



Talking Children's Mental Health and the Core Story of Child Development in Alberta

A FRAMEWORKS RESEARCH REPORT

Lynn Davey • January 2011

ECD REPORT 4 OF 4



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Davey, L. (2010). *Talking child mental health and the core story of child development in Alberta*. Washington, DC: FrameWorks Institute.

Introduction

Over the past several years, great advances in neurobiology have provided scientific evidence to support long-held theoretical concepts in child development, such as the interactive nature of genes and environments. Many of these advances offer direction to those working to ensure that, as a society, we care for, support, and provide opportunity for children in ways the best facilitate their development. To this end, FrameWorks Institute has partnered with the Alberta Family Wellness Project in Alberta, Canada, with support from Norlien Foundation, to identify how evidence-based communications might inform the efforts of those working in support of early child development and child mental health policies and practices. This work builds on several years of research in the United States, in conjunction with the Center on the Developing Child at Harvard University, to identify a core scientific story of development, to determine how that diverges from the understanding of the lay public, and to establish a translation story of the science that will improve public understanding of key developmental principles (e.g., *what* develops, *how* development is facilitated, and in *what contexts* development is derailed, with what consequences).

In a series of descriptive research reports, FrameWorks has documented the dominant frames in public discourse about children's issues, revealed the impact on public thinking of those frames, and exposed the gaps between expert and lay understandings. In charting a new path for public communications, a companion set of prescriptive reports have structured a narrative that promises to close the gaps we identified and allow ordinary people to understand the process of child development, its interactive nature and the deleterious effects of adverse experiences on development.¹ We refer to this translation story as the "Core Story of Child Development." By this, we mean that it focuses attention on the most important aspects of the developmental science that scientists wish to convey and that the public needs to know to inform public decision-making.

This Core Story is not static in that scientists continue to identify new information that is critical an informed public. Thus, in addition to general developmental principles, there are other specific constructs or issues within child development – for example, epigenetics, and executive function – that expand and refine this core story for which FrameWorks continues to conduct research on effective translation strategies. With this Core Story well-established in the U.S., our first task in the research reported here was to secure evidence of its applicability to Alberta.

Next, our inquiry was expanded in Alberta to parallel work underway in the U.S. that emerged from scientists' perceptions that the core story of early child development required a deep and expanded explanation of child mental health. In the course of FrameWorks' research, it became clear that current public understandings of child and family mental health create particular challenges for effective communications. Yet, without greater understanding of the social and emotional development of young children, the interplay of genetic predispositions, and the role of environmental stressors, there can be little progress on key aspects of the child mental health policy and program agenda. At issue here are important measures to advance effective treatment for child mental health problems and increase access

to preventive family and community services, and to limit risks posed by everything from untreated maternal depression to family violence. There is simply too much at stake to engage in framing hypotheses played out in the public square with unexamined effects.

To this end, FrameWorks conducted research in Alberta on how best to talk about children's mental health, within the context of the larger core story of development. As in the U.S., the research reported here documents a considerable lack of public understanding about essential features of child mental illness and mental health, from prevalence to causes to the provision of effective treatments. Again, the gaps between expert and lay understandings are profound, with implications for efforts to create or sustain effective public programs and policies. However, significant differences were observed as well, as Albertans showed more willingness to assign these problems to public systems for remediation. In the end, however, Albertans demonstrated no more understanding of the underlying science to explain how mental health can be promoted and mental illness addressed than did our U.S. informants.

Our experience with the Core Story of Early Child Development strongly suggests that this lack of scientific literacy poses a serious obstacle to effective citizen dialogue and long-term decision-making. Until there is a clearer recognition of exactly how the public reasons about the topic of child mental health and a concomitant effort to explain fundamental principles in terms that ordinary Albertans can understand, experts will not be able to fully engage the public in recognizing the value of the solutions scientists and policy leaders seek to advance. This MessageMemo charts the course to achieving such a robust conversation.

About the Research

This MessageMemo reports on research conducted by the FrameWorks Institute on how Albertans think about children's mental health. FrameWorks' multi-method, multi-disciplinary research is an empirical approach to documenting public thinking, identifying destructive understandings, exposing areas of confusion and evaluating the potential effects of alternative presentations. As mentioned previously, this investigation was further enabled by the fact that, over the past decade, the FrameWorks Institute has devoted a substantial portion of its research portfolio to investigating public understanding of child development; in addition, we have conducted a concomitant investigation into children's mental health in the United States. In Alberta, issues of early child development and children's mental health were combined in a rich series of investigations designed to yield a refined core story with resonance in the province.

In this MessageMemo, we report the findings from a series of studies that set out to: (1) document the cultural models available to ordinary Albertans when they think about children's mental health and early child development, (2) observe these models in action as small groups of Albertans negotiate conversations about child mental health, (3) identify the major challenges for communicating about these issues, and (4) develop, refine and test frame elements — specifically, values and simplifying

models — that might deepen understanding of the core tenets of the science of child development and child mental health, and evoke a more productive public discussion. To date, more than 4,500 Albertans have participated in this research that seeks to answer these questions and to demonstrate how various ways of framing the issue of child mental health could be shown to impede or improve public thinking. For a complete description of these methods, see Appendix A. Wherever the findings differ markedly between the U.S. and Alberta samples, we call attention to this; where findings are consonant, we do not distinguish between the two populations.

This Memo is not intended to take the place of the research reports that inform it; communicators should read the original reports² to more fully understand the conclusions and recommendations reported here.

In addition to summarizing and synthesizing this body of research, this Memo provides more detailed and prescriptive interpretation of children’s mental health communications strategies. We believe the research findings make clear that certain frames in use by experts and advocates are not advancing understanding of children’s mental health; we believe the recommendations detailed in this Memo can be used with far greater effect than many current communications practices.

This MessageMemo is organized as follows:

- » We first **Chart the Landscape** of public thinking by providing a description of the dominant patterns of thinking that are chronically accessible to people in reasoning about children’s mental health;
- » We then identify the **Gaps in Understanding** between experts and ordinary people — a final reminder of where public thinking will break down without the bridging remedies of the framing recommendations;
- » We next focus on the **Traps in Public Thinking** that must be avoided if reframing is to succeed;
- » We then **Redraw the Map** by offering framing recommendations that explain those frame elements that the research indicates can improve the course of public thinking.

