on their capability to conduct the Web Pilot**
 - A. Capable (3 Counties)
 - B. Probably Capable (3 Counties)
 - C. Unknown Capability (10 Counties)
 - D. Incapable (1 County)
- **Selected 6 counties from Groups A and B**
- **Selected 4 counties from Group C**
- **Counties were replaced if they were found to be unable to participate prior to data collection**

EFYS Sample



Three Selected Counties Opted out of Participation in the Web-pilot

- County Coordinator not available to oversee administration
- All laptops/computers were being “prepped” for state testing
- Not enough laptops/computers/tablets available for each student to take the survey during the survey window

EFYS Sample

Schools Selected to Participate

- **1 High School selected & 1 Middle School selected in each**
- **School Respondents**
 1. **Capable (3 Counties, 6 schools)**
 2. **Probably Capable (2 Counties, 4 schools)**
 3. **Unknown Capability (4 Counties, 8 schools)**

Class Selection within School

- **Students were selected as part of intact classes**
- **Target at each level within school was approximately 260 students (Approximately 10-15 classes)**
- **Class Intervals were created based on the target number of students and the school enrollment**

EFYS Feasibility



EFYS Administration: County Coordinator Responses

Preference for Web Administration

- 8 of 9 coordinators prefer web administration even if future administration required 2 to 3 times the number of students to participate
- Single respondent who preferred paper-based survey identified lack of computer resources as the primary reason for preferring a paper-based survey

Identified Advantages of FYS Web Administration

- Less burden
- Less potential for coordination errors
- More confidential

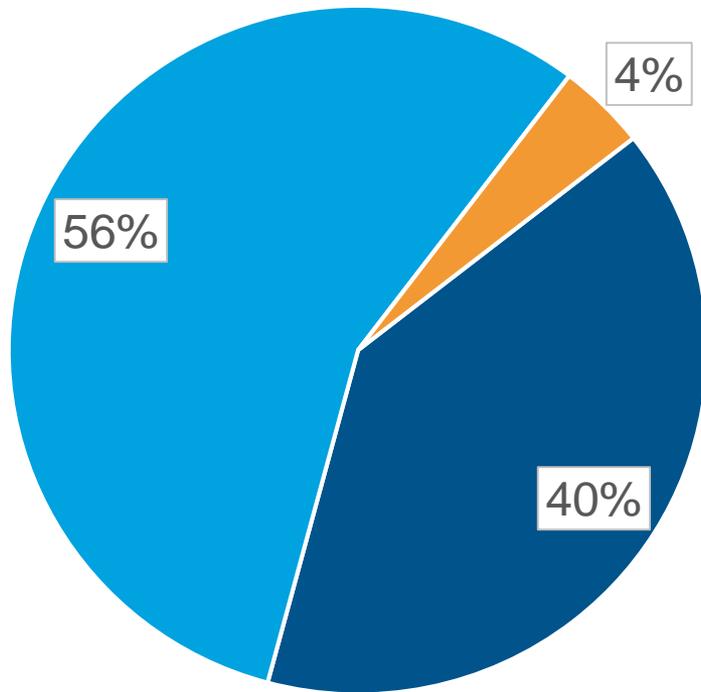
Identified Challenges of FYS Web Administration

- Computer resources
- Less control over the process
- Teachers less comfortable with process

