Strategies for Effectively Communicating about Toxic Stress

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FRAME WORKS

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Introduction

For more than 10 years, the FrameWorks Institute has conducted extensive research in the United States and globally to reframe the conversation around early childhood. Through the "core story" of early childhood development—a set of empirically tested communications strategies and tools—this reframing effort has yielded explanatory tools that build public understanding of how chronic, severe stressors undermine healthy development and lifelong health and wellbeing. It has also empowered a broad coalition of scientists, advocates, and service providers in their goal of strengthening policies and programs that can prevent, address, and reduce adverse childhood experiences (ACEs).

For this effort to be realized, communicators must engage in this science the individuals and communities disproportionately affected by ACEs. As prior FrameWorks' research has noted,[1] it is vital to find strategies to communicate with adults facing adversity in ways that build their understanding of how stress affects development; foster openness to participation in services for themselves and their families, and empower them to advocate on behalf of their communities. These services are crucial, yet many individuals are reluctant to access them, in part because of deeply held beliefs about how trauma impacts their lives and their capacity for resilience, as well as a lack of self-efficacy and empowerment. This report identifies a set of framing strategies that can more effectively communicate the science with these audiences in ways that acknowledge their dignity, their capacity for resilience, and ultimately allow them to serve as agents of change, both for themselves and their communities.

The research reported here, conducted by FrameWorks for the Center on the Developing Child at Harvard University, is an initial step toward that goal. It begins with the premise that individuals with histories of lifelong adversity do not engage with clinicians and direct service providers as "blank slates." Rather, they implicitly bring their past experiences and prior knowledge to the way they think and talk about the effects of lifelong stress and the actions they take to address it in their lives. Our goal is to more effectively communicate key concepts from the science of development, not only to build public understanding but also to leave affected individuals feeling empowered about their health and wellbeing.

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This Message Brief is designed to help advocates, pediatricians, direct service providers, and other frontline professionals to more effectively communicate the science of development with members of communities dealing disproportionately with economic and socio-cultural disadvantage. It provides actionable recommendations, building on more than a decade of FrameWorks' research on communicating key concepts about adversity and resilience, with a particular focus on communicating with individuals who have experienced significant adversity.

Research Methods

To arrive at the recommendations below, we applied Strategic Frame Analysis®—an approach to communications research and practice that yields strategies for reframing social issues in order to change the public discourse. This approach has been shown to increase public understanding of and engagement in conversations about child development and other scientific and social issues.

This approach begins with an analysis of expert views on lifelong development, stress, and adversity in order to discern the key attitudes and understandings that project partners wish to promote. (See the appendix for this "untranslated" expert story.) Next, we compared and contrasted the expert perspective with public views of this issue. This report departs from FrameWorks' typical research process in its focus on communicating with members of the public who have (or are likely to have) experienced significant adversity. The goal is to produce a set of communications recommendations that not only strengthen this audience's understanding of the developmental science but that does so in a way that leaves them feeling (1) empowered about their health and (2) motivated as citizens and community members to push for changes that address the root causes of toxic stress.

FrameWorks' researchers were specifically interested in learning how these affected populations engage with existing elements of the core story of early childhood development; the explanatory metaphor of *Toxic Stress*; and an explanation of the systemic causes of stress in families and communities.

Toxic Stress Explanatory Metaphor

There are three main kinds of stress that young children experience: positive stress, tolerable stress, and toxic stress. Positive stress is a challenge—like facing a new social situation—that helps children develop. Tolerable stress could damage development, but not if buffered by strong and supportive relationships—like having adult support when a loved one dies. And then there is toxic stress, which happens when a child experiences severe and ongoing stress—like extreme poverty, abuse, or neglect—without adult support. Toxic stress can affect the way that a child's brain develops and can lead to lifelong problems in physical and mental health.

Explanation of the Social Determinants of Stress

The environment in which a child lives can cause significant stress. For example, children living in low-income communities deal with day-to-day stresses that children in higher-income communities do not. Inadequate resources and supports creates stress for parents and children, as does living in a community with high rates of violence. Ongoing discrimination causes stress that can wear on the brain and body over time. To create services that effectively address the root causes of stress, doctors and community members need to know more about how environments cause stress and affect children's health and development.