I. Charting the Landscape: Default Patterns of Thinking about Children’s Mental Health in Alberta

In this section, we discuss the most prevalent conceptual routes that ordinary Albertans consistently take in thinking about child mental health. These constitute the most important challenges that the reframing research, reported in Section II below, sought specifically to address, and are crucial for communicators to understand as they attempt to redirect the conversation.

Mental Health is about emotions

The research revealed a consistent pattern of thinking about mental health as *emotional* health. Informants assumed quite narrowly that good mental health is the experience of positive emotions, for which the individual is assumed to be responsible and capable of resolving, as these excerpts from cultural models interviews in Alberta attest:

Some people are lucky enough that they can eat whatever they want and they still stay skinny. Some people have to make choices every day and make sure that they keep themselves healthy by exercising, eating healthy, I don’t know. It’s the same — I think it’s [mental health] the same way.

It’s funny, but I think a lot of it [mental health] comes down to self-confidence. A person who has some confidence can deal — can trust themselves to be able to deal with anything that comes along. To know when they need assistance. To know when they can handle it themselves.

The first thing that pops into my mind is confidence and self-esteem.

Alberta Cultural Models Interview Informants³

This understanding of **mental health as emotional health** is highly reliant on the foundational cultural model of *mentalism*, which is a set of assumptions that drive thinking about psychological and social phenomena in narrow individualist and personal terms⁴. In this case, if someone doesn’t “have” mental health, the cause is considered to be a lack of personal character or motivation, and the solution is to summon the motivation to manage one’s own emotions. This model is also applied when people reason about *children’s* mental health.

Further, thinking about mental health in children was complicated by two contradictory cultural models, often simultaneously considered:

1. Children can’t have mental health. Informants often reasoned that children don’t have mental health because children have undeveloped emotional capacities and limited memories. Their minds work in such fundamentally differently ways than those of adults that they simply cannot experience mental health.

I don't associate poor mental health with somebody that young. In terms of an infant, somebody below 3, they're just too busy learning what's around them to really worry about what's in the brain, you know? They're not cognizant enough to be aware of it, you know?

Alberta Cultural Models Interview Informant⁵

This way of thinking is consistent with mistakes FrameWorks has observed in public thinking about child development more generally. Because people struggle to appreciate the complex interactive nature of children with their environments, and the effects of these interactions on the developing brain, they dismiss the importance of these influences. The consequences of this dismissal are profound to communicating the significance of child mental health. This thinking further constrains their ability to understand that early influences can have long-term impacts.

2. Children can have mental health. At the same time, many informants indicated that children *can* experience mental health because, essentially, children are people, too. They argue that children are just little adults and so they *can* experience mental health, but it is less complicated, with fewer variables or factors at play. Unfortunately, when individuals assume that children are “little adults,” they also mistakenly assume that treatments for adults and children must also be the same. In short, their considerations of appropriate treatments are limited to those that would encourage children to take responsibility for their own emotions.⁶

Informant: You take the person who's 20 or 30 years old or whatever, they've had a million more experiences in their life where maybe they just have that poor state of mental health or whatever that it's just compounded.

Interviewer: It's interesting, though, when I asked you between the 2- and 8-year-old [is mental health the same] you said “yes” right away. Then I asked you between 2 and 8 and an adult and it was more qualified, I guess.

Informant: Well I think it's just more of the same thing. That's kind of what I'm looking at it like.

Alberta Cultural Models Interview Informant⁷

It is important to note that many of our Albertan informants toggled back and forth between these two contradictory explanations of child mental health. The fact that they can be simultaneously considered may seem counterintuitive, but in fact both models derive from a lack of understanding of children's cognitive, social and emotional development – what FrameWorks has previously termed the public's “black box” theory of development⁸. In other words, absent a clear understanding of developmental processes, the public often relies on analogies to adult functioning to consider children's capacities. This leads to the assumption that children are little adults who can experience mental health, and/or leads them to think that children simply aren't as developed as adults and so cannot have such

experiences. Neither of these models engenders an understanding of child mental health consistent with its promotion in programs and policies nor with effective interventions.

Mental Illness is about chemicals

Research revealed that informants relied on a dramatically different set of assumptions when reasoning about mental illness than they did when reasoning about mental health. The models used to think about mental illness are nested within another foundational cultural model: *fatalism*.⁹ The fatalism model rests on assumptions about inevitability, predetermination and lack of personal agency. Whether considering mental illness more broadly or children’s mental illness specifically, informants’ reasoning was organized through the following three related assumptions:

- 1. Mental illness is located in the brain, and caused by a chemical imbalance;**
- 2. Chemicals are the products of genes, and**
- 3. Genes are set in stone.**

In other words, our informants in Alberta saw mental *illness* as physical and located in the brain, caused by a chemical imbalance that was determined by one’s genetic structure, which was predetermined and impervious to influence. Common to all of these assumptions is the notion that individuals don’t “get” mental illness, but rather “have” mental illness, and that is determined from birth:

It’s clearly defined [mental illness], this needs to be treated by medicine, then that’s the intervention that needs to be there. If it’s clearly some kind of chemical imbalance that cannot be treated any other kind of way, then I guess that’s what you’ve got to choose.

Alberta Cultural Models Interview Informant¹⁰

I think, if a child has mental illness, I think that’s already predisposed. Now my exposure to ADHD is minimal. But I would say, that seems like something that’s definitely a chemical imbalance, so that would be an illness that needs to be treated. That seems to be something that would be looked at as mental illness and not poor mental health, ’cause I don’t think that’s environmental.

Alberta Cultural Models Interview Informant¹¹

The implications of these default assumptions are clear: First, there is nothing one can do to avoid mental illness, as it is determined by the genetic hand one is dealt. Second, when people assume that genes are set in stone, then mental illness is considered to be essentially immune to treatment. In fact, informants indicated that treatment could only temporarily “rebalance” chemicals through medical interventions, but that there is no ultimate “cure” for mental illness. Medication, then, becomes a logical if regrettable

response, even for very young children.

