



Telling Stories That Explain:

Comparing Media and Organizational Discourse on
Adolescent Substance Use

A FrameWorks Research Report

August 2016

Sponsored by the Conrad N. Hilton Foundation

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Introduction

Over the past three decades, neuroscientists have made major advances in the science of substance use and addiction and are building a growing body of evidence about the effectiveness of prevention and early intervention. The public conversation about these issues, however, has not caught up with these advances. Experts and advocates are frustrated by the outmoded public discourse and struggle to move new ideas into the public conversation, especially via the popular media. Advocates and scholars alike describe media coverage of substance use as sensationalistic, inaccurate, and devoid of meaningful information about how to effectively address this issue. Nevertheless, media coverage of substance use largely determines how the public understands and responds to this issue. Media coverage of the “crack epidemic” in the 1980s and early 1990s, for example, fueled public demand for more punitive drug policies, often at the expense of public investment in prevention and early intervention.¹

Media coverage, public opinion, and social policy are closely linked. The media act as information “gatekeepers” that filter, amplify, and mute messages about social issues. They shape people’s beliefs and attitudes by repeating certain stories and frames and excluding others, a phenomenon scholars call the “drip, drip” effect.² Over time, these incessant drips carve deep channels in our culture’s collective conscience and shape public opinion, outlook, and action on social issues.

Shifting these opinions—and ultimately changing policies and practices about adolescent substance use—requires a new and different story. This report takes a step toward that end. It identifies and compares the frames that are embedded in media coverage of this issue and analyzes the framing approaches used by advocacy, direct service, and research organizations in their communications materials. This report pays particular attention to the stories that organizations tell about Screening, Brief Intervention, and Referral to Treatment (SBIRT). It is designed to provide experts and advocates with a detailed understanding of the communications environment that they are working in and to demonstrate how media and advocacy communications practices impact public thinking on this issue. Media coverage is a double-edged sword; it can be harmful and misleading or informative and productive. Experts and advocates who understand how media coverage works—and how to manipulate it—will be better able to use it to drive positive change.

The research presented here was conducted by the FrameWorks Institute and sponsored by the Conrad N. Hilton Foundation. It is one piece of a larger, multi-method project to design and test framing strategies that have the power to improve public understanding of adolescent substance use, build support for programs and practices that can address it, and fuel a movement for change. In the first part of this project, FrameWorks researchers identified differences between the way that experts, pediatric practitioners, and members of the general public understand issues related to adolescent substance use. This report draws on that research to describe how media and advocacy groups shape public understanding of this issue. It also makes initial recommendations that experts and advocates can use to more effectively communicate the importance of prevention and early intervention, and SBIRT in particular. More research is needed to

develop and empirically test framing strategies that can communicate key concepts from the field and shift the public conversation about adolescent substance use.

Executive Summary

Our research shows that members of the public have limited understanding of adolescent substance use: what causes it; how it affects individuals, families, and society; and how it can be addressed and prevented. To better understand why these gaps in understanding exist, and how to address them, FrameWorks researchers analyzed a sample of 296 organizational and media materials about adolescent substance use that appeared between January 2014 and January 2016.

In systematically analyzing these materials, researchers identified patterns in framing and storytelling that compete to shape public thinking and action on adolescent substance use issues. This research, along with previous FrameWorks studies on public and professional perceptions of adolescent substance use, offers a set of evidence-based recommendations for people working to build public will and shift policy and practices related to adolescent substance use in this country.

Media and organizational materials lack explanations of prevention and early intervention.

Organizations often *assert* the importance of primary prevention and early intervention, but rarely *explain* what prevention looks like or how early interventions work to improve outcomes. Even explicit public education campaigns about adolescent substance use—places where one would expect to find explanations of how prevention works—do not provide the details people need to understand and appreciate why primary prevention and early intervention are critical. The lack of explanation in media and organizational communications allows the public to fill in these holes with their own unproductive ideas about the risk factors associated with adolescent use and the most effective ways to address it: Namely, adolescents do not understand or appreciate the risks of substance use, and substance use is a natural and unpreventable aspect of this period of life.

There are two conflicting stories being told about adolescent use. On one hand, media frames naturalize adolescent substance use. Media stories substantiate public beliefs that experimentation with alcohol is natural, inevitable, and largely acceptable. On the other hand, both advocacy and media materials frame substance use as a crisis by focusing on the extreme effects of adolescent substance use. The media, in particular, portrays addiction as the inevitable result of the use of any substance other than alcohol and marijuana, especially in their coverage of opioid use. These two very different narratives have similar effects on public thinking: If adolescent use is a normal part of development, then the importance of prevention and early intervention is difficult to understand. Similarly, if severe addiction is the inevitable result of any level of use, prevention—and even early intervention—is seen as futile.

There is no developmental perspective in media coverage of adolescent substance use. While organizations in the field frequently evoke principles from the science of adolescent development in their public-facing materials, media materials contain scant information about development and its relationship to adolescent use. This hole in media coverage impedes people's ability to understand the causes and effects of substance use and misuse among adolescents, decreases the public's sense of the salience of the issue, and depresses support for necessary solutions, including Screening, Brief Intervention, and Referral to

Treatment (SBIRT).

Advocacy organizations and journalists tend to focus on one aspect of adolescent substance use at a time. For example, a news article may list programs that address substance use among adolescents, but fail to discuss risk factors associated with substance use. Alternatively, organizational materials might list the risk factors associated with use, but they do not explain the role of protective factors. This practice of focusing on one part of the story does not provide people with complete information about substance use among adolescents. As a result, people may not understand the extent or seriousness of the problem and why it matters to society, the risk factors associated with problematic use and its effects, or the importance of prevention and early intervention. If people do not consistently hear complete stories about this issue, they will fill in these gaps with what they already know and think about this issue—attitudes and beliefs that, in this case, we have found to be largely unproductive for people trying to advance prevention and early intervention solutions.

