EARLY LEARNINGS ABOUT USES FOR THE RESILIENCE SCALE METAPHOR IN PRACTICE

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Prepared by FSG for the Alberta Family Wellness Initiative

Colleen McCann, Joelle Cook, and Euphonise Loiseau
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INTRODUCTION

A growing body of research across a variety of sectors and fields suggest that resilience is critical for leading a healthy, thriving life, and organizations working with children and families are increasingly focusing on resilience as a core outcome of their work. Research has also made us aware of strategies for building individuals’ resilience and interventions that can make a quantifiable difference in peoples’ lives.¹ A 2017 paper from the Center on the Developing Child laid out three “design principles” that practitioners and policymakers across sectors can use to improve outcomes for children and families:

2. Strengthen core life skills.
3. Reduce sources of stress in the lives of children and families.²

Figure 1. Core Principles of Development to Drive Practice and Policy for Children and Families

These design principles directly map on to the Resilience Scale metaphor, a simplifying frame used by the Alberta Family Wellness Initiative (AFWI).³ This explains why some people seem more resilient than others, and helps to visualize how to improve resilience (here, resilience is defined as the ability to respond positively in the face of adversity).

¹ Frontiers of Innovation (FOI) is a research and development lab at the Center on the Developing Child at Harvard University. FOI designs, tests, and refines a diverse portfolio of interventions that have the potential to transform the lives of children and families facing adversity.⁷ These interventions align with the three design principles described in the 2017 paper cited below.
² Center on the Developing Child at Harvard University (2017). Three Principles to Improve Outcomes for Children and Families.⁷
³ The AFWI’s core story of brain science utilizes several metaphors to illustrate its key messages. These metaphors were co-developed by the National Scientific Council on the Developing Child, the Center on the Developing Child at Harvard University, and the FrameWorks Institute.
The Resilience Scale metaphor uses the visual of a balance beam or see-saw to demonstrate how negative experiences and adversity can be counterbalanced by positive experiences and supports (Figure 2).4 Individuals’ resilience can be built by increasing their skills and abilities (e.g., executive functioning, “serve and return” social interactions), thereby shifting the fulcrum (the tipping point) of the scale toward more positive outcomes.

Figure 2. The Resilience Scale: A Visual Metaphor for the Components of Resilience

Figure 3. Mapping the Core Principles of Development onto the Resilience Scale

Principle 3: Reducing sources of stress protects from the harmful buildup of toxic stress, which depletes the energy the brain needs for healthy development throughout one’s life.

Principle 1: Supporting responsive relationships is a critical factor in building resilience across the lifespan.

Principle 2: Strengthening core life skills shifts the balance point, or fulcrum, of the scale.

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4 The Alberta Family Wellness Initiative, “Resilience.” The AFWI’s “Brains: Journey To Resilience” video helps explain how the components of the scale interact to contribute to resilience.
Spurred by these research developments and organizations’ hunger for tools to support their work to build resilience in children and families, the AFWI became interested in the potential utility of the resilience scale beyond a metaphor. The AFWI and several partner organizations saw the opportunity to use the resilience scale visual in conversations with clients to help explain what resilience is and how the clinical care decisions practitioners were making would help clients build resilience. The scale could also help practitioners identify individual clients’ needs and assets for each component of the scale and determine appropriate interventions, programming, or services aligned with the core design principles.

From June – November 2020, the AFWI convened a community of practice (CoP) in which eight organizations participated. Six of the organizations were based in Alberta (Calgary and Edmonton), Canada, with two based in London, England. Each of these organizations had deep familiarity with the brain science concepts encapsulated in the AFWI’s Brain Story Certification Course, including resilience, and saw integrating the resilience scale into practice as a natural extension of work they had been doing for some time. The intent of the CoP was for participants to design, implement, and test out various uses of the scale in practice as best fit their context and to collaboratively learn from the process.

The AFWI engaged FSG to develop this brief capturing early learnings from organizations’ experience integrating the resilience scale into their work. To inform the learnings, FSG interviewed each of the participants in the resilience scale CoP (13 individuals from eight organizations), observed bi-weekly CoP meetings, and reviewed relevant research and supporting documents. FSG did not set out to evaluate the efficacy of any organization’s approach, the resilience scale in general, or the CoP as a structure for facilitating peer learning. Rather, this brief surfaces early learnings for organizations as well as the AFWI about areas of promise and stumbling blocks encountered in this experience.