In sum, these dominant and distinctive cultural models of mental health and mental illness steer public thinking down a decidedly different path from that which the expert discourse would direct, and have implications for the public's ability to understand prevention, a construct clearly in use among Albertans who communicate about children's mental health. (note: make footnote or endnote that We discuss this further in Section II.) In both cases — when mental health is relegated to emotional health *and* when mental illness is defined in terms of genetic determinism — the implications of early adversity are lost. When reasoning from the *mental health is emotional health* model, informants suggested that negative emotions can get “embedded,” but their definition of embeddedness was quite different from expert constructions.¹² Their considerations followed what prior research has revealed to be the public's primary consideration of stress, namely, that it has no material effect on development; stress is good for you, it makes you stronger¹³. Solutions, then, are limited to those treatments for “negative emotions” that improve the individual's ability to control emotional states. When reasoning from the *mental illness is genetic* model, there is no room to consider prevention, to consider that external, environmental influences can affect functioning, or that treatment can produce any discernible improvement.

There is, however, a dominant pattern of reasoning among Albertans that *is* consistent with expert construction of children's mental health, and that is Albertans' emphasis on mental health as functioning. This promising pattern was not observed in the U.S. research to any noticeable degree and, thus, holds special interest for understanding culturally distinct views on the topic.

Mental health is about functioning

Albertans made distinctions between good and poor mental health by considering “functioning” and age appropriate behaviors. In other words, thinking about mental health in terms of one's ability to function had a great deal of conceptual power in Alberta; in fact, this construct was discussed by all cultural models interview informants at different times during the interviews.

I think a person with good mental health not only is able to carry out all the things that you need to be able to do to live in a society -- hold a job, have friendships, relationships, financial, somewhat smart with your money, all those things -- but that a person with really good mental health can function. I think a person with poor mental health dreams about a future, but doesn't really have any way of making it happen.

Alberta Cultural Models Interview Informant¹⁴

This was a *dominant* pattern of reasoning among Albertans. And most importantly, this pattern of reasoning aligns with expert constructions of child mental health, providing additional benefits to communicators in the province.

II. Gaps in Understanding

Gaps in understanding are those places where the cultural model that is employed by the public to think about a concept is significantly dissonant from the experts' understanding. These also represent the slots into which the frame elements outlined below can be introduced in order to bridge the gaps between expert and lay understandings. We begin our discussion with an explanation of the significant gaps in Albertans' understanding of child mental health, and then move to demonstrate how often-deployed framing strategies observed in expert and media communications can trap public thinking by triggering unproductive patterns of reasoning.

Gap #1: Existence of the issue. While mental health experts universally insisted that child mental health is a real phenomenon, the Albertan public often equivocates. One of the dominant cultural models limits their ability to appreciate that children can experience good or poor mental health. When our informants employed the assumption that children can't understand or remember emotional events, and therefore can't have mental health, communicating about the existence of and importance of child mental health simply got lost in that gap.

Even when Albertans reasoned that children could have mental health, the basis of this reasoning limited their ability to see the causes and solutions that are easy for experts to think. In other words, when the public reasons that children can have mental health, they rely on notions that children are "little adults," although their mental health is less complicated than it is for adults.¹⁵ In either case, this thinking undermines their ability to appreciate a developmental perspective of mental health and how it can best be promoted for children. For example, the importance of treating the whole family as part of a child's environment of relationships is discounted by both cultural models; in the "children can't have it" model, the parents' mental status is obviously unimportant, and in the "children are little adults" model, the child's autonomy is emphasized. In this sense, Albertans demonstrated little difference in their approach to these topics when compared to U.S. informants.

Gap #2: Causal factors: The relationship between genes and environment. As was found in FrameWorks' earlier qualitative research investigating public understanding of gene-environment interaction,¹⁶ the Alberta cultural models interviews on children's mental health revealed a sizeable gap between expert and lay understandings of genes, their expression, and the implications for outcomes. The public reasoned about genes in strongly fatalistic terms, namely, that genes are set in stone, whereas experts explain that environments play an essential role in shaping how and when genes are expressed. This gap in causal factors has implications for Albertans' understanding of both contexts of importance and appropriate treatment, which are discussed below.

Gap #3: Contexts of importance. Our interviews with ordinary citizens underscored the somewhat narrow scope of environments that they considered influential in shaping children's

mental health. In Alberta, the contexts identified were certainly broader than those considered by U.S. informants (who focused solely on the family and the individual). Albertans hold a much wider, ecological understanding of “environments,” as composed of resources, services and supports. They included the contexts into which families and individuals are embedded. Albertans’ thinking, then, has some features of the expert discourse, which emphasizes that environmental factors extend beyond the family. At the same time, when thinking about mental health as emotional health, Albertans assert the individual’s personal responsibility in ensuring his or her own mental health. This has a narrowing effect by reducing “complex interactions between individuals, contextual determinants, systems and physiologies down to either the presence or absence of individual motivation and internal fortitude.”¹⁷ And, when thinking about mental illness as genetically determined, they argue that it must “run in the family,” and that this inherited frailty is immune to treatment. In addition, in Peer Discourse sessions held in Alberta many conversations were dominated by individualist conceptions of child development and child mental health, conversations that obscured the role of broader contexts of influence. A further entailment of the public’s narrow construction of causal factors, then, is that it can serve to deemphasize these broader contexts of importance and make more accessible notions of individual responsibility. This vulnerability in public thinking underscores the need to bolster scientific thinking in Alberta and not to rest on the laurels of the population’s contextual thinking.

Gap #4: Appropriate treatment. Given their broader considerations of both causal factors and contexts of importance, it is not surprising that experts have more complex understandings of effective and appropriate treatments. Correspondingly, given the public’s narrower construction of causes (health = emotions; illness = genetics), and “location” of mental health and illness (embedded deep within individuals), it is not surprising that Albertans asserted the role of personal responsibility for maintaining positive emotional health. At the same time, this model of personal responsibility did not overtake thinking in the way we have observed in the U.S.¹⁸ Instead, while Albertans emphasized that individuals are responsible for seeking help, they also assumed a critical role for government in the provision of programs and services. So, while there is a gap between expert and lay publics in the breadth of understanding of appropriate treatments (due to the public’s narrower constructions of causation), Albertans’ understanding of the public dimensions of mental health services represents an opportunity for conveying the importance of programs and policies in addressing children’s mental health issues. The problem occurs in the fact that Albertans have no way of determining which programs work and which don’t – that is, they struggle to understand quality vs. quantity and to appreciate effectiveness. One might say that the value they place on “programs” is vulnerable to subsequent thought and redirection, because they lack a way to connect the science of how a problem happens to a solution that addresses that precise problem.

