



A Report Submitted pursuant to Specific Appropriation 374, of the 2013 General Appropriations Act.

**The Florida Department of Children and Families
January 15, 2014**

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I. Summary

The Department of Children and Families was directed in the 2013-14 General Appropriations Act to provide a report to the Legislature on the effectiveness of the prevention services provided by Informed Families of Florida. Informed Families focuses on teaching people how to say no to drugs, and make better choices, by:

- Creating awareness through publicity;
- Generating community involvement; and
- Engaging people in the process of prevention.

Informed Families is implementing the following five campaigns using this specific appropriation:

- **Safe Homes, Safe Parties.** The Safe Homes/Safe Parties campaign is intended to encourage parents to ensure that alcohol, tobacco or other drugs will not be permitted at parties held in their homes and discouraged at parties in the community.
- **Lock Your Meds.** The Lock Your Meds campaign is intended to reduce prescription drug abuse by encouraging adults to keep prescription and over-the-counter medications away from drug abusers.
- **Family Day/Family Dinner.** The Family Day/Family Dinner campaign encourages families to eat dinner together and discuss substance abuse and its consequences.
- **Red Ribbon Week.** Red Ribbon Week events are described as a way for people and communities to unite and take a visible stand against drugs and show their personal commitment to a drug-free lifestyle by displaying symbol of the Red Ribbon.
- **Red Ribbon School Certification Process.** Schools apply and complete a survey about their prevention efforts. A team of reviewers scores applications on a scale of 100 possible points, with at least 80 points required for certification.

This report provides the following findings:

- From the review of the implemented campaigns, the outcome as to effectiveness is presently equivocal. It is not possible to say with certainty that the desired outcome will or will not be achieved.
- Measuring the efficacy of prevention programs intended to change social behaviors is problematic.
- Of note, there is literature to suggest that children with greater family interaction may be less likely to engage in negative behaviors.

II. Introduction

The 2013-2014 General Appropriations Act (GAA) provided \$750,000 from Specific Appropriation 374 to Informed Families of Florida (IF) for the purpose of providing a statewide program for the prevention of child and adolescent substance abuse. Proviso directed the Department of Children and Families (Department) to assess the effectiveness of these prevention efforts with the resources and services utilized throughout the state. The program outcome against which the effectiveness of IF efforts are assessed, is the prevention of child and adolescent substance use.

Evaluations of the effectiveness of prevention programs, while often complex and fraught with limitations, are extremely important to conduct. To prepare this report for the Legislature, the Department reviewed a range of materials from several sources, including:

- Informed Families
 - Toolkits;
 - Guidelines;
 - Web pages;
 - Promotional material;
 - Grant applications;
 - Worksheets;
 - Strategic plans; and
 - Contracts.

- Florida State University Center for Prevention Research
 - A study of the Red Ribbon school certification process.

- Behavioral Science Research Institute
 - A study of the Red Ribbon Week; and
 - A study of the Family Day/Family Dinner Campaign.

Section III of the report begins with a description of Informed Families and their prevention campaigns. All of the available evidence regarding the effectiveness of these specific campaigns is presented. Section IV discusses the theory and underlying assumptions behind these campaigns. The risk and protective factors that are targeted for change are assessed in relation to the support found in the published literature with regard to similar variables, relationships, and programs. Section V focuses on a process assessment that distinguishes between outputs and outcomes and discusses the challenges of establishing performance standards for contracted outputs. Finally, the key findings and recommendations for future evaluators are presented in the conclusion.

III. What is Informed Families?

III.A. Background

Informed Families (IF) is a nonprofit organization that describes itself as follows:

Informed Families/The Florida Family Partnership...is a broad-based, grass roots volunteer/parent organization...Informed Families is an education, training and support center for parents, schools and communities to help raise safe, healthy and drug-free children. We teach people how to say no to drugs and how to make healthy choices. To reduce the demand for drugs, Informed Families has focused its efforts on educating and mobilizing the community, parents, and young people in order to change attitudes. In this way we counteract the pressures in society that condone and promote drug and alcohol use and abuse. The organization educates thousands of families annually about how to stay drug and alcohol free through networking and a variety of programs and services.¹

The focus of the program has been to teach adolescents how to say no to drugs, how to make healthy choices to counteract the pressures in society that condone or promote drug and alcohol use or abuse.² The following goals are associated with all of their campaigns:

- Awareness through publicity.
- Youth, family, school, and community participation.
- Student, parent, teacher, and community engagement.³

IF has been a part of the symbolic association with the national “Red Ribbon” brand, which is linked to the prevention of substance use.⁴ IF developed the following five campaigns that are described and assessed in more detail in the remainder of this section:

- Safe Homes Safe Parties Campaign;
- Lock Your Meds Campaign;
- Family Day/Family Dinner Campaign;
- Red Ribbon Week; and
- Red Ribbon School Certification Process.

The approach behind these campaigns can be divided into the following three strategies:

- Disseminating messages to a wide ranging audience via:
 - Email,
 - Broadcast,
 - Newsletters,
 - Flyers,
 - Website content, or
 - Other media.
- Outreach that includes:
 - Disseminating promotional materials and tool kits,
 - Sending letters to stakeholders,
 - Providing webinars and training for parents, and
 - Recruiting volunteers.
- Participation and engagement as evidenced by:
 - Submitting pledges,
 - Downloading web resources,
 - Recruiting volunteers, and
 - Attending webinars or trainings.⁵

¹ See, <http://informedfamilies.org/about/> (site accessed December 12, 2013).

² *Id.*

³ Informed Families of Florida. *Report to the Florida Legislature* (2013).

⁴ See, http://redribbon.org/downloads/NFP_RedRibbonGuide2013_Final.pdf (site accessed December 12, 2013). *Id.*

III.B.1. The Safe Homes Safe Parties Campaign

The IF Safe Homes Safe Parties initiative will encourage parents to ensure that alcohol, tobacco or other drugs will not be permitted at parties held in their homes and discouraged at parties in the community.⁶ Parents will be directed to electronically sign and submit the following pledge:⁷

Parents take ownership of the program by signing the following pledge:

Take the Safe Homes Safe Parties pledge between March 11, 2013 and April 30, 2013 to support underage drinking prevention and you'll automatically be entered to win a \$50.00 Publix gift card!

Your Information		The Pledge
Email*	<input type="text"/>	I pledge to do the following: <ul style="list-style-type: none">• set guidelines• not allow underage youth to drink alcoholic beverages or use tobacco or other drugs in our home or place of business• be present at all pre-teen and teenage parties held in their homes to ensure that no drugs, alcohol or tobacco are present• encourage future drug and alcohol free activities for underage youth
First Name*	<input type="text"/>	
Last Name*	<input type="text"/>	
Address*	<input type="text"/>	
City*	<input type="text"/>	
State*	<input type="text" value="Choose..."/>	
ZIP Code*	<input type="text"/>	
Phone*	<input type="text"/>	
Fax	<input type="text"/>	
School (child 1)	<input type="text"/>	
Homeroom (1)	<input type="text"/>	
School (child 2)	<input type="text"/>	
Homeroom (2)	<input type="text"/>	
School (child 3)	<input type="text"/>	
Homeroom (3)	<input type="text"/>	
Comments	<div style="border: 1px solid black; height: 80px; width: 100%;"></div>	

* Required information

This campaign is projected to be implemented in April and May of 2014.

⁵ *Supra*, note 4.

⁶ See, http://informedfamilies.org/campaigns/safe_home/pledge/ (site accessed December 12, 2013).

⁷ *Id.*

III.B.2. The Lock Your Meds Campaign

The IF Lock Your Meds campaign is intended to reduce prescription drug abuse by encouraging adults to keep prescription and over-the-counter medications away from drug abusers.⁸ People will be directed to secure their medications, not share them, and properly dispose of them.⁹ Parents will be encouraged to electronically sign and submit the following pledge.¹⁰

Take the Lock Your Meds® Pledge and you could win a Rx Safe!



MED GUARD™ SAFES
Safeguard Your Medicine



Mounts in your Medicine Cabinet!

Informed Families will award three MedGuard Safes Model 3015 via random drawing on February 15, 2014 from Lock Your Meds Pledge submissions received by Informed Families between 12:00AM January 1, 2014 and February 15, 2014 at 5:00PM EST.

Your Information

Email*

First Name*

Last Name*

Address*

City*

State*

ZIP Code*

Phone*

Fax

School (child 1)

Homeroom (1)

School (child 2)

Homeroom (2)

School (child 3)

Homeroom (3)

Comments

* Required information

The Pledge

I pledge to do the following:

- Teach your children the difference between helpful medicine and harmful drugs.
- Teach your children to take only medicine that is prescribed by a doctor and given by a parent or caregiver.
- Secure and take stock of your medicines regularly to prevent children and guests from accessing it.
- Teach your children to refuse any harmful drugs offered so they can achieve their dreams.

This campaign is projected to be implemented in January and February of 2014.

⁸ http://informedfamilies.org/campaigns/lock_your_meds/ (site accessed December 12, 2013).

⁹ *Id.*

¹⁰ http://informedfamilies.org/campaigns/lock_your_meds/pledge/ (site accessed December 12, 2013).

III.B.3. The Family Day/Family Dinner Campaign

National Family Day was launched by the National Center for Addiction and Substance Abuse at Columbia in 2001 and is celebrated on the fourth Monday of every September.¹¹ In FY13-14, family day was September 29, 2013. The IF Family Day/Family Dinner campaign encourages families to eat dinner together and discuss substance abuse and its consequences. The campaign involves the following activities:

- Disseminating flyers, newsletters, and a Family Day toolkit with promotional content and a variety of suggested activities;
- Sending emails and letters to school superintendents, teachers, and other school staff asking them to participate in Family Day events and encourage students and families to participate as well;
- Sharing campaign messages through morning announcements at schools;
- Encouraging children to play games and participate in contests;
- Asking parents to electronically sign and submit pledges.¹²

This campaign notes that there is a correlation between the frequency of family dinners and substance use. This correlation is highlighted in campaign materials with the assertion that kids who eat dinner with their parents at least four times weekly are less likely to drink and use drugs,¹³ observing that parental engagement is the single most potent weapon in preventing substance abuse among youth.¹⁴ The emerging scholarship related to the importance of the family dinners and the family environment will be discussed in more detail later in this report.

The Behavioral Science Research Institute (BSRI) was contracted to conduct an evaluation of the Family Day/Family Dinner campaign. The following represents a description of the BSRI study, and the reported outcomes.

- Between September 10-16, 2013, 77,115 emails were sent to IF's distribution list, with a request to complete a pre-campaign survey.
 - 361 surveys were completed.
- Between October 10-21, 2013, 361 post-campaign survey requests were sent to those who responded to the pre-campaign survey request.
 - 20 post-campaign surveys were completed. Only 12 of these 20 post-campaign responses could be matched to pre-campaign responses. BSRI did not analyze these 12 pairs of matched responses.¹⁵

In addition to this, BSRI noted that a second survey was sent out in October 10-21, 2013 to the IF email distribution list (excluding individuals who had previously completed the pre-campaign survey mentioned above). A total of 89,545 emails were sent and 507 people completed the entire survey.¹⁶ The following findings are based on these 507 responses:

- When asked to describe their family – 19% of respondents selected “not applicable.”¹⁷
- 281 people (55%) reported hearing about the Family Day Campaign, whereas 226 (45%) had not.
- The vast majority (75.8%) of those who had heard about the campaign indicated that they had heard about it through an email from Informed Families. Others heard about it from Informed Families' website (15%), a friend or colleague (11%), an Informed Families' “Ambassador” at their child's school (9%), their child (6%), or a web search (3%).
- Only 35% of those who were familiar with the campaign recalled seeing any Family Day/Family Dinner promotional materials. Emails and flyers were the most common ways that promotional materials were encountered.

¹¹ See, <http://casafamilyday.org/familyday/> (site accessed December 12, 2013).

¹² Informed Families. *Family Day Toolkit: Feed Your Roots* (2013); Informed Families. *End of Year Report* (2013).

¹³ Informed Families. *Family Day Toolkit: Feed Your Roots* (2013).

¹⁴ *Id.*

¹⁵ Science Research Institute. *2013 Family Day Campaign – Informed Families* (2013).

¹⁶ *Id.*

¹⁷ Note – these respondents were not removed from the analysis by BSRI. *Id.*

- About 89% of those familiar with the campaign reported that they thought it was “extremely important” for their family to eat dinner together; 91% of those who were not familiar with the campaign also thought it was “extremely important” for their family to eat dinner together.
- Around 92% of those familiar with the campaign reported that they had a family dinner on Family Day compared to 70% of those who were unfamiliar.
- Respondents were also asked, “Thinking about the past two weeks (14 days), how often did your family eat dinner together?” The responses from those familiar and not familiar with the campaign are presented in the table below:¹⁸

	Familiar with Campaign	Not Familiar with Campaign
Less than two times	5%	14%
2-5 times	17%	26%
6-10 times	33%	26%
More than 10 times	45%	35%

¹⁸ *Id.*

III.B.4. Red Ribbon Week

Red Ribbon Week, which is a national brand, is celebrated each year from October 23-31 in schools around the country. This event is described as a way for people and communities to unite and take a visible stand against drugs and to show their personal commitment to a drug-free lifestyle through the symbol of the Red Ribbon. The Red Ribbon Week campaign is intended to disseminate information to the general public about the dangers of drug abuse and to get people talking and working on activities that will help rebuild a sense of community and common purpose.¹⁹

The campaign entails a variety of school based activities that include:

- Hosting poster or essay contests;
- Disseminating promotional newsletters, flyers, and social media posts;
- Sharing information during morning announcements at schools;
- Scheduling presenters to speak to the students about the dangers of substance abuse;
- Decorating school environments and attire with red ribbons;
- Asking local governments to sign proclamations; and
- Asking parents and students to sign and submit pledges.²⁰

I pledge to set guidelines to help children grow up safe, healthy and drug-free.



Your Information

Email*

First Name*

Last Name*

Address*

City*

State*

ZIP Code*

Phone*

Fax

School (child 1)

Homeroom (1)

School (child 2)

Homeroom (2)

School (child 3)

Homeroom (3)

Comments

* Required information

The Petition

- As parents, we will talk to our children about the dangers of drug abuse.
- We will set clear rules for our children about not using drugs.
- We will set a good example for our children by not using illegal drugs or medicine without a prescription.
- We will monitor our children's behavior and enforce appropriate consequences, so that our rules are respected.
- We will encourage family and friends to follow the same guidelines to keep children safe from substance abuse.

Students who volunteer to be a part of the Red Ribbon program at their school called Student Ambassadors. They are also encouraged to take the following pledge:

¹⁹ See, http://redribbon.org/downloads/NFP_RedRibbonGuide2013_Final.pdf (site accessed December 12, 2013).

²⁰ *Id.*

I pledge to grow up safe, healthy, and drug free by:

- Understanding the dangers of drug use and abuse and setting goals for not using drugs.
- Talking with my parents to know their rules about smoking and drinking and the consequences for breaking those rules.
- Setting a good example for my friends, family members and classmates by not using drugs, alcohol or tobacco.²¹

As with the Family Dinner campaign, BSRI was contracted by IF to complete a study of Red Ribbon Activities. Between November 12-21, 2013, 75,789 requests to complete surveys were sent via email through the IF distribution list. Excluding duplicates and IF staff, 626 responses were examined by BSRI.²² The following findings are based on these 626 responses:

- Respondents were asked how they heard about Red Ribbon Week (respondents could choose more than response option):
 - 60% “some other way;”
 - 40% through an email from IF;
 - 27% through the school;
 - 16% from the IF website; and
 - 4% from another parent.
- Respondents were asked if they passed the Red Ribbon Week message on to anyone else (respondents could choose more than response option):
 - 83% passed it on to “some other person:”
 - 51% to a child;
 - 48% to school personnel;
 - 34% to another parent; and
 - 12% did not pass the message on at all.
- Respondents were asked to identify the 2013 Red Ribbon Week theme, which was “A Healthy Me is Drug Free.”
 - Approximately 64% correctly identified this as the theme;
 - 21% chose “I choose to be Free from Drugs;”
 - 4% choose “Red Ribbon Week Helps Me Stay Healthy;” and
 - 10% responded “none of these.”
- When asked, “Did you participate in the Red Ribbon Week:”
 - 16% of respondents said “no.”
- Respondents were asked how they participated in Red Ribbon Week, (respondents could choose more than response option):
 - 58% “decorated something;”
 - 50% “told others about the Red Ribbon Campaign message;”
 - 47% took the Red Ribbon pledge;
 - 9% served as a student volunteer; and
 - 81% did something else.²³

²¹ *Id.*

²² Behavioral Science Research Institute. *2013 Red Ribbon Week – Informed Families* (2013).

²³ *Id.*

III.B.5. The Red Ribbon School Certification Process

The Red Ribbon Certified Schools (RRCS) process assesses, reviews, recognizes, and celebrates school-based prevention activities.²⁴ According to the RRCS website, schools go through a rigorous review of how they promote a healthy school environment.²⁵ RRCS certification is intended to:

- Sustain school pride;
- Improve teacher retention;
- Improve academic performance;
- Enhance awareness and social norms around drugs and alcohol;
- Reduce substance use; and
- Increase parental involvement in schools.²⁶

Schools that apply to become certified must complete a 60-item survey used to assess their prevention efforts. A team of reviewers must assign at least 80 out of 100 possible points to a school's application in order for it to be certified.²⁷ The table below lists the schools that have been certified in Florida.²⁸

School	Award Year	County
Hialeah Miami Lakes Sr High	2006	Miami-Dade
Palm Springs Middle	2006	Miami-Dade
Southwest Middle School	2006	Orange
Booker T. Washington High School	2006	Escambia
Willima H. Turner Technical Arts High School	2006 (re-certified in 2011)	Miami-Dade
Workman Middle School	2006 (re-certified in 2013)	Escambia
R.C. Lipscomb Elementary School	2006 (re-certified in 2013)	Escambia
Seabreeze High School	2007 (re-certified in 2011)	Volusia
Avalon Middle School	2007 (re-certified in 2011)	Orange
Bronson Middle/High	2007	Levy
Paul Laurence Dunbar Middle School	2007	Lee
Triangle Elementary	2007	Lake
J Colin English Elementary	2007	Lee
Conway Middle School	2007	Orange
Rolling Hills Elementary	2007	Orange
OASIS Academy	2007	Escambia
Yulee High School	2007	Nassau
Mater Academy of International Studies #1017	2010	Miami-Dade
Nautilus Middle School	2010	Miami-Dade
Southwood Middle School	2010	Miami-Dade
South Miami K-8 Center	2010	Miami-Dade
Apopka High School	2010	Orange
Boone High School	2010	Orange

²⁴ See, http://redribbon.org/downloads/NFP_RedRibbonGuide2013_Final.pdf; and <http://redribbonschools.org/certification/> (site accessed December 12, 2013).

²⁵ See, <http://redribbonschools.org/> (site accessed December 12, 2013).

²⁶ See, <http://redribbonschools.org/> (site accessed December 12, 2013); <http://redribbonschools.org/about-us/> (site accessed December 12, 2013); <http://redribbonschools.org/certification/> (site accessed December 12, 2013).