In this brief, we first provide highlights from scientific research on resilience. The bulk of the brief focuses on organizations’ experiences with the community of practice and integrating the resilience scale into practice. We conclude by outlining ideas for future learning by organizations as well as about clinical uses of the resilience scale.

**HIGHLIGHTS FROM SCIENTIFIC RESEARCH ON RESILIENCE**

“Whether it is considered an outcome, a process, or a capacity, the essence of resilience is a positive, adaptive response in the face of significant adversity. It is neither an immutable trait nor a resource that can be used up. On a biological level, resilience results in healthy development because it protects the developing brain and other organs from the disruptions produced by excessive activation of stress response systems. Stated simply, resilience transforms potentially toxic stress into tolerable stress.”  
— Center on the Developing Child at Harvard University, Working Paper 13

Research supported by the AFWI indicates that protective factors within a child and in the child's social environment interact to produce resilience. Importantly, children are not born with an innate amount of

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5 This brief is part of FSG’s [developmental evaluation](#) of the AFWI’s work. The full suite of evaluation materials includes an evaluation report exploring the AFWI’s work from 2015 – 2019 and three other case studies, for a total of five products.

resilience, and one’s resilience is not fixed; rather, brain science and child development research has shown that resilience can be built and that there are strategies that promote healthy development in the face of adversity. These include at least one consistent relationship with a supportive parent, caregiver, or other caring adult that is rich in “serve and return” interactions and helps provide a safe, stable, and supportive environment.\(^7\)

When a child experiences abuse early in life, first-hand or as a witness, it initiates a serious stress-response in the child. An absence of or interruption in positive supports prompts a similar reaction. And this ongoing activation of the stress response can induce serious physiological changes in the brain and other vital organs and body systems. This build up is known as toxic stress. The consistent presence of positive supports can buffer children from developmental disruption and divert this potentially toxic stress into tolerable stress, thereby helping children develop “resilience,” or the set of skills needed to respond to life’s natural adversity and thrive. In this way, a combination of protective factors and the development of coping skills can produce positive outcomes and counterbalance the effect of early negative experiences.

Of course, adversity and challenges in life persist past childhood. As people age and encounter new sources of adversity, gain additional positive supports, and develop new skills and coping abilities, the dynamic interactions between these components of resilience continue.

INTEGRATING THE RESILIENCE SCALE INTO PRACTICE: EARLY LEARNINGS

INCREASING INTEREST IN RESILIENCE LED THE AFWI TO CONVENE A COMMUNITY OF PRACTICE

In November 2019 and January 2020, the AFWI convened more than 200 practitioners, policymakers, and researchers spanning multiple sectors for two-day “From Knowledge to Action: Using Brain Story Science to Improve Outcomes for Children and Families in Alberta” events.\(^8\) The goals of the From Knowledge to Action convenings were to:

- Share emerging and promising Brain Story-aligned practices being implemented at various levels of different systems (e.g., health, children’s services, education, justice);
- Identify ways to support the initiation and sustainability of such practices;
- Explore indicators and outcomes for measuring the impact of brain science-aligned practices; and
- Build collective will and leadership to mobilize interagency and cross-sector collaboration for policy and practice change.\(^9\)

The importance of resilience was a key theme and topic of discussion at the convenings, and was the focus of two different presentations: one by staff from Alberta’s Ministry of Children’s Services about

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\(^8\) The agenda and structure for the two convenings were largely identical; the first was held on November 25-26, 2019 in Edmonton, AB, and the second on January 16-17, 2020 in Calgary, AB.

the Ministry’s Well-Being and Resiliency Framework and Evaluation Framework\textsuperscript{10}, and the other by Carlene Donnelly, Executive Director of CUPS, about CUPS’ transition to an integrated care model specially designed to increase clients’ resiliency. These presentations and other discussions during the convenings about the centrality of resilience to the work sparked widespread interest in further exploring the use of the resilience scale in practice. Many organizations in the province such as the YWCA of Calgary, The Family Centre in Edmonton, and others had been keenly focused on resilience as a critical aspect of their work with clients for years prior to these convenings, but felt they were lacking tools to support this work. Practicioners expressed a desire to continue gathering across cohort groups to talk about their work integrating the Brain Story and, in particular, the resilience scale metaphor:

“At both convenings, participants stressed the need to create collaborative networks that could develop and test mutually reinforcing programs, policies, and practices that increased the resilience of individuals and families, especially those exposed to adverse social, economic, and environmental conditions. Participants also wanted to create brain story science-based communities of practice for themselves that would help them continue the conversations they were having at the convenings about how to embed brain story science into their own organizations and communities. The spread of communities of practice such as the Change in Mind initiative supported by Palix would allow participants to continue sharing stories from their separate journeys, identify where they were on their journeys, discuss the barriers and challenges that slowed their progress, and give them a chance to seek support and advice from others.”

- From Knowledge to Action Proceedings Report\textsuperscript{11}

To further explore these ideas, the Palix Foundation consulted with several community agencies who had been leaders in applying Brain Story science in their organizations and services. The purpose of these meetings was to seek community input and gauge capacity and interest in using the resilience scale concept in one of four possible ways:

1. As a tangible, visual tool for use directly with clients, to more clearly understand how clients are showing up and explain what they need to do to build their own resilience, and to chart client progress as they engage with agency-level programs and services.

2. As a tool to understand how to better measure client outcomes, and what measures are pertinent to this goal.

3. As a tool to frame organizational theories of change, and better understand how organizations can more fully integrate brain story science for the benefit of their clients and staff.

4. As a tool to explore within- and cross-sector partnerships and client referral pathways that can provide more comprehensive, wrap-around supports than any one agency can provide alone.


\textsuperscript{11} NORC, “From Knowledge to Action: Using Brain Story Science to Improve Outcomes for Children and Families in Alberta, Proceedings Report.”
The excitement and passion expressed by consulted agencies in these meetings prompted the AFWI to convene a community of practice (CoP) beginning in June 2020 that would support agencies to think collectively about the resilience scale concept and its potential utility in their practices. The CoP met 10 times between June 15 and November 4, 2020 and was facilitated by Nicole Sherren, then the Scientific Director at the AFWI.

Though the approximately five-month timeframe for the community of practice was relatively short, participants spoke positively about several aspects of this opportunity to learn from their peers. In particular, participants appreciated:

- **Exchanging ideas**: Participants shared that hearing about the different approaches others were taking to integrating the resilience scale into practice gave them new ideas or helped them refine what they had been planning.

- **Having space to pause and think about their work**: In a similar vein, organizations appreciated the dedicated time every other week to think deeply about how using the resilience scale could further their work. Needing to articulate to others outside their organization about what they were trying to achieve and how integrating the resilience scale in their planned way supported those aims also prompted this deeper reflection.

- **Making connections and deepening relationships**: Several CoP participants noted that they had connected with staff from other participating organizations outside of the CoP sessions to work through common problems, share ideas and get feedback, and find ways to collaborate. Perhaps a silver lining in moving to virtual meetings was that it enabled organizations to participate more fully in the CoP than they may have been able to otherwise. Had the meetings not been virtual, the opportunity would not have been available to the UK-based organizations. An Alberta-based participant noted that meetings in person also require time for commuting to the meeting location, finding parking, and other logistics that can quickly add up to a much more significant time commitment than just the scheduled meeting itself.

- **Accountability to a group**: Several participants noted that the structure of the CoP built in a positive form of peer pressure that encouraged them to push forward the work within their organizations. One interviewee jokingly shared that they never wanted to feel like the odd person out not doing their part on the group project when they showed up to the bi-weekly meetings, and that the group accountability lit a fire under them to prioritize their project amongst their numerous other priorities.

That said, the CoP was launched during a very challenging time; the COVID-19 pandemic spread across the globe in early 2020 and organizations experienced varying levels of shutdowns throughout the year. Interviewees noted the challenges of innovating and trying out something new during COVID, when organizational staff were working under constrained and stressful conditions (e.g., meeting with clients virtually, working from home for months with no clear end in sight) and facing budget cuts and economic uncertainty for their organizations.