Media and organizational materials frame adolescent substance use as an *individual problem* rather than a *public issue*. Experts on adolescent substance use prevention and early intervention emphasize the need for systemic policy reform and cultural change to address substance use issues. They emphasize the importance of changing context to change behaviors and outcomes. This message is not part of media coverage and is absent from external-facing advocacy messages. Both media and organizational discourses overlook the social and environmental factors that function as risk or protective factors in adolescent substance use. Furthermore, they do not consistently explain why prevention and early intervention matters to society as a whole and not simply to people who are personally impacted. This implicitly frames adolescent substance use as a private issue, rendering it difficult for communicators to make arguments about the important role that society plays in addressing the issue.

This research points to a set of recommendations for those seeking to expand public thinking about adolescent substance use and the importance of prevention and early intervention.

1. **Explain how prevention and early intervention work.** Advocacy groups frequently and successfully assert the *importance* of prevention and early intervention, but stop short of providing a sense of how these processes actually work. Using explanatory examples can give the public specific and concrete information about primary prevention that goes beyond the harmful effects of early substance use. Coverage of SBIRT, and how it is implemented in health care and other settings, would give readers this kind of information. However, this content is currently absent from media materials.
2. **Build in explanations of adolescent development.** Media coverage of adolescent substance use does not include information about adolescent development. While organizations do focus more attention on the developing adolescent brain, they emphasize the “brain damage” caused by substance use and do not tell the larger story of heightened brain plasticity, the potential impacts of early use, or the efficacy of developmentally appropriate interventions. Getting accurate and understandable explanations of the science of plasticity into the public discourse is vital for prevention and early intervention advocates. Having more robust understandings of adolescent

development—above and beyond the damage done by exposure to substances—will give non-experts the ability to fully appreciate and evaluate the efficacy of SBIRT and other similar approaches to adolescent substance use that forefront prevention and early intervention.

3. **Frame facts, figures, and findings.** Advocacy groups are important sources of information for members of the public and practitioners about the latest research on adolescent substance use and effective interventions. However, facts and findings are not the message. Audiences need guidance about how to interpret data.

Methods

This research was designed to answer four questions:

1. What stories and framing strategies are advocacy, direct service, and research organizations currently using to communicate about adolescent substance use?
2. How is the media currently framing adolescent substance use issues?
3. What are the similarities and differences between the stories that organizations and the media are telling?
4. How can prevention and early intervention advocates shift media narratives to expand public understanding and build support for policies and programs designed to address adolescent substance use?

Data

The media sample includes articles taken from national newspapers and national television broadcasts. The sources include: *The Arizona Republic*, *The Cincinnati Enquirer*, *CNN*, *The Columbus Dispatch*, *The Dallas Morning News*, *The Denver Post*, *Detroit Free Press*, *Fox News Network*, *Los Angeles Times*, *The Mercury News*, *MSNBC*, *The New York Post*, *The New York Times*, *Star Tribune*, *The Tampa Tribune*, and *The Washington Post*. Sources were selected based on their circulation, as well as geographic and ideological diversity (as measured by their endorsements in the 2008 and 2012 presidential elections).

Using LexisNexis, FrameWorks researchers searched and downloaded articles from these sources using a search strategy designed to capture a broad range of topics that concern adolescent substance use.³ The search was conducted twice, first excluding any sources that mentioned SBIRT, and second only including sources that mentioned SBIRT. This strategy was used to ensure that media discussions of SBIRT were analyzed and coded. The searches were limited to pieces that appeared between January 2014 and January 2016. The first, non-SBIRT search resulted in the identification of 743 stories, and the second SBIRT-specific search resulted in the identification of four stories. Media pieces that did not deal substantively with adolescent substance use and duplicate articles (the same article published in multiple news outlets) were removed from the sample. This process resulted in a final sample of 193 stories, each of which was coded and analyzed.

FrameWorks researchers also gathered materials from organizations in the field. In collaboration with Substance Use Prevention program staff at the Conrad N. Hilton Foundation, FrameWorks researchers created a list of advocacy, direct service, and research organizations working to address adolescent substance use to include in the analysis. Particular attention was paid to ensuring that organizations advocating for the use of SBIRT were well represented in the sample. We then sampled communication materials from each of these organizations. These materials included press releases, reports, and “About Us” webpages. These materials were selected because they contain content about how each organization

describes its mission, as well as the specific approaches to adolescent substance use that each organization promotes. In total, the sample consisted of 103 materials drawn from 15 organizations.

Analysis

Each media and advocacy document was coded to identify the presence or absence of each of the following narrative components:

Narrative component	Description	Examples of codes
Topic	What is the document about? What is the primary issue or topic being discussed?	<ul style="list-style-type: none"> • Adolescent Development • Public Education about Adolescent Use • Research on Adolescent Use
Risk Factor	Why does adolescent substance use happen? Why is intervention necessary?	<ul style="list-style-type: none"> • Parents' Behavior • Peer Pressure • Lack of Access to Support/Help/Programs
Effect	What are the results of adolescent substance use?	<ul style="list-style-type: none"> • Death • Legal Action • Limiting of Opportunity
Value	Why should we care about adolescent substance use?	<ul style="list-style-type: none"> • Potential • Crisis • Public Health
Solution	What is being done/should be done to address adolescent substance use?	<ul style="list-style-type: none"> • Early Prevention • Public Education or Awareness Campaigns • Individual-Level Action
Demographics	What specific groups are mentioned?	<ul style="list-style-type: none"> • Black Adolescents • Adolescent Girls • LGBTQ Adolescents

After coding the data, analysis proceeded in three phases:

1. **Identification of communications practices.** FrameWorks researchers used three types of analysis to map how adolescent substance use is currently framed by media and by organizations in the field. The first was an analysis of the frequency with which specific narrative components appear in media and organizational materials (results are summarized in tables). The second was a cluster analysis, which analyzes the likelihood that specific narrative components will co-occur in a single material. We used a version of cluster analysis called multidimensional scaling (MDS). This algorithm places the narrative components (e.g., topics, values, causes) on a two-dimensional grid. Components placed closer together on this plot co-occur more frequently in the sample than components placed farther apart. In short, *this technique allows us to identify the component parts of specific narratives and to determine how frequently they occur together within media and organizational discourses.* Finally, we conducted a qualitative analysis of the materials, which identified the implicit patterns of discourse conveyed by the materials. Taken together, these analyses identify a set of communications practices that are currently competing to shape public understanding and action on adolescent substance use.
2. **Comparison.** After identifying the central tendencies in media and organizational discourses, and measuring their relative dominance, we then compared the results between the media and organizational samples to identify similarities and differences between the stories told by the media and by organizations in the field of adolescent substance use.
3. **Cognitive analysis.** Finally, the implications of our findings were examined against the background of the public's deep assumptions and implicit understandings about adolescent substance use, which were identified in an earlier stage of research.⁴ This final analysis made it possible to identify how frames embedded within media and organizational materials are likely to affect public understanding of adolescent substance use and support for early intervention and prevention. In the concluding sections, we offer initial recommendations based on this analysis.

Findings

1. Narrative Holes: What Is Left Unsaid?

We found that there is a set of key absences in media and advocacy materials about adolescent substance use. In many cases, materials include fragmented and inconsistent pieces of information that are not integrated within a coherent narrative framework. As we discuss below, this has profound implications for public uptake of information. Incomplete narratives lack the power to shift public understandings in durable ways. Instead, they reinforce existing ways of understanding substance use among adolescents.

Narratives are powerful framing tools through which we organize, remember, and recall information. In keeping with the scholarly literature, FrameWorks defines a complete narrative as one that defines a problem or issue, states why this issue is a matter of concern, explains who or what causes the problem, provides a clear vision of improved outcomes, and delineates concrete actions that can be taken to create change in relation to the problem.⁵ Our analysis reveals that *a substantial proportion of communications materials from both media outlets and advocacy organizations are missing critical elements of this narrative structure.* We detail those missing elements below.

Adolescent development is overlooked, especially in media materials. A developmental perspective on adolescent substance use is generally absent from media discourse on this topic. About one-quarter of organizational materials address issues of brain development, neuroplasticity, or the development of social, emotional, and cognitive skills. Only nine percent of media materials provide information about adolescent development and how it is affected by substance use (see Table 1).

Table 1: Topical Area

	Media (percentage of materials mentioned)	Organizations (percentage of materials mentioned)
Adolescent Alcohol Use	61	56
Adolescent Illicit Drug Use	41	68
Adolescent Tobacco Use	6	27
Adult Use (all substances)	24	24
Adolescent Development	9	29

Risk factors associated with adolescent substance use are frequently missing from media and organizational materials. Over 40 percent of both organizational and media materials contain no discussion of the risk factors associated with adolescent substance use. Some media materials focus on changes in the *rates* of use, as is the case in the excerpts below, but relatively few provide information about the factors contributing to these shifts.

Between 2002 and 2014, “the prevalence of driving under the influence of alcohol alone and alcohol and marijuana combined significantly declined among persons aged 16-20 years and 21-25 years,” the CDC concluded. Among 16 to 20 year olds, the drunk driving rate fell 59 percent. Among the 21 to 25 set, the rate fell by 38 percent.⁶

The article goes on to emphasize the difficulty of defining the precise causal mechanisms that explain shifts in adolescent use.⁷

Table 2: Risk Factors Associated with Adolescent Substance Use

	Media (percentage of materials mentioned)	Organizations (percentage of materials mentioned)
Parental Behaviors	10	21
Traumatic Experiences	2	15
Genetics	1	14
Peer Influence	16	26
Social Media	2	6
Availability/Access to Substances	21	23
Lack of Access to Programs that Prevent or Address Use	.5	9
Ineffective Policies	7.3	7
No Risk Factors Cited	47	43

Media and organizational materials lack values that explain society’s stake in addressing substance use among adolescents. Values are enduring beliefs that orient individuals’ attitudes and behaviors. Effective Values form the basis for social appeals that pull audiences’ reactions in a desirable direction and motivate action. FrameWorks research has consistently demonstrated that appealing to Values at the beginning of communications cultivates public support for a wide range of social issues. However, media and organizational materials do not include regular statements about *why* preventing and addressing adolescent substance use matters to society as a whole and not just those people personally affected. More than half of organizational materials, and 80 percent of media materials, do not contain collective-level statements about Values. In short, the majority of materials included in this analysis lacked clear statements about why society generally, and not just those personally affected, should be concerned about adolescent substance use.

Table 3: Values Statements

	Media (percentage of materials mentioned)	Organizations (percentage of materials mentioned)
Future Prosperity	1	5
Human Potential	3	9
Crisis	7	4
Public Health	4	12
Prevention	6	15
No Collective Value Cited	80	61

Structural causes of, and solutions to, adolescent substance use are also absent. Organizational and media materials that discuss environmental risk factors tend to focus on *social relationships* between adolescents and their parents. However, structural factors that affect young people’s susceptibility to harmful use—such as the lack of access to quality health care and housing, alcohol distribution zoning ordinances, and the extent to which a community relies on the criminal justice system to address adolescent use—are largely absent from materials. For example, only 7.3 and 7 percent of media and advocacy materials, respectively, focus on policy-level risk factors for adolescent use (see Table 2).

This inattention to structural and societal factors can also be seen in the absence of information about adolescents’ demographic backgrounds. More than half of organizational materials, and about one-third of media materials, do not include information about gender, socioeconomic status, or racial, ethnic, or sexual identity (see Table 4). Advocates or reporters may exclude this information to avoid supporting stereotypes about certain groups of adolescents being more prone to problematic use than others. This fear

is not unfounded: Several scholars have pointed to the media’s role in racializing public discourse around drug use, a practice which is suspected to contribute to more punitive drug policies.⁸ At the same time, discussion of adolescents’ demographic characteristics offers an opportunity to provide more contextual information about why and how adolescents are engaging in dangerous use. Membership in a historically marginalized group, for example, can shape substance use experience and exacerbate potential harms. This therefore represents a missed opportunity for experts to explain how social inequality shapes adolescent substance use.