²⁷ *Id.*

²⁸ See, <http://redribbonschools.org/certification/whos-certified/> (site accessed December 12, 2013)

Corner Lake Middle School	2010	Orange
Gotha High School	2010	Orange
Lancaster Elementary	2010	Orange
Legacy Middle School	2010	Orange
Timber Creek High School	2010	Orange
Carol City Middle School	2011	Miami-Dade
Carol City High School	2011	Miami-Dade
Frank C. Martin K-8	2011	Miami-Dade
Glenridge Middle School	2011	Orange
Wekiva High School	2011	Orange
Westridge Middle School	2011	Orange
Hialeah Gardens Middle School	2012	Miami-Dade
Aspira South Charter	2012	Miami-Dade
West Miami Middle School	2012	Miami-Dade
Edgewater High School	2012	Orange
Howard Middle School	2012	Orange
South Creek Middle School	2012	Orange
Ransom Middle School	2012	Escambia
Biscayne Elementary Community School	2013	Miami-Dade
Citrus Grove Elementary	2013	Miami-Dade
Ludlam Elementary	2013	Miami-Dade
Shenandoah Elementary	2013	Miami-Dade
Freedom Middle	2013 (re-certified)	Orange
University High School	2013 (re-certified)	Orange
Winter Park High School	2013 (re-certified)	Orange
Lee Middle School	Not Reported	Lee

While there has not been a published review of the certification process, the Center for Prevention Research at Florida State University completed an unpublished study.²⁹ There are several methodological limitations with this study, which have reduced its utility for this report. While the purpose is not to critique a study's methodology, the following limitations were observed:

- It is not certain that schools in the intervention group were actually exposed to the certification process; and
- The schools were not randomly assigned to intervention or control groups.

²⁹ S. G. Brooks and J. M. Clem, (Florida State University Center for Prevention Research). *The Red Ribbon Certified Schools Program* (No date).

IV. Theory Assessment

This section discusses the impact theory behind IF's campaigns. An impact theory is a set of assumptions about the program and the improved conditions expected as a result, that describe the possibility of a relationship between variables.³⁰

According to IF, all of their activities and campaigns are based upon the theory that evidence-based substance abuse prevention must address appropriate risk and protective factors for substance abuse in a defined population.³¹ The goal that implements this theory is to increase protective factors and decrease risk factors by involving parents, schools, students, and community supporters.³²

IV.A. Evidence Based Defined

It is important to define evidence-based,³³ as it is used by IF in the description of the campaigns. This is a term that has been used tautologically in behavioral health, however, it is a concept that finds its roots in medicine.³⁴ Researchers note that this was a term first used in the 1990s, and has crystallized around the concept of the analysis of published research forming the basis for medical decision making, essentially integrating individual clinical expertise and the best external research.³⁵ The American Psychological Association, in a 2005 statement endorsed a modification of the approach for psychology:

Evidence-based practice is the integration of best research evidence with clinical expertise and patient values. The purpose of EBPP (sic) is to promote effective psychological practice and enhance public health by applying empirically supported principles of psychological assessment, case formulation, therapeutic relationship, and intervention.³⁶

There is an important distinction to draw between what evidence-based means in the substance abuse prevention and treatment field. Here, the term has evolved to mean the implementation of a program or practice that has produced scientific and peer-reviewed evidence that demonstrates it is effective in preventing or treating a substance use disorder.³⁷ So, the application of evidence-based practice is not a decision making model for clinicians, rather the determination of fidelity to the program or practice that has been determined as evidence based.³⁸ The U.S. Substance

³⁰ P. H. Rossi, M. W. Lipsey, and H. E. Freeman. *Evaluation: A Systematic Approach* (2004). SAGE Publications.

³¹ See, http://redribbon.org/downloads/NFP_RedRibbonGuide2013_Final.pdf (site accessed December 12, 2013).

³² *Supra*, note 4.

³³ It is important to note that this report has not made an attempt to deconstruct the epistemology of what is meant by evidence, nor has an attempt been made to construct such a definition. For the purposes of this report – evidence is undefined. See, J. Soren, J. Hetteema, and S. Larios, "What is Evidence-Based Treatment," in P. Miller, ed., *Evidence Based Addiction Treatment*, 2009.

³⁴ See e.g., B. Hjørland. Evidence Based Practice: An Analysis Based on the Philosophy of Science. *Journal of the American Society for Information Science and Technology*, 62(7), 1301–1311 (2011); P.C. Wver J. A. Claridge, and T. C. Fabian, *History and Development of Evidence Based Medicine*, 29 *World Journal of Surgery*, 5, 547-53 (May, 2005); A. Gerber, M. Lungen, and K.W. Lauterbach, *Evidence Based Medicine is Rooted in Protestant Exegesis*, 64 *Medical Hypothesis*, 5, 1034-8, (2005); G. Federspil, and R. Vettor, *Evidence Based Medicine: A Critical Analysis of the Concept of Evidence in Medicine*, 2 *Italian Heart Journal Supplement*, 6, 614-23, (2001).

³⁵ See, P.C. Wver J. A. Claridge, and T. C. Fabian, *History and Development of Evidence Based Medicine*, 29 *World Journal of Surgery*, 5, 547-53 (May, 2005); D. Sackett, W. Rosenborg, J. Muir-Gray, R. Haynes, and W. Richardson, *Evidence Based Medicine. What It Is, and What It Isn't*, 312 *British Medical Journal*, (1996).

³⁶ See, <http://www.apa.org/practice/guidelines/evidence-based-statement.aspx>, (site accessed December 12, 2013).

³⁷ See e.g., <http://www.oasas.ny.gov/prevention/evidence/evidence.cfm> (site accessed December 12, 2013);

<http://store.samhsa.gov/product/Identifying-and-Selecting-Evidence-Based-Interventions-for-Substance-Abuse-Prevention/SMA09-4205> (site accessed December 13, 2013).

³⁸ The Florida Certification Board (FCB) certifies prevention specialists in Florida, and in the Role Delineation Study completed in 2007, a job task identified for a prevention specialist was to "maintain program fidelity when implementing evidence-based programs." http://www.flcertificationboard.org/upload_documents/preventionrdsfinal.pdf (site accessed December 12, 2013). In Technical Assistance Protocol (TAP) 21, Addiction Counsellor Competencies, the U.S. Substance Abuse and Mental Health Services Administration (SAMHSA), noted as a knowledge domain, the importance of theory, research, and evidence-based literature to engage the client in recovery, and that an appropriate

Abuse and Mental Health Services Administration maintains structured summaries of programs to help policymakers determine whether there is sufficient evidence that a particular program will meet their needs.³⁹

IV.B. Risk and Protective Factors Defined

What are risk and protective factors? According to the National Institute on Drug Abuse:

Many factors have been identified that help differentiate those more likely to abuse drugs from those less vulnerable to drug abuse. Factors associated with greater potential for drug abuse are called “risk” factors, while those associated with reduced potential for abuse are called “protective” factors.⁴⁰

Kleiman, Caulkins and Hawkins note that:

Risk factors are traits that are statistically associated with drug use, meaning that someone who has the risk factor is more likely to use drugs than is an otherwise similar person who does not have the risk factor. Protective factors are the opposite – people with protective factors are less likely to use drugs.⁴¹

The language used in these definitions is reflective of the belief that some factors may be correlated with drug use but not necessarily a cause.⁴² According to Kleiman, et al., the proper interpretation of risk and protective factors studiously avoids any notion of causality.⁴³ Risk and protective factors are ‘associated with’ greater or lesser drug use, but in most cases there is no hard evidence that the factor causes drug use, or in the case of protective factors, prevents it.⁴⁴ The following example is an illustration of this:

[D]oing poorly in school is a risk factor for drug use. It is easy to imagine a causal relationship. People who do poorly in school may come to distrust conventional notions of success and so become more likely to act out – by using drugs, for example. However, causality could run the other way; extensive drug use could cause bad grades. Or maybe an “omitted” or third factor might cause both. For example, a behavioral or mental health issue (such as a conduct or personality disorder) might cause both poor school performance and drug use. Likewise, regular attendance at worship services is a protective factor. That could be a direct effect (religious practice promotes abstinence), a peer effect (surrounding oneself with abstemious friends makes it easier to say no), or it may simply be because drug users stay away from churches, synagogues, and mosques.⁴⁵

A part of the reason why prevention scientists rarely have the kind of scientific evidence they need to accurately distinguish between correlated and causal factors for drug use is because:

Prevention scientists avoid statements about causality because the surest way to ascertain whether a relationship is causal is to run an experiment. However, it is neither ethical nor feasible to randomly assign some youth to get good grades or to go to church while preventing another random group from doing the same. Statisticians and

attitude for a counselor is to be open to the use of new evidence based practices in treatment – such as medication assisted therapy.

<http://store.samhsa.gov/shin/content//SMA12-4171/SMA12-4171.pdf> (site accessed December 12, 2013).

³⁹ It is important to note that SAMHSA does not warrant that a program or practice that is included on the list has been evaluated or endorsed by the agency. <http://nrepp.samhsa.gov/> (site accessed December 12, 2013).

⁴⁰ National Institute on Drug Abuse. *Preventing Drug Use among Children and Adolescents: A Research-Based Guide for Parents, Educators, and Community Leaders* (Second Edition) (2003). NIH Publication No. 04-4212(A).

⁴¹ M. A. R., Kleiman, J. P., Caulkins, and A. Hawken. *Drugs and Drug Policy: What Everyone Needs to Know* (2011). Oxford University Press.

⁴² A correlation is defined as an empirical relationship between two variables such that (1) changes in one are associated with changes in the other or (2) particular attributes of one variable are associated with particular attributes of the other. Correlation in and of itself does not constitute a causal relationship between the two variables, but it is one criterion of causality. The other two main criteria for causal relationships in social research are (1) the causal variable must occur earlier in time than the variable it is said to affect” and (2) “the observed effect cannot be explained as the effect of a different variable. See, E. Babbie. *The Practice of Social Research* (10th Edition) (2004). Wadsworth.

⁴³ *Supra*, note 42.

⁴⁴ *Id.*

⁴⁵ *Id.*

social scientists have invented fancy methods for trying to tease out causal inference from nonexperimental data, but even the fanciest methods can't substitute for true experimental designs.⁴⁶

With regard to the relevance of risk and protective factors for prevention programming, there is disagreement as to whether risk and protective factors predict the greatest need for prevention services, or whether prevention programs alter risk and protective factors.⁴⁷ Federal agencies have endorsed the view that prevention programs should attempt to modify risk and protective factors. The Center for Substance Abuse Prevention (CSAP) at SAMHSA notes:

Research now confirms that interventions aimed at reducing the risk factors and increasing the protective factors linked to substance abuse and related problem behavior can produce immediate and long-term positive results... Characteristics and conditions that exist within [individuals, families, peers, schools, and communities] also function as risk or protective factors that help propel individuals to or safeguard them from substance abuse. As such, each of these domains presents an opportunity for preventive action.⁴⁸

Furthermore, guidelines published by the National Institute on Drug Abuse (NIDA) observe:

Prevention programs should enhance protective factors and reverse or reduce risk factors... "[S]cience-validated" prevention programs work to boost protective factors and eliminate or reduce risk factors for drug use.⁴⁹

It is important to note that programs predicated on behavior modification, which change choices only work if there is a causal relationship between the program and the resultant behavior. Proponents of the risk and protective factor framework have acknowledged:

Experimental research is needed to discover which risk factors are causal and which are spurious in the etiology of drug abuse. Only by addressing risk factors in experimental trials and observing the effects on drug abuse can one determine whether a precursor of drug abuse is causally related to drug abuse. Experimental prevention research is therefore necessary both to understand the etiology of drug abuse and to determine which risk factors should be targeted in prevention policy and programs.⁵⁰

In addition to randomized experiment design, quasi-experimental designs can be used when it is not feasible to do random assignment. In a quasi-experimental design, the intervention and control groups are created by some means other than random assignment, and thus cannot be assumed to be equivalent.⁵¹ To the extent that the groups resemble each other on relevant characteristics and experiences, or can be statistically adjusted to do so, then program effects can be assessed with a degree of statistical confidence.⁵² Some examples of quasi-experimental design include:

- **Matched Controls:** In this design, a control group is constructed by matching program nonparticipants with the participants. To avoid bias in the estimates of program effects resulting from this design, the variables on which the groups are matched must include all those strongly related to the outcome on which the groups would otherwise differ.
- **Multivariate Statistical Controls:** Multivariate statistical methods are used to control for a number of group differences simultaneously. Multivariate analysis may use control variables that are presumed to be related to the outcome or to selection into the control and intervention groups.

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. *Principles of Substance Abuse Prevention* (2001). DHHS Publication No. (SMA) 01-3507.

⁴⁹ National Institute on Drug Abuse. *Drugs, Brains, and Behavior: The Science of Addiction* (2007). NIH Publication No. 07-5605.

⁵⁰ J. D. Hawkins, R. F. Catalano, R. F., and J. Y. Miller, J. Y. Risk and Protective Factors for Alcohol and Other Drug Problems in Adolescence and Early Adulthood: Implications for Substance Abuse Prevention. *Psychological Bulletin*, 112, 64-105 (1992). Kleiman et al., note that strategies predicated on changing risk and protective factors only work when there is a causal relationship. See, *supra* note 41.

⁵¹ E. Babbie, *supra* note 42, Wadsworth; J. L. Fitzpatrick, J. R. Sanders, and B. R. Worthen. *Program Evaluation: Alternative Approaches and Practical Guidelines* (2011). Pearson Education.

⁵² *Supra*, note 30.

- Reflexive Controls: In studies using reflexive controls, the estimation of program effects comes entirely from information on the targets at two or more points in time, at least one of which is before exposure to the program. One type of reflexive control design is the pre-post design (also known as a before-and-after study) in which outcomes are measured before and after an intervention. A stronger reflexive control design is the time-series design, which relies on a number of repeated measurements of the outcome variable taken before and after an intervention.⁵³

According to Rossi, et al., “quasi-experiments can yield estimates of program effects that are comparable to those derived from randomized designs, but they can also produce wildly erroneous results.”⁵⁴ Such a design should only be used when it is not possible to use a randomized design and they should only be undertaken with a thorough awareness of their limitations and strong attempts to overcome them.⁵⁵

In practice, it is not possible to exclude the impact of other variables from the analysis that may or may not have an impact on the relationship that is being tested. As such, in social science, quasi-experimental research designs may be a valid alternative method for testing relationships between variables.

Randomized experiments also tend to be costly and time-consuming. Furthermore, as noted above, in some cases it may be unethical to expose participants to experimental conditions involving poor academic achievement, economic deprivations, association with delinquent peers, or trauma. However, randomly assigning youth or families to experimental and control groups that vary with regard to the frequency of family meals may not raise the same ethical concerns as the preceding examples.

It is important to note that the risk and protective factor framework can be very broad. Depending on program design, it could be so broad as to encompass every correlate of substance use, across all possible domains. Such an expansive framework is an obstacle to evaluation, particularly if not all of the variables are described, defined, measured, or studied in the published literature.

IV.C. Application to Informed Families’ Campaigns

The remainder of this section attempts to identify the points of convergence between the literature and the IF campaigns. Firstly, in relation to the IF assertion that the campaigns are evidence based, on review, this is unclear.

With regard to the risk and protective factors targeted by IF, youth attitudes and family behaviors are generally indicated as the basis for all their prevention campaigns.⁵⁶ A review of IF documents identifies the following risk and protective factors as targets for change:

- Favorable parental attitudes towards the problem behavior;
- Parental involvement in the problem behavior;
- Community laws and norms favorable toward drug use;
- Awareness and knowledge;
- Parental supervision;
- Availability of alcohol and pharmaceuticals; and
- Frequency of family dinners.⁵⁷

⁵³ *Id.*

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ *Supra*, note 4.

⁵⁷ http://informedfamilies.org/campaigns/lock_your_meds/ (site accessed December 21, 2013); <http://redribbonschools.org/about-us/> (site accessed December 21, 2013); Informed Families of Florida. *Report to the Florida Legislature* (2013).

It would appear from the information presented by IF, that the assumption is that changes in any of these variables will cause reductions in substance use. This can be assessed in relation to the support found in the published literature on similar variables, relationships, and programs.

For example, existing literature about the impact of information dissemination on drug use indicates that conveying information about drugs and drug effects, whether delivered through the mass media, in the community, or in classrooms, has no effect on behavior.⁵⁸ Education may increase knowledge and change attitudes, however, it does not appear to have a long-term effect on substance use.⁵⁹

IV.D. Research Related to Family Dining

Since 1997, slightly more than half of parents responding to a Gallup poll have indicated that they eat dinner together as a family at least 6 times per week. The average of 5.1 dinners that families share each week is unchanged since 2001. Additional details are provided in the table below:⁶⁰

Frequency of Family Dining According to U.S. Parents (How Many Nights a Week Out of Seven Does Your Family Eat Dinner Together at Home?)				
	1997	2001	2005	2013
0-3 Nights	16%	22%	20%	21%
4-5 Nights	31%	29%	28%	28%
6-7 Nights	52%	50%	52%	53%
Mean	5.4 days	5.1 days	5.1 days	5.1 days

The emphasis on the family meal as a vehicle for family interaction has been the subject of research. The National Center on Addiction and Substance Abuse at Columbia University, one of the earliest and most prominent proponents of efforts to increase the frequency of family meals, observes that it is not family dinner, per se, that contributes to beneficial outcomes, but rather other variables related to the quality of family relationships and engagement.⁶¹ As observed in the most recent annual report on family dinners, the magic that happens at family dinners isn't the food on

⁵⁸ T. Babor, J. Caulkins, G. Edwards, B. Fischer, D. Foxcroft, D., et al. *Drug Policy and the Public Good* (2010). New York, NY: Oxford University Press; Kleiman, et. al., *supra* note 41; A. Paglia and R. Room. Preventing Substance Use Problems Among Youth: A Literature Review and Recommendations. *Journal of Primary Prevention*, 20(1), 3-50 (1999); N. S. Tobler, M. R. Roona, P. Ochshorn, D. G. Marshall, A. V.. Streke, and K. M. Stackpole. School-Based Adolescent Drug Prevention Programs: 1998 Meta-Analysis. *Journal of Primary Prevention*, 20(4), 275-336 (2000); T. Babor, R. Caetano, S. Casswell, G. Edwards, N. Giesbrecht, et al. *Alcohol: No Ordinary Commodity* (Second Edition) (2010). Oxford University Press; M. Lemstra, N. Bennett, U. Nannapaneni, C. Neudorf, L. Warren, T. Kershaw, and C. Scott. A Systematic Review of School-Based Marijuana and Alcohol Prevention Programs Targeting Adolescents Aged 10-15. *Addiction Research and Theory*, 18(1), 84-96 (2010); F. Faggiano, F. Vigna-Taglianti, E. Versino, A. Zambon, A. Borraccino, A. and P. Lemma. School-Based Prevention for Illicit Drugs' Use. *Cochrane Library*, Issue 3 (2008); G. La Torre, G. Chiaradia and G. Ricciardi. School-Based Smoking Prevention in Children and Adolescents: Review of the Scientific Literature. *Journal of Public Health*, 13(6), 285-290 (2005); W. R. Miller and P. L. Wilbourne. Mesa Grande: A Methodological Analysis of Clinical Trials of Treatments for Alcohol Use Disorders. *Addiction*, 97, 265-277 (2002); M. J. Stoil and G. Hill. *Preventing Substance Abuse: Interventions that Work* (1996). New York, NY: Plenum Press; R. L. Bangert-Drowns, The Effects of School-Based Substance Abuse Education: A Meta-Analysis. *Journal of Drug Education*, 18(4), 243-264 (1988); G. J. Botvin and K. W. Griffin. Drug Abuse Prevention Curricula in Schools. In Z. Sloboda and W. J. Bukoski (Eds.), *Handbook of Drug Abuse Prevention: Theory, Science, and Practice* (p. 45-74) (2003). New York, NY: Springer; U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. *Principles of Substance Abuse Prevention* (2001). DHHS Publication No. (SMA) 01-3507.

⁵⁹ *Id.*

⁶⁰ Gallup. *Most U.S. Families Still Routinely Dine Together at Home* (2013). <http://www.gallup.com/poll/166628/families-routinely-dine-together-home.aspx> (site accessed December 27, 2013).