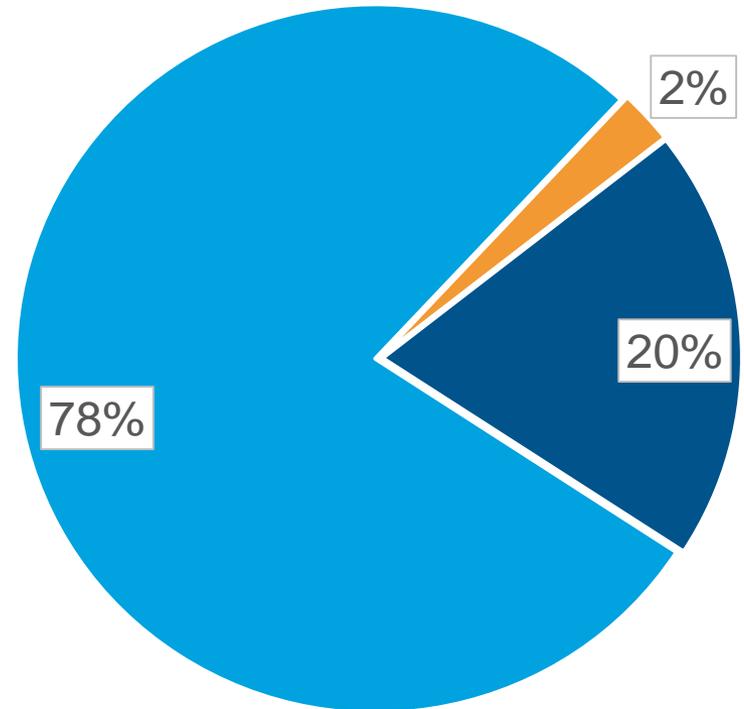
EFYS Administration: Teacher Responses

WHERE WAS THE SURVEY ADMINISTERED?

High School (n=73)



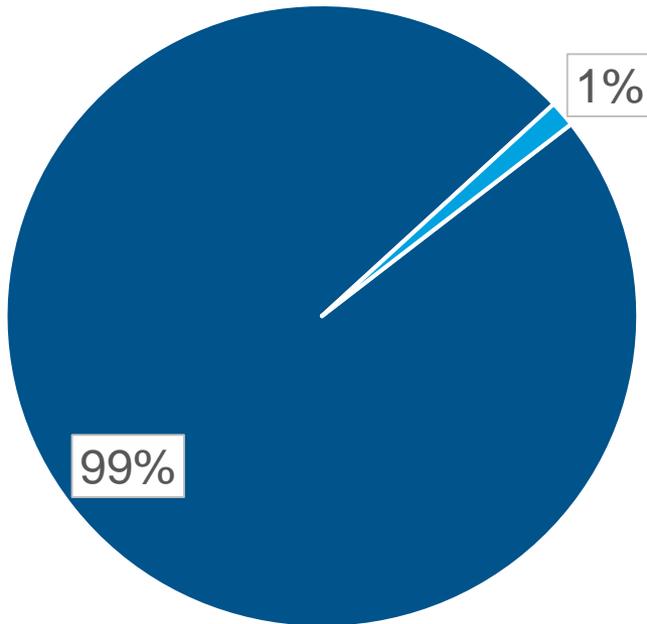
Middle School (n=81)



EFYS Administration: Teacher Responses

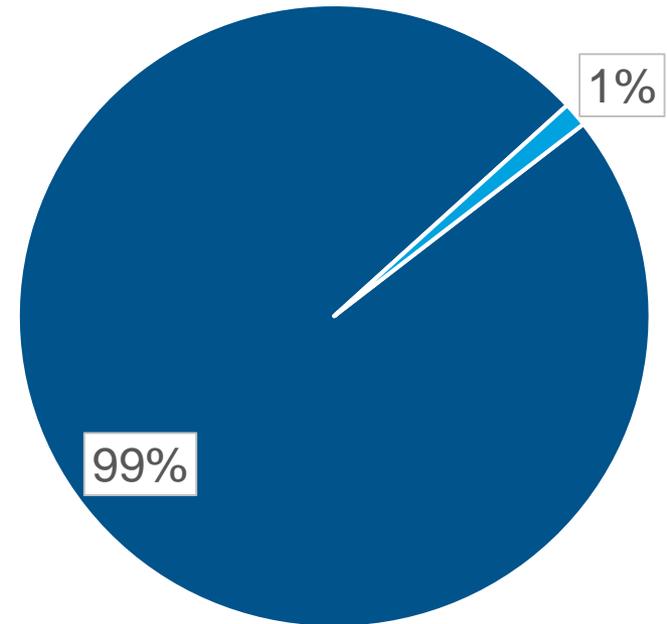
DO YOU BELIEVE THAT STUDENT ANONYMITY WAS MAINTAINED DURING THE WEB ADMINISTRATION?