The following sources of data inform the research findings and framing recommendations in this report:

Cognitive Interviews

FrameWorks' researchers interviewed 16 members of the public who self-identified as having experienced one or more childhood adversities.[2] Interviews were one-on-one, semi-structured, and lasted approximately two hours. All participants were parents and had previously been involved with the child welfare system (as a child, a parent, or both). Interviews were conducted in Seattle and New York City. Interview questions covered a range of topics but did not probe specifically about participants' own life experiences (although biographical details were often raised voluntarily over the course of the interview in response to questions about development, stress, and resilience). These interviews, and the subsequent analysis, were designed to:

— Identify where participants' thinking about lifelong development, stress, and resilience converged with, and diverged from, patterns of thinking identified in prior FrameWorks' research with the general public (i.e., those without a known background of childhood adversity).

— Explore the effects of particular framing strategies on participants' thinking and discussion. In the final half hour of the interviews, researchers engaged participants in a discussion of two existing, commonly used ways of speaking about stress: a message using the *Toxic Stress* metaphor and a message explaining the *Social Determinants of Stress*. Participants read each message and were asked to discuss and interpret both with researchers.

Peer Discourse Sessions

FrameWorks' researchers conducted five peer discourse sessions to test communications hypotheses and ideas. These were conducted in Los Angeles and Austin, Texas, in December 2018. Each session included eight or nine participants. Participants were recruited by a professional marketing firm, and the composition of each group approximated the communities that this research was designed to benefit, particularly those dealing with economic and socio-cultural disadvantage. Consequently, 50 percent of participants were people of color, and all participants reported household incomes below $50,000 a year. These sessions were designed to meet the following research objectives:

— To identify and confirm patterns of thinking about lifelong development, stress, and adversity that emerged from the analysis of cognitive interviews, including participants' responses to existing frames about toxic stress and the social determinants of stress; and

— To explore the effects of particular framing strategies on group thinking and discussion. Participants were exposed to a set of frames: four values statements presenting different arguments about why prevention and intervention services that address stress matters and four metaphors to explain the causes and effects of and solutions to toxic stress in communities.

Community Partner Meetings

Throughout the duration of this project, FrameWorks' researchers met with a group of community-based advocates, many of whom have direct systems experience (e.g., in child welfare or social services) and experience working with members of marginalized communities. The purpose of these meetings was to gather feedback from community partners on the interpretation of interview and focus group data. This feedback was used to develop new framing strategies and to refine communications recommendations.

Framing Recommendations

Strategic framing is about knowing both what to *say* and what *not* to say to help people reason productively about a topic. The framing strategies below can empower people who have experienced significant early adversity at multiple levels of identity—as individuals, as parents, and as community members. Social issues are complex, and so are personal identities. An individual can easily be, at once, someone who has experienced high levels of early trauma, a parent of young children, a neighbor or friend to other parents of young children, and a voter. The recommendations here are designed to engage and empower members of the public as they navigate these varied identities.

Recommendation #1: Don't talk about toxic stress without also explaining people's capacity for resilience.

Research shows that serious and ongoing adversity during childhood, such as extreme abuse, poverty, and neglect, can have serious effects on the developing brain and body and can contribute to negative outcomes in health and wellbeing later in life. At the same time, adverse experiences in early childhood do not automatically translate into negative outcomes. Effective services and interventions at the individual, family, and community levels can ameliorate the effects of toxic stress, helping children and adults cope with, adapt to, and prevent adversity in their lives.

What gets in the way

As prior FrameWorks' research has shown, members of the general public assume that derailed development cannot be put back on track. Put simply, "damage done is damage done."[3] This way of thinking leads people to reason that interventions are futile, especially when children have already experienced adversity, and obscures expert understandings of how appropriate interventions support resilience and healthy development.

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This tendency to understand developmental disruptions as irreparable was *also* evident in cognitive interviews with adults who have experienced significant adversity. FrameWorks' researchers asked participants to read and discuss two different statements about toxic stress and the social determinants of stress, both of which explained how stress affects development and can cause lifelong problems in learning and health. Discussion of these statements provoked an unproductive and fatalistic understanding of childhood adversity as something that, to quote one participant, "you can't escape or overcome." Their responses to these messages, as exemplified by the quotations below, suggest that these frames evoked deeply personal responses, prompting participants to think that little can be done to address the effects of stress that they or their families may have experienced.

> **Researcher:** What does this statement stay to you about the effect of stress on kids?

> **Participant:** I don't know. It just changes you as a person. So, if stuff happens when you're a kid, you'll never forget it. It makes you grow differently.

> **Participant:** The toxic stress, I just think it's like a plague. It just goes on and on. You don't know how to stop it, you don't have the support. It gets to a point where you have given up, like, "This is all I know, so what else is there to do?"