⁶¹ www.casacolumbia.org/addiction-research/reports/importance-of-family-dinners-2012 (site accessed December 12, 2013).

the table, but the conversations and family engagement around the table.⁶² The study identified correlations between family meals and other variables that are in turn correlated with substance use:

Teens who have frequent family dinners are more likely to say their parents know a lot about what's really going on in their lives, and such parental knowledge is associated with decreased incidence of teen marijuana, alcohol and tobacco use. Family dinners are the perfect opportunity when teens can talk to their parents and parents can listen and learn...Family dinner is also an ideal time to strengthen the quality of family relationships. Teens having frequent family dinners are more likely to have excellent relationships with their parents. As the quality of teens' relationships with their parents declines, their likelihood of using marijuana, alcohol and tobacco rises...[H]igh-stress teens are more likely to have used marijuana, alcohol and tobacco, teens who have frequent family dinners are less likely to be highly stressed...[P]arental expectations, particularly expressing strong disapproval of substance abuse, can be a decisive factor in their teens' behavior. Family dinners are an excellent opportunity for parents to express their beliefs and expectations about teen substance abuse.⁶³

This implies that increasing the frequency of family meals can ultimately result in reduced drug use by influencing a variety of intervening variables like parental knowledge, the quality of family relationships, stress, and parental expectations. Some researchers have suggested that family meals may be both a cause of positive family functioning and a consequence of positive family functioning:

It may be that eating a family meal is a reflection of overall family functioning, beyond dyadic relationships between family members. In reality, it is likely that the causal pathway goes both ways and that a family that functions well partakes in a family meal while a family meal encourages positive family functioning.⁶⁴

A comprehensive review of the research regarding the relationship between family meals and intervening variables, and the relationship between these intervening variables and substance use, is beyond the scope of this report. However, several findings are important to mention.

With regard to the relationship between family meals and substance, a recent literature review noted an inverse relationship between family meal frequency and adolescent substance use, particularly among females.⁶⁵ With regard to tobacco, five out of seven studies found an inverse relationship between meal frequency and tobacco use.⁶⁶ Marijuana use among adolescent males, but not females, also appears to be influenced by the frequency of family meals.⁶⁷ With regard to other illicit drugs, the authors reported that the relationship with family meals is unclear and that only one study reported a significant association between these variables.⁶⁸

Overall, family meals may be protective against substance use, but this relationship may be dependent on the substance studied, and may be modified by gender.⁶⁹ However, the same relationship was also observed with regard to the frequency of family meals and poor school performance, aggressive or violent behavior, sexual behavior, and mental health problems.⁷⁰ From a methodological perspective, the authors also made this important observation:

...there are no randomized controlled trials specific to family meals. Therefore, an opportunity exists for the development of potential interventions for increasing family meals...An experimental study design would allow for

⁶² *Id.*

⁶³ *Id.*

⁶⁴ K. A. Levin, J. Kirby and C. Currie. Adolescent Risk Behaviours and Mealtime Routines: Does Family Meal Frequency Alter the Association Between Family Structure and Risk Behaviour? *Health Education Research*, 27(1), 24-35 (2012).

⁶⁵ M. R. Skeer and E. L. Ballard. Are Family Meals as Good for Youth as We Think They Are? A Review of the Literature on Family Meals as They Pertain to Adolescent Risk Prevention. *Journal of Youth and Adolescence*, 42, 943-963 (2013).

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ *Id.*

the comprehensive examination of how family meals contribute to adolescent risk outcomes and determine potential explanations for the positive (or potentially negative) outcomes associated with family meals.⁷¹

In the absence of randomized experiments, other analytic techniques can be used to help reduce the risk of certain biases and strengthen the credibility of the evidence as it relates to causal relationships. In one methodologically sophisticated study, researchers used propensity scores to create matched treatment and control groups. The study found that:

[A]fter matching and regression adjustment, the frequency of family dinners does not affect alcohol or cigarette use; nor is it associated with substance use initiation...However...family dinners do affect marijuana use. Even after matching and regression adjustment, there is less marijuana use among adolescents who report more frequent family dinners...Given these general findings...it seems that the most important approach to understanding the causes of early adolescent drug use is to address the broader family environment, rather than focusing on family dinners in isolation from other conditions...Studies might still consider family meals as an indicator of family interaction, but attempting to isolate their effects on adolescent behaviors seems shortsighted. Yet it remains important to consider the association between family meals and marijuana use, because the findings suggest a modest causal impact that is not accounted for by other factors.⁷²

Another study analyzed longitudinal data with a rigorous design and a large number of controls and found the effect of family meals on child academic and behavioral outcomes to be small or effectively zero and not significant.⁷³ Another analysis found that:

Changes in family dinners were also statistically significant predictors of changes in substance use in a model without controls, but adding changes in other aspects of the family environment reduced the statistical significance...[Furthermore they] found no evidence of a causal effect of family dinners on delinquency, irrespective of how we modeled the process.⁷⁴

With regard to the relationship between substance use and some of the family-based intervening variables identified in the research above, a systematic review of 77 longitudinal cohort studies found evidence that supports the association between adolescent alcohol consumption and parental monitoring, involvement, communication, support, and the quality of parent-child relationships.⁷⁵

However, the Cochrane Collaboration systematically reviewed the evidence on the effectiveness of universal family-based prevention programs at preventing alcohol use among children.⁷⁶ Twelve randomized controlled trials met the inclusion criteria for this review.⁷⁷ Some, but not all, of the interventions reviewed are similar to the IF campaigns. According to the authors:

The components of the evaluated intervention programs in the majority of trials were the promotion of awareness in parents and adolescents (e.g., benefits, consequences, risks), resilient behavior, change in normative beliefs/attitudes, self-esteem, social networking, peer resistance, as well as the development of problem solving, refusal, and/or decision-making skills. Other features were development of parental rules, monitoring and supervision, support, communication between parents and their children, time spent together, attachment, and conflict resolution.⁷⁸

⁷¹ *Id.*

⁷² J. P. Hoffman and E. Warnick. Do Family Dinners Reduce the Risk for Early Adolescent Substance Use? A Propensity Score Analysis. *Journal of Health and Social Behavior*, 54(3), 335-352 (2013).

⁷³ D. P. Miller, J. Waldfogel, and W. Han. Family Meals and Child Academic and Behavioral Outcomes. *Child Development*, 83(6), 2104-2120 (2012).

⁷⁴ K. Musick and A. Meier. Assessing Causality and Persistence in Associations Between Family Dinners and Adolescent Well-Being. *Journal of Marriage and Family*, 74, 476-493 (2012).

⁷⁵ S. M. Ryan, A. F. Jorm, and D. I. Lubman. Parenting Factors Associated with Reduced Adolescent Alcohol Use: A Systematic Review of Longitudinal Studies. *Australian and New Zealand Journal of Psychiatry*, 44, 774-783 (2010).

⁷⁶ Universal prevention programs are delivered to large groups without any prior screening for risk factors. D. Foxcroft and A. Tsertsvadze, Universal Family-Based Prevention Programs for Alcohol Misuse in Young People (Review). *The Cochrane Collaboration*, Issue 9 (2011)

⁷⁷ *Id.*

⁷⁸ *Id.*

Nine of the studies demonstrated statistically significant effects across a range of outcome measures for the prevention of alcohol misuse amongst young people, in the short-term and also over the longer-term.⁷⁹ With regard to the other three studies, one suggested a positive, though not statistically significant effect which may have been due to a small sample size, and the other two studies, which did have sufficient sample sizes, found no significant positive program effects.⁸⁰

⁷⁹ *Id.*

⁸⁰ *Id.*

V. Process Assessment

This section of the report outlines a process assessment of the IF campaigns. A process assessment focuses on the activities and functions of a program, and is designed to evaluate the degree to which implementation is consistent with the program design.⁸¹ This is not intended to examine the effectiveness of a program, which was discussed in section IV.⁸² Process evaluations answer questions such as:

- How many persons are receiving services?
- Are those receiving services the intended targets?
- Are they receiving the proper amount, type, and quality of services?
- Are members of the target population aware of the program?
- Do participants engage in appropriate follow-up behavior after service?⁸³

This is consistent with the approach Informed Families takes toward measuring success, which entails answering the following questions:

- Did we send the message?
- Did anyone open or receive the message?
- Did anyone participate in the message?
- How many participants were we able to engage?⁸⁴

Quantitative data produced to answer these questions represents program outputs, but not outcomes. The distinction between outputs and outcomes is important:

Outcomes are observed characteristics of the target population or social conditions, not of the program, and the definition of an outcome makes no direct reference to program actions. Although the services delivered to program participants are often described as program “outputs,” *outcomes*, as defined here, must relate to the *benefits* those products or services might have for the participants, not simply their receipt...Put another way, outcomes always refer to characteristics that, in principle, could be observed for individuals or situations that have not received program services.⁸⁵

In a sense, outputs are the building blocks of outcomes. The following list demonstrates the kinds of outputs that are commonly mentioned in Informed Families’ reports, contracts, and promotional materials:

- The number of emails, letters, flyers, press releases, newsletters, or pledges distributed;
- The number of emails opened, flyers received, or pledges submitted;
- The number of materials or resources (activity guides, toolkits, posters, etc.) downloaded or purchased;
- The number of people who visit a website, play a campaign-related video game, participate in a scavenger hunt, or sign a banner;
- The number of people who respond to surveys and report seeing or hearing a campaign message, sharing a campaign message with someone else, or participating in a Red Ribbon event;
- The number of entries or votes cast in promotional contests;
- The number of people who attend webinars, seminars, training events, or presentations;
- The number of schools initiating the Red Ribbon certification process; and
- The number of collaborative agreements formally established with partners.

Contracted deliverables and performance measures commonly take the form of outputs. The following list demonstrates the deliverables that IF has contracted for:

⁸¹ *Supra*, note 30.

⁸² *Id.*

⁸³ *Id.*

⁸⁴ Email correspondence from Informed Families Staff, December 5, 2013.

⁸⁵ *Supra*, note 73.

- Get a minimum of 2-5% conversion rate from participation to engagement.⁸⁶
- Achieve a 2% increase of conversion rate into programs.⁸⁷
- Increase Catalyst newsletter circulation and e-blasts by 2%.⁸⁸
- Ensure that “50% of parent leaders are attending webinars” and that “50% of students, teachers and parents of Direct Service Schools have participated in the Scavenger Hunt Game and signed the Banner.”⁸⁹
- “The goal is for five schools in the target counties to participate in at least two of the four campaigns by utilizing the Distance Learning Toolkit in their schools.”⁹⁰

The existing literature does not indicate whether these outputs and performance targets are related to changes in risk and protective factors or outcomes. The standard against which performance should be judged is not clear because there is no empirical basis for determining how many pledges need to be signed, or how many flyers need to be distributed, to produce safe, healthy and drug-free children.

⁸⁶ Contract Between the South Florida Behavioral Health Network and Informed Families, The Florida Family Partnership. *Attachment IV Scope of Services* (2013-2014).

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ Subcontract between Big Bend Community Based Care and Informed Families/The Florida Family Partnership (Contract No. A009). *Attachment 1 – Manner of Service Provision* (2013).

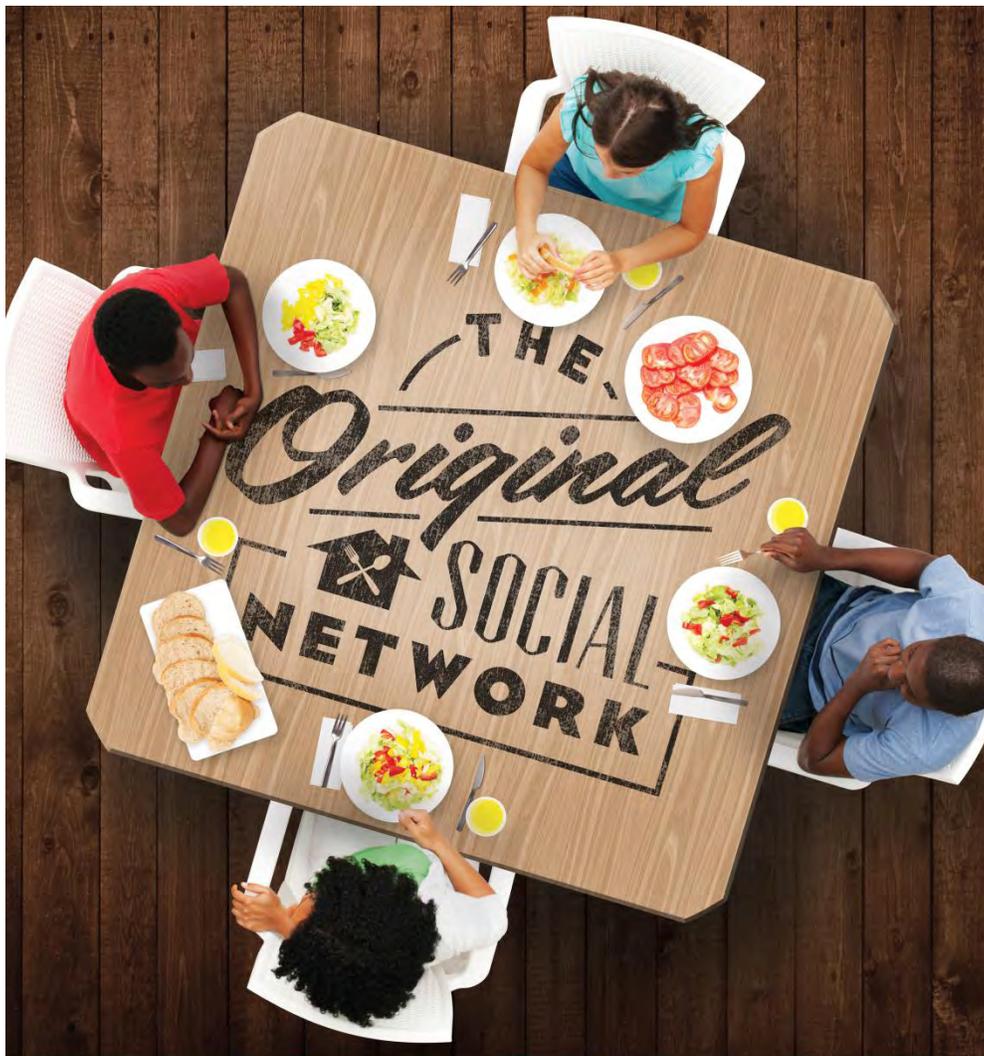
⁹⁰ *Id.*

VI. Conclusion

It is difficult to determine whether Informed Families' programs reduce youth substance abuse. Of the documents the Department obtained to assess the effectiveness of these specific programs, only one measured the outcome of interest to the Legislature -youth substance abuse - and methodological limitations preclude conclusions.

It is also difficult to determine whether these initiatives have succeeded at changing relevant risk factors. The evaluation reports provided to the Department do not contain the information needed to determine if the Family Day/Family Dinner campaign increases the frequency of family dinners. If this campaign were found to cause an increase, a causal relationship between must be proven to determine that it caused the desired outcome. This is not to discount the potential importance of the quality of parent-child relationships and parental monitoring, involvement, communication, and support when it comes to preventing youth substance abuse. Nor does it result in the conclusion that family dinners do not strengthen relationships.

**APPENDIX A – INFORMED FAMILIES OF FLORIDA REPORT TO THE FLORIDA LEGISLATURE
(DRAFT REPORT, DECEMBER 7, 2013)**



A family is only as strong as its foundation. Coming together at dinnertime each day not only keeps a family involved with each other, but also creates a network of communication and support. Visit FFamilyday.com for fun family dinner activities & to play our Family Day video game. High scores will be eligible to win a \$250 publix gift card.

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**INFORMED FAMILIES OF FLORIDA
REPORT TO THE FLORIDA LEGISLATURE
DRAFT REPORT, DECEMBER 7, 2013**

EXECUTIVE SUMMARY

Since 1982, **Informed Families of Florida** has been educating parents, structuring educational programs in schools and initiating activities that link children, parents and school systems in a network of anti-drug and anti-alcohol use messages to adolescents. Starting as a grass-roots outgrowth of the “parent movement” response to the incursion of drug use into school-age children in the 1970s and 1980s, **Informed Families** and the parent movement developed the community wheel model as a systematic model of message dissemination, outreach to key stakeholders and advocacy co-sponsors, multi-level participation by school systems and parents. As its message delivery and program models have developed, **Informed Families** is reaching a new generation of engaged Distance Learning Ambassadors who are taking the **Informed Families** message to new generations of youth. The **Informed Families** approach is aimed at strengthening the environments that research has shown have the most impact on youth development and have been found to be the most influential in inoculating a child against substance abuse, and working to offset the family and environmental risk factors endanger school-age youth.

Informed Families’ primary prevention campaigns, such as Red Ribbon, have a long history, reaching millions with their universal messages. In effect, they are part of the “school culture” for many school systems, involving multiple schools in Red Ribbon activities for such a long time that Red Ribbon Week has become entrenched in the school system culture. In addition, Informed Families has systematized many of its prevention efforts to ongoing campaigns in the present, including targeted trainings/webinars, school-based events and contests, and volunteerism.

A review of three clusters of Informed Families activities from 2004 to the present – the Community Action Teams, the Red Ribbon Program and the new Distance Learning Ambassadors initiative – shows evidence of reaching millions of parents and youth every year. There is no question that Informed Families puts forth a great deal of effort in its work to combat youth drug abuse by strengthening families, educating parents and creating positive anti-drug environments in schools. Putting forth high levels of effort is not enough, however: public participation is necessary for any prevention message to be received, heard and acted upon. Informed Families has committed itself to testing the results of specific campaigns and initiatives, seeking to demonstrate not only a high level of effort but a high level of outcomes. Two such evidence-based evaluations are discussed in this report as illustrative of the impact of Informed Families’ efforts.

+ The Family Day / Family Dinner campaign in 2013 was evaluated to determine whether significant exposure to the Family Dinner message was effective in increasing the frequency of family meals.

Based on large scale post-campaign surveys, family members who reported familiarity with the Family Day / Family Dinner campaign reported eating together significantly more frequently than families who were not familiar with the Family Day campaign.

+ In an evaluation conducted by Florida State University, researchers found that youth who attended schools that were red Ribbon Certified had a lower incidence of drug and alcohol use, higher academic achievement, and believed their parents disapproved of substance use more so than youth in matched control schools.

Increasingly, **Informed Families** structures its programming and prevention messages and campaigns to include evidence-based interventions and published data regarding the risk and protective factors influencing youth substance use. **Informed Families** leverages community resources by training Distance Learning Ambassadors to be volunteers in school systems, disseminating **Informed Families** messages and materials to Florida communities in sustainable and cost-effective ways. **Informed Families** also works within existing coalitions and networks to enhance collaboration and community efforts against youth substance use, and in doing so, is able to alter the social norms around substance use and abuse.

Informed Families seeks to continue its current primary prevention campaigns, outreach, and engagement across the state of Florida for decades to come. Specifically, future directions include increasing the level of volunteerism and recruiting more community members to serve as Distance Learning Ambassadors to both expand the number of Florida counties that receive specific targeting and outreach, and to maintain a high rate of return on investment to Florida taxpayers. **Informed Families** also plans to continue to evaluate the effectiveness of its messaging and approaches, making adjustments and adaptations as needed, and refining strategies and techniques to produce the most optimal outcomes with the fewest resources necessary. Through expanding their database with continued process and outcome measurement, **Informed Families** plans to develop a strategic plan to achieve recognition as an evidence-based program at a national level (i.e. under SAMHSA's National Registry of Evidence-based Programs and Practices).

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Summary

Purpose of this Report:

In 2013, \$750,000 was provided to Informed Families of Florida from General Revenue by the Florida legislature, for the purpose of providing a statewide program for the prevention of child and adolescent substance abuse. The Department of Children and Families was tasked with evaluating the effectiveness of these prevention efforts with the resources and services utilized throughout the state. The department shall provide a report to the chair of the Senate Appropriations Committee and the chair of the House Appropriations Committee by January 15, 2014. Important Please use the paragraph I sent you

Informed Families and the Parent Movement against youth drug abuse:

Informed Families began in 1982 as part of the "parent movement" response to adolescent drug use in the 1970s. While the widespread drug use of the 1960s was alarming for its anti-establishment counter-cultural overtones, the majority of the drug users were college-age young adults and the problem seemed encapsulated. Parents became alarmed with the drug culture began to spread among high school and junior high children in the 1970s, with marijuana use reaching an all-time high in 1978. The first parent drug education and awareness group [name] was formed in 1977 [citation?Pat Barton, First President of the National Federation of Parents for Drug Free Youth], and the number of these grass-roots groups had grown to 2,000 by 1981. First Lady Nancy Reagan added impetus to the fledgling movement by adopting the issue and NFP as her main focus: in the ensuing years, about 40 states formed statewide organizations and many collaborative initiatives were undertaken by various groups and state and national entities. Between 1978 and

1991, casual drug use dropped by 50%, and the parent movement is generally acknowledged as a significant contributor to this remarkable turnaround.