High School (n=74)



■ Yes ■ No

Middle School (n=79)

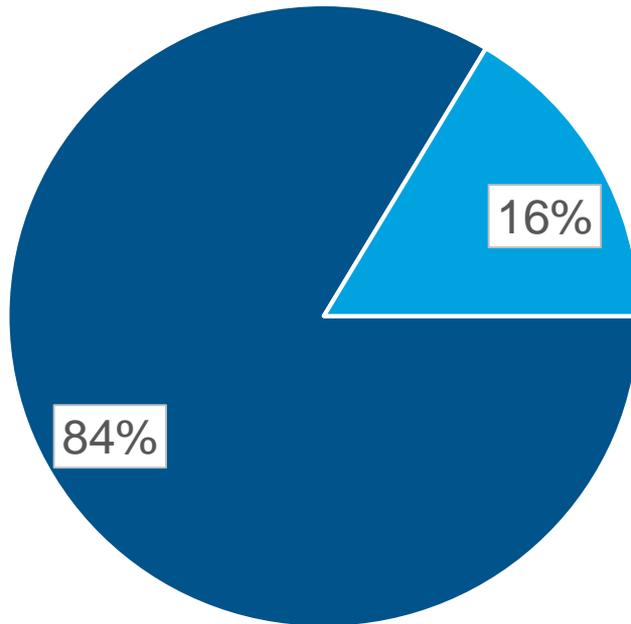


■ Yes ■ No

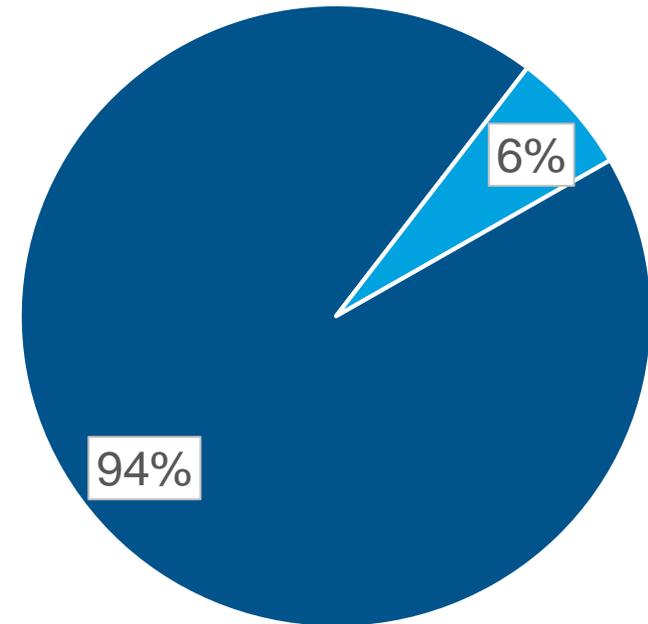
EFYS Administration: Teacher Responses

IF SELECTED TO GIVE THIS SURVEY IN THE FUTURE, WOULD YOU RATHER ADMINISTER VIA WEB OR PAPER AND PENCIL?

High School (n=73)



Middle School (n=79)



■ Web ■ Paper

■ Web ■ Paper



Methodological Test



Methodological Tests

- **Skip Logic:**

- Skipped based on lifetime question
- Skipped questions are “In the Past 30 Days”

Have you ever smoked cigarettes?

- Never
- Once or twice
- Once in a while but not regularly
- Regularly in the past
- Regularly now

- **Methodological Test:**

- 1. Fictitious Drug (Derbisol):**

- Derbisol has been used for 20 yrs to filter students. We have replaced it with new fictitious drug (Nyxocine). Does Derbisol still work as a filter or do kids know its fictitious?

- 2. Response Option Scale:**

- “YES!, yes, no, NO!” vs “Strongly Agree to Strongly Disagree”

- 3. Using Specific Drug Names:**

- In the past we have presented general prescription drug categories and specific drug names. Does this end up with different results?

Respondents by Methodological Test Group

	High School		Middle School	
	n	%	n	%
Control	344	25.3%	413	24.5%
Skips Logic Only	333	24.5%	420	24.9%
Methodological Tests Only	346	25.5%	427	25.3%
Skips and Methodological Test	335	24.7%	425	25.2%
Total	1,358		1,685	

Methodological Test Results

Skip patterns:

- **We used the “in your life time” questions to indicate skip patterns**
 - A respondent who indicated they **never smoked** cigarettes skipped the past 30 days cigarette question
 - A respondent who indicated there were **0 occasions** in which they had alcohol the skipped the past 30 day alcohol question
- **High School Respondents:**
 - The mean time difference 3 ½ min.
- **Middle School Respondents:**
 - The mean time difference was 1 min.
- **Both difference were statistically significant but in a practical sense, the skip pattern questionnaire did not save time.**