> **Participant:** I don't want to think of my kids as deteriorating and wearing down. I want to think of them as being resilient and having that feeling. I don't want to think of anything negative happening to them because of them being discriminated against. I feel like it just hurts me to think about that.

This understanding of the effects of childhood adversity—that "the die is cast"—is strongly deterministic and fatalistic. In the absence of additional information about how positive outcomes can be achieved in the wake of trauma, the idea of resilience appears fundamentally unachievable and unrealistic and is likely to undermine affected individuals' sense of self-efficacy and optimism about their future. And, once people reason from this perspective, they are less likely to appreciate or support proffered solutions and may be less open to access services for themselves or for their children.

What framing needs to accomplish

Communicators and advocates may, understandably, want to draw attention to the threats that adverse experiences pose to lifelong learning, development, and health. However, they must do so in a way that avoids cuing the idea that chronic stress leaves mental and physical scars that cannot be erased. Instead of reinforcing the notion that "damage done is damage done," frames must consistently advance a sense that, with the right supports, individuals have the capacity to thrive in spite of adverse life experiences.

What helps

Our research findings suggest that, when communicating about toxic stress, especially with audiences that may have experienced it, communicators would benefit from adopting the following strategies:

— **Avoid deterministic language.** Communicators should not overstate the causal relationship between early adversity and later outcomes. Instead, they should incorporate the idea of probability into their messaging: that childhood adversity and toxic stress may increase the *likelihood* of negative developmental outcomes but do not *guarantee* their occurrence. This strategy is both scientifically accurate and sound communications practice.

Instead of this:	Try this:
A toxic stress response occurs when children are exposed to significant amounts of adversity.	Toxic stress responses can occur when children are exposed to significant adversity.
Children who experience early adversity will have more health problems later in life.	Over time and without supports, children who experience early adversity are more likely to have health problems later in life.
Toxic stress damages the developing brain.	Toxic stress can undermine healthy brain development.
Toxic stress exposure in childhood is linked to risky behavior and adult disease.	Toxic stress exposure may result in chronic physical and mental health conditions.

— **Use a hopeful, efficacious tone.** Communicators should avoid leading with an explanation of all of the threats posed by toxic stress. Instead, they should begin their communications with an aspirational appeal to the power of resilience. Rather than using crisis language to communicate about the harsh reality of adversity and its impacts, this approach sets a more inviting tone that recognizes individuals' assets. One way of setting this tone is to begin by speaking about "resilience in the face of toxic stress." Another way is to refer to the ability to thrive in the face of challenging life circumstances. This makes the idea of resilience much more feasible and concrete.

Before
Toxic stress can have damaging effects on learning, behavior, and health.

After
Providing every community with a robust system of supports is one way to ensure resilience in the face of the potentially harmful impacts of toxic stress.

— **Embed solutions into communications and evoke them in multiple ways.** Wherever possible, communicators should give examples of solutions that can alleviate the effects of toxic stress in affected communities. Instead of merely naming a set of promising policies or programs, communicators should explain how they work. One way to do this is with explanatory chains— a "what-affects-what" sequence that gives individuals a fuller understanding of *how* solutions lead to positive outcomes.

> **How Parent Coaching Builds Resilience**
>
> — Because healthy adult-child interactions lay the foundation of the developing brain, we need to make sure all parents have what they need to develop strong parenting skills. The lack of positive interactions can impact a child's developing brain.
>
> — Parenting can be difficult for everyone, but it is especially challenging for people who face multiple sources of stress. Some parents and caregivers don't have the resources they need to ensure positive interactions with their children.
>
> — Parent coaching programs, especially those that call attention to the positive ways that parents interact with children and that help improve interactions with children, can buffer the impacts of chronic stress on the child and the parent.
>
> — We should make it a priority to ensure that all parents have access to the supports they need in to engage in positive interactions with young children.

Recommendation #2: Place parenting in context to reduce stigma and guilt.

Scientists and other experts emphasize that an "environment of relationships" is crucial for the healthy development of children and can play a powerful role in buffering children from the effects of toxic stress.[4] However, they also recognize that responsive caregiving is a skill that, like any skill or capacity, can be compromised when parents are overwhelmed with ongoing stressors.

What gets in the way

Discussions in our cognitive interviews about the factors that shape child outcomes were not limited to the family, nor did participants view the family as divorced from larger contextual influences. Instead, participants in cognitive interviews, as well as in our

discussions with parent advocates, were *highly* aware of the environments, systems, and contexts in which families, children, and parenting practices are embedded. They were equally attuned to how stress and other life challenges undermine parenting capacities.