Unfortunately, these positive gains were interpreted as an indication that the drug craze of the 1970's and 1980's was over: funding for parent group support and other prevention agencies was largely cut. Children grew up, parents moved on and drug use among children went underground as alcohol, club drugs and prescription drug use replaced more visible illegal drugs, and marijuana use moved into the mainstream. During this time, ***Informed Families*** continued developing its programs to strengthen family communication, teach good decision-making and reinforce health messages with the involvement and engagement of students and parents in school-based programs. These programs have constantly faced challenges from the moving targets of changes in youth culture, the availability of prescription drugs in households, changing household demographics, and economic pressures on Florida families.

As the data in this report will show, ***Informed Families*** has become a long-standing beacon of education, coordination, and capacity building for youth, parents, families, educators, and the community. ***Informed Families*** has grown from a South Florida organization of six volunteers into a state and national organization dedicated to drug abuse prevention, centered upon a single core strategy: prevention is a grass-roots bottom-up community activity, grounded in local schools and families who take ownership of the problem to create environments that inform families of the pressures that lead to drug use among children and adolescents, and strengthen family ties and communication to inoculate the children and adolescents against these pressures. ***Informed Families*** materials and other prevention tools include school curricula, campaigns targeting specific anti-drug behaviors, using young people as student ambassadors, teacher and parent training, all available at no or little cost to the schools. These are primary prevention strategies, based on ***Informed Families'*** education/public health model, seeking to make an environmental community-wide change by targeting individuals and the environments that surround them.

From the outset, ***Informed Families*** has maintained the position that over time, , that drug use was more often a sign of dysfunctional environments than dysfunctional youth, and that strengthening communication in families and creating positive socio-emotional environments for adolescents in schools would be more effective as longer-term prevention strategies than admonitions against specific drugs. This "protective factor vs. risk factor" model is well documented in the literature (**Hawkins, et al., 1994, Hawkins, Catalano, Miller,**

1992), and is the design basis for *Informed Families'* programs. Some of these protective factors and risk factors are outlined below.

PROTECTIVE FACTORS	RISK FACTORS
Baseline positive functioning in families, including self-esteem among children, clear behavioral expectations, open and honest communication, minimal and responsible substance use by parents.	Dysfunctional families, belittling and bullying, poorly defined behavioral expectations, parents engaged in heavy alcohol and drug use, family norms support drug and alcohol use by children
Providing positive alternative norms, youth culture and peer values and bonding to these positive alternatives in families, schools, communities and peer groups	Local laws, social norms, school culture and peer group pressure favorable toward youth drug and alcohol use, firearms, crime; Lack of commitment to school
Providing opportunities to build self-esteem, coping skills, and recognition in families, schools, communities and peer groups	Limited opportunities for self-expression, participation in activities to build self-esteem in non-drug, non-crime context
Restricted casual access to prescription drugs and alcohol in the home	Easy Availability of drugs on the street, in schools, in family medicine chests

The mission of *Informed Families* is “to help kids grow up safe, healthy, and drug free.”

Informed Families operates statewide, with representatives across Florida but with targeted efforts in specific urban hubs (Pensacola, Miami-Dade, Orlando), using these urban areas as base camps to expand to other counties that are invested in the *Informed Families* model of strengthening protective factors and offsetting risk factors that impact youth drug use.

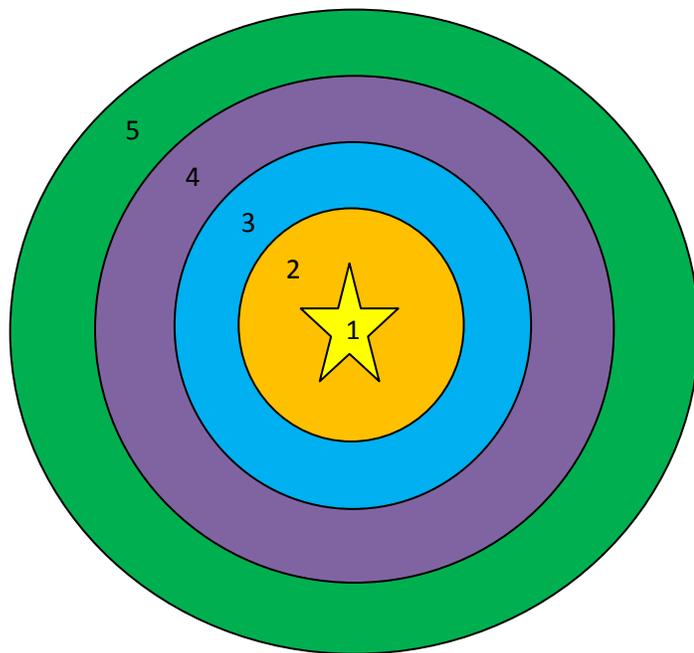
Informed Families campaigns are all under the umbrella of “Red Ribbon”, a widely recognized community symbol indicating support for prevention of youth substance use. The Red Ribbon Campaign, the largest and longest running substance abuse prevention program in the nation, encourages participants to take a stand against drugs by wearing or posting a red ribbon, Over the past 30 years, “Red Ribbon” campaigns, posters and activities have become part of the culture of elementary and secondary schools across the state. This “brand identity” is visible in all *Informed Families* campaigns, e.g., Family Day, Red Ribbon Week, Lock Your Meds, Safe Homes Safe Parties. The goal of *Informed Families* for each of these campaigns is fourfold: to **create awareness** (both through general ("universal") publicity and targeted "outreach" publicity to school and community groups); generate **participation** by youth, families, schools and communities; and ultimately to **engage** students, parents, teachers, and the community in the process of strengthening families and

weakening the impact of drug use in the community, to build healthier, stronger families. The tools **Informed Families** provides direct all stakeholders to the same page of an issue, whether it be prescription drug abuse, underage drinking, or electronic cigarette dangers, so that youth all get the same health messages and community norms can change.

This is the core of everything **Informed Families** seeks to do: to create sustainable changes in community norms and social behaviors regarding youth substance use. Specifically, by targeting messages to individual youth and their surrounding environments (parents, teachers, schools, neighborhoods), **Informed Families** seeks to create a healthy environment where smoking cigarettes or going to a party where a parent supplies alcohol is unacceptable. By directing age and population specific messages to youth, parents, teachers, principals, and other community leaders, **Informed Families** is building social capital and encouraging community members to change social norms and participate in making their communities safer, healthier, and drug-free.

Informed Families Reach

1. 🏫 Students: Elementary, Middle, High School
2. 👨‍👩‍👧 Family unit: parents, siblings, children
3. 🏫 Schools: Superintendent, principal, teachers
4. 🏛️ Organizations: Juvenile Justice, Drug Free America Foundation
5. 🌍 Greater Community



Longstanding research clearly documents that substance use prevention for youth requires comprehensive strategies that target peers, families, schools and communities. Parents have repeatedly been shown to be the most influential force against substance use (Wright & Pemberton, 2004; Ellickson, Tucker, & Klein, 2008; SAMHSA, 2009). Parents need to understand that they are an integral and effective part of substance use prevention, and Informed Families education, materials, campaign messages, and consistent outreach keeps

parents aware and in the loop on what they need to know, and how to talk to their children about drug-related issues. Informed Families prevention strategy and activities all align with research on youth substance abuse and seek to make long-lasting, community-level change.

Informed Families: the Four Dynamic Strategies

Over the years of its operations, *Informed Families* has built strategies to address these risk and protective factors and has divided its work into four (4) strategic involvement areas:

- **Universal** broadcasting of its message to wide community audiences;
- **Outreach** to specific audiences in homes, schools and communities;
- **Participation** by youth and the community in the programs designed and promulgated by Informed Families; and
- **Engagement** of youth and parents to become volunteer ambassadors and advocates for *Informed Families* programs themselves, and to become identifiable leaders in this process.

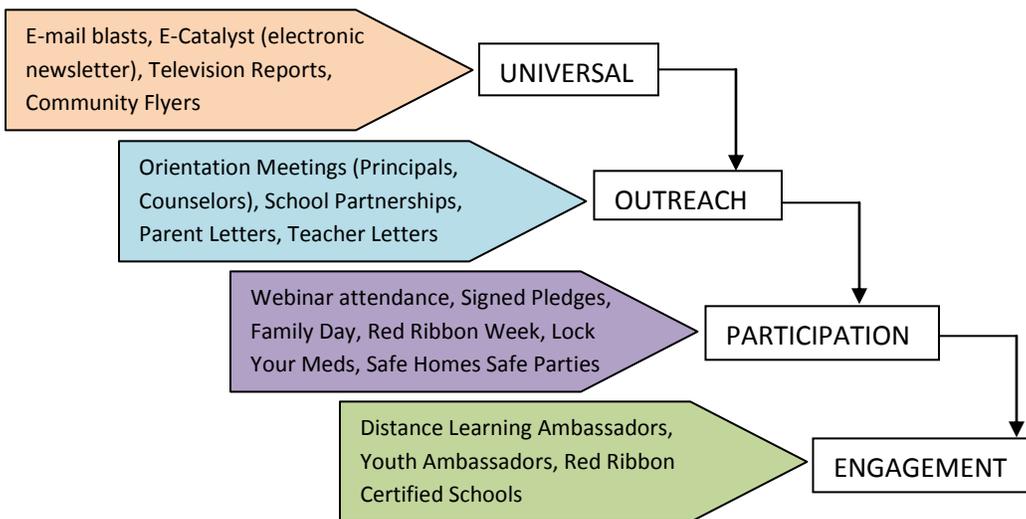
a. **Universal:** At the broadest level, *Informed Families* delivers widespread (universal) prevention and family facilitation messages to the public via email blasts, newsletters, broadcasts and website materials. These messages lay the groundwork for targeted messages and activities (outreach), with the goal of engaging some of the millions of households reached with *Informed Families'* messages into active participation and engagement as Informed Families ambassadors.

b. **Outreach:** As a sub-set of universal communications activities, *Informed Families* partners with schools and community networks to spread more targeted messages within schools and home to parents. Creative and ready-to-use materials include toolkits available to schools (i.e. morning announcement templates, campaign signs), parental materials (parent toolkits with pledges, activity ideas, webinars), and activities specifically for youth (contests for substance prevention slogans, campaign-based online games). Other outreach strategies and community resources include: letters to parents, teachers, principals, and superintendants; lunch and learn webinars; and training on how parents can become ambassadors to their child's school and disseminate *Informed Families* materials to the schools and communities. Monthly e-blasts with tips, the latest research reports, schedules for webinars and the topics covered, information about the four prevention campaigns and what will be sent to participating schools (i.e. campaign instructions, campaign morning announcements and newsletter blurbs; campaign contests with prizes, signage banners, and youth

prevention activities and information) also are sent out to families and stakeholders across the state. Finally, for those community members who sign up to be volunteer distance learning ambassadors, **Informed Families** provides them with free toolkits and campaign materials to distribute to schools.

c. **Participation** opportunities include submitting hard-copy and electronic pledges based on various campaigns (i.e. parent pledges to not allow underage drinking to occur at their homes), downloading materials from the IF website and attending the various webinars and training opportunities Informed Families organizes, and disseminating IF messages and information to schools not currently involved with Informed Families and/or fellow parents, students, community members, or legislators.

d. **Engagement** is the point at which persons exposed to Informed Families materials cease being recipients of this information and become active in disseminating them, explaining them, and developing them further. This engagement phase is measured by the number of adults who sign on to be Distance Learning Ambassadors and youth who become youth ambassadors, schools who become Red Ribbon Certified Schools, and schools participating in spreading campaign messages via **Informed Families** toolkit materials. When community members are engaged in taking a proactive stance against drugs in their communities, children are safer, academic successes come easier, and the power against such daunting issues truly is in the hands of the people.



Informed Families: level of effort and outcomes

The basis for **Informed Families'** tracking of effort and outcome has been focusing on campaigns and communications as precursors to substance abuse prevention, looking at changes in youth attitudes and

family behaviors as the basis for the inoculation process that underlies these prevention programs. **Informed Families** has been tracking their prevention program processes and activities since 2004, and select activities are listed in the historical data, below, in three main areas:

- + Building the capacity of communities and schools by engaging and supporting Community Action Teams (CAT) and team leaders,
- + Promoting the longstanding Red Ribbon Campaign and its activities around substance use prevention, and
- + Leveraging volunteers as ambassadors to decrease the overall costs of the program and build on people’s commitments to serving their communities.

Each activity they implement targets a particular level of involvement and is based in prevention literature on risk and protective factors for youth and adults. Activities range from emails out to families on the current substance abuse trends (aimed at changing community norms) to in-person and online trainings and webinars on parenting (aimed at changing adult attitudes towards youth substance use), and school morning announcements and newsletters sent to teachers, principals, and superintendants (aimed at curbing early initiation of substance use).

Historical Data: Informed Families Targeted Activities from 2004 – present	
Community Action Teams Component	
Example Activities for youth	Example Activities for adults/parents
<ul style="list-style-type: none"> • ATOD Announcements • Alcohol and Drug Prevention • Alternatives to Suspension • Youth Group • Youth Prevention Agents • Mile for Prevention • Youth conference 	<ul style="list-style-type: none"> • Newsletters, phone calls, emails, and other media • Events and Outreach meetings • Parent breakfast events • Safe Homes, Safe Parties information and pledges • Parent webinars and classes (brain development, domestic violence, life skills) • Parent Peer Groups, family bonding fatherhood initiatives
Risk Factors Targeted by the CATs	
<ol style="list-style-type: none"> 1. Favorable attitudes towards problem behavior 2. Early initiation of problem behavior 3. Community laws and norms favorable toward drug use, firearms and crime 	
Average Cost per year	\$392,570
Average Number of persons reached per year	10,693

Average Cost per person reached	\$36.73
Red Ribbon Component	
Example Activities for youth	Example Activities for adults/parents
<ul style="list-style-type: none"> • ATOD Announcements • Alcohol, Tobacco and Substance Prevention • Violence Prevention • Family Day • Red Ribbon 	<ul style="list-style-type: none"> • Newsletters, phone calls, emails, and other media • Parent Peer Groups • Red Ribbon Guide • Health Fairs • Family Day toolkit • Safe Homes Safe Parties toolkit • Lock your Meds toolkit • Red Ribbon toolkit • Parent breakfast events
Risk Factors Targeted	
<ol style="list-style-type: none"> 1. Favorable parental attitudes and involvement in the problem behavior 2. Early initiation of problem behavior 3. Community laws and norms favorable toward drug use, firearms and crime 	
Average Cost per year	\$242,820
Average Number of persons reached per year	3,152,745
Average Cost per person reached	\$.08
Distance Learning Ambassadors Component	
Example Activities for youth	Example Activities for adults/parents
<ul style="list-style-type: none"> • Google impressions • Television media • Distance learning training 	<ul style="list-style-type: none"> • Google impressions • Television media • Distance learning training • Family Day signed pledges • Lock your Meds signed pledges • Safe Homes Safe Parties signed pledges
Risk Factors Targeted	
<ol style="list-style-type: none"> 1. Favorable parental attitudes and involvement in the problem behavior 2. Early initiation of problem behavior 3. Community laws and norms favorable toward drug use, firearms and crime 	
Average Cost per year	\$124,638
Average Number of persons reached per year	610,798
Average Cost per person reached	\$.20

From time to time, ***Informed Families*** has also utilized the resources of external evaluation teams as independent evaluators of the effectiveness of their campaigns. The most recent of these are Florida State University's evaluation of the Red Ribbon Certified Schools program, and Behavioral Science Research

Institute's evaluation of the September 2013 Family Day Family Dinner Campaign and their October 2013 Red Ribbon Week Campaign. These external evaluations are outlined below.

Effectiveness Case Example 1: Florida State University's evaluation of the

RED RIBBON CERTIFIED SCHOOL PROGRAM

Research documents that approximately 30% of high school students by the age of 18 will experiment with drugs and alcohol (NIDA, 2012). Related literature indicates that an adolescent's social surroundings, made up primarily of his/her school environment during the middle and high school years, plays a large role in determining attitudes toward health behaviors (Flay, 2000). In response to this, a number of school-based environmental approaches have emerged as possible prevention strategies to reach youth (Botvin and Botvin, 1992 and Hansen, 1992). Environmental strategies seek to change the environment where risky behaviors occur by recognizing the risks associated with an individual's social surroundings.

The Red Ribbon Certified Schools (RRCS) Program is a major component of the Red Ribbon Campaign and serves as an assessment and recognition tool designed to review existing policies, identify corrective measures, and highlight effective efforts in the prevention of substance use among students. The goal of the program, consistent with all of *Informed Families* campaigns, is to increase the protective factors and decrease the risk factors by involving parents, schools, students, and community supporters. RRCS creates a prevention-oriented culture in participating schools in order to enhance outcomes for youth by reducing factors that place a youth at risk of using drugs or alcohol (risk factors) and increasing factors that protect a youth from using drugs or alcohol (protective factors)—all of which improve student health behaviors (Hawkins et al, 2001). As a prevention strategy, RRCS is designed to change student substance use and abuse attitudes, impact awareness of issues and trends, and provide alternative opportunities to celebrate and promote positive health behaviors.

The 2013 evaluation of RRCS by Florida State University prevention researchers contained the following findings that are consistent with the literature on primary prevention:

- RRCS plays a significant role in students' attitudes, beliefs, and practices toward drugs and alcohol-- students in RRCS schools had **better attitudes** toward non-substance use than students in control schools
- Students in RRCS schools reported that they **used drugs and alcohol less frequently** than students in control schools
- Students in RRCS schools reported **higher academic achievement** than students in control schools

- Students in RRCS schools found it more difficult to procure drugs and alcohol, perceived their neighborhoods as *safer*, and believed their neighbors are more concerned about students using substances than students in control schools
- Students in RRCS schools perceived their parents as more disapproving of drugs and alcohol and having clearer rules regarding substance use than students in control schools
- Parental involvement is a key element in student performance--students in RRCS schools experienced positive effects of *parental monitoring* of substance use
- The visibility of RRCS within a school *raises awareness* about substance abuse prevention.

Effectiveness Case Example 2: Behavioral Science Research Institute's evaluation of the

FAMILY DAY / FAMILY DINNER CAMPAIGN

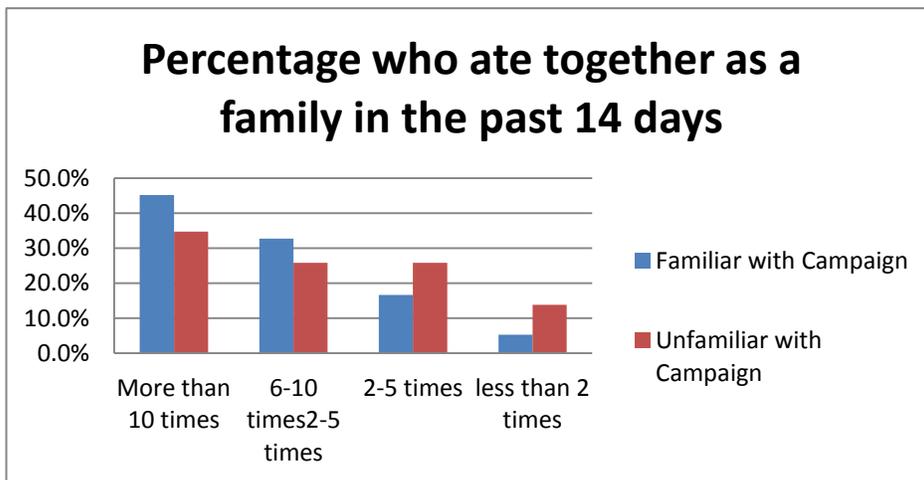
During the month of September, 2013, *Informed Families* disseminated information on its Family Day campaign, which encourages parents and youth to eat dinner as a family as often as possible, and specifically to do so on September 23 – the actual Family Day. This idea is based on research conducted by the National Center on Addiction and Substance Abuse at Columbia University that found, regardless of economic status, race, or household makeup, the more often children eat dinner with their families, the less likely they are to smoke, drink or use illegal drugs. Created by CASAColumbia™ in 2001, Family Day - A Day to Eat Dinner with Your Children is a national effort to promote family dinners as an effective way to reduce substance abuse among children and teens.