III. Traps in Public Thinking

In the following section, we list those aspects of commonly deployed communications strategies that, while appearing to offer advantages, in fact trap thinking about children's mental health in the swamp of dominant and unproductive considerations. We offer this as a checklist against which communicators can evaluate their framing to ensure that they do not unintentionally trigger a model that is "easy to think" but which will not ultimately serve to improve public understanding of the issue.

- a.) **The Black Box trap.** As noted above, many of the cultural models on which Albertans rely to consider children's issues more broadly are also at play when considering children's mental health. Communications that situate children's mental health as a particular challenge of a broader child development concern or initiative will need to make developmental processes explicit, particularly through values salient to Albertans (which we will address in Section IV), and the use of simplifying models in the existing core story of child development that explain what develops, how it develops, and with what consequences.
- b.) **The Mentalism trap.** Any communication that emphasizes emotional control, personal actions, choices or individual responsibility is likely to trigger the dominant cultural model that mental health is emotional health, which individuals are assumed to be able to control. Because mentalist models obscure context, this pattern of thinking limits the public's ability to understand both the science of causal factors and the range of appropriate treatments that can be brought to bear to improve child mental health.
- c.) **The Fatalism trap.** Given the public's narrow and faulty understanding of how genes and their expression are determined, communicators should steer clear of any explanations that advantage notions of "chemical imbalances" or genetic determinism. In addition, two of the stories most often told in media about mental illness align with the fatalism model.¹⁹ First, vivid episodic stories of individuals with mental illness cue the fatalism model and reinforce beliefs that illness can only be controlled, not cured or prevented. Second, crisis stories of individual or familial trials with treatment systems reinforce beliefs about the intractability of mental illness and obscure prevention.
- d.) **The Environments trap.** Related to both b) and c) above, communicators in Alberta need to explicitly articulate the context of children's mental health. The research shows how Albertans are already predisposed to think about contexts beyond the family, including government systems, services and supports. However, there are also strong cultural models that shape patterns of reasoning toward individualism and parental responsibility. If left unchallenged, these individualist models are likely to block the potential for more systemic thinking. Given the tendency for the media discourse to reinforce models about parents' primary responsibility for children's developmental outcomes, communicators should take advantage of Albertans' systemic thinking by *explicitly* widening the lens to reveal the

types of environments that can either promote or derail child mental health, and to explain how genes and environments together influence functioning.

- e.) **The Rugged Individualism trap.** In both cultural models interviews and peer discourse sessions, there was ample evidence of the prominence of two types of identities among Albertans that are central to Western, frontier societies - what Frederick Jackson Turner termed “the cowboy” and “the barnraiser.”²⁰ While the cowboy represents ideals of rugged individualism and independence, the barnraiser represents ideals of collective action and interdependence. The cowboy ideal dominated those conversations that did not specifically appeal to concepts of interdependence and common good, and, when triggered, obscured notions of shared fate. Our research found that the barnraiser ideal is easily accessible among Albertans, but requires intentional priming to emerge. When tapped, this barnraiser identity generated conversations about the collective stake in ensuring the healthy development of children. Communicators should strive to activate these more communitarian impulses among Albertans, and steer away from priming the model of rugged individualism which confines reasoning about the causes of and solutions to children’s mental health to individualist concerns.
- f.) **The Prevention trap.** To date, a number of FrameWorks investigations have verified the limited utility of prevention as a frame to lift support for prevention policies.²¹ As explained by Simon,²² because the public lacks an understanding of developmental processes, they cannot grasp how prevention is pertinent to developmental outcomes. As prior FrameWorks research has concluded, absent an explication of development, the visionary language of “prevention” seems idealistic and impractical.²³ Moving support for preventive policies cannot be achieved without explaining first the dynamics of development — specifically, what develops, how and how development can be disrupted. As related to child mental health, the fatalism model precludes prevention; no amount of prevention can influence genetically determined fates. The mentalism model underestimates the impact of any adversity and relegates responsibility entirely to the individual. Both of these models crowd out any consideration of the public dimensions of child mental health and illness.

In addition, communicators should be aware that Prevention had particular entailments among Albertans. When prevention is primed as getting it right early instead of trying to fix things later, *because this requires more support and resources* (i.e. clinical interventions are more costly than preventive measures), Albertans objected to what they saw as an economic rendering of the importance of early childhood. Albertans also discussed prevention as an “ideal” that cannot be attained, as they considered eliminating all stressors from children’s lives to be a futile endeavor.²⁴ In sum, research showed that the Prevention frame, while widely used by advocates in Alberta, is particularly problematic in the Albertan context. By contrast, the Ingenuity value, which asserts that a “can do” orientation can help improve conditions, appears to drop the perceived venality of the appeal to a common economic interest in children’s developmental health.

IV. Redrawing the Map

Redrawing the map will require communicators in Alberta to counter these highly accessible but unproductive patterns of thinking that limit the public's understanding of the causes, essential features and mechanisms, and societal as well as individual benefits of children's mental health. This will require the introduction of strategic framing elements that work for Albertans to translate expert understanding by clarifying what children's mental health *is*, how it can be promoted, and identify children's mental health as an issue with public dimensions

These recommendations emerge from FrameWorks' iterative method of both qualitative and quantitative research, which allows us to discern the strengths and weaknesses of proposed framing strategies for improving public understanding and moving support for policy preferences that experts suggest can improve child mental health. These frame elements include: (1) Values that orient public thinking to the collective goals and shared consequences of child mental health; and (2) explanatory metaphors called Simplifying Models that concretize and simplify for lay audiences expert explanations of the fundamental mechanisms that underlie child mental health and illness.

DO:

1. Prime communications with values that orient Albertans toward the collective importance of ensuring children's mental health. FrameWorks' qualitative research in Alberta revealed that group discussions often tended toward explanations of rugged individualism, or the "cowboy" dimension of Albertan culture, which often obscured the public dimensions of child development and mental health issues. The value of Interdependence, specifically, was able to tap into a "barn raising" ethos among Albertans, where more communitarian notions - of collective responsibility and implications for the common good - were advantaged in discussions about children's mental health issues.²⁵ Our later quantitative research demonstrated that both the values of Ingenuity and Interdependence exerted positive and statistically significant influences on Albertans' policy support for early childhood issues and the prioritization of child mental health.²⁶ Following are examples of how these values were articulated in our research in Alberta:

Interdependence

Albertans recognize that our future depends on ensuring that all of our children grow, thrive and contribute to our collective well-being as a province. Because we understand that what affects one community in Alberta affects us all, we should use our resources to work for the greatest common good. A good mental health system for Alberta would recognize that we are all in this together and would apply this approach to making decisions about children's mental health issues.