For example, when research participants read about toxic stress, participants' attention was often drawn to the idea that child stressors can be "buffered by strong and supportive relationships." They expressed profound empathy for how difficult responsive caregiving can be when a parent is consumed by the daily, ongoing struggle of social and economic disadvantage. For example:

> **Participant:** How does it affect adults? Because I guess the adults are caregivers. And I feel like they're held to a certain standard of providing a certain type of care and lifestyle for their child. So, if you're not up to those standards, it's stressful.

> **Participant:** I think sometimes, poverty is confused with neglect.
>
> **Researcher:** Can you say more about that?
>
> **Participant:** I think if you're poor and you have a hard time feeding or clothing your kid, it doesn't mean you're neglecting them. [Officials at the Department of Child Protective Services may] think you're neglecting them. And no matter how hard you tried to put food on the table and the clothes on their back, they put it down as abuse and neglect. Like it's a crime to be poor, sometimes.

What framing needs to accomplish

These findings highlight a key challenge and tension facing communicators working with families that have experienced ongoing stressors in their lives: the need to communicate about the importance of responsive caregiving while *also* making it clear that systemic factors can undermine parents' ability to do this, which leads to feelings of blame and stigma.

What helps

In peer discourse sessions, FrameWorks' researchers tested a range of metaphors and other communications tools for their ability to provide people with a more contextual understanding of parenting—one that foregrounds the role of systems and contexts and inoculates against the notion that parents are to blame for their inability to buffer their children from stressors. One metaphor, *Overloaded*, showed strong positive effects on participants' attitudes and understandings:

The *Overloaded* metaphor

The weight of extreme poverty can overload a parent's ability to provide the supportive relationships children need. Just as a truck can only bear so much weight before it stops moving forward, challenging life circumstances can slow parents down, making it hard for them to provide high-quality care and support. However, just as we can unload an overloaded truck by bringing in other trucks or moving cargo in other ways, we can provide supports and services that improve parents' ability to care for their children. These supports can keep families moving forward, even in bad conditions. This can prevent children and families from experiencing toxic stress and ensure they have the opportunity to do well.

This metaphor draws attention to the external factors that interfere with effecting parenting, such as financial problems, housing instability, and unemployment. After exposure to the metaphor, participants reasoned that parenting, just like maneuvering a cargo truck, is affected by interconnecting systemic factors that are outside of individuals' control. This metaphor sparked productive conversations about the need for community supports, such as resources that provide financial and housing support. Crucially, when participants reasoned with this metaphor individual characteristics like love, care, and willpower, while present in conversations, were never seen as the *exclusive* determinants of effective parenting. In other words, the metaphor helped people easily see how social factors constrain parents' ability to provide responsive caregiving for children, but not in a way that denied their agency and resilience. On the basis of these findings, we recommend that communicators use *Overloaded* to:

— **Deepen explanation of parenting under conditions of chronic stress.** Communicators can use the *Overloaded* metaphor in conjunction with the *Toxic Stress* metaphor. This can help people understand the negative impacts of children's experience of stress without adult support in a way that does not cast blame on parents.

— **Focus on the external pressures that hamper parents' ability to care for their children.** The conventional associations between stress and feeling overloaded, such as the idea of being "burdened" or "weighed down," can be leveraged to focus on influences that are outside of individuals' control. At the same time, communicators should take care to preserve individuals' sense of autonomy and efficacy in the face of these stressors.

— **Frame discussions about how community-based and societal-level solutions can address this problem.** Use metaphorical language to communicate the idea that resources, services, and interventions help "take the load off" or "manage the load." This allows communicators to discuss what parents need to return to a state of optimal functioning.

Recommendation #3: Emphasize self-efficacy rather than *Individualism.*

Advocates, pediatricians, clinicians, direct service providers, and other frontline professionals want to promote feelings of hope and empowerment among families and communities affected by adversity so that they are motivated to seek out and engage with services. However, they must do so in ways that builds self-efficacy—not in ways that inadvertently casts blame upon parents or that obscure the importance of resources and supports.

What gets in the way

FrameWorks has found across health-related issues a strong tendency in American culture to see problems through the lens of *Individualism*—the notion that drive, willpower, and the propensity to make "good" choices are the sole determinants of individual outcomes. This pattern emerged strongly in FrameWorks' interviews with individuals with backgrounds of adversity and disadvantage. When describing how they dealt with challenging life experiences, the notion of choice was critical— the idea being that resilience is fundamentally about whether someone lets their past experiences define them or whether they choose another path.