For this campaign, Informed Families posted their Family Day toolkit for download, sent materials to learning ambassadors and schools, and worked with a marketing company to develop creative posters targeting youth and families, and to develop a Family Day game where playing and posting scores rewarded participants with chance to win a Publix gift card. They also posted a video of Miami catering chef Chris Valdes preparing three healthy meal options that could be prepared as a family.

Behavioral Science Research Institute evaluated the effectiveness of the Family Day campaign based on post-campaign assessments of differences between families exposed to (and aware of) the campaign and families that were not. Post-campaign surveys were distributed by email to target adults and youth, asking questions on how important eating together as a family was to them, how often they ate together as a family in the past two weeks, whether they were familiar with the Family Day campaign, and if they specifically ate together on September 23 because of Family Day. Results of the campaign evaluation indicated that:

- Nearly all respondents (90%) recognized that eating together as a family was “Extremely Important”

- Persons who had heard about the campaign were more likely to report eating together as a family in the recent two weeks (See Figure below) than persons who had not.
- The Informed Families campaign messages reached people in multiple formats: 76% heard via email; 15% received information from the Informed Families website; 10% heard the campaign messages from a distance learning ambassador, and 10% received the information from a friend or colleague. This data clearly demonstrates the effectiveness of Informed Families in utilizing multiple outlets for their campaign information.
- The majority of survey respondents (82%) did eat dinner together as a family on Family Day (September 23) and more than one-third said this decision was motivated by the Family Day campaign.



Effectiveness Case Example 3: Behavioral Science Research Institute's evaluation of the **2013 RED RIBBON WEEK CAMPAIGN**

The Red Ribbon Campaign, the largest and longest running prevention program in the nation, encourages participants to take a stand against drugs by wearing or posting a red ribbon. Red Ribbon Week takes place every year from October 23-31 at a national level sponsored by the National Family Partnership, and sponsored in Florida by *Informed Families*. For this past 2013 Red Ribbon Week, Informed Families created and distributed a new toolkit to parents, ambassadors, and school leaders which included tips for parents, a parent and student pledge, posters, flyers, and a planning guide. More than 6,000 schools and faith-based organizations received materials, and celebrated with poster and essay contests, decorating, hosting parades, and coordinating fundraising activities.

Behavioral Science Research Institute designed post-campaign surveys, emailed out following the end of the week (early November) asking respondents how they had heard about Red Ribbon Week (if at all), whether they participated and how, if they passed along the Red Ribbon Week message, and what barriers they experienced in participating if any. A total of 626 persons responded to the survey: responses are summarized below.

- Respondents reported hearing about the campaign from a variety of places and people including Informed Families emails (40.3%), their child's school (27.3%), from their child (16%), and from the Informed Families website (15.7%). Small percentages also heard about the campaign week from a fellow parent or colleague, indicating that Informed Families methods of outreach and engagement cast a wide net and are effective in spreading the message.
- Out of the 626 survey respondents, only 11% reported that they did not pass on the Red Ribbon Week message. More than half (51%) passed the message onto a child and 49% passed the message onto school personnel. One-third of participants shared the message with a fellow parent, and many people wrote in responses including sharing the message with classrooms, the larger community, coworkers, churches and other faith-based organizations, and friends and family. Again, this data indicates that Informed Families is not only getting these campaign messages to constituents, but also encouraging them to participate and take ownership of these messages to create a healthier community for youth.
- 83% of participants who responded to the online survey reported that they did participate in Red Ribbon Week. The most common way people participated was to decorate something (57%), followed by telling others about the message (50%), taking the pledge (47%), and being an ambassador (10%). Other responses included participating in and coordinating school-hosted activities, held a Red Ribbon parade, joined online videos and discussion groups, and ran/walked in Red Ribbon races.
- For those respondents who wanted to do more for Red Ribbon Week, the most commonly endorsed barrier to greater participation was a lack of time during the week (32%). A small fraction of respondents cited Informed Families-specific reasons as barriers including a Lack of information (5%) and insufficient toolkits (2%), again reinforcing that, for those who want to participate, Informed Families provides the necessary tools and capacity.

Statistics tell only part of the story. Below is a text from a graduate student in Williamsburg, VA, reporting the way in which the Red Ribbon campaign was conducted at her school.

November 16, 2013

To Peggy Sapp, President of The National Family Partnership:

My name is Morgan McNally and I am a graduate student at the College of William and Mary, working towards my Master's degree in School Counseling. This semester I am doing my internship at Queens Lake Middle School in York County. This is the first year that Queens Lake Middle has participated in the Red Ribbon Week Campaign and it was a huge success! I think that the campaign and pledge provide a wonderful opportunity and avenue to talk to youth, their families, and the community about drugs and the dangers of drug abuse.

One way in which our school partook in Red Ribbon Week this year was to have the students show their support through a spirit week! Each day had a drug related theme to which the students could show their support by dressing up. The week consisted of: Monday "I am FREE from drugs"- wear red, white, and blue; Tuesday "My future is BRIGHT, no drugs in sight"- wear neon and bright clothes; Wednesday "Friends don't let friends do drugs"- dress like twins or match a group; Thursday "Drugs are Wacky"- dress in your wacky tacky clothes; Friday "I mustache you (must ask you) to stay away from drugs"- wear mustaches and mustache clothes. This was a great way to get the kids excited about Red Ribbon Week and invested in the campaign. We also did a daily multiple-choice special Question of the Day in the morning over the announcements and all the students would answer in their first blocks and get candy at lunch for participating. The questions were all related to different side effects and dangers of drugs in the form of "what drug causes these side effects...". In addition we had all of our students read aloud and sign a pledge banner to agree to be drug free. We had a lot of support from families and teachers. Some classrooms used their resources to incorporate the dangers of drugs into their lessons and projects. Overall, it was a great way to start the conversations about drugs and raise awareness in the community.

Alcohol and drugs are a really hard topic to bring up in schools and often administration and parents do not want to address the issue at all. I cannot express enough how instrumental campaigns such as Red Ribbon Week can be in the lives of students. Since RRW we have had students coming into the counseling office to talk about drug related issues in their lives and express how they didn't realize something like spice could be as dangerous as more "hard core" drugs. These conversations are ones that need to be happening year round but this was a really great start. We plan to have our students sign the pledge every year and to infuse more activity to raise awareness into our Red Ribbon Week.

Sincerely,

Morgan McNally

Candidate for M.Ed in Counseling, School Counseling Track

College of William & Mary

SUMMARY

IF has been around doing this work for a long time and is known within the state, country, and internationally through its campaigns/programs/strategies

IF is unique in its approach

IF forms collaborations and works in conjunction with schools, parents, community organizations, prevention programs, prevention coalitions, etc

IF's work gets people to actively participate in making their schools, families, and communities healthier, they are invested in the next generation of Floridians, they are making both community-level and statewide impacts (IFF'd approach is unique; its impact is aligned with prevailing research documenting the effectiveness of primary prevention efforts)

IF is cost-effective

Informed Families plans to continue its work, investing more in recruiting distance learning ambassadors and expanding the number of communities that currently receive specific targeting and outreach. Another major goal Informed Families will focus on is to continue collecting outcome data on their campaigns and intervention strategies, both at the individual and community level. By constantly evaluating its messaging and approaches, Informed Families can make adjustments and expand based on data-driven outcomes, increasing their effectiveness and thus their return on investment. All of this data and evaluations can then be used to begin achieving recognition as an evidence-based program at a national level (i.e. under SAMHSA's National Registry of Evidence-based Programs and Practices).

APPENDIX B – Behavioral Science Research Institute Report on the Family Day/Family Dinner Campaign

2013 Family Day Campaign

Informed Families

Background:

During the month of September, 2013, ***Informed Families*** disseminated information on its Family Day campaign, which encourages parents and youth to eat dinner as a family as often as possible, and specifically to do so on September 23 – the actual Family Day. This idea is based on research conducted by the National Center on Addiction and Substance Abuse at Columbia University that found, regardless of economic status, race, or household makeup, the more often children eat dinner with their families, the less likely they are to smoke, drink or use illegal drugs. Created by CASAColumbia™ in 2001, Family Day - A Day to Eat Dinner with Your Children is a national effort to promote family dinners as an effective way to reduce substance abuse among children and teens.

For this campaign, Informed Families posted their Family Day toolkit for download, sent materials to learning ambassadors and schools, and worked with a marketing company to develop creative posters targeting youth and families, and to develop a Family Day game where playing and posting scores rewarded participants with chance to win a Publix gift card. They also posted a video of Miami catering chef Chris Valdes preparing three healthy meal options that could be prepared as a family.

Methodology:

BSRI worked with Informed Families to develop a pretest and posttest to be distributed via the Informed Families email distribution list prior to the campaign during the second week in September. The email distribution list includes email and contact information from IF donors, volunteers, partners and sponsors, as well as educators, school administrators, church leaders, governmental contacts, parents and concerned citizens who we've met over the years through our programs. It also includes community members who've opted in to receive more information via the Informed Families website. The goal of the pretest was to capture data on the makeup of the respondent's family, how the respondent heard about the Family Day campaign, their opinion about the importance of eating together as a family, how often they eat dinner as a family, and the barriers to eating dinner together as a family. The sample received an Informed Families email about the Family Day Dinner Dash online game as part of the Family Day Campaign. The email (attached) mentioned that if they decided to participate in the online game and post their scores, they would be entered into a drawing for a \$50 Publix gift card. If the sample chose to click on the game icon directing them to play the game, they were then taken to a link with the online pretest first.

In addition to the pretest, BSRI also developed two posttest measures: one was aimed at persons who were *pretest responders*, and the second directed at the general Informed Families sample of *non-pretest responders*. The goal was to elicit enough pretest/posttest matches that the alternative posttest would serve as a control group, thus providing more power to detect specific attitude and behavior changes that were a direct result of the campaign. The posttest forms were slightly different. The measure directed towards *pretest responders* was nearly identical to the pretest with additional items asking how they were involved with the campaign, how important the Publix gift card incentive was to their involvement with the Family Day Dinner Dash online game, and whether they were able to eat together as a family on Family Day (September 23). The sample of *pre-test responders* was emailed the posttest directed towards them using the same email address they responded to the pretest with. For *non-pretest responders*, the general Informed Distribution list was used after removing the emails of those who took the pretest. This survey included similar questions as well, and also asked whether they were familiar with the campaign (and if so, how), and whether they recalled seeing promotional materials. Specifically, the survey asked about two promotional posters that Informed Families had developed by an external marketing company (Appendix A).

Pretest emails blasts were sent out prior to Family Day on ten different occasions and included the opportunity for an incentive immediately (a drawing for a \$50 Publix gift card). Although a total of 872 persons clicked on the Family Day Dinner Dash game link, thus opening the pretest survey, just 361 people completed the pretest giving a response rate of 1% (See Table 1). Informed Families then emailed these pretest completers the posttest (they were sent the posttest to the email address they responded to the pretest with), only 20 persons opened the survey (6.4% response rate). As shown in Table 3, the email with the survey link was sent out on three different occasions. After receiving fifteen responses, Informed Families offered an incentive - a chance to win a \$50 Publix Gift Card. However, this only resulted in an additional five responders. Ultimately, from the total twenty responders, only 12 could be matched to their original pretest using their email addresses. Thus, this matched sample of pre-posttest responders only provided complete paired data for twelve persons. Hence, BSRI worker with Informed Families and ultimately decided to analyze the posttest (pretest non-responder) data.

Table 1.

Family Day Pre-Survey Email Blasts						
Date Mailing was Sent Out	Number of Recipients	Number of People who opened mailing	Total Number of Clicked Links	Number of People who Clicked ANY link on the mailing (unique clicks)	Number of clicks captured for Family Day Game link	Incentive given?
9/10/2013	10,938	938	146	91	99	Yes
9/18/2013	30,897	2067	611	383	413	Yes
9/10/2013	226	43	21	12	0	Yes
9/10/2013	20,210	1,319	428	249	274	Yes
9/10/2013	174	39	5	3	4	Yes
9/11/2013	62	17	20	5	10	Yes
9/11/2013	234	45	6	5	3	Yes
9/12/2013	14,083	1035	296	151	69	Yes
9/16/2013	61	3	0	0	0	Yes
9/16/2013	230	22	2	1	0	Yes
	77,115	5528	1535	900	872	

Table 2.

Family Day Post Survey: <i>Pretest Responders</i>						
Date Mailing was Sent Out	Number of Recipients	Number of People who opened mailing	Total Number of Clicked Links	Number of People who Clicked ANY link on the mailing (unique clicks)	Number of clicks captured for FD Post-Survey link	Incentive given?
10/10/2013	310	41	14	11	7	No
10/15/2013	274	25	12	9	8	No
10/21/2013	291	51	5	5	5	Yes
	875	117		25	20	

For *pretest non-responders*, the email blast with survey link was sent out to all persons on the distribution list (n = 30,540) with the exception of those who completed the pretest. Again, the email blast was sent out on three different occasions, with an incentive offered (a chance to win a \$50 Publix gift card) on the third attempt. After the second attempt, only 133 persons had opened the survey; however, in this case, the incentive seemed to have a huge impact, generating an additional 571 respondents! The response rate for this group was 2.3%, with 704 participants who opened the survey and 507 unduplicated individuals who completed it in full. **All participants and results discussed below reflect this sample of *pretest non-responders*.**

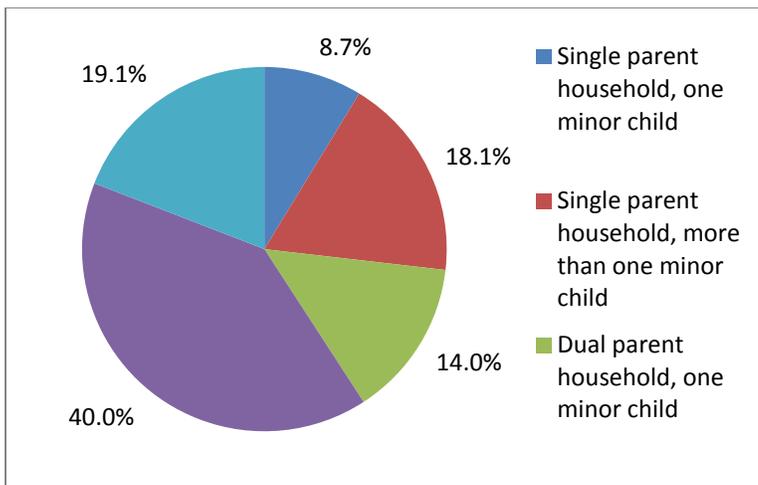
Table 3.

Family Day Post Survey: <i>Pretest Non-Responders</i>						
Date Mailing was Sent Out	Number of Recipients	Number of People who opened mailing	Total Number of Clicked Links	Number of People who Clicked ANY link on the mailing (unique clicks)	Number of clicks captured for FD Post-Survey link	Incentive given?
10/10/2013	30540	1882	183	139	82	No
10/15/2013	28687	992	98	76	51	No
10/21/2013	30318	2822	744	647	571	Yes
	89545	5696		862	704	

Participants

- 1) Respondents were first asked about their family composition. As can be seen from the data below, the majority of respondents belonged to a two-parent household and had multiple minor children. The “Not Applicable” category most likely represented others who may be on the distribution list, but are not parents; including school personnel (i.e principals, teachers, etc.) or other family members (adult siblings or children).

Which best describes your family? (n = 507)	
Answer	Percentage
Single parent household, one minor child	8.7%
Single parent household, more than one minor child	18.1%
Dual parent household, one minor child	14.0%
Dual parent household, more than one minor child	40.0%
Not applicable	19.1%

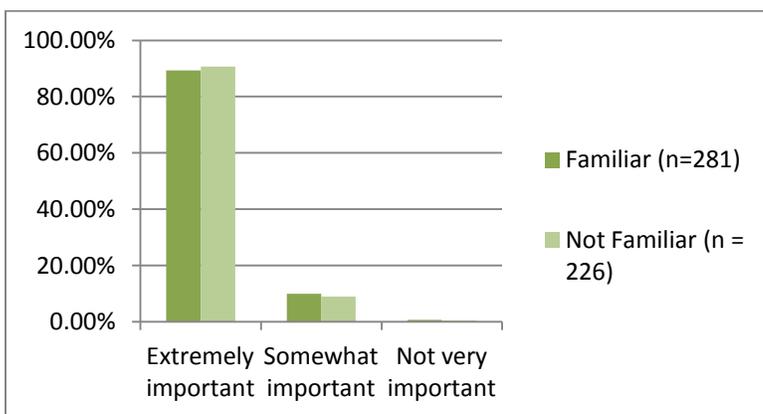


Attitudes and Behaviors: Eating together as a family

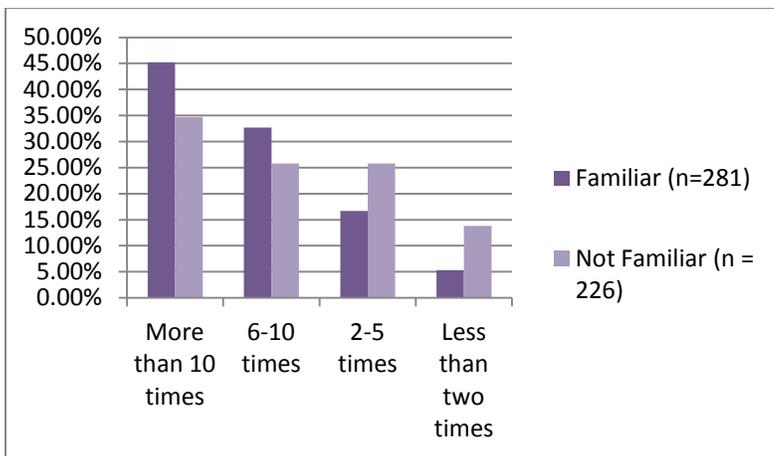
2) Participants were asked about how important eating dinner together as a family is and how often in the past two weeks they actually ate dinner together. For these items, frequencies were examined based on whether respondents had heard about the Family Day campaign (n = 281; 55%) or not (n = 226; 45%).

Regarding the importance of eating dinner together as a family, respondents overwhelmingly believed it was “extremely important” regardless of whether they were familiar with the campaign. However, those who reported familiarity with the Informed Families Family Day campaign were significantly more likely to report eating together as a family during the past two weeks, $\chi^2: 20.19; df: 3, p<0.001$.