Ingenuity

When making mental health policy, developing innovative solutions to tackle our problems needs to be our number-one goal. We should not limit our thinking to the way that current programs address child mental health issues, but should use our resources to find new and innovative solutions to promote child mental health. A good mental health system for Alberta would take an innovative approach to making decisions about child mental health issues.

What is important to include in the values frame:

- » An explanation that connects children to a collective, positive outcome.
- » A can-do assertion that solutions are available, and they need to be implemented.
- » An explanation that using resources today can produce long-term improvements in children's outcomes.

What is important to leave out of the values frame:

- » Any articulation of disparities or vulnerable children who deserve more.
- » “Prevention” or “Crisis” as orienting themes.
- » A solely economic exchange on the investment in children.

2. Use the simplifying model of Levelness, or the idea that children and their environments need to be brought into a functional state. The metaphor includes ideas of stability, the influence of a variety of causal factors, and the ability to make adjustments and modifications to achieve levelness. This will enable people to see that children do have mental health, that their mental states are different from adults, that the determinants of mental health are multiple, and that early influences can affect later outcomes. Communicators have an advantage in promoting such a message, in that “functioning” is a dominant way of thinking about child mental health among Albertans.²⁷

Below is an example of how the simplifying model of Levelness has been executed in FrameWorks' research:

Scientists say that children's mental health affects how they socialize, how they learn, and how well they meet their potential. One way to think about child mental health is that it's like the levelness of a piece of furniture, say, a table. The levelness of a table is what makes it usable and able to function, just like the mental health of a child is what enables him or her to function and do many things. Some children's brains develop on floors that are level. This is like saying that the children have healthy, supportive relationships, and access to things like good nutrition and health care. For other children, their brains develop on more sloped or slanted floors. This means they're exposed to abuse or violence, have unreliable or unsupportive relationships, and don't

have access to key programs and resources. Remember that tables can't make themselves level — they need attention from experts who understand levelness and stability and who can work on the table, the floor, or even both. We know that it's important to work on the floors and the tables early, because little wobbles early on tend to become big wobbles later. So, in general, a child's mental health is like the stability and levelness of a table.

What is important to include in the Levelness Model:

- » That Levelness is a quality, with analogy to a piece of furniture such as a table.
- » Levelness is important because it determines the functioning and usability of the table and, likewise, with children's mental health.
- » In reality, there are many degrees of the levelness of a table, as there are also degrees of levelness of the floors they're placed on.
- » There are many reasons that a table might be level or unlevel; it could depend on the condition of the table, the floor, or both.
- » Positive mental health can be achieved by adjusting the floor, the table, or both.
- » Tables don't level themselves. They must either be made that way or they require intervention by people who know about furniture and levelness.

After being presented with the model of Levelness, FrameWorks' research informants were able to explain what child mental health *is*. As Erard et al. explain, "It [Levelness] easily generated a brain-based conception of mental health, as opposed to one based on emotional or moral conceptions, but without defaulting to genetics as the only explanation for changes in brain structure or functioning."²⁸ Further, Levelness organized informants' thinking around the functional aspects of child mental health. In other words, because they could grasp that a table that isn't level cannot function, they were able to consider that child mental health was important to children's overall functioning. Finally, equipped with the metaphor, informants recognized the existence of multiple causal factors of mental health and the need for flexible and multi-modal intervention strategies that would address "levelness."

It is important to note that FrameWorks tested the Levelness simplifying model both for its underlying metaphorical concept and in terms of the specific linguistic execution of that concept ("*levelness*" or "*leveling*" explicitly). In this way, we can be sure that the model represents both an effective metaphorical concept as well as an effective expression of the concept. For these reasons, while a certain latitude and flexibility in use and application are to be expected, even encouraged, the specific concept and language that appear in the report have empirically demonstrated effectiveness.²⁹

3. Rely on elements of the core story of development (see Appendix B) to explain what develops, how development happens and what derails development, but use the model of Levelness to specifically address problems in public thinking related to children's mental health.

Given the public’s lack of understanding of developmental processes, it was not surprising to discover that existing elements of the core story of development improve some aspects of the public’s thinking about child mental health. These core story elements can be used to explain foundational developmental principles and to set the stage for a more complete interpretation of children’s mental health via the simplifying model of Levelness:

- » The first critical part of the core story is the simplifying model of *Brain Architecture*, which explains that the interaction of genes and early experiences shapes the developing architecture of the maturing brain. The metaphor of a brain’s architecture was highly effective in concretizing for Albertans a key scientific principle, namely, that early experiences affect the brain’s development. At the same time, while participants in Peer Discourse Sessions in Alberta who were exposed to the brain architecture model could then talk about the role of brain development in early childhood, they had difficulty applying this idea to considerations of potential determinants of children’s mental health. Instead, they often described children’s mental health outcomes as the result of chance or fate, outside of the control of any individual or social intervention. These findings suggest that the brain architecture model can effectively explain that something material is constructed in the brain during development, but the metaphor of Levelness will also be needed to provide essential information about the types of environments and experiences that contribute to mental health.
- » The simplifying model of *Toxic Stress*, which explains how development can be derailed, also proved fruitful in discussions with Albertans about child mental health. Toxic Stress distinguishes the experience of *damaging* stress from *growth-promoting* stress, by explaining that when the body’s stress management systems are activated for prolonged periods the body can release chemicals that are *toxic* to the brain’s architecture. Cultural models interviews with Albertans confirmed that Albertans consider stress, even when severe, to be a compulsory and beneficial aspect of development; stress and early adversity are seen as “character building.” The consequence of this reasoning is that interventions to address early adversity are often seen as unnecessary or idealistic.³⁰ In Peer Discourse sessions, FrameWorks found that this notion of Toxic Stress³¹ was successful in improving informants’ understanding of how stressful environments might affect child mental health outcomes. As O’Neil³² explains, the Toxic Stress simplifying model allowed Albertans to consider how particular types of environments and experiences — exposure to violence, trauma, etc. — effectively communicated the social determinants of adverse mental health and developmental outcomes in children. Toxic Stress can be used in support of Levelness to further explicate the consequences when children’s brains “develop on sloped or slanted floors.” In other words, toxic stress reactions in the brain are caused by the kinds of destabilizing environments - exposure to abuse or violence, unreliable or unsupportive relationships, lack of access to key programs and resources - that can affect one’s “levelness.”