> **Participant:** I believe, like, you have trauma that affects people differently. Some people bury their head in the sand, and they don't want to talk to you. Other people are, like, "Wow, that was really traumatic, and I want to do something about it. I don't want to experience that anymore. I'm going to change. I'm going to do something different." You know? And you have various... That's one extreme, and then you have the other extreme, right? And then, like, you have a bunch of people that fall somewhere in the middle of that.

> **Participant:** I think stress is a choice, and a lot of people... And I didn't know that it was a choice. Because once again, it's all about how I'm allowing myself to experience this situation. I can either expect it, reject it, move on from it, or just say it is what it is.

Individualism also surfaced in discussions about how to alleviate the effects of stress. Trauma and other adverse experiences were described by participants as obstacles that keep them "stuck," impeding their ability to achieve their goals and ambitions. They frequently returned to the idea of therapy as a way to "work through" or "release" issues from their past. And, while this way of thinking does allow people to understand

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how access to therapy can facilitate a person's progress toward resilience, it is highly individualistic, obscuring other, more structural solutions.

> **Participant:** Yeah. It's helped me a lot. Like, even with my therapist. Like, when I sit with my therapist, I was very reluctant to do therapy because I know what my past looked like. So, I didn't want to do it at first, and then when I started, I got to know that my feelings were okay. And that who I'm becoming is a person worth becoming. It helped me feel less stagnant because of the level of years that child welfare's been involved in my life. I felt stagnant, and it helped me work through that.

> **Participant:** So, I went through trauma therapy, which was cognitive behavior therapy. And I was going through dialectical behavioral therapy. And before having those therapeutic experiences, I didn't know anything about what the heck was going on with me. The messaging I got was that I was a bad child, I had these behavior problems, and a lot of anger and rage that I didn't know where to put.

From a communications perspective, these findings present both challenges and opportunities. On one hand, this individualistic strand of thinking interferes with some key communications goals: it exaggerates individuals' ability to ensure good outcomes; it obscures the role of supportive interactions and environments; and it may also hide the role of economics, social policies, and other factors in shaping development. On the other, participants' strong sense of self-efficacy—that *they,* and not their circumstances—control their fates was adaptive. It provided a sense of optimism and hope and appeared to underpin participants' feelings of resilience and empowerment.

What framing needs to accomplish

Reconciling these two perspectives is an important communications task. It requires walking the line between the idea that individuals have agency and control while also recognizing their choices are either facilitated and constrained by situational and contextual factors. Communicators must avoid *Individualism* (the idea that individuals are solely responsible for their outcomes and are to blame for negative outcomes) and instead promote a sense of *self-efficacy* (the sense that one's actions can be efficacious and make positive change).

What helps

It is crucial that communicators tell rich stories that illuminate the ways in which systems and context constrain or facilitate individual choice. This involves validating individuals' need for control and empowerment while simultaneously illuminating the environmental

and systems-level influences that make this possible. To do so, communicators should consider the following framing strategies:

— **Emphasize our shared connectedness.** Further empirical research is needed to determine the best ways to inoculate against individualistic thinking. In the absence of further research, though, FrameWorks advises using the value of *Interdependence*—the idea that we all depend on one another. This value has been tested in FrameWorks' work on related issues and has been found to promote thinking about social solutions, collective benefits, and collective responsibility.[5] The following text is framed around this value; it argues that our wellbeing depends on the social networks and supports that are available to us.

> **The value of *Interdependence*:**
>
> We depend on one another in many ways. People's lives are connected through threads that are sometimes not easy to see at first. These threads grow stronger when we take on difficult challenges in our lives, such as dealing with the effects of trauma. Instead of suffering alone or trying to get better without any help or by sheer force of will, we need to recognize that no person is an island, and we all need the help of others in order to deal with challenges in our lives.

— **Tell stories that place individual self-efficacy in context.** As FrameWorks' prior research has shown, messages about the societal causes of stress are perceived to rob affected populations of their sense of agency and efficacy.[6] When reasoning this way, negative outcomes appear to be unavoidable and inescapable, a consequence of societal forces over which they have no control. As a corrective, communicators should speak about the systemic sources of stress in ways that also acknowledge individuals' autonomy and capacity for self-determination. Metaphors and other explanatory tools, such as *Overloaded* (described above), can be particularly helpful in balancing these two seemingly contradictory objectives. Order also matters: when possible, describe the conditions that drive individual or community-level outcomes *before* referring to self-efficacy or other individual-level solutions to address the effects of stress. Leading with a systems story helps inoculate against more individualistic understandings of the issue.