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12 The concept note for the Resilience Scale Community of Practice is included as Appendix B.
There were also other challenges with the design of the community of practice, including:

- **Lack of clarity or specificity from the AFWI about what “using the resilience scale as a clinical tool” meant practically:** In the concept note for the CoP, the AFWI provided four ideas for organizations’ use of the resilience scale. These ideas were, by design, high-level and not prescriptive, in keeping with the AFWI’s strategy of disseminating knowledge and accelerating innovation. The AFWI wanted to provide starter ideas that organizations could then run with as they felt best fit their context, client base, and goals. To participating organizations, the most clear and straightforward idea put forth by the AFWI was for clinicians or service providers to bring the visual of the resilience scale into interactions with patients or clients, and several CoP participants pursued this route. The simple fact that this approach was so straightforward, though, was in some ways a double-edged sword – organizations weren’t clear if they were on the right track, and some overthought or veered away from what the AFWI was aiming for, because they thought the charge was much more expansive.

- **The community of practice couldn’t align around a common practice challenge, because they were all trying out different approaches to different problems:** The organizations who participated in the CoP did so because they were excited about exploring ways to use the resilience scale – but they came to the work with different problems of practice that they were trying to solve. For example, some organizations wanted to be able to better explain resilience to clients and help them understand the decisions about care plans that clinicians were making. Others were hungry for a way to measure individual clients’ levels of resilience to show progress and saw a connection between that goal and the resilience scale. Because they were trying to solve different problems of practice, organizations designed very different approaches to integrating the resilience scale. This presented a challenge, given that what we know from research is that effective individual and group learning occurs when there is at least one point of commonality among participants, whether that is a shared goal that participants are working towards or implementation of the same practice or approach in different contexts.¹³ Neither were present among the group of organizations convened for the community of practice, which led to organizations not fully understanding exactly what their charge was over the course of the CoP and for some, a feeling like participants were not on the same page as one another as well as the AFWI.

In the next section, we describe the points of light from organizations’ early forays into integrating the resilience scale into clinical practice in a variety of ways. We conclude the paper by offering considerations for further learning about uses of the resilience scale, including design recommendations for a future community of practice.

**Organizations’ Experiences Piloting Uses of the Resilience Scale in Practice**

Integrating the resilience scale into clinical practice was a natural extension of the work for the organizations involved in the AFWI’s resilience scale community of practice (CoP). While there were different approaches to integrating or deepening use of the resilience scale across the eight

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¹³ For information on effective communities of practice to enable social learning and innovation, see Introduction to communities of practice, Communities of Practice: Learning as a Social System, and UC Davis School of Health Communities of Practice: A Toolkit.
organizations participating in the CoP, a common thread across was that all organizations had deep familiarity with the concepts embodied in the scale and had been focusing on building client resilience through their programming for some time. Participants in the CoP represented organizations where many or all staff receive training on the core story of brain science, whether that is through completing the Brain Story Certification Course or an adapted version of the content – so staff knowledge of the resilience scale was already common. Having this positive experience with the resilience scale as a simplifying frame for internal alignment suggested that a natural next step for several was to test out whether the same might hold true with clients.

THE RESILIENCE SCALE AS A TANGIBLE, VISUAL TOOL TO USE WITH CLIENTS

One use of the resilience scale that the AFWI and organizations involved in the community of practice saw as promising is bringing the visual into practitioner-client interactions. Practitioners can share a visual of the scale with clients to explain resilience and map the client’s unique sources of adversity, positive supports, and skills and capacities onto the components of the scale. This engages the client in documenting their own history, and helps them understand the interventions or supports that their practitioner recommends for them to build their resilience. Standardized use of the scale in this way, within and across organizations, can lay the groundwork for a common understanding and frame of reference for resilience for clients as well as practitioners and service providers. The beauty of the simplicity and universality of the resilience scale is that it can be used across sectors as well – it holds relevance for health care, mental health, education, and other sectors that support healthy child development and adult wellbeing. Over the course of the CoP, several involved organizations tested out use of the visual by frontline providers in their interactions with clients / patients.