- » Specific and narrower scientific constructs, such as *epigenetics* (an explanation of the interaction of genes and environments) and *executive function* (the planning, reasoning, and decision making abilities that control and regulate a broad range of important life skills, competencies and behaviors), can further support communications on child development more broadly, and children’s mental health specifically. Research in Alberta confirmed that two simplifying models translate these scientific concepts well. Explaining epigenetics as the idea that *experiences and environments that children have as they develop leave a signature on their genes—a permanent mark that influences how the genes carry out their instructions*, showed considerable strength in helping people more fully understand gene-environment interaction. Explaining Executive Function as similar to air traffic control at a busy airport – *a mechanism in the brain that regulates the flow of information and the focus on tasks, creates mental priorities, avoids collisions, and keeps the system flexible and on time*, successfully shifted Albertans’ consideration of essential skills away from basic academic skills (such as the 3 Rs) and toward a more nuanced understanding of the skills and capacities necessary for a variety of early childhood competencies. In Peer Discourse sessions on children’s mental health, FrameWorks found that Albertans focus naturally on skills as the outcomes of development. Albertans include reading and writing skills, but also discuss the importance of skills like being able to cope, navigate social situations and control behavior. The air traffic control metaphor can further reinforce the skills and competencies essential for healthy development.

The evidence suggests that the most complete framing of child mental health in Alberta will rely on established elements of the core story of development to explain what is at stake, what develops and how development can be derailed, with a strategic pivot to explain the mechanisms of child mental health via the simplifying model of *Levelness*. While this simplifying model can assert considerable power in overcoming default considerations of child mental health, communicators should not assume that dropping *Levelness*, alone, into communications materials about child mental health will do the work that a more complete “core story” of child mental health would produce. Without Brain Architecture to explain what needs to be level, without Serve and Return to explain how levelness gets built into the brain, and without Toxic Stress to explain the erosion of Levelness and its consequences, Levelness cannot fulfill its full potential as a powerful element of the Core Story.

Note that many more examples of how to apply the values and models to strategic communications on children’s mental health in Alberta are available in our toolkit, *Talking about Early Child Development and Children’s Mental Health in Alberta*.³³

DON’T:

- » Begin the conversation with “mental health” or “mental illness.”
- » Fall into the fatalism trap (that mental illness is primarily caused by genetics, and/or that

development is finished by age three or four.)

- » Fall into the mentalism trap (Individuals are responsible for and have control over their emotional health and well-being.)
- » Suggest monetary reasons for preventive policies and programs.
- » Assume that support for programs equates with support for quality or effective programs without further framing.
- » Play to Alberta stereotypes about rugged individuals or frontier individualism.
- » Use vivid case studies of individual children or families as a way to highlight policy or program needs. (As noted above and in O'Neil³⁴, these are commonly told stories in the media that easily trigger notions of fatalism and hide solutions.)

Conclusions

The research reported here suggests that the public's default ways of reasoning about children's mental health leave little room for an accurate interpretation of scientific explanations. In addition, many of the cultural models the Albertan public relies on when thinking about children's mental health derive from an incomplete understanding of child development. There are, however, models unique to reasoning about child mental health specifically that require targeted communications strategies. There are also significant differences in Alberta and nuances in values that make particular framing strategies more salient to Canadians. These reframing strategies should be used to orient the public toward the collective good of child mental health programs and policies.

In addition, serious attention must be paid by science and policy communicators to 1) provide alternatives to frames about children's mental health that dominate news coverage, and 2) secure opportunities to get the science of children's mental in the news. In fact, the current public discourse in Alberta on child mental health increases the accessibility of certain dominant and unproductive cultural models, both through the stories that are told and those that are not told.³⁵ While there is a good deal of media coverage on the science of children's mental health, the narratives that are relied upon to bring attention to children's mental health issues are often sensationalized stories about out-of-control children with mental health problems, with narrow definitions of the environmental factors that contribute to mental health outcomes³⁶. In fact, poor parenting was most often defined as the cause of children's mental health problems. Despite the reliance on science, then, an incomplete science story is being told, and the dominant narrative serves to support two unproductive cultural models about mental illness: that mental illness is fated and intractable, and that parents are primarily responsible for children's developmental outcomes.³⁷ Further, the media is ripe for influencing the public discourse in a positive direction, given the reliance by media on researchers and scientists as storytellers. Communicators should seize this opportunity to tell a more complete science translation story, and for scientists themselves to become effective storytellers on this issue. We hope that this Memo and the research that informs it serve to provide the impetus for a new strategy in Alberta for retelling of the story of children's mental health.

Appendix A

FrameWorks research methods deployed for this inquiry include:

- » **Media content analysis** — FrameWorks routinely conducts media content analyses that: review and analyze how issues are framed in news stories, discern important thematic patterns in news reporting and identify the leading frames within that coverage.
 - ♦ **In this report**, we apply this analytical method to: (1) delineate the dominant frames typically used in newspaper media coverage with respect to child and family mental health and mental illness; and (2) examine how those frames shape, facilitate, constrain or otherwise affect public thinking about the contributing factors and interventions that can further child development and mental health. FrameWorks reviewed 221 articles collected from to January 15, 2009, to January 15, 2010. The sample was drawn from the following newspapers: *The Globe and Mail*, *Red Deer Express*, *National Post*, *The Edmonton Sun*, *Edmonton Journal*, *The Daily Herald-Tribune*, *Cochrane Times*, *Carstairs Courier*, *Canmore Leader*, *The Calgary Sun*, *Calgary Herald*, *Airdrie Echo*, and *Banff Crag & Canyon*. The sample also included national newscasts from CTV Television. The complete results are published in O’Neil (2010b).³⁸