Table 4: Demographic Characteristics

	Media (percentage of materials mentioned)	Organizations (percentage of materials mentioned)
Low Income	2.4	3.5
Middle/High Income	2.0	1.8
Asian	0	1.9
Black	3.6	4.4
Latino	2.0	3.5
White	3.2	3.5
Adolescent Girls	18.5	26.5
Adolescent Boys	27.7	30.1
LGBTQ Adolescents	0	1.8
None	30.5	35.8

Structural and policy-level *solutions* appear infrequently, especially in the media. While experts focus on environmental and policy-level changes—such as changes in insurance coverage or improvements in professional training for medical doctors—this type of systematic focus is generally absent from media materials (Table 5).

Table 5: Solutions

	Media (percentage of materials mentioned)	Organizations (percentage of materials mentioned)
Public Education Campaigns	26	33
Prevention and Early Intervention	29	50
Later Interventions and Treatment	12	38
Policy Change	29	17
Individual Action	12	41
No Solution Cited	16	9

SBIRT is not part of the media discourse. All of the organizations that were sampled for this analysis contained at least one public-facing document that focused on SBIRT. This makes sense, as their work on SBIRT was a criterion for inclusion in the sample. The media, however, do not cover SBIRT. FrameWorks researchers, in fact, could not find any articles about SBIRT in a first search of media materials. We ultimately identified four mentions, but only after extending the date range of the search. This speaks to how rare discussion of SBIRT is in the media.

Implications: Narrative Holes

The absences discussed above have a set of key implications for those trying to communicate about adolescent substance use issues.

Without explaining how risk factors contribute to adolescent substance use, members of the public and practitioners will continue to normalize current rates of use. As a result, public support for prevention and early intervention will remain low. FrameWorks research shows that members of the public and practitioners maintain a strong sense of fatalism about adolescent substance use. They reason that adolescent substance use is normal and will continue, and that there is little that can be done to reduce rates of use.⁹ Without a better sense of what *causes* adolescent substance use, people will continue to believe that substance use is a natural part of adolescence. Employing this understanding, people are likely to reject proposals for primary prevention or early intervention because they will see them as unnecessary or futile. When people understand substance use as a normal part of adolescent development, they simply cannot see prevention or early intervention as effective. The lack of a causal story in media and organizational communications supports this fatalism.

The absence of Values statements and societal impacts of adolescent substance use reinforces people’s individualist perspectives. People are not being alerted to how the problem of adolescent substance use affects communities and reverberates beyond individuals and their families. In the absence of statements that explain the collective importance and societal benefits of preventing and addressing adolescent substance use, members of the public will view this issue as a personal trouble—not a public health concern. When people hold individuals solely responsible for substance use problems and do not recognize the collective impacts of these issues, it becomes difficult for them to support policy-level solutions to addressing adolescent substance use.

The lack of attention to shifts in policy and practice will lead people to think about narrow individual solutions. Experts and advocates emphasize the importance of policy change to address adolescent substance use—including changing insurance coverage, improving training for healthcare professionals, and expanding settings where SBIRT might be implemented. However, members of the public are not consistently exposed to solution-oriented discussions that go beyond individuals; they rarely hear about systemic solutions. This makes it hard to imagine what societal-level solutions look like or to understand their importance in addressing this issue.

The lack of media discussion about SBIRT contributes to people’s difficulty in appreciating the importance of interventions that occur in settings beyond the home environment. People are skeptical about the efficacy of programs in healthcare settings that are designed to prevent adolescent substance use. This skepticism stems both from their understandings of adolescent substance use, in particular, as well as a more general pessimism about the state of the healthcare system in the United States. This pessimism will remain if people do not get concrete information about how programs like SBIRT work and how changes in practice can actually be implemented.

2. Partial Stories and Long Lists

The second part of this analysis identifies a set of clusters of narrative elements that appear in public discourse about adolescent substance use. For the most part, these clusters of narrative elements are missing key components of a complete story. However, even these incomplete stories activate public assumptions and cue understandings in distinctive and predictable ways and thus have implications for communications practice. Figures 1 and 2 present a summary of each of the clusters that our analysis identified in the media and organizational data.

The primary finding that emerged from the cluster analysis is that when media commentators or organizations discuss risk factors, effects, or solutions, they tend to focus on only one of the narrative categories and layer on multiple examples. For example, when a story touches on risk factors, it tends to list multiple risk factors and not include other narrative elements. In short, ***the media and organizations are communicating in lists that zoom in on one aspect of adolescent substance use.*** Below we describe the key narrative patterns that run through media and organizational materials, respectively.

Figure 1: Media Clusters



- Topic: Adolescent Development
- Topic: Adolescent Tobacco Use
- Risk Factor: Traumatic Experiences
- Risk Factor: Parental Behaviors
- Effect: Limited Opportunities
- Value: None
- Solution: None



- Topic: Adult Substance Use
- Solution: Public Education
- Solution: Prevention
- Solution: Policy Change
- Risk Factors: None
- Value: None
- Effects: None



- Risk Factor: Genetics
- Risk Factor: Social Media
- Risk Factor: Lack of Access to Services
- Value: None
- Effects: None
- Solutions: None

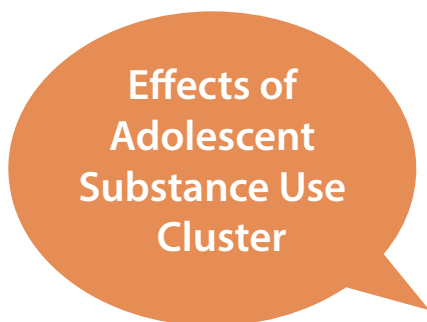
Figure 2: Organizational Clusters



- Risk Factor: Parental Behavior
- Risk Factor: Trauma
- Risk Factor: Genetics
- Value: None
- Effects: None
- Solution: None