Methodological Test Results

Fictitious Drug (Derbisol vs Nyxocine):

Fictitious Drug	High School		Middle School	
	% Lifetime	% Past 30 Days	% Lifetime	% Past 30 Days
Derbisol	3.10	2.66	1.2	1.08
Nyxocine	3.23	2.50	2.0	1.76

Methodological Test Results

Comparison of Response Options

- We varied the response scale options for 4 questions

1. I feel my life is not worth it
2. I think I'm no good
3. I am a failure
4. I am depressed most days

YES!

yes

no

NO!

vs

Strongly Agree

Agree

Disagree

Strongly Disagree

Methodological Test Results

Comparison of Response Options

- High school students responded at similar rate regardless of scale
- Middle school students responded differently depending on the scale
 - Middle schoolers responded at a high rate for “Strongly Disagree” than when “NO!” was a response option

Question	Strongly Disagree	NO!
I feel my life is not worth it	63.39%	59.76%
I think I’m no good*	47.16%	42.86%
I am a failure*	60.44%	55.11%
I am depressed most days*	52.09%	47.11%

Methodological Test Results

Using Specific Drug Names

- **Using specific prescription drug names significantly increased the Lifetime Prevalence of high school and middle school students who have used prescription drugs without a doctors note**
- **It had no impact on the Past 30 Day prescription drug use prevalence rate among high school or middle school students.**

EFYS Comparative Analysis



Impact of Web-Based Administration on FYSAS Data

- **Will a web-based FYSAS administration measure student attitudes and behaviors in the same way as the standard paper-and-pencil FYSAS?**

Yes, understanding...

- Random differences due to sampling error
- Differences between the 2016 and 2017 questionnaire
- Real changes in student behavior

EFYS Comparative Analysis – Response Rates

County	High School		Middle School	
	2017 Web	2016 Paper	2017 Web	2016 Paper
	RR	RR	RR	RR
Baker	54%	52%	87%	87%
Calhoun	85%	86%	90%	94%
Gilchrist	71%	82%	91%	86%
Levy	86%	81%	86%	86%
Monroe	82%	87%	72%	85%
Suwannee	77%	83%	85%	87%
Union	73%	80%	90%	87%
Walton	87%	75%	81%	84%
Washington*	64%	85%	66%	91%



EFYS Comparative Analysis – Estimate Comparison

Question	High School		Middle School	
	2016 (%)	2017 (%)	2016 (%)	2017 (%)
Past 30 Days – Use on One or More Occasions				
Alcohol	31.4	28.6	11.2	11.8
Cigarette	10.7	7.9	3.3	2.9
Marijuana	19.8	20	4.7	4.9
Electronic Vapor Product	18.3	12.7*	7.5	4.9
Great Risk or Harm Associated with				
Binge Drinking	45.9	49	57.3	57.3
Smoking	64.4	70.7*	67.2	65.2
Participates in Extracurricular Activities				
School Sports	47.2	49.9	45.9	44.9
Sports outside School	17.2	22.0*	35.5	42.8*
School Band	9.7	10.3	15.5	16.4
School Clubs	37.1	43.8*	28	27.6
Community Clubs	10.5	13	8.2	10.7

Conclusion





Conclusions

- **Web Surveys are Feasible**

- Teachers and County Coordinators preferred the Web administration
- Resource availability needs to be considered

- **Methodological Test**

- Skip patterns had no really impact on the length of the Survey
- Derbisol is still a good validity check
- Middle school students responses differed depending on the scale
- Name brand prescription drugs had an impact on the Lifetime prevalence but not the Past 30 Day prevalence

- **Paper vs Web Comparison Resulted in Some Differences**

- The differences may be due to real change

Practical Considerations with Changes in Survey Methodology

- **Usage of technology and computer resources will require additional effort and attention on the part of Coordinators, School Contact and Teachers**
- **Some schools and some classrooms will experience technical difficulties**
- **For the first few survey cycles, response rates for the web FYS may be different than for the paper-and-pencil FYS**

Questions?
Comments?