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Recommendation #4: Build understanding that toxic stress is a public concern in need of community-based solutions.

Experts recognize that a community-based approach to addressing ACEs and toxic stress—one that involves partnerships between local residents, community-based organizations, and primary care physicians, among others—can support meaningful, responsive solutions to address the social determinants of health and create nurturing, healthy environments for all children. These kinds of initiatives require not only an understanding that toxic stress is a public (rather than individual) concern but also that community members themselves may serve as agents of change.

What gets in the way

As prior FrameWorks research has shown, thinking among the general public relies heavily on the assumption that parents are the primary (and often, exclusive) influences on how children develop. This poses a major obstacle for building public and political will for more robust systems of support, and makes it challenging to appreciate the shared, societal responsibility for supporting children and youth.

As described above, participants in the current research *were* more attentive to the factors outside the family that shape child outcomes. However, community-level solutions were rarely on the radar. Individuals in cognitive interviews, for example, often expressed fatalism and resignation about their own communities' capacity for change—likely stemming from the fact that issues facing their local communities were perceived to be too deeply entrenched and intractable. Instead, they often came to the conclusion that the only viable way to address toxic stress in their families' lives is to leave their communities altogether—to "get out."

Researcher: One of the other things you said is some families get out of living in a poor community. I'm wondering, just from your perceptions, how does that happen?

Participant: Because they want something better for themselves and their families. So, they may not have had the best upbringing or be in the best place, or whatever, and you see so much violence. And you're scared for your kids to go outside. They can't go outside and play anymore. You've got to watch them, or they got to stay in front of the door and you're at the window the whole time. And that becomes stressful. And then that becomes depressing, because now my child can't do anything, I need to leave. You do whatever you have to do to get out.

Researcher: And what about adults living in an environment that's talked about in this statement? What could be done for them?

Participant: Try to get out of it if it's a negative environment. Like the low-income [environment]. I feel like try to get out of that environment.

What framing needs to accomplish

Community members and those affected by toxic stress need to be empowered and engaged to advocate for change within their communities. They need to understand that, through community-led initiatives, stakeholders can work together to build comprehensive systems of support for all children.

What helps

Communicators may appeal to values in order to build understanding of, and support for, interventions and services to address stress. Values are widely shared principles or beliefs that can prime your audience to see an issue from a certain perspective. Used at the start of your message, values set the course and tone for the conversation that follows. However, not every value works to your advantage.

In peer discourse sessions, FrameWorks researchers tested several values and found that the value of *Community Strength* (the idea that communities are stronger when we address the root causes of stress and adversity) was most effective at shifting attitudes about the need to address toxic stress, and for building support for evidenced-based programs that address stress in communities.

Importantly, this value cued productive discussion about the ways in which communities *themselves* can serve as agents of change. Participants spoke about the ways in which local residents, working together with local policymakers and direct service providers, can inform decision-making in ways that are appropriate for their contexts and their needs. Thinking this way, the "community" was not just an object of intervention, but rather a partner. This asset-based perspective fostered productive understanding of the ways that that community members can work together to address challenges in people's lives. Below are some examples of how to cue this value in conversation.

Cues for the value of *Community Strength*

— Addressing toxic stress is a foundation for strong, healthy communities.

— Communities are stronger and more vibrant when all members are supported—especially in the face of social stressors.

— Resilient communities do what it takes to buffer people from the impacts of toxic stress.

Recommendation #5: Don't rely on the value of science alone.

Over the last two decades, advances in the brain and biological sciences have revolutionized our understanding of child development. This evidence base has the potential to deepen public understanding of core developmental principles to better support parents and caregivers and to guide priorities for a science-based policy agenda that improves family and community wellbeing. Explaining the importance of this scientific research, however, is challenging and rarely straightforward.

What gets in the way

People have multiple ways of thinking about science and research, and not all of them lead to fruitful conversations. In both cognitive interviews and peer discourse sessions, participants spoke about science in a number of consistent and patterned ways that often fed their skepticism and led them to dismiss scientific authority and research:

— **Scientists are elitist.** In our research, participants understood science as an inaccessible, complicated activity performed only by a set of highly educated specialists. This helped foster the assumption that scientists cannot easily relate to, and may be even be dismissive of, the challenges experienced by communities facing significant social and economic disadvantage. (One participant described this as "scientists thinking that they are better than everyone else.")