In your opinion, how important is it for your family to eat dinner together? (n = 507)		
Answer	Familiar (n=281)	Not Familiar (n = 226)
Extremely important	89.30%	90.70%
Somewhat important	10.00%	8.90%
Not very important	0.70%	0.40%



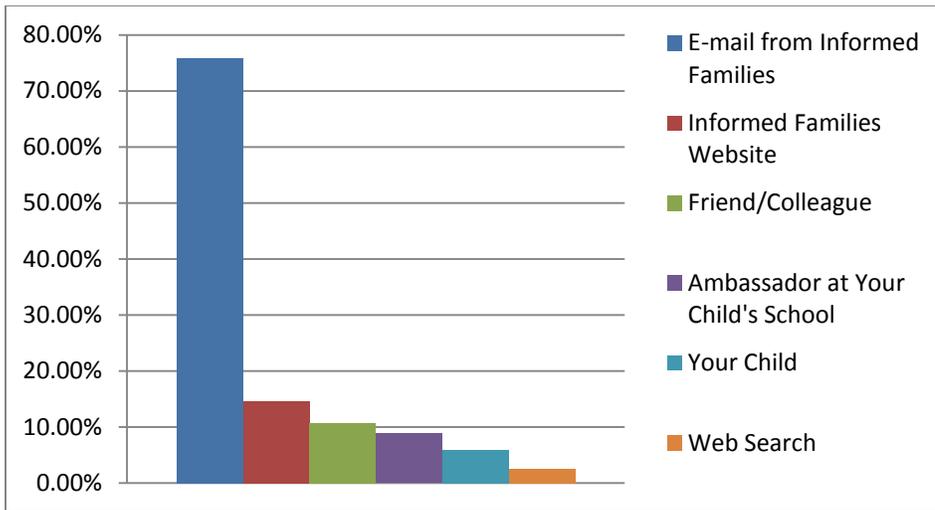
Thinking about the past two weeks (14 days), how often did your family eat dinner together? (n = 507)		
Answer	Familiar (n=281)	Not Familiar (n = 226)
More than 10 times	45.20%	34.70%
6-10 times	32.70%	25.80%
2-5 times	16.70%	25.80%
Less than two times	5.30%	13.80%



Informed Families universal messaging

3) For those 281 respondents who reported familiarity with the Family Day campaign, they were asked to select all the ways that they had heard about it. Results indicated that, while the majority of messaging about the campaign was received via email, Informed Families was also successful in their universal prevention efforts, reaching people via their website and school system connections. Respondents also indicated that they heard about the campaign from their friends and colleagues, and from their children, indicating that people are not only hearing the Informed Families prevention messages, they are sharing these messages with others.

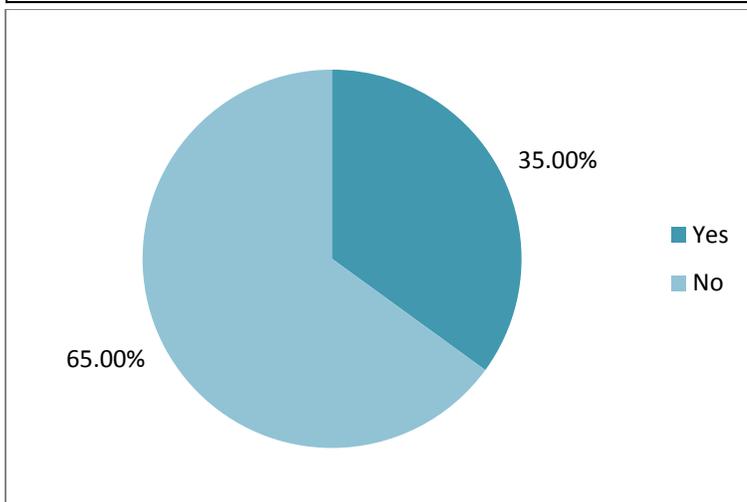
How did you hear about Informed Families' Family day / Family Dinner campaign? (n = 281)	
Answer	Percentage
E-mail from Informed Families	75.80%
Informed Families Website	14.60%
Friend/Colleague	10.70%
Ambassador at Your Child's School	8.90%
Your Child	6.00%
Web Search	2.50%



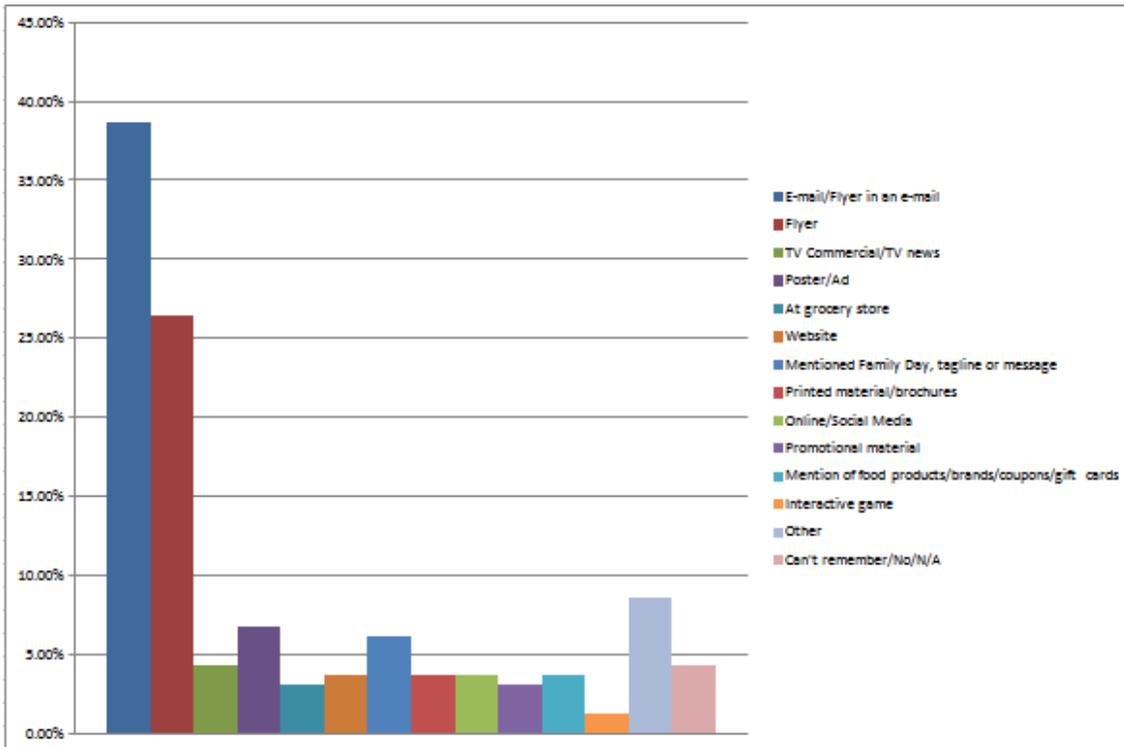
Family Day promotional materials

4) Although 55% of the respondent sample did report familiarity with the Family Day campaign, just 35% recalled seeing campaign-specific promotional materials. Still, data indicated that, for those who did recall seeing materials, the materials were widely distributed across locations.

Do you recall seeing any Family Day / Family Dinner promotional materials? (n = 507)	
Answer	Percentage
Yes	35.00%
No	65.00%



Family Day marketing posters



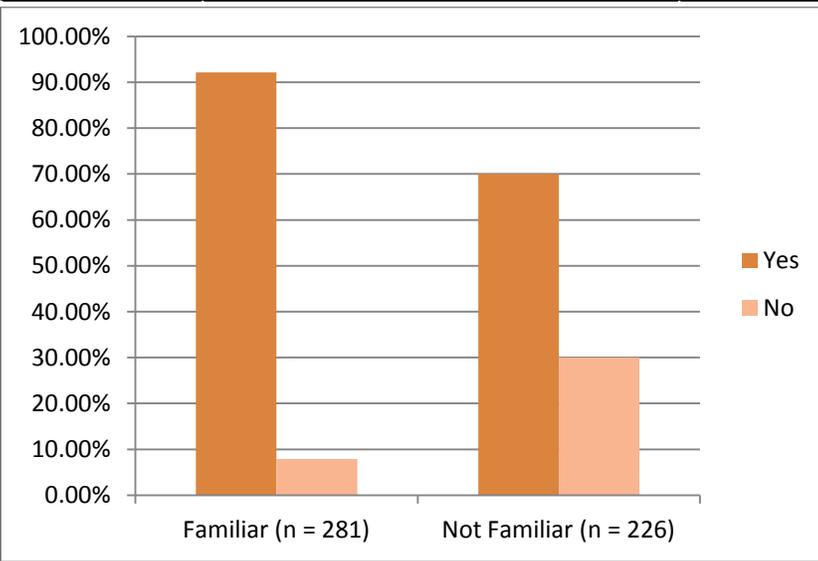
5) Informed Families worked with a local marketing company to develop two Family Day posters which were distributed to children in schools who participated in the campaign. Although materials were sent home to all children attending these schools, just over one-third of respondents recalled seeing the first poster and less than one-quarter of respondents recalled seeing the second poster.

Do you recall seeing a poster or flyer with (n = 507):		
Answer	Children sitting around a table together, describing eating dinner together as the "Original Social Network"?	Two small children at the dinner table with a large green monster or action figure, with text that says "Tune in and Turn off - It's dinner time"?
Yes	36.40%	23.70%
No	25.40%	42.80%
Can't Remember	38.20%	33.50%

Informed Families campaign impact on behavior

6) Finally, responders were asked whether they ultimately did eat dinner together as a family on Family Day (September 23, 2013). As seen below, although both those who were familiar with the campaign and those who were not familiar both reported eating dinner together at high rates, respondents who were familiar with the Family Day campaign were significantly more likely to report eating together on Family Day 2013, $\chi^2: 41.49; df: 1, p < 0.001$.

September 23, 2013 was Family Day. Was your family able to eat dinner together on September 23? (n = 507)		
Answer	Familiar (n = 281)	Not Familiar (n = 226)
Yes	92.10%	70.00%
No	7.90%	30.00%



APPENDIX C – Behavioral Science Research Institute Report on the 2013 Red Ribbon Week

2013 Red Ribbon Week

Informed Families

Background:

The Red Ribbon Campaign, the largest and longest running prevention program in the nation, encourages participants to take a stand against drugs by wearing or posting a red ribbon. Red Ribbon Week takes place every year from October 23-31 at a national level sponsored by the National Family Partnership, and sponsored in Florida by *Informed Families*. For this past 2013 Red Ribbon Week, Informed Families created and distributed a new toolkit to parents, ambassadors, and school leaders which included tips for parents, a parent and student pledge, posters, flyers, and a planning guide. More than 6,000 schools and faith-based organizations received materials, and celebrated with poster and essay contests, decorating, hosting parades, and coordinating fundraising activities.

Methodology:

Behavioral Science Research Institute worked with Informed Families to develop a posttest to be distributed via the Informed Families email distribution list prior to the campaign during the second week in September. The email distribution list includes email and contact information from IF donors, volunteers, partners and sponsors, as well as educators, school administrators, church leaders, governmental contacts, parents and concerned citizens who we've met over the years through our programs. It also includes community members who've opted in to receive more information via the Informed Families website. Given the campaign goal to encourage involvement in substance use prevention (i.e. more process rather than behavior change outcome-based), a posttest only design was used. The goal of the posttest was to capture whether the sample had heard about Red Ribbon Week (and if so, how), whether they participated (and if so, how), if they passed along the Red Ribbon Week message, and what barriers to participation they experienced. The posttest was emailed out to the Informed Families distribution list following Red Ribbon Week in the second and third weeks in November.

To keep the posttest sample size high, Informed Families continued to distribute the posttest in three email blast iterations, and via one online newsletter email (November 19) offering a chance to win a \$50 Publix gift card incentive on all occasions. The total response rate for people who opened the posttest survey was 4.4% (See Table 1, below). After cleaning the data for duplicates and Informed Families staff, a total of 626 responders were left in the data set.

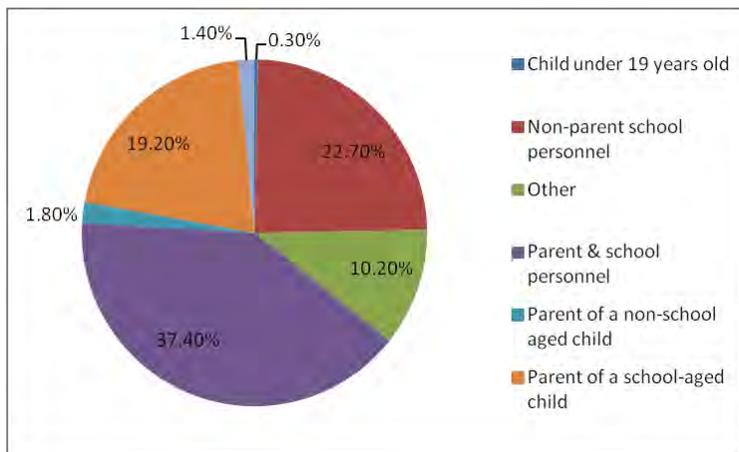
Red Ribbon Post Survey Responders

Date Mailing was Sent Out	Number of Recipients	Number of People who opened mailing	Total Number of Clicked Links	Number of People who Clicked ANY link on the mailing (unique clicks)	Number of clicks captured for RR Post-Survey link	Incentive given?
11/12/2013	23,183	1,703	673	543	511	Yes
11/15/2013	22,899	1,434	297	262	241	Yes
11/19/2013	7046	419	125	82	25	Yes
11/21/2013	22,751	1,097	310	267	253	Yes
	75,879	4,653		1154	1030	

Participants

1. Respondents were asked first to select the best option describing them. Results shown below indicate that most respondents were parents and school personnel followed by parent and school personnel non-parent.

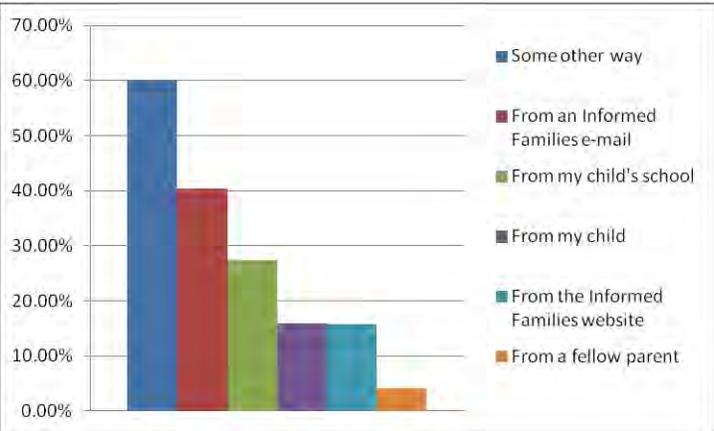
I am a...(n = 626)	
Answer	Percentage
Child under 19 years old	0.30%
Non-parent school personnel	22.70%
Other	10.20%
Parent & school personnel	37.40%
Parent of a non-school aged child	1.80%
Parent of a school-aged child	19.20%
Prevention coalition	1.40%



Universal Campaign Awareness

2. Respondents were asked about how they heard of Red Ribbon Week, and they were able to select all options that applied. Of the options provided within the survey, most said they heard through the Informed Families email blasts; however, substantial percentages also heard from both their child's school and from their child. More than half of respondents also said they heard about the Red Ribbon Week campaign in some other way. For these respondents, by far the most common response was through their school where many reported working as a teacher or a counselor, or through a school listserv (i.e. Dade schools). Others reported seeing flyers around or at their places of employment (i.e. Connect-ed), and some said they heard about it through a colleague working at a participating school. Clearly, Informed Families universal prevention awareness is disseminated across multiple channels, including children in the process.

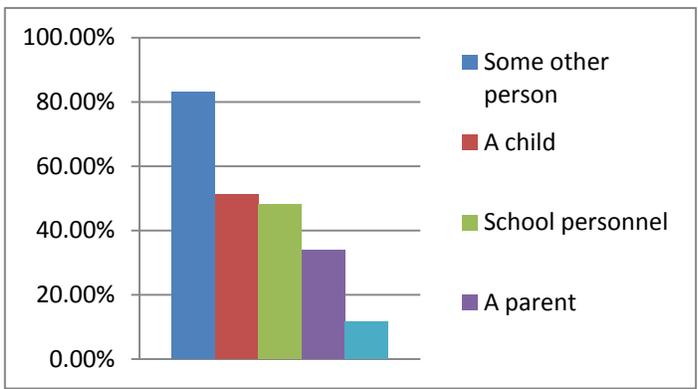
How did you hear about ...? (n = 626)	
Answer	Percentage
Some other way	60.10%
From an Informed Families e-mail	40.30%
From my child's school	27.30%
From my child	16.00%
From the Informed Families website	15.70%
From a fellow parent	4.20%



Red Ribbon Week: Spreading the Universal Prevention Message

3. Part of the Red Ribbon Week involves relaying the message of the campaign about getting involved in youth substance abuse prevention on to others. Respondents were asked who they passed the message along to and were able to select multiple responses. Very few persons (11.7%) said that they did not pass on the messages of Red Ribbon Week. For those who did pass it along to at least one other person, a child was the most common followed by school personnel and another parent. Many people reported telling someone about the Red Ribbon Week message to stay drug-free. For those who mentioned they told “some other person”, respondents most frequently mentioned was students or “my class”. Church, friends and family members, neighbors, and the community were also mentioned by respondents. Again, this data indicates that Informed Families is not only getting these campaign messages to constituents, but also encouraging them to participate and take ownership of these messages to create a healthier community for youth.

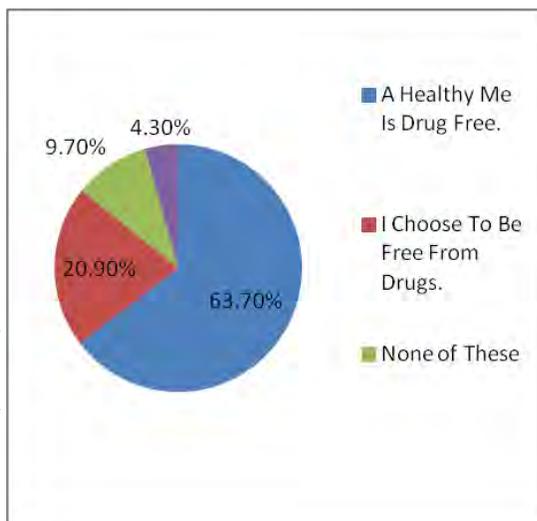
Who did you pass the message on to? (n = 626)	
Answer	Percentage (YES)
A child	51.10%
School personnel	48.10%
A parent	33.90%
Some other person	83.10%
No one	11.70%



Red Ribbon Week Theme Identification

4. Each year, Red Ribbon Week has a theme which students generate and vote on in the previous year. Respondents were asked to identify the 2013 Red Ribbon Week themes which was: A Healthy Me is Drug Free. Almost two-thirds (63.7%) of respondents did know the correct 2013 theme.

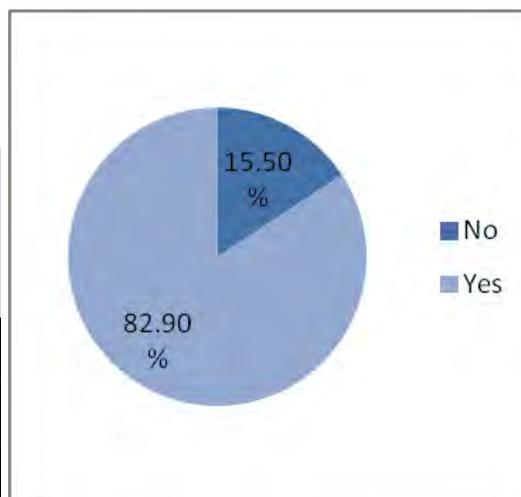
Which of the following is the 2013 Red Ribbon Week Theme? (n = 626)	
Answer	Percent
A Healthy Me Is Drug Free.	63.70%
I Choose To Be Free From Drugs.	20.90%
None of These	9.70%
Red Ribbon Week Helps Me Stay Healthy.	4.30%



Red Ribbon Week Participation

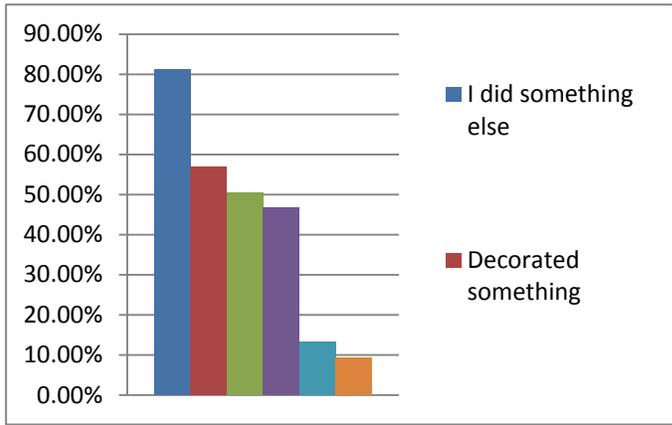
5. Respondents to the Red Ribbon Week Post Survey were asked some questions about whether they participated in the campaign, how they participated, and whether they faced any barriers to participating. First, the majority of respondents did participate during the week in some way (82.9%). Respondents were asked about specific activities they may have engaged in and could select all that applied, as well as could write in their own activity. Many decorated something with a red ribbon or red ribbon banners or flyers. As mentioned earlier, many also reported that they shared the message with people and nearly half also took the Red Ribbon Pledge. Slightly less than 10% reported that they were distance learning ambassadors for the Red Ribbon Week. Just 13.3% of respondents did not participate in any way. The majority also reported participating in an activity not mentioned in the survey. Some other activities mentioned included participating in and coordinating school-hosted activities, held a Red Ribbon parade, joined online videos and discussion groups, and ran/walked in Red Ribbon races.