- » **Cultural Models Interviews** are one-on-one, semi-structured interviews with citizens that allow researchers to examine the ways people think about a topic, the patterns of reasoning, the connections they make to other issues, and the mental strategies they use to resist new information. In-depth interviews conducted from this perspective permit FrameWorks researchers to identify the cultural models — implicit shared understandings and assumptions — that guide people’s thinking about abstract social issues.
 - ♦ **For this report, 40 in-depth interviews** were conducted by three FrameWorks researchers in Edmonton and Calgary from December 2009 through February 2010. Informants were recruited through a professional marketing firm to represent variation along the domains of ethnicity, gender, age, residential location (i.e., both in Calgary and in rural areas several hours drive from the metropolitan area), educational background and political ideology (as self-reported during the screening process). Interviews ranged from one to two hours in length and followed an open-ended guide created by FrameWorks researchers to elicit a wide array of issues from how people view mental health in general, to how they view it when applied to children, to their explanations of causal mechanisms involved in mental health and mental illness. They were recorded, transcribed and analyzed based on principles and data-gathering methods adapted over the last ten years from the fields of psychological anthropology and cognitive linguistics. The complete results are published in Kendall-Taylor (2010).³⁹

- » **Peer Discourse Analysis** captures the effects of frames in social settings by exploring inter-group negotiations around particular social issues. The analysis is organized to validate the findings from the cognitive interviews, to experiment with promising alternative frames, and

to observe the negotiations between members of the public (i.e., peers) when using dominant cultural models and potential reframing elements.

◆ **This report incorporates findings from four peer discourse sessions** conducted in April 2010 in Edmonton and Calgary. All sessions were moderated by researchers affiliated with the FrameWorks Institute and followed guides developed by the FrameWorks research group. The 36 participants were selected through a professional marketing firm to represent variation along domains of ethnicity, gender, age, educational background and political ideology, but all participants were screened to ensure a strong interest in current events and active involvement in their communities. Based on previous FrameWorks research, we suspected that participant responses and views would be particularly sensitive to variations in level of education and political identification. The groups were formed as follows: one College/University education group (some college experience), one High School education group (high school diploma or less), one liberal group and one conservative group. Each session of nine participants lasted two hours, was audio and video recorded, and transcribed for analysis. This analysis combines principles from cultural models analysis with methods adapted from political sociology. The complete results are published in O’Neil (2010).⁴⁰

- » **Simplifying Models Development** — Numerous studies in the cognitive sciences as well as a growing body of FrameWorks research have established that the public’s ability to reason about complex, abstract or technical public policy concepts relies heavily on metaphor and analogy. As a result, we actively develop simple and concrete metaphorical frame elements that help people to organize information on issues in new ways, to fill in understanding currently missing from their repertoire, and to shift attention away from the misleading default patterns they consistently bring to bear on those issues.

◆ In prior research in the United States, FrameWorks identified, empirically tested and refined simplifying models for child mental health using a range of methodologies. First, using approaches from cognitive linguistics, researchers analyzed transcripts of the cognitive interviews conducted in the first phase to generate a list of metaphor categories that capture salient elements of the expert understanding. Promising simplifying models were then refined and tested in a large-scale experimental survey in Alberta (see below) for their ability to improve understanding of child mental health and support for preventive and interventive services. The complete results of the simplifying models development process are published in Erard et al. (2010).⁴¹

- » **Experimental surveys** — FrameWorks uses experimental surveys to test the efficacy of potential framing strategies in a) improving public understanding of social problems and b) increasing support for those policies that experts suggest will improve social conditions. To conduct these experiments, we employ web-based surveys and randomly assign a nationally representative sample to one or more treatments and a control group. The treatment groups are exposed to framed messages and are subsequently asked a series of questions that assess their support for

a variety of related policy questions. By comparing the responses of the treatment groups to the control group (which receives no stimulus at all), we can ascertain any effects that emerge as a result of exposure to the framed stimuli. Using this method, we can demonstrate the magnitude and extent to which particular frames affect the public's policy attitudes and preferences.

- ◆ For this inquiry, online experimental surveys were conducted with a sample of 4,513 Albertans between May 25 and June 3, 2010 to establish frame effects of values and simplifying models on understanding of and support for policies related to early childhood and child mental health. A second study examined the frame effects of simplifying models concerning epigenetics and executive function. This study was conducted between March 22 and March 28, 2010, with 1,382 participants, who were drawn from the same online panel of Albertans noted above. Participants in these two surveys were derived from an Internet panel maintained by YouGov Polimetrix. The sample was weighted on the basis of age, gender, education level and party identification to statistically represent all adults in the province.. Complete results of these studies are reported in Simon (2010).⁴²

Appendix B

Frameworks Institute’s research with the National Scientific Council on the Developing Child has resulted in the articulation of an overall “Core story” or key elements of development. An explanation of the Core Story of Development can be found in FrameWorks’ *Framing Early Child Development MessageBrief*, which can be found here:

http://www.frameworksinstitute.org/assets/files/ECD/ecd_message_brief_2009.pdf

The essential outline of the Core Story is as follows:

- » **VALUE: INGENUITY** Innovative states and communities have been able to design high-quality programs for children. These programs have solved problems in early childhood development and shown significant long-term improvements for children — but many places still don’t have access to these innovations.
- » **WHAT DEVELOPS: BRAIN ARCHITECTURE SIMPLIFYING MODEL** The basic architecture of the human brain is constructed through an ongoing process that begins before birth and continues into adulthood. Like the construction of a home, the building process begins with laying the foundation, framing the rooms and wiring the electrical system in a predictable sequence. Early experiences literally shape how the brain gets built; a strong foundation in the early years increases the probability of positive outcomes. A weak foundation increases the odds of later difficulties.
- » **HOW IT GETS BUILT: SERVE AND RETURN** The interactive influences of genes and experience shape the developing brain. The active ingredient is the “serve and return” relationships with their parents and other caregivers in their family or community. Like the process of serve and return in games such as tennis and volleyball, young children naturally reach out for interaction through babbling and facial expressions. If adults do not respond by getting in sync and doing the same kind of vocalizing and gesturing back at them, the child’s learning process is incomplete. This has negative implications for later learning.
- » **HOW IT GETS BUILT: CAN’T DO ONE WITHOUT THE OTHERS** You can’t focus on developing just one part of the child without paying equal attention to the other capacities. Cognitive, emotional and social capacities are tightly connected throughout the life course. Being an interactive organ, the brain utilizes some functions to enrich others. Language acquisition, for example, relies on hearing, the ability to differentiate sounds, and the ability to pay attention and engage in social interaction.
- » **HOW IT’S DISRUPTED: TOXIC STRESS** Chronic stressful conditions such as extreme

poverty, abuse or severe maternal depression — what scientists now call “toxic stress” — can also disrupt the architecture of the developing brain. This can lead to lifelong difficulties in learning, memory and self-regulation. We know that children who are exposed to serious early stress develop an exaggerated stress response that, over time, weakens their defense system against diseases, from heart disease to diabetes and depression.