— **Science is uncertain.** Researchers understand that science is a continual process of discovery that involves updating our understanding of the world as new findings build on, or sometimes displace, earlier ones. In many cases, however, participants in our research interpreted this characteristic of knowledge production as a sign of uncertainty. In discussions about the value of science in addressing toxic stress, some participants voiced concern that science-backed recommendations are liable to change. ("...Scientists, many times, are wrong. Things can just go out the window!") This turned

participants away from the idea that science can translate into useful, actionable insights to improve the lives of those facing adversity.

— **Science can serve nefarious purposes.** Consistent with prior FrameWorks' research, participants voiced some skepticism about the claims and motives of scientific research. (As one participant in a peer discourse session noted, "It can be used in the wrong way.") This understanding of science was informed by knowledge of how scientific and medical innovations have historically been used in highly problematic ways, including the ways in which scientific and technological advances have either not benefited, or even *harmed*, marginalized communities.

— **Science is only good for certain types of social problems.** At times, participants struggled to understand how scientists could effectively collaborate with parents and communities to improve child outcomes. At the heart of this assumption is the idea that parents are best equipped to understand their child's needs (leading one participant to argue, "You should know your child, and you shouldn't have to ask a scientist what's wrong with your kid"). This way of thinking shuts down productive dialogue about how science can address stress in the lives of families.

What framing needs to accomplish

Careful framing is key if members of the public are to engage with the science of early childhood development, stress, and resilience, especially for members of historically marginalized groups, whose interactions with medical and scientific research in the past has been problematic. Without such framing, people will reject evidence-based messages and resist new ideas.

What helps

Previous FrameWorks' research has shown that using science or research to establish your authority on a subject can backfire. So can appealing to science as a shared value (that is, assuming that the public values scientific knowledge about a topic in the same way that researchers and other experts working in that field do). Communicators should exercise caution when speaking about science. Here are a set of guidelines:

— **Avoid non-specific language.** Phrases like "according to experts" may be read as an invitation to a debate rather than a conversation: "Which experts?" "From where?" "Why should I trust them?" "Do these experts agree or disagree with other experts I trust?" Similarly, phrases like "research shows…" or "scientists have found…" can also foster cynicism. When referring to research, communicators should be as specific and concrete as possible.

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— **Collectivize the process of knowledge production.** A sentence like, "We know a lot more than we used to about how toxic stress affects development" nods to scientific progress in a way that implicitly includes readers in that collective "we" rather than putting them on notice that their views may be challenged in the message that follows.

— **Emphasize the problem-solving function of science.** Prior FrameWorks' research has shown that the value of *Ingenuity* works in powerful ways to help people answer the question of why science matters and increases receptiveness to the idea that it can be used to address social problems. This affirmative case for science should be presented early in communications so that it can set the stage for the information that follows. Here are some ways in which this value can be conveyed:

  — **Our country has a history of using science to address complex social problems.**

  — **Science can provide us with the knowledge, tools, and expertise to make sure all children in our communities develop well.**

  — **Innovative states and communities have been able to design high-quality programs to reduce the sources of stress in families' lives.**

Putting It All Together

An example of how to talk about toxic stress in a flyer to community members

The following sample message about a fictional, community-based initiative shows how a number of framing recommendations in this report can be combined:

Building the resilience and strength of our communities is one of the most important investments we can make. Chronic and unrelenting stress can impact our health and wellbeing long after we experience it, especially if it happens when we are young. Later in life, stressors can feel like weights that overload us when we try and get through our day. Stress can also make it hard to get through one of the most challenging jobs of all—parenting.

Science can provide us with the knowledge, tools, and expertise to make sure everyone in our communities can develop well. With your help and participation in the Resilient Communities project, we can lift the weight of toxic stress from families and help prevent the root causes of stress in our neighborhoods. Together, we can build resilience children, families, and communities. Join us for the next community meeting.

Strategies for Effectively Communicating about Toxic Stress

Conclusion

The recommendations described in this brief are intended to establish some general guidelines and evidence-based best practices for communicating about development, stress, and resilience with affected individuals and communities. There is certainly much to be explored. Despite these open questions, firm and actionable strategies exist for engaging these audiences in conversations around their health and wellbeing that leave them efficacious and hopeful.