- Risk Factor: Social Media
- Risk Factor: Bad Policy
- Risk Factor: Lack of Access to Services
- Effect: Constrained Opportunities
- Solution: None
- Value: None



- Topic: Adolescent Development
- Effect: Death
- Effect: Developmental Effects
- Effect: Health Issues
- Risk Factors: None
- Value: None
- Solutions: None

Organizations separate familial and structural risk factors, while the media include more episodic discussions of multiple risk factors. The cluster analysis reveals that discussions of risk factors tend to occur in single documents (see Figures 1 and 2). For organizations, this tendency often manifests itself in complicated presentations of data that do not present clear connections between various risk factors that may contribute to adolescent use. This is exemplified in the following passages:

They found that teens who spent the most unsupervised time with peers were 39 percent more likely to smoke cigarettes, 47 percent more likely to drink alcohol and 71 percent more likely to smoke marijuana than average. Teens who spent the most time in sports were 19 percent more likely than average to drink alcohol but less likely to use marijuana. And those with the most paid employment were 46 percent more likely to use tobacco and 28 percent more likely to drink. For all three substances, having used them already by age 15 raised the odds of use during the study by three or four times. Organized time, such as arts classes at school, religious activities outside school and community volunteer work, had a very modest protective effect. Kids with the most time in these activities showed a 7 percent to 18 percent lower than average risk of drinking or smoking.¹⁰

The basic issue is that individuals who drink early and often in adolescence are not a random subset of adolescents, and it may be that the factors that led these individuals to drink early—perhaps mental health problems, personality, or coming from a dysfunctional family—are the actual causes of the adverse adult outcomes with which adolescent drinking has been associated.”¹¹

The listing—without explanation—of risk factors leaves audiences with little means to interpret the facts provided. The first excerpt, for example, begs the question: Why does organized, activity-focused time have a more protective effect than employment? The answer is not addressed in the remainder of the article. The second excerpt does not discuss the relationship among mental health problems, experiences of early adversity, and individual personalities. Nor does it discuss how these factors translate into higher rates of adolescent drinking. These connections are asserted, not explained.

Organizations separate familial and structural risk factors. Within documents, organizations tend to focus *either* on risk factors at the individual or familial level—such as genetic predisposition, parental behaviors, or experiences of trauma—*or* on structural risk factors, such as the influence of social media, ineffective policies, and adolescents’ access to substances. The excerpts quoted above illustrate this tendency: The first looks at environmental and structural factors, while the second homes in on individual and familial factors. Put another way, organizational discussions of risk factors that result from interpersonal relationships tend to be distinct and separated from discussions of how those relationships might be shaped by specific social structures.

Media discussions of risk factors are individualized and episodic. The media largely ignores risk factors at a *population* level; instead, they zoom in on specific instances of adolescent use or specific communities where problematic use is taking place. The excerpts below demonstrate this pattern:

Semaj Clark was dealt a bad hand. Born to a teenage drug addict, he never knew his father. He was abused in foster care, he dropped out of high school, ran with hoodlums and built a long rap sheet that began with an arrest for burglary at age 12.¹²

"Let's be honest. A lot of kids in our communities live in a war zone on a daily basis," Gay said. "Whether it's mom and dad, or mom and her boyfriends, or dad and his girlfriends, or what's going on at school with unsafe bullying behavior."¹³

Organizational discussions of development are rarely accompanied by solutions. Organizations' discussions of substance use tend to focus on developmental *effects*, but typically are *not* accompanied by any mention or discussion of solutions (see Figures 1 and 2). The following excerpts show how organizations list the effects of substance use on adolescent development, but do not include solutions:

Unfortunately, developing brains may be more prone to damage. This means that experimentation with drugs and alcohol can have lasting, harmful effects on your teen's health.

- Research shows that alcohol abuse during the teenage years negatively impacts the memory center of the brain (the hippocampus).
- The use of drugs and alcohol may also disrupt the development of the adolescent brain in unhealthy ways, making it harder for teens to cope with social situations and the normal pressures of life.
- Moreover, the brain's reward circuits (the dopamine system) get thrown out of whack when under the influence. This causes a teen to feel in a funk when not using drugs or alcohol—and going back for more only makes things worse.¹⁴

Research shows that young people's brains keep developing well into their 20s. Alcohol can alter this development, potentially affecting both brain structure and function. This may cause cognitive or learning problems and/or make the brain more prone to alcohol dependence. This is especially a risk when people start drinking young and drink heavily.¹⁵

While the passages above accurately describe the developmental effects of early substance use, they do not discuss how effective, early interventions can promote more resilient outcomes for adolescents. By focusing on terms like "brain damage," organizations are not telling the fuller story of heightened brain plasticity, the potential impacts of early use, or the efficacy of developmentally appropriate interventions. Heightened neuroplasticity leaves adolescents more vulnerable to developmental disruption but, at the same time, creates greater responsiveness to early interventions. The latter point is consistently absent from advocacy discussions of developmental effects. Organizations have moved away from fear-based public service announcements like the well-known "This is your brain on drugs" campaign and, as the above excerpts demonstrate, are making a concerted effort to include more research and science in their materials. However, organizational discussions of "brain damage" are not consistently taking an explanatory approach that elucidates the processes of adolescent development and the implications of

these process for solutions.

Implications: Partial Stories and Long Lists

Lists of unconnected risk factors are unlikely to deepen understanding or build support for solutions.

People need a fuller understanding of how risk factors lead to substance use. This is especially important if they are to appreciate the power of prevention. If people understand *how* various risk factors predict adolescent substance use, they will be in a better position to support a wider range of programs and policies designed to reduce risks and protect adolescents. This will ultimately elevate support for increasing access to interventions like SBIRT.