- » *WHAT ARE THE CONSEQUENCES: PAY NOW OR PAY MORE LATER* Trying to change behavior or build new skills on a foundation of brain circuits that were not wired properly when they were first formed requires more work and is less effective. Remedial education, clinical treatment and other professional interventions are more costly and produce less desirable outcomes than the provision of nurturing, protective relationships and appropriate learning experiences earlier in life. The exaggerated neurological response to toxic stress never goes away, with costly consequences for both children and society.
- » *WHAT ASSISTS WITH OPTIMAL DEVELOPMENT: EFFECTIVENESS FACTORS and RETURN ON INVESTMENT* We can measure “effectiveness factors” that often make the difference between programs that work and those that don’t work to support children’s healthy development. Without these effectiveness factors, some children can spend just as many hours in a program, but not show many positive outcomes. In addition, we can evaluate the efficiency of programs for young children by comparing the benefit of the investment to the cost. This allows a reliable comparison between programs that don’t improve child development and those that show real results.

ENDNOTES

¹ See Kendall-Taylor, N. (2010). Kids must have mental health...but they can't, can they?: How Albertans think about child mental health. Washington, DC: FrameWorks Institute; O'Neil, M. (2010). Between cowboys and barnraisers: The challenge of explaining children's mental health and development in Alberta. Washington, DC: FrameWorks Institute; O'Neil, M (2010b). Scientists, holy terrors and lax parents: How the Alberta media tell stories about early child development and its disrupters. Washington, DC: FrameWorks Institute; Simon, A. (2010). MOVING NORTH: Translating child mental health values and models to Canada. Washington, DC: FrameWorks Institute. Additional reports on research conducted in the United States can be found The research reports can be found on the Early Childhood Development issue page of the FrameWorks Institute website, here: <http://www.frameworksinstitute.org/eecd.html>

² *ibid*

³ Kendall-Taylor, N. (2010). p. 14

⁴ Kendall-Taylor, N. (2010).

⁵ *ibid*, p. 16

⁶ Kendall-Taylor, N. (2009). Conflicting Models of Mind in Mind: Mapping the Gaps Between the Expert and the Public Understandings of Child Mental Health as Part of Strategic Frame Analysis™. Washington, DC: FrameWorks Institute.

⁷ Kendall-Taylor, N. (2010). P. 17.

⁸ Bales, S.N. (2005). Talking early child development and exploring the consequences of frame choices: A FrameWorks MessageMemo. Washington, DC: FrameWorks Institute.

⁹ Kendall-Taylor, N. (2009).

¹⁰ Kendall-Taylor, N (2010). P. 15.

¹¹ *ibid*

¹² Kendall-Taylor, N. (2009).

¹³ Bales, S.N. (2005).

¹⁴ *Ibid*, p. 22

¹⁵ Kendall-Taylor, N. (2010).

¹⁶ Erard, M. (2010). More to genes than that: Designing metaphors to explain epigenetics. Washington, DC: FrameWorks Institute.

¹⁷ Kendall-Taylor, N. (2010). P. 18

¹⁸ Kendall-Taylor, N. (2009).

¹⁹ O'Neil et al., (2009).

²⁰ Turner, Frederick Jackson (1935). *The Significance of the Frontier in American Society*. Holt and Company: New York, New York.

²¹ Bales, (2006). Framing lessons in elevating prevention policies for children: A FrameWorks MessageMemo. Washington, DC: FrameWorks Institute.

²² Simon, A. (2010). Refining the options for advancing support for child mental health policies. Washington, DC: FrameWorks Institute.

²³ Bales, S. (2006).

²⁴ O’Neil, M. (2010). Between cowboys and barnraisers: The challenge of explaining children’s mental health and development in Alberta. Washington, DC: FrameWorks Institute.

²⁵ O’Neil, M. (2010).

²⁶ Simon, A. (2010). MOVING NORTH: Translating child mental health values and models to Canada. Washington, DC: FrameWorks Institute.

²⁷ Note that final verification of this simplifying model in the context of Alberta is forthcoming. The research to data in Alberta strongly suggests the efficacy of this model, nonetheless.

²⁸ Erard, M., Kendall-Taylor, N., Davey, L., & Simon, A. (2010). The power of levelness: Making child mental health visible and concrete through a simplifying model. Washington, DC: FrameWorks Institute.

²⁹ Kendall-Taylor, N. (2009).

³⁰ See Kendall-Taylor, N. (2010) and O-Neill (2010).

³¹ The following execution of Toxic Stress was presented to participants in Alberta during Peer Discourse Sessions, as a prime for discussions about child mental health:

Neuroscientists are now reporting that certain kinds of stress in a child’s environment are what lead to child mental health problems. There are many different kinds of stress, but some stress is toxic, they conclude. Toxic stress is extreme, frequent and is when children don’t have supports to buffer against these experiences. Toxic stress in early childhood can be things like extreme poverty, abuse, chronic neglect, or severe maternal depression, all of which can disrupt the developing brain. In this way toxic stress can lead to lifelong problems in learning, behavior, and both physical and mental health. Being surrounded by environments with supports and resources is key in protecting against these toxic stresses and promoting child mental health.

³² O’Neil, M. (2010).

³³ FrameWorks Institute. (2010). Talking about children’s mental health in Alberta. <http://frameworksinstitute.org/toolkits/alberta/>

³⁴ O’Neil, M. (2010).

³⁵ O’Neil, M (2010b). Scientists, holy terrors and lax parents: How the Alberta media tell stories about early child development and its disrupters. Washington, DC: FrameWorks Institute.

³⁶ *ibid*

³⁷ *ibid*

³⁸ *ibid*

³⁹ Kendall-Taylor, N. (2010).

⁴⁰ O'Neil, M. (2010).

⁴¹ Erard, M. et al. (2010).

⁴² Simon, A. (2010).