The visual of the resilience scale is a powerful communications tool that can support frontline providers in explaining resilience to clients. Interactive or dynamic visualizations of the scale may help drive the point that while each aspect of the scale is important in its own right, it is the interaction among the components that builds resilience. Prior to the community of practice, several organizations had been using some form of a visual representation of the resilience scale in their work with clients. For example, staff from Fresh Start Recovery Centre often drew a picture of the scale on a whiteboard to help men receiving treatment services understand how toxic stress and ACEs factor into their own experiences with addiction; the role that positive supports (e.g., attending 12 step meetings, working with a sponsor or recovery mentor, having stable housing) can play; and how building skills to cope with life’s inevitable ups and downs contributes to what Fresh Start calls “recovery capital.”

However, they found that this static representation of the scale only went so far, and felt their clients would benefit from having something tangible and interactive. Fresh Start Recovery Centre staff built a physical model of the resilience scale, complete with weighted red blocks that simulate negative experiences and sources of adversity, weighted blue blocks representing positive supports and protective factors, and a movable pin demonstrating how the fulcrum can shift, that counselors are now using in treatment groups and one-on-one conversations with patients. Shared one staff member,

"[Our scale model] is a great tool for dialing in to what resilience means for a particular individual, and it's a nice visual for people that haven't been trusting and who haven't had hope. When they're seeing the demonstration, it helps them see that actual change can occur in their lives, and understand that
we’re not able to change their ACEs but we’re able to affect the supports and we help them understand the resiliencies they already have, it’s fantastic. When one of our counselors brought the model into the group, the reaction from the men – finally, it connects the dots for them. And it will never get stale, because you can look at it in six months, you can review it in a year, so seeing the changes in short-term recovery and beyond.”

Another example of how an organization is thinking about a dynamic visualization is the Child and Adolescent Addictions, Mental Health and Psychiatry Program (CAAMHPP)’s development of a website for clinicians in their Acute at Home project to use to talk about resilience with families and how it is a core component of the project itself. Clinicians could pull the website up on a tablet and show the AFWI’s short video “Brains: Journey to Resilience,” which introduces the resilience scale, and the website would also provide clinicians with simple language to use when talking with families about adversity and resilience. A leader from CAAMHPP shared,

“One of the things that we heard from clinicians was that there wasn’t comfortability with using trauma language. We thought they would feel more comfortable starting the conversation with resiliency and then leading into trauma, and have the iPads pre-loaded with the videos they could use in sessions with families and use them as starting points for the conversation. The videos are really approachable, and less threatening than giving a ten-point survey for families to fill out. Clinicians are the ones administering the ACE questionnaire, but there was still discomfort doing it. So our goal was trying to find ways to have those conversations differently than we had in the past and the videos about resilience really help soften the language around the concepts of trauma and resiliency."

While CAAMHPP had not been able to launch their pilot test of clinicians’ use of these supports with clients due to COVID-19 restrictions in autumn 2020, the leader interviewed was excited about the prospect, and had also identified other programs within their department where she thought this same approach would be beneficial.14

The resilience scale metaphor can also help organization leaders explain resilience to their key external audiences who may be less steeped in the science. These audiences could include organizations’ Boards, current or prospective funders, and even the general public. To this point, a leader from Catholic Family Service shared these thoughts:

“If I’m speaking to a group and they start making this confused face, like ‘what are you saying?’, then I use the resilience scale to frame what I’m talking about, and they can understand it. So it’s a way of getting some of the work that we do that that’s actually quite complex into a package that’s more of the right-sized bite for someone who may not [have clinical expertise]. I’m really excited about the way we're using the resilience scale from an organizational theory of change perspective because it’s something that makes sense to us, but it’s something that will make sense when we talk about it in the broader world as well."

Similarly, a leader from Fresh Start Recovery Centre shared, “The concepts of resilience are central to the work of recovery. What I love about the concepts in the resilience scale is that you don’t have to be

14 Since data collection for this brief concluded in October 2020, CAAMHPP has developed a comprehensive and ambitious plan for their next phase of work related to resilience, which is Phase II of their Adverse Childhood Experiences (ACE) / Trauma-Informed Care (TIC) 2.0 Resilience Initiative. From fall 2020 – late summer 2025, CAAMHPP is embarking on an effort to build knowledge; design, implement, evaluate, and scale clinical interventions; and build out care pathways. See Appendix C for a memo on CAAMHPP’s Resilience Initiative. AHS staff provided this memo to FSG on December 10, 2020.
in recovery to understand it. The concepts aren’t hard, they’re incredibly intuitive, but conveying that message and making it stick with the individual can be tricky – the resilience scale helps with that."