Separating individual and familial risk factors from structural risk factors impedes appreciation of the range of solutions that are required to address adolescent substance use.

When organizations separate individual/familial and structural factors, they miss an opportunity to help people see the way that risk at multiple levels *comes together* to explain patterns of use and misuse. Understanding these connections is a vital part of building support for solutions that involve a continuum of care.

Organizations' tendency to explain the developmental effects of adolescent substance use without solutions is likely to substantiate the public's fatalism about this issue.

FrameWorks research demonstrates that people have a thin understanding of adolescent development.¹⁶ In addition, people do not understand how adolescent brain development can be impacted by prolonged substance use in ways that move beyond observable, behavioral outcomes. Pediatric practitioners have a more robust sense of adolescent development, but also lack an understanding of the *developmental*—as opposed to *behavioral*—impacts of adolescent use. Without a developmental perspective, understanding and supporting early intervention is difficult. The lack of sustained discussion of adolescent development in the media and in organizational materials is thus a missed opportunity to fill key gaps in understanding and move support forward.

The public has limited exposure to the range of interventions that can address adolescent substance use.

SBIRT is based on the premise that there are preventative actions and early forms of intervention that can be deployed before an adolescent shows signs of a substance use disorder. Conversely, intense forms of treatment are not necessarily appropriate in the early stages of adolescents' initiation into substance use. When healthcare professionals have access to a continuum of prevention and intervention programs, they are better able to address the needs of any individual adolescent. Simply stated, our analysis shows that the public is not getting these messages. This allows the public to fall back on their fatalistic sense that substance use is an unfortunate, but normal, part of adolescence.

3. Deeper Patterns: Normalization, Crisis, and Individual Responsibility

The final set of findings come primarily from the qualitative analysis of organizational and media data. Qualitative analysis reveals the tacit assumptions that are commonly embedded within media and organizational materials. As we discuss below, the assumptions built into these materials are often

counterproductive, reinforcing problematic lines of thinking that are widespread within the public. We contextualize these qualitative findings using data from the frequency analysis, to show how common these unproductive patterns are.

Adolescent drinking and tobacco use is normalized in the media. While underage drinking is a primary issue in media materials—appearing in 52 percent of all media stories analyzed—qualitative analysis revealed the media’s tendency to present adolescent alcohol use as a normal, if regrettable, part of the adolescent experience. As demonstrated in the passages below, media stories often *implicitly* assume that adolescent alcohol use is a normal and inevitable part of adolescence.

Part status symbol, part rite of passage, fake IDs have been integral to American adolescence since a national minimum drinking age of 21 was first imposed in 1984. But the days of chalking the birth date on your driver’s license are now gone, replaced by an expensive, high-stakes war of escalation between authorities and aspiring underage drinkers.¹⁷

The tidal wave began in John Belushi chanting, “TOGA! TOGA! TOGA!” in National Lampoon’s “Animal House” ignited a litany of iconic scenes on movie screens over the years, each conveying a narrative of the ultimate partying experience in college. From Will Ferrell exclaiming, “We’re going streaking!” in “Old School” to the newer generation of the stereotypical frat boy Stiffler in “American Pie 2” or Fat Amy in “Pitch Perfect,” audiences nationwide soak in the drunken, boozy, wild parties that prospective college students have to look forward to or college students are, supposedly, experiencing. This cultural expectation is so pervasive that simply typing “Best College Party Movies” into Google yields an overwhelming six million hits.¹⁸

It is important to note that even though the passages are critical of adolescent drinking, they nevertheless reinforce a sense that it is central to being an adolescent in American culture. The articles above refer to adolescent alcohol use as a “rite of passage” and a “cultural expectation,” as well as a “taboo allure.” The idea expressed is that excessive alcohol use is central to the experience of being an adolescent in the United States.

The media normalizes adolescent tobacco use more implicitly—through its almost complete absence in media materials. Adolescent tobacco use appears in only 6 percent of the sample of media materials sampled.

Adolescent substance use is consistently framed with crisis language. The most frequently cited effect of adolescent substance use in media materials, and second-most frequently cited effect in organizational materials, is death (Table 6). In focusing on mortality as an effect of adolescent substance use, media and organizations are engaging in crisis framing. Qualitative analysis revealed subtle differences in the ways that media and organizations address the issue of mortality and adolescent substance use. The media focus on single “episodic” stories of adolescents who died as a result of their substance use. The following examples illustrate this pattern:

The teenage driver in an alcohol-related crash that claimed the life of a student from Sherwood High School and left another severely injured was sentenced to 18 months behind bars Thursday at an emotional hearing that drew dozens of friends and relatives into a Rockville courtroom. Austin Donovan Hall, now 18, lost control while driving 119 miles per hour on Labor Day weekend 2014 in a residential area of Olney, where the speed limit was 35. He had just left an underage drinking party less than a mile away. The Chrysler convertible Hall was driving veered, hitting a tree and a light pole. Shawn Gangloff, 15, was ejected and later died from his injuries; Max Dechter, then 17, was severely injured and hospitalized for months... Prosecutors said in court papers that Hall was “heavily intoxicated”—with a blood-alcohol level of 0.11, well above the legal limit of .02 for an underage driver—when he was tested more than two hours after the crash, which occurred shortly before 1:30 a.m. on Aug. 30, 2014.¹⁹

New York’s party buses have become traveling circuses packed with underage drinkers and even strippers—but now the party may be over. After a 16-year-old was killed poking his head out of the roof hatch of one of the vehicles, and other incidents involving teen drinkers, state Sen. Jeff Klein (D-Bronx/Westchester) wants to crack down by requiring chaperones on all buses with underage passengers.²⁰

Organizations, on the other hand, focus their attention at the population level and tend to cite mortality rates.