Strategies for Effectively Communicating about Toxic Stress

Appendix: Key Content to Frame

The following are key scientific principles related to child and adult development, stress, and resilience. These principles were derived from over a decade of FrameWorks' research with scientists affiliated with the Harvard Center on the Developing Child, participation in meetings with developmental scientists convened by the Center, and reviews of relevant scientific literature. Together, these principles constitute what FrameWorks calls the "untranslated expert story," or the core content that scientists wish to communicate to non-expert members of the public.

— Brain development begins before birth and extends into young adulthood. There are two especially important periods of brain development: the early years (especially the first three years of life) and adolescence. Neurological development is driven by early experiences, through interactions with adults, the environment, and genes.

— Brain and other biological systems have the capacity to change over the life course—a phenomenon known as "developmental plasticity." Different systems remain plastic (or changeable) to different degrees; however, the ability to develop adaptive skills becomes harder and more expensive as we age. While the brain is always capable of learning, it's easier and more cost-effective to provide the foundations for healthy development earlier in life. In order for adults to take full advantage of the continuing ability to change, learning experiences must activate specific, relevant neural circuits, and the individual's attention must be highly engaged in the task.

— Experiences of stress in childhood are not necessarily bad. Learning to cope with adversity is an important part of healthy child development. When we experience a stressor, our bodies prepare us to respond by increasing our heart rate, blood pressure, and stress hormones, such as cortisol. When a young child's stress response systems are activated within an environment of supportive relationships with adults, these physiological effects are buffered and brought back down to baseline. The result is the development of healthy stress response systems.

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— However, "toxic stress," or the chronic activation of the body's stress response systems in the absence of adult support, can damage the developing brain and lead to problems in learning and behavior and increased susceptibility to physical and mental illness. Exposure to child abuse or neglect, family turmoil, neighborhood violence, extreme poverty, racial discrimination, or other hardships—in the absence of supportive, responsive relationships with adults—can prime biological systems to become hyper-responsive to adversity, particularly for children with constitutional (i.e., genetic) vulnerabilities.

Resilience is built throughout life through supportive relationships and building adaptive skills. In childhood, the presence of at least one stable and committed relationship with a supportive parent or other adult can help buffer children from developmental disruption. These relationships also help build key capacities, such as the ability to plan, monitor, and regulate behavior, that enable children to respond adaptively to adversity and thrive. Adults can also develop these core capacities, which can help them be successful as parents and workers. In addition to changes to programs and services that alleviate some of the stressors in adults' lives, we can also help adults improve their core capacities. These include teaching individuals strategies for self-regulation and executive function, targeting the skills that can override automatic responses.

In addition to these key messages, project partners also wanted to cultivate a willingness to participate in services for themselves and/or their families that mitigate the effects of childhood adversity *and* to feel efficacious and empowered about their health and wellbeing.

Strategies for Effectively Communicating about Toxic Stress

Endnotes

1. FrameWorks Institute (2018). *Framing biomarkers of adversity*. Washington, DC: FrameWorks Institute.

2. Participants who self-identified as having experienced any of the following (before the age of 18) were included in our sample: child sexual, physical, or emotional abuse; exposure to intimate partner violence; having a family member with experience of substance misuse (e.g., drug or alcohol addiction); having a family member with mental health issues; having an incarcerated parent.

3. Kendall-Taylor, N. (2011). "*Anyone can do it … Wake up, rise up and get some gumption": Mapping the gaps between expert and public understandings of resilience and developmental outcomes*. Washington, DC: FrameWorks Institute.

4. National Scientific Council on the Developing Child (2004). *Young children develop in an environment of relationships: Working paper No. 1.* Retrieved from www.developingchild.harvard.edu.

5. Simon, A. (2010). *Refining options for advancing support for child mental health policies*. Washington, DC: FrameWorks Institute.

6. FrameWorks Institute (2018). *Framing biomarkers of adversity*. Washington, DC: FrameWorks Institute.

About FrameWorks

The FrameWorks Institute is a nonprofit think tank that advances the mission-driven sector's capacity to frame the public discourse about social and scientific issues. The organization's signature approach, Strategic Frame Analysis®, offers empirical guidance on what to say, how to say it, and what to leave unsaid. FrameWorks designs, conducts, and publishes multi-method, multi-disciplinary framing research to prepare experts and advocates to expand their constituencies, to build public will, and to further public understanding. To make sure this research drives social change, FrameWorks supports partners in reframing, through strategic consultation, campaign design, FrameChecks®, toolkits, online courses, and in-depth learning engagements known as FrameLabs. In 2015, FrameWorks was named one of nine organizations worldwide to receive the MacArthur Award for Creative and Effective Institutions.

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