Did you participate in the Red Ribbon Week?	
Answer	Percent
No	15.50%
Yes	82.90%



How did you participate? (n = 626)

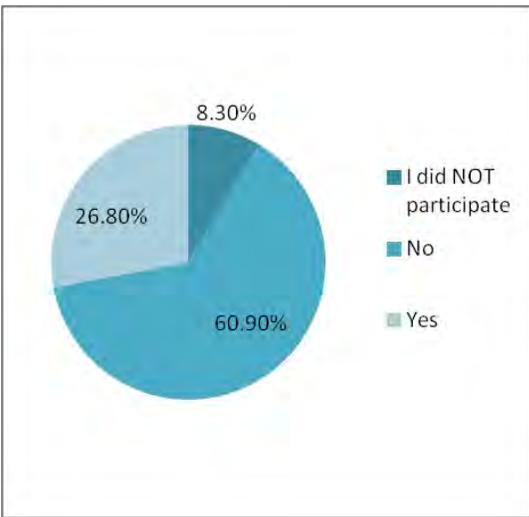
Answer	Percent
I did something else	81.30%
Decorated something	56.90%
Told others about the Red Ribbon Campaign message	50.50%
Took the Red Ribbon Pledge	46.80%
I did NOT participate	13.30%
Served as an ambassador	9.40%



Finally, respondents were asked about what barriers (if any) prevented them from participating in Red Ribbon Week in the ways that they would have liked. Only one-quarter of respondents reported that they were unable to participate in all the ways they wanted, again with just 8.3% saying they did not participate. When asked about specific barriers to participating, respondents were allowed to check all that applied to them. For those respondents who wanted to do more for Red Ribbon Week, the most commonly endorsed barrier to greater participation was a lack of time during the week (32%). A small fraction of respondents cited Informed Families-specific reasons as barriers including a Lack of information (5%) and insufficient toolkits (2%), again reinforcing that, for those who want to participate, Informed Families provides the necessary tools and capacity.

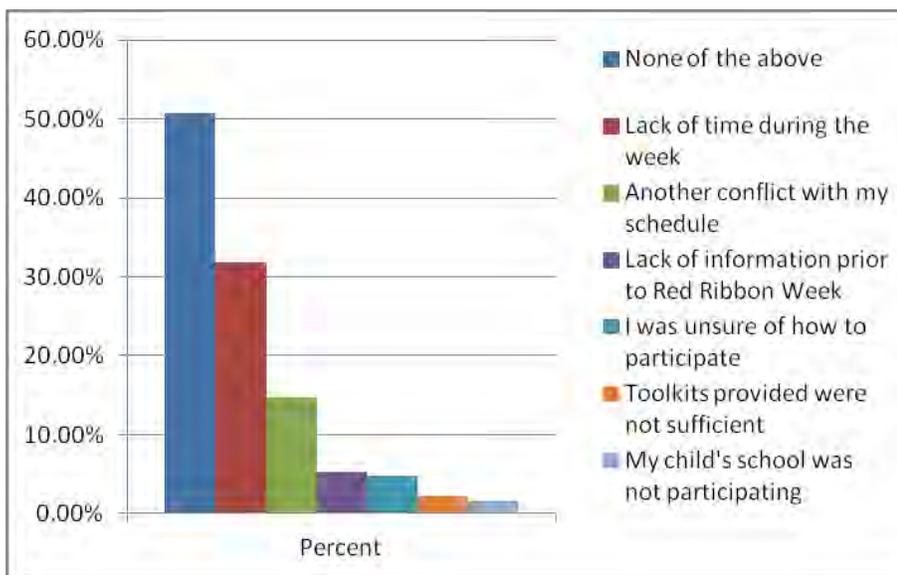
Were there ways you wanted to celebrate Red Ribbon Week, but were unable to do so? (n = 626)

Answer	Percent
I did NOT participate	8.30%
No	60.90%
Yes	26.80%



What were some of the barriers that prevented you from participating in Red Ribbon Week? (n = 626)

Answer	Percent
None of the above	50.80%
Lack of time during the week	31.90%
Another conflict with my schedule	14.70%
Lack of information prior to Red Ribbon Week	5.30%
I was unsure of how to participate	4.80%
Toolkits provided were not sufficient	2.20%
My child's school was not participating	1.60%



APPENDIX D – The Red Ribbon Certified Schools Program

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Keywords: Substance use, Prevention, Youth, Environmental approach, Evidence-based program

Abstract

Approximately 30% of high school students by the age of 18 will experiment with drugs and alcohol (NIDA, 2012).

Related literature purports that an adolescent's social surroundings, made up of primarily their school environment during the middle and high school years, plays a large role in determining attitudes toward health behaviors (Flay, 2000).

In response to this, a number of school-based environmental approaches have emerged as possible prevention strategies in reaching youth (Botvin&Botvin 1992; Hansen, 1992). Among these includes one of the oldest and most recognized universal school-based prevention campaign across the country. The Red Ribbon program raises substance abuse prevention awareness using schools, law enforcement, and community organizations to reach middle and high school students. As an environmental strategy, it changes communities' substance use and abuse attitudes, impacts issues and trends, and provides alternative fun opportunities to celebrate and promote positive health behaviors. The purpose of this study is to describe the Red Ribbon program and explain the process of certification for schools interested in participating in the campaign. Using a cross-sectional survey design, preliminary evidence regarding the impact of Red Ribbon certified schools are reported. Results reveal that students in these schools have strong negative beliefs toward the use of substances as well as actually use drugs and alcohol at less rates than students in comparable schools. These findings are consistent with the literature on primary prevention. Coordinating efforts among

families, schools, community organizations and the health care system can create an environment from which students will flourish.

Literature Review

Approximately 30% of high school students by the age of 18 will experiment with drugs and alcohol (NIDA, 2012). Although the majority of these adolescents will not develop a substance abuse disorder or engage in further criminal activity, many researchers have identified early substance use as a precursor to other social and psychological harm (Macleod, et al., 2004). As the *Child Delinquency Bulletin* published by the US Department of Justice highlights, the “focus on risk factors that appear at a young age is the key to preventing child delinquency and its escalation into chronic criminality” (Wasserman et al., 2003, p.10). Because of this, it proves vital that we address the *prevention* of such behaviors, targeting school-aged youth.

It is clear that there is a dynamic relationship with the individual and his or her social environment. The literature in this area has long demonstrated that one’s surroundings play a large role in the shaping of various health behaviors, including the use of alcohol, tobacco, and other drugs (ATOD) (Brook, Brook, & Rosa, 2001; Crum, Lillie-Blanton, & Anthony, 1996; Wagner & Anthony, 2001). Additionally, research has found that there are various environmental risk-factors that have detrimental effects on health behavior. These factors include violence and abuse, drug-availability, poor social relationships, peer pressure, unsafe neighborhoods, and lack of parental involvement. In fact, many researchers purport there is a direct association with substance use initiation and one’s relationships to parents and peers (Wasserman et al., 2003; Hawkins et al., 2004).

In response to this, environmentally-based prevention approaches have emerged to target the specific behaviors of youth (Botvin & Botvin 1992; Hansen, 1992). Environmental strategies seek to change the environment where risky behaviors occur by recognizing the risks associated with an individual’s social surroundings. Linked to public health, environmental strategies provide information and support resources through media campaigns and other large-scale efforts in order to disseminate positive messages to counteract the problem/emerging issues. Researchers agree that school-based, environment approaches are the most effective at reaching youth (Flay, 2000). A meta-analysis of such programs indicates that interactive, student-centered prevention efforts are indeed successful at reducing youth substance use (Tobler, et al., 2000).

Since youth spend the majority of their time in schools, environmental approaches become even more effective when they focus on students' personal and social assets and their school environment (Greenberg et al., 2003). The intent of the school system is to educate and prepare youth for success through academic achievement and development. Poor academic performance and lack of school commitment have been identified as risk factors for substance abuse among youth (Pollard et al., 1999). By ensuring a safe and drug-free environment, schools create the appropriate atmosphere for student success and achievement. Coordinating efforts among families, schools, community organizations and health care system can create an environment from which students can flourish (Crosnoe, Erickson, & Dornbush, 2002).

Red Ribbon

Informed Families, a non-profit corporation, was created in 1982 as part of the parent-movement started by First Lady Nancy Reagan. The Parent Movement is credited for reversing the 1970s escalation in drug use by children, adolescents, and young adults, and for initiating the reduction in regular drug use that took place among all ages between 1979 and 1992. Informed Families/The Florida Family Partnership has been and is the leading parent group in America. In 1986 after the death of Drug Enforcement Administration (DEA) Agent Kiki Camerano, Informed Families created the Red Ribbon campaign to commemorate his death and to remind the public that drug use hurts others and society...it is not a victimless crime. An important component of this campaign is the acknowledgement that prevention is *participation*. Knowledge is not enough; buy-in and participation turn knowledge into healthy habits and positive social norms.

From the beginning, Red Ribbon had wide appeal and participation. Each year during the week of October 23-31, thousands of Florida residents celebrate Red Ribbon Week. It is the oldest and most recognized universal prevention campaign in communities and schools across the country. The program raises substance abuse prevention awareness using schools, law enforcement, and community organizations to reach middle and high school students. As an environmental strategy, it changes communities' substance use and abuse attitudes, impacts issues and trends, and provides alternative fun opportunities to celebrate and promote positive health behaviors. In concert with public health, it is a population-based [school] approach that target health risk issues by identifying the cause of the problems and to

resolve them before they occur (Manderschied, 2007). Its main goal is to promote positive health behaviors in communities throughout the nation.

The Red Ribbon Certified Schools Program (RRCSP) aims to recognize schools that participate in a certain level of evidence-based, school-based prevention efforts. The RRCSP is a marriage between a successful prevention process and programs. It serves to review existing policies, identify corrective measures, and highlight effective efforts in the prevention of substance use among students. Its main goal is to promote positive health behaviors in communities throughout the nation. To achieve this goal, the initiative outlines specific objectives aimed at decreasing substance use and other destructive behaviors by youth throughout schools while increasing pro-social behaviors. This is done through enhancing school-based protective factors while simultaneously decreasing risk factors, increasing community support, and boosting parental involvement- a key factor in academic achievement and healthy development. The key to building protective factors and reducing health-risk behaviors is the connectedness to family and school (Bond, et al, 2000). The RRCSP does not focus on creating new services. Rather, it highlights what is working in schools to reduce risks and build resiliency; coaching the school team to see how current programs, policies and practices might be improved. In addition, it serves to highlight efforts by individuals and groups inside and outside of the school, especially parents and provide constructive feedback where need is indicated. The RRCSP engages not just youth and teachers, but parents and the greater community in the process of evaluating and creating its prevention model. Simply, when parents and schools are encouraged to be part of the prevention process (from assessment through program development and implementation), they feel more excited, engaged and have a sense of ownership thus they are committed to achieving better outcomes for their students. This new initiative provides resources to educate and inform parents, youth, schools, and the community on the impact and dangers of substance use. It serves as an assessment and recognition tool designed to review existing policies, identify corrective measures and highlight effective efforts in the prevention of substance use among students.

The Red Ribbon Certification Schools Process

The RRCSP application is a 60-item, multi-dimensional tool used to assess the level to which a school is participating in evidence-based prevention efforts, originally developed in 2005 by the Florida Center for Prevention Research, Florida State University. Initially, researchers conducted focus groups in three regions of the state of Florida:

Northwest, Central and South; participants included school staff, teachers, parents and members of the community. Results from these collaborations yielded valuable information over seven domains regarding evidence-based, school-based prevention practices that heavily informed the development of the RRCSP application. After review by researchers, the content from these interviews yielded an application instrument streamlined into four main component areas: School environment, Evidence-based programs, Parent involvement, and Red Ribbon commitment/ Community Involvement.

In the school environment section, criteria include commitment from leadership, continuous in-service training and open and frequent communication among all school personnel. The evidenced-based section requires identification of work guided by best practices.

Because parents play a key role in prevention, the parent involvement section focuses on parents as partners in improving academic achievement and their inclusion in reducing high-risk behaviors of youth. The Red Ribbon commitment section reviews year round Red Ribbon events to communicate norms and expectations. Additionally, this section addresses school and community consciousness regarding risk and resilience. Throughout the Red Ribbon application, schools respond to respective questions found in the aforementioned sections and provide narrative clarification and supporting information. Once completed and submitted, qualified reviewers assess the information and provide certification to qualified schools.

In order to become certified, the school must assemble an application team consisting of the principal, a teacher, a student, a parent, and a liaison community person. Once the application is completed and submitted, it is reviewed by three program representatives who are experts in prevention, education, and research. The maximum application score is 100 points. A total of 80 points are needed to become certified. Each component of the application is worth a maximum of points: School environment – 20 points, Parent involvement – 30 points, Red Ribbon commitment – 20 points, and Evidenced-based programs – 20 points. Ten points are awarded based on the completeness of the submission, including supporting materials and signatures of the application team members. Applications must be received by April 15th each year. Schools that meet set standards related to prevention practices along with achieving a grade of 80 points or higher are awarded Red Ribbon certification.

Schools that apply for certification receive their scores and are provided with detailed feedback about their prevention practices. Program representatives discuss with the application team each of the four component areas covered on the application. Where schools need improvement, individualized guidance is offered and new evidence-based, Red Ribbon prevention strategies are explored based on the specific needs of the schools. Schools that do not meet certification standards after initial application are encouraged to implement this feedback into their prevention efforts and re-apply the following year. Schools that indicate an interest in doing so are provided continued support throughout the year to help with this effort. Schools interested in learning more about the RRCSP or how to become certified can visit redribbonschools.org. The application form is available from this website.

[INSERT FIGURE 1 HERE]

Methodology

Design

Using a cross-sectional survey design, preliminary evidence regarding the potential impact of Red Ribbon certified schools is explored in this study. As part of the Service to Science (STS) initiative -a national program designed to enhance the evaluation capacity of innovative programs that address substance abuse prevention or mental health needs- one high school and two middle schools in Orlando (Orange County) and Miami (Miami-Dade County) respectively were selected to participate in this study. Schools were selected if they had previously engaged in Red Ribbon week activities and expressed interest in becoming Red Ribbon certified. All six schools selected agreed to participate and were given a financial incentive of \$200 per school. Researcher then randomly selected classes from each school using a list of all classes provided by the schools through Informed Families. Only classes from grades six through 12 were included in the sample. In May and August of 2012, all students present in these classes were administered an abbreviated paper and pencil version of the Florida Youth Substance Abuse Survey (FYSAS) in order to obtain information about their substance use practices. In order to enhance consistency in administration, an Informed Families designee provided instruction/assistance to each of the teachers involved in administering the survey. Training included how to give consistent instructions, emphasize the anonymity of the survey, and deal with students that opt out. A brief, two page instruction sheet was also provided to the designee to distribute to the survey administrators. Three control schools from Miami-Dade and Orange Counties, consisting of one high school and two

middle schools were subsequently purposively selected to receive the same survey for comparison. Comparison schools were selected by school district from a ranked list of three possible schools for each participating Red Ribbon school and matched by county, enrollment size and distribution, percentage of students receiving free or reduced lunch, as well as a number of other demographic features.

In addition to the FYSAS, focus groups were conducted with selected participants from Red Ribbon schools in order to supplement the quantitative information gleaned from the survey results. The use of focus groups allowed researchers to gather a richer understanding of the types of prevention activities in practice at these schools. Six in-person, semi-structured interviews were conducted on-site in Miami and Orange Counties. Participants consisted of school staff, teachers, parents and members of the surrounding community. Participants were asked to freely respond to a set of open-ended questions related to school-based prevention activities. Questions pertained to the following four areas, each corresponding to a component on the Red Ribbon Certification instrument: School environment, Parent involvement, Red Ribbon activities/Community involvement, and Evidenced-based programs.

[INSERT TABLE 1 HERE]

Measurement

Florida Youth Substance Abuse Survey- Abbreviated Form. The abbreviated FYSAS is a valid and reliable tool developed from the Communities That Care Youth Survey as a way to explore adolescents' beliefs regarding substance use and abuse. From this tool, 31 items were carefully selected to limit burden (requiring roughly 15 minutes to complete) representing seven distinct domains. Items were carefully chosen based on face and content validity. In addition, a reliability analysis demonstrated moderate to strong levels of internal consistency with this sample for each of the domains as well as for the full version of the FYSAS abbreviated form. Domains include: a) prevalence and frequency of substance use (items 18-21, $\alpha = .814$), b) attitudes toward substance use (items 11-17, $\alpha = .712$), c) academic performance (item 5), d) school environment (items 6-10, $\alpha = .619$), e) community environment (items 22-26, $\alpha = .679$), f) home environment (items 29-31, $\alpha = .472$), g) parental attitudes toward substance use (items 27-28, $\alpha = .782$) and h) the total FYSAS score (items 5-31, $\alpha = .832$), representing the construct *youth substance use practices*.

Analysis

Descriptive information from both Red Ribbon and comparison schools about school-level beliefs and practices toward substance use are first discussed. Frequencies of responses are reported for the seven areas captured by the FYSAS: a) prevalence and frequency of use, b) attitudes toward use, c) academic performance, d) school environment, e) community environment, f) home environment, and g) parental attitudes, and t-tests were run in order to determine if there were any significant differences between Red Ribbon and comparison schools. Additionally, a multiple regression analysis was conducted using SPSS version 19 in order to determine the amount of variance in substance use practices was predicted by Red Ribbon. This analysis allows us to see what percent of contribution the Red Ribbon prevention efforts play in students' beliefs and practices regarding substance use. Since a variety of schools were selected for this study in two different counties, it is important to look at and control for the impact of geographic community as well as other student characteristics, including grade-level, sex, race, and ethnicity.

Information from focus group interviews was first transcribed, and then analyzed using the constant comparison method of qualitative analysis in order to provide the richest picture of the prevention activities currently in place in participating schools. Codes were grouped into themes based on relative similarity then compared to one another for re-evaluation. Check-coding was used, where two separate evaluators independently identified these themes; codes were compared to one another and retained if both evaluators agree on them. This process allowed researchers to iteratively generate and reduce codes based on consensus, thus enhancing inter-rater reliability.

Results

When each of the seven areas was examined independently, results demonstrated significant differences between Red Ribbon and comparison schools in five areas was found: frequency of use ($F= 14.781, p=.000$); attitudes toward use ($F= 22.898, p=.000$); academic performance ($F=23.377, p=.000$); community environment ($F= 9.984, p=.002$); and parental attitudes toward use ($F=13.090, p=.000$). There was no difference in school or home environment.

Prevalence and Frequency of Use

Students in schools participating in the RRCSP reported that they used drugs and alcohol less frequently than students in the comparison schools. The average scores for students in the RRC and comparison school groups were 26.79 and 26.26 respectively. The theoretical range for this domain is four to 27, where higher scores indicate less use.