Drinking affects college students, their families, and college communities at large. Research estimates that each year about 1,825 college students between the ages of 18 and 24 die from alcohol-related unintentional injuries, including motor-vehicle crashes.²¹

How many families will have to bury a child before we change the way Americans treat those who care for a loved one with a substance use disorder? How many families will make the heart-wrenching decision to call the police on their own daughter because it is the only way they can get her a treatment bed? How many communities will succumb to substance abuse because funding support for prevention programs has been slashed? ... The human cost? It is almost too much to bear. Forty-four Americans die each day of prescription painkiller overdoses—that’s 16,060 people per year—making substance abuse the leading cause of accidental death in our country.²²

Table 6: Effects of Adolescent Substance Use

	Media (percentage of materials mentioned)	Organizations (percentage of materials mentioned)
Death	32	28
Non-lethal Health Effects, Including Adult Addiction	21	22
Developmental Impacts	12	40
Legal Action	27	8
Compromised Opportunities	8	25
No Effects Cited	26	37

Media and organizational materials hold individuals responsible for making good choices. While prevention is part of organizational materials and, to a lesser extent, media stories, qualitative analysis shows that these discussions are often rooted in language about choice and individual decision-making. This tendency was clearest in organizational materials. The implicit idea in many of the materials is that as long as adolescents or their parents receive information and education about the harms of substance use, they have what they need to rationally weigh the costs and benefits of use and make the right decision. There is a strong tendency to cast adolescent substance use as simply a matter of making good choices.

Given the above statistics, if you are hanging out with a group in which the majority of kids are using drugs to get high, you may want to think about making some new friends. You may be headed toward an alcohol or drug problem if you continue to hang around others who routinely drink alcohol, smoke marijuana, abuse prescription drugs or use illegal drugs. You don't have to go along to get along.²³

The Partnership for Drug-Free Kids today announced the celebration of the Fourth Annual Above the Influence (ATI) Day. Taking place at the House of Sweden in Washington, D.C, Above the Influence Day is a national event that celebrates teens across the country who choose to rise above the negative influences in their lives to be their best selves.²⁴

In addition, public education and awareness campaigns were promoted in more than a quarter of both media and organizational materials. These campaigns rely on a similar assumption that if adolescents and their parents just understand the harm of early use, they will change their behavior and make better decisions. While experts also highlight the importance of education and information provision, they advocate for a more holistic approach that also includes skill-building for adolescents to avoid use and contextual changes that can prevent harms related to substance use. These skills-based and contextual perspectives are generally absent from both media and organizational materials.

Organizations do not consistently explain how prevention and early intervention work. While organizations frequently assert the importance of prevention and early intervention, they do not explain *how* such actions reduce potential harms. The following passages demonstrate this tendency:

If childhood abuse can lead to future addictive behavior, and drug addicted parents have a higher rate of neglect and abuse toward their children, then the kind of treatment offered by the Family Nurturing Center in Florence could be the key to stopping that seemingly endless cycle.²⁵

"There are 14 randomized studies that show, when compared to other treatments, children who get Trauma Focused Cognitive Behavioral Therapy have reduced posttraumatic stress disorder, fewer behavior problems, and reduced anxiety and depression. They just do better. We treat parents, caregivers and foster parents, and they also do better," she said. "We also have at least one study showing that adolescents who received this treatment showed decreased substance use at the end of treatment, so these results are promising. But does treating a traumatized 10 year old prevent future heroin use? We don't have that study yet," Olafson said.²⁶

The final excerpt is representative of a tendency to report findings from studies without explaining how interventions work. Without clear discussion of how prevention and early intervention work and the reasons to be hopeful, it is easy for the public to imagine the 10 year-old as destined for future substance addiction.

Implications: Deeper Patterns

The normalization of adolescent tobacco and alcohol use undercuts concern about these issues. These messages reinforce an existing lack of concern in the public, especially about low-level use, and directly undercut the salience of the issue in public thinking.

Focusing on individual decision-making obscures messages about adolescent development and makes it hard for people to see the importance of settings outside the family. Experts want to explain adolescence as a period of incredible neuroplasticity, when young people are developing critical executive function skills that help them control impulses and prioritize behaviors. By holding adolescents responsible for their decisions and exhorting them to "rise above the influence" and make good choices about their peer groups, organizations are forwarding an understanding that intervention is about deciding to make better choices and obscuring key points from the science of development. Individual

responsibility must be balanced by developmental and contextual perspectives.

Furthermore, attributing responsibility for use to parents and adolescents themselves is likely to reinforce the *Family Bubble*—the idea that families are solely and completely responsible for their children’s outcomes, including their decisions to use alcohol and other substances. This model appeared frequently in research with the public.²⁷ When this way of thinking is active, people have difficulty recognizing a role for individuals outside of the family and a wider set of contexts as appropriate sites to address adolescent substance use. When media and organizational materials attribute responsibility to parents and adolescents, it becomes harder for the public to see the need for programs and approaches like SBIRT.²⁸ Emphasizing individual and family-level responsibility is likely to strengthen the belief that parents are the only adults in an adolescent’s life who can recognize the signs of, and respond appropriately to, substance use.

Crisis messaging in media and organizational materials is counterproductive. Media and advocacy organizations seem to focus on the most serious effects of adolescent substance use as a way to grab public attention and generate interest on this issue. This tendency is particularly pronounced in media discussions of the “opioid epidemic.” While it is important for the public to understand that a serious problem exists in order to see the importance of proposed solutions, a body of social science research has found that, paradoxically, priming people to feel a sense of crisis about a problem can *depress* their support for solutions. This phenomenon is commonly attributed to “compassion fatigue,” or the limits of people’s ability to sustain the heightened emotional state required to address imminent emergencies. Crisis-oriented language is common currency in advocacy communications, yet research suggests that it is not helping to achieve communications goals and is likely to overwhelm people and cause them to disengage.

The lack of explanation of how early intervention and prevention work does not increase support for these solutions. Our analysis of public thinking suggests that people generally do not understand *how* prevention and early intervention work to address substance use issues and improve outcomes. This suggests that explaining how and why programs are effective will be vital communications tasks.

Recommendations

The recommendations below represent important opportunities for SBIRT advocates and others working on adolescent substance use to improve the effectiveness of their communications. We realize that shifting the media discourse and public conversations on adolescent substance use is a challenging task. However, as FrameWorks has seen in our work on early childhood development, an effective core story that is consistently told by multiple voices and respected institutions can introduce science-based messages into public conversations on that topic.²⁹ We offer the following recommendations to begin that process for adolescent substance use experts and advocates.

Tell *complete stories*. Communicators should aim to tell complete stories in their organizational materials and interactions with media professionals. People who are advocating for prevention and early intervention, and SBIRT specifically, can improve their messages' odds of entering into the public discourse by framing messages as story. Furthermore, advancing complete stories will prevent the tendency for people to “fill in the blanks” with default—and often unproductive—understandings and help advance new, more productive ways of thinking. Communicators can use the following checklist to make sure they are telling complete stories:

Does the communication:

- ✔ Explain why adolescent substance use is a problem from a developmental perspective?
- ✔ Explicitly state why addressing the issue is important for *all* Americans, and what is at stake if we fail to act?
- ✔ Explain risk as well as protective factors associated with adolescent use?
- ✔ Describe the developmental effects of substance use and delineate how those effects impact everyone, not just those immediately involved?
- ✔ Provide concrete and public solutions to address the issue, and explain how they result in improved outcomes for adolescents?

It is important to note here that complete stories do not necessarily mean long stories. Given the attention span of today's media and media consumers, there will be instances where communicators need to be concise in their messages. Furthermore, this recommendation does not mean that organizations need to explain *every* aspect of adolescent substance use in a single communication. Rather, communicators should strive to include as much explanation (rather than description or assertion) as they can in a given communication. Below is an example of what this explanatory approach might look like in practice.

Description: The basic issue is that individuals who drink early and often in adolescence are not a random subset of adolescents, and it may be that the factors that led these individuals to drink early—perhaps mental health problems, personality, or coming from a dysfunctional family—are

the actual causes of the adverse adult outcomes with which adolescent drinking has been associated.”

Explanation: Many of the adverse adult outcomes with which adolescent drinking has been associated may actually be caused by things like mental health problems, personality, or coming from a dysfunctional family—the factors that led adolescents to drink early in the first place. Ultimately, the basic issue is that individuals who drink early and often are not a random subset of adolescents.

Contextualize numbers; don’t expect them to speak for themselves. Several of the unproductive communications practices listed above are related to how organizations and the media are presenting data and reporting on research findings. The use of numbers and statistics can be an effective part of a larger communications strategy, but only if they are properly framed. While the meaning of a given data point or statistic may be obvious to experts and advocates, the public interprets numbers in unexpected and potentially unproductive ways if they are not framed in a way that guides interpretation and meaning-making.³⁰ To guard against unproductive thinking, experts and advocates should take caution to always frame data and research findings. Communicators must provide a way for people to think about what the numbers mean, why they matter, and what they suggest in terms of solutions. Data and numbers are a critical part of the story, but data cannot speak for itself.

Elaborate on environmental risk factors and how they contribute to adolescent substance use. Conversations about the structural and environmental determinants of substance use among adolescents are inconsistent in the media and in advocacy materials. More specifically, many advocacy materials are designed to change parental behavior in order to prevent, identify, and address adolescent substance use. Very few communications are directed at increasing support and demand for services and programs that can help prevent and address adolescent use. In other words, the problem may not be that parents lack information, but that they lack *access* to effective programs like SBIRT or other supports. Focusing communications on environmental risk factors and solutions seems particularly important in under-resourced and marginalized communities, where youth who experience problems with substances are likely to be funneled to the criminal justice system.

Communicators need to use a “wide angle lens” when messaging about adolescent substance use. Robust discussions of the societal and community-level factors that contribute to adolescent substance use will play an important role in helping people think about substance use as an issue that extends beyond problems of willpower. These types of messages can also help people imagine community-based solutions and prevent them from thinking about use and abuse as a private problem best handled in the home. Encouraging people to consider how communities might contribute to problematic use and how communities can be a locus of prevention and remediation opens up space for people to more productively engage with and support programs like SBIRT.

Adopt an explanatory approach. Experts and advocates consistently focus on the relationship between adolescent development and substance use. However, advocacy organizations’ treatment of adolescent

development is complicated by a general lack of explanation about *how* substance use affects adolescent development and *how* solutions prevent and remediate these developmental processes. Furthermore, the language of “choice” in the field’s discussions of adolescent development implicitly attributes responsibility for the problem of adolescent substance use to adolescents themselves. People need a more robust understanding of the relationships between adolescent development and substance use. They need more information about how substance use impacts developmental processes and, importantly, how programs like SBIRT can address the specific developmental needs of adolescents. Communicators can begin developing more explanatory messages now, but further communications research should take this task on as a top priority.

Appendix

The following 15 influential organizations were included in the analysis:

Treatment Research Institute
Partnership for Drug-Free Kids
Boston Children's Hospital
American Board of Addiction Medicine
American Academy of Pediatrics
National Institute on Alcohol Abuse and Alcoholism
Community Anti-Drug Coalitions of America
Society for Prevention Research
National Council on Alcoholism and Drug Dependence
American Academy of Child and Adolescent Psychiatry
SBIRT Colorado
National Institute on Drug Abuse,
Institute for Research, Education, and Training in Addictions
Addiction Technology Transfer Center
The National Center on Addiction and Substance Abuse at Columbia University



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O’Neil, M., Volmert, A., and Kendall-Taylor, N. (2016). *Telling Stories That Explain: Comparing Media and Organizational Discourse on Adolescent Substance Use*. Washington, DC: FrameWorks Institute.

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