The mean difference is .519; although small, this value reaches statistical significance. One percent of students in the RRCSP reported using alcohol 40 or more times in the last 30 days; 0.4% reported using alcohol on 20-39 occasions; 1.4% 10-19 occasions; 3.4% 6-9 occasions; 5.2% 3-5 occasions; 12.3% 1-2 occasions; and 74.3% reported no alcohol use in the last 30 days. This is compared to 2% of students in control schools reporting using alcohol 40 or more times in the last 30 days; 0.6% on 20-39 occasions; 1.5% on 10-19 occasions; 3.1% on 6-9 occasions; 5.4% on 3-5 occasions; 16.7% on 1-2 occasions; and 70.1% reported no alcohol use. Additionally, 2% of RRCSP students reported using marijuana and other drugs 40 or more times in the last 30 days; 0.6% reported using on 20-39 occasions; 1.7% on 10-19 occasions; 1.8% on 6-9 occasions; 2.5% on 3-5 occasions; 3.9% on 1-2 occasions; and 85.4% reported no drug use in the last 30 days. Whereas 3.5% of students in control schools reported using marijuana and other drugs 40 or more times in the last 30 days; 1.6% reported using on 20-39 occasions; 1.5% on 10-19 occasions; 1.9% on 6-9 occasions; 2.2% on 3-5 occasions; 5.4% on 1-2 occasions; and 82.8% reported no drug use in the last 30 days.

Attitudes toward Use

Students in schools participating in the RRCSP also had better attitudes toward substance use than students in control schools. The mean score on this domain for the RRC schools is 25.07 and 24.13 for control schools, indicating a difference in scores of .93, again mild but reaching statistical significance. The theoretical range for this domain is seven to thirty where higher scores mean that substance use is perceived more negatively. 56.8% of RRCSP students report that it is “very wrong” to drink alcohol; 62.6% reported it is “very wrong” to smoke marijuana, and 83.7% reported it is “very wrong” use other illegal drugs. This is compared to control group students where 50.7%, 59.9%, and 81.4%, reported attitudes toward alcohol, marijuana, and other drugs respectively. In addition to this, RRCSP students also reported that they would be perceived as less “cool” for using these drugs. 55.9% reported that there was “no or very little chance” they would be seen as cool for using alcohol and 55.2% reported the same for marijuana use. This is compared to 53.4% of control group students reporting the same for both alcohol and drug use. Finally, students in RRCSP participating schools report that they perceive a higher risk associated with using substances, as compared to students in the control schools. 50.2% of RRCSP students reported that they believe using alcohol poses serious physical risks and 52.1% report the same for marijuana use. This is compared to only 45.8% and 46.6%, respectively, in control schools.

Academic Performance

Students at RRCSP schools reported statically significantly higher academic performance than students in control schools. RRCSP students reported that on average they receive Mostly B-'s to B's (M=4.04). Whereas students in control schools reported receiving Mostly C+'s to B-'s (M=3.85) with the average score difference of .188. Although the effect is again mild, students enrolled at RRCSP participating schools do have higher grades than student enrolled at schools who do not meet the standards for Red Ribbon certification.

Community Environment

Students reported that the community environment surrounding RRC schools are more supportive and engaged in prevention efforts when compared to non-RRC schools. The average score on this domain for students in the RRC group is 15.82 versus 15.38 for the control group. The theoretical range for this domain is five to 25, although the highest observed score here was twenty. Although the mean difference is small, .44, it reaches statistical significance. 36.7% and 52.5% of RRCSP students find it "very difficult" to procure alcohol and marijuana respectively, compared to 37% and 47.4% of students in control schools. Additionally, 58.1% and 64.3% of RRCSP students reported that their neighbors think it is "very wrong" to use alcohol and drugs, respectively. Again, this is compared to 54.4% and 61.9% of control school students. Lastly, 36.5% of RRCSP students reported perceive their neighborhoods as very safe, whereas only 31.8% of students in the control group reported feeling the same way.

Parental Attitudes

In general RRCSP students reported perceiving that their parents are more disapproving of them using drugs and alcohol and have clearer rules regarding substance use as compared to control group students. The theoretical range for this domain is two to eight. The average score on this domain for the RRCSP group was 7.43 as compared to 7.24 for the control group, with a mean difference of .18- a small but significant difference in parental attitudes. 74.5% and 83.7% of RRCSP students report that their parents would view alcohol and drugs as "very wrong"; 13.8% and 8.3% reported that their parents would view alcohol and drug use as "wrong"; and 9.2% and 5.3% reported that their parents would view their use as "a little bit" or "not at all wrong". This is compared to only 70.7% and 80% of students in the control group reporting "very wrong"; 9.8% and 14.5% reported "wrong"; and 12.9% and 8.8% reported that their parents would view their use as a "little bit" or "not at all wrong".

[INSERT TABLE 2 HERE]

In order to determine if the differences found here were, in fact, accounted for by the school's prevention efforts, and not a result of other student features (for example grade, race, and gender), a regression analysis was performed, allowing us to see what portion of contribution the prevention efforts play in students' beliefs and practices regarding substance use. Since schools were selected for this study in two different counties, the impact of geographic community as well as other student characteristics, including grade-level, sex, race, and ethnicity are accounted for in the model. After controlling for these effects, it was found that Red Ribbon significantly explains 21.4% of the variance in the way students responded to the survey.

Focus Groups

A qualitative approach allowed evaluators to build a holistic picture of the complex dynamics involved in school-based prevention practices. Key to understanding the effectiveness of Red Ribbon was looking at the *process* component of the program and identifying any needs and/or gaps as well as limitations and challenges. The intent of the focus groups was to reveal specific activities the Red Ribbon schools accomplished. Based on these interviews, several themes emerged for each component area.

School Environment. The Red Ribbon schools provided a sound environment for students. Members of the focus groups described the school orientation process, which helps students transition to middle and high school. There is a "meet and greet" on the Friday before school starts for the year, open house for new students, and "peer/buddy for new students". They also reported that the school policies were made aware to students and parents through a "booklet, reminders", "code of conduct", use of "telephonic messaging", and "quarterly newsletters". Training also occurs in RRCSP schools at the teacher, parent and student-level. Teachers participate in professional development; parents participate on committees focusing on prevention; where students participate in "mentoring", presentations, and prevention. Additionally, students reported that the RRCSP school's environment allowed "them to bring ideas to the administration", stating that student councils are active and involved in ATOD prevention activities. Lastly, RRCSP school students reported that they were taught to "report potential problems", "take ownership" of their schools, and provide ideas on how to improve the environment.

Parents. Parent involvement was identified as a key element in student performance. Parents reported that they felt as though they played an “important role in school”, through “volunteering”, “joining as members of PTA/PTO”, walking hallways, and tutoring. They participate in Red Ribbon activities such as “food drives” and obtaining “speakers on prevention topics” and volunteers with the PTA/PTO. They also reported that they are “actively involved in providing ideas to the principal and administrative staff”. Communicating with parents was identified as essential in this domain as well. Through the “Connect Ed” process, a telephonic information system, “parents are kept up-to-date” of activities and concerns within the school.

Red Ribbon Commitment / Community Involvement. When specifically asked about the school’s current participation with Red Ribbon activities, members of the focus group reported that the Red Ribbon program was “visible” on campuses and that the community provides a “key ingredient” in fund raising, awareness, and support. One teacher reported there is a constant message to the students, “year around focus” on DUI, ATOD, prescription drugs and bullying. Students agreed, reporting that teachers were engaged in promoting activities by grade-level, involved students in raising awareness, and brought in “guest speakers” during class.

Evidenced-based Programs. Because the goal is to reduce substance use and abuse, students are the key to prevention. Red Ribbon events target specific age groups and are therefore typically split up by grade, each focusing on different topics. Students reported that incoming sixth graders, for example, engaged in more getting-to-know-you activities, whereas eighth graders focused on behavioral issues such as “bullying”, and “anger management”. Additionally, when asked about evidence-based programs, faculty indicated that the program is very “student-centered”; they are “encouraged to report incidents in school” and are heavily involved in “student activities”.

[INSERT TABLE 3 HERE]

Discussion

These findings suggest several interesting things. First, when looking at the cross-sectional data, our analyses provide evidence that Red Ribbon certification plays a significant role in students’ attitudes, beliefs, and practices toward drugs and alcohol. Those enrolled in schools who meet the standards for Red Ribbon certification used drugs and alcohol at significantly less rates than students in comparison schools. Controlling for expounding influences, students at RRCSP schools reported that they used drugs and alcohol less frequently than students in control schools. They also had

better attitudes toward substance. This means that RRCSP students reported they believed that it is more wrong to drink alcohol, smoke marijuana, and use other illegal drugs. They also reported that they would be perceived as less “cool” for using these drugs as well as associated a higher risk with using substances, as compared to students in the control schools.

Since Red Ribbon certification serves to highlight schools that employ a community-based school prevention model, it was anticipated that students in RRCSP group would report differences in community environments and in parental attitudes. As hypothesized, students reported that the community environments surrounding RRCSP schools were more supportive and engaged in prevention efforts when compared to non-RRCSP schools. RRCSP students find it more difficult to procure drugs and alcohol, perceive their neighborhoods as safer, and believe that their neighbors are more concerned about students using substances than neighbors of students’ communities whose schools do not meet Red Ribbon certification standards. Parents of students in the RRCSP group also appear to have better attitudes toward reducing substance use. In general RRCSP students perceive their parents as more disapproving of drugs and alcohol and having clearer rules regarding substance use. It was also anticipated that RRCSP students would report significant differences in both school and home environment as well. Interesting, there were no statistically significant differences between the groups in terms of the students’ perception of their school environment. This could be due to the specific questions asked that make up the school environment construct on the FYSAS abbreviated version. Questions focused on students’ levels of enjoyment of school, including “How often did you enjoy being in school?” and “How often did you hate being in school?”. While these questions may seek to provide meaningful information, this construct might not be capturing the elements of prevention efforts it intends to collect. Similarly, it may be reasonable to assume that a student’s level of enjoyment of attending class may not be impacted by their school’s attempt to improve substance use practices. The same could also be true of the questions used to capture the home environment construct. Questions asked included, “When I am not home, one of my parents knows where I am and who I am with”, “My family has clear rules about alcohol and drug use”, and “How often do your parents tell you they’re proud of you for something you’ve done?” When these questions are examined as one construct, there was no significant difference between groups. However, when looked at individually, there was a significant difference in student’s perceptions of their parents knowing where they are when they are not home ($F=4.156$, $p=.008$). This finding is consistent with other research on the

positive effects of parental monitoring on adolescent substance use (Borawski, Leverls-Landis, & Lovegreen, 2003; Dishion, Nelson, & Kavanagh, 2003; Li, Stanton, & Feigelman, 2000).

The qualitative data compiled from focus group interviews demonstrate that the Red Ribbon certified schools are focused on students. Overall environment for each school allows students to bring ideas to the administration; student councils are active, and involved in ATOD prevention activities. Further, students in the Red Ribbon certified schools were taught to report potential problems, take ownership of their schools and provide ideas. It is clear that when students feel a connectedness to their schools, a sense of belonging and supportive, they perform better. Through positive relationships, teachers and counselors are available and approachable. Research has shown that this positive relationship leads toward student's improvement in social outcomes and academic performance (Greenberg, et al., 2003). Additionally, parent involvement in the school environment has been identified as a key element in student performance. Parents play an important role for each school, volunteering, joining as members of PTA/PTO, walking hallways, and tutoring.

Communication is another key area that was identified as a key component in school-based prevention. This can be accomplished through newsletters, Ed Connect, flyers, twitter and Facebook. Orientation, as the first communication with students, sets the tone for the school year. Middle schools focus on 6th grade orientation, "meet and greet" before schools starts, and tours. Other schools included teacher orientation, peer/buddy team concept and open house.

Finally, it is evident that the community also played a major role in substance abuse prevention for RRCSP schools. A number of organizations and agencies from the surrounding communities engage with students and the schools in order to build connections and lasting relationships. Officers from the local police force come to speak to students about the legal consequences of using ATOD, vendors participate in fund-raising opportunities to raise awareness for substance abuse, and community counselors come in to run groups and have real discussions with students about risk factors for using drugs, including anger and bullying.

Using a qualitative approach to gather information related to RRCSP schools enabled us to confirm the importance of RRCSP components and their effect toward successful prevention. Focus group interviews demonstrated that Red Ribbon schools focused heavily on students in their education. RRCSP school's environment allowed students to bring ideas to the administration and student councils are active and involved in ATOD prevention activities. It is clear

that when students feel a connectedness to their schools, a sense of belonging and support, they perform better. These findings echo very clearly what other research has demonstrated. Positive relationships with parents and one's school leads toward student's improvement in health behaviors and academic performance (Catalano, et al., 2004).

It should be noted, however, that focus groups were not conducted with comparison schools. Therefore the extent to which comparisons between Red Ribbon and non-Red Ribbon schools is limited. It is possible that comparison schools engaged in some of the same prevention activities that Red Ribbon schools did.

Other Limitations

As with much of community-based research, this study does have certain limitations specifically in respect to design. Because of this, it is impossible to rule out certain threats to internal validity. Although classes from which students were sampled were randomly selected, the schools were purposively selected based on meeting inclusionary criteria. Although this was done so initial comparisons could be drawn between RRCSP and non-RRCSP, the naturalistic assignment to group introduces the possibility that results may have been impacted by extraneous and unmeasured factors. On the same note, only schools in Orange and Miami-Dade County were chosen for participation in the study. This was done as previous relationships had been built in these communities. If future research seeks to generalize results to the Florida education system, studies should aim to look at randomization at the school-level, utilizing institutions within the entire state of Florida.

Threats to instrumentation can also not be ruled out. Using an abbreviated version of the FYSAS instrument may have limited the depth of information collected. Although questions were carefully selected through an iterative process and most constructs demonstrated moderate to strong levels of internal consistency, there were domains, home and school environment, in which internal consistency lacked. Additionally, the abbreviated version of the measure has not been validated with this sample. Future research should address evidence of validity in this shortened version of the FYSAS. A briefer version of the survey would require significantly less time to complete and may decrease user fatigue, enhancing the scales' practical application in classrooms.

While the purpose of this study was to provide preliminary evidence about the potential impact of the RRCSP, in order to truly test the effectiveness of Red Ribbon more schools should be included in the study. An analysis that

accommodates for the effects of nesting, for example hierarchical linear modeling, would be able to provide more convincing and concrete evidence as to the actual impact of program participation.

Conclusion

Weighted against these limitations, are the very tangible strengths of the study. Perhaps the clearest strength is its applicability to the real-world. The purpose of this study was not to make definitive conclusions about how effective Red Ribbon is at reducing substance use, but to provide initial evidence as to its potential influence on substance use behaviors. Additionally, this article provides valuable information regarding the RRCSP and how schools can get certified.

There are several design features that were used to consciously enhance the rigor of the study design. The use of a comparison group facilitates some initial inferences by allowing researchers to examine the program's impact as compared to what occurs in its absence. Similarly, schools were purposively matched based on a number of important characteristics including student demographics, various socio-economic features such as the percentages of free and reduced lunches, as well as enrollment. Matching schools allows for the comparison of groups by ensuring group differences are non-significant. Additionally, students within schools were randomly selected to participate, again enhancing the likelihood that groups were comparable.

Adding to its utilitarian value, each step of the process- from the development of Red Ribbon certification standards to the conception and implementation of prevention strategies- was informed by focus groups of key stakeholders, including parents, teachers, and community members. This serves to enhance the practical application of the RRCSP and its ability to affect change in schools.

Findings of this study indicate that students in schools meeting Red Ribbon certification standards use drugs and alcohol less, have better attitudes toward non-substance use, perform better in school, perceive their community environment as safer, and perceive their parents as having more stringent rules regarding substance use when compared to students in schools that do not meet RR certification criteria. Although the effect was mild in many cases, even slight differences can indicate a meaningful improvement. Of great interest is the large impact that the strategies had on both student attitudes toward substance use and their perception of their community. These findings are consistent with the literature on primary prevention. Numerous studies have demonstrated that an adolescent's social surroundings, made up of primarily their school environment during the middle and high school years, plays a large role

in their attitudes toward health behaviors (Flay, 2000). Our results support the claim that by changing school climate through environmental approaches, students' attitudes toward and usage of drugs and alcohol will be positively impacted.

References

- Bond, L., Butler, H., Thomas, L. & Carlin, J. (2007). Social and school connectedness in early secondary school as predictors of late teenage substance use, mental health and academic outcomes. *Journal of Adolescent Health, 40*, 357.
- Botvin, G. E., & Botvin, E. M. (1992). Adolescent tobacco, alcohol, and drug abuse: Prevention strategies, empirical findings, and assessment issues. *Journal of Developmental and Behavioral Pediatrics, 13*, 290–301.
- Brook, J.S., Brook, D.W., & De La Rosa, M. (2001). Adolescent illegal drug use: The impact of personality, family, and environmental factors, *Journal of Behavioral Medicine, 24*, 183-203.
- Carson-DeWitt, R. (2001). The parent movement. *Encyclopedia of Drugs, Alcohol, and Addictive Behavior*. Retrieved from <http://www.enotes.com/preventionreference/prevention-299177>.
- Community Anti-Drug Coalitions of America. (2008). *The coalition impact: Environmental prevention strategies*.
- Crosnoe, R., Erickson, K.G., & Dornbusch, S.M. (2002). Protective functions of family relationships and schools factors on deviant behaviors in adolescent boys and girls: Reducing the impact of risky friendships. *Youth and Society, 33*, 515-544.
- Crum, R.M., Lillie-Blanton, M., & Anthony, J.C. (1996). Neighborhood environment and opportunity to use cocaine and other drugs in late childhood and early adolescence. *Drug and Alcohol Dependence, 43*, 155-161.
- Flay, B.R. (2000). Approaches to substance use prevention utilizing school curriculum plus social environment change. *Addictive Behaviors, 25*, 861-885.
- Greenberg, M.T., Weissberg, R. P., O'Brien, M.U., Zins, J. E., Fredericks, L., Resnik, H., &

- Elias, M.J. (2004). Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning. *American Psychologist*, 58, 466-474.
- Hansen, W.B.(1992).School-based substance abuse prevention:A review of the state of the art in curriculum. *Health Education Research: Theory and Practice*, 7,403–430.
- Hawkins, D.J.,Catalano, R.F.,&Miller, J.Y.(1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin*, 112, 64-105.
- Macleoad, J., Oakes, R., Copello, A., Crome, M. & Egger, M. (2004). Psychological and social sequelae of cannabis and other illicit drug use by young people: A systematic review of longitudinal, general population studies. *The Lancet*, 363, 1579-1588.
- Manderschied, R. W. (2007). Considering a public approach: The public health framework might work well in addressing mental health and substance use problems.*Behavioral Healthcare*, 27(8), 45-46.
- National Institute on Drug Abuse. (2012). *Drug facts: High school and youth trends*. Retrieved from <http://www.drugabuse.gov/publications/drugfacts/high-school-youth-trends>.
- Pollard, J., Hawkins, J., & Arthur, M. (1999). Risk and protection: are both necessary to understand diverse behavioral outcomes in adolescence?. *Social Work Research*, 23(3), 145-158.
- Tobler, N.S., Roona, M.R., Ochsorn, P., Marshall, D.G., Streke, A.V., &Stackpole, K.M. (2000). School-based adolescent drug prevention programs: 1998 meta-analysis. *Journal of Primary Prevention*, 20, 275-336.
- Wasserman , G., Keenan K., Tremblay, R.E., Coie, J. D., Herrenkohl, T.I., Loeber, R., & Petechuk, D. (2003). Risk and protective factors of child delinquency, *The Office of*

Juvenile Justice and Delinquency Prevention, Child Delinquency Bulletin. Retrieved from <https://www.ncjrs.gov/pdffiles1/ojjdp/193409.pdf>.

Wagner, F.A., & Anthony, J.C. (2001). From first drug use to drug dependence: Development periods of risk for dependence on marijuana, cocaine, and alcohol.

Neuro-psycho-pharmacology, 26, 479-488.