The language of resilience and the concepts embodied in the scale provides staff within and across organizations with a shared base of understanding and focus, and a shared conceptualization of resilience. This point is consistent with FSG’s findings in a recent developmental evaluation about the power of the Brain Story Certification Course establishing a common language about early childhood development, mental health, addiction, and brain science. Noting that the clients they served also frequently received services from other organizations, a staff member from The Family Centre in Edmonton was particularly excited about benefits to clients when agencies use the common language of resilience to frame their work:

"Being part of the CoP has helped me gain some clarity in terms of how can we align ourselves with the bigger picture here in Edmonton and in Alberta, so that when our staff are talking to clients and our clients are talking to other people, they run into some similar language and feel like this is all making sense because they are hearing it from other people too. Before this, maybe they were hearing similar language but through totally different lenses from two different agencies, and that can be very confusing for people when we’re talking about the same thing, but using different vocabulary. That’s a real benefit from this community of practice, that if we really do push this out to our staff, our clients, across all kinds of agencies, then we’ll use the same language for the same thing. For me, that feels hopeful and that’s the right thing to do."

CONCEPTUALIZING THE RESILIENCE SCALE AS A TOOL TO SUPPORT MEASUREMENT WAS A STUMBLING BLOCK

The promise of the resilience scale for measurement is that it provides a way for practitioners to map the various components that contribute to an individual’s level of resilience at a point in time. Practitioners can use the visual to communicate about resilience to clients, help clients see and understand their own story, and explain why the clinical choices they are making (i.e. the interventions they have identified for clients based on their particular “red boxes”) will help the client build resilience. A client’s unique resilience scale can then be updated periodically as positive effects of interventions, as well as changes in circumstances or life conditions, occur. Using the resilience scale in this way helps clients see their own progress, which in itself is motivating and empowering, and also supports clinical decision-making and measurement.

One could imagine organizing evaluations around the concepts depicted in the Resilience Scale metaphor, or even using the visual to share findings (as CUPS has begun to do). But organizations interested in this possibility encountered challenges with using “resilience scale” in this way in their organizations.

At least three organizations noted a language-related challenge – specifically, the use of the term “scale.” To some, using the terminology of “scale” and “clinical tool” in conversations about outcome measurement prompted a literal response to the words, for example, people thought it connoted a scale for measurement (e.g., a Likert scale) that would be used to calculate a neat resilience score for an
individual. At least one organization adapted the name of the metaphor, and instead of referring to the concepts as the resilience scale, instead said, “tipping the scales.”

“When we had done previous evaluations of how people were responding to the resilience scale concept we found that [the language of “resilience scale”] didn’t quite land, and the phrase “resilience scale” was confusing to some professionals, they expected it to be a scale of measurement, like the Ungar scale or something, but actually we’re talking more about a weighing scale, like a seesaw or teeter-totter. So we ended up calling it ‘tipping the scales’ and slightly adjusting the way that we talked about it. We’ve just found that that language tends to land better for us. Similarly, the word fulcrum seems to be a bit problematic sometimes so we shifted that to ‘base of the scales.’”

– Staff member from the National Society for the Prevention of Cruelty to Children (UK)

A leader from an Alberta-based organization voiced a similar tension, suggesting the concern raised by NSPCC may not be entirely due to differing points of reference in the United Kingdom. This may imply that a visual – or physical, in the case of Fresh Start – representation of the scale may be necessary to ensure clear communication about the resilience scale, and that using the phrase “resilience scale” absent a visualization could lead to confusion.

Another challenge related to use of the resilience scale to support measurement and evaluation was that organizations became caught up in trying to determine numerical values or relative weights for the metaphorical blocks in the scale and the mathematical formulae for how skills and abilities would factor into shifting the fulcrum. For example, one organization was working to develop a digital dynamic visualization of the scale for each patient that incorporated their individual data points from various assessments the organization used (e.g., ACEs screening questionnaire, Ungar scale). While this is a logical direction for organizations and researchers to pursue that may ultimately produce interesting findings in time, this interpretation of the idea of using the resilience scale to develop something like a composite ‘resilience score’ differed from what the AFWI had in mind. Rather, the point was that in order to help individuals build resilience, practitioners need to identify the “red boxes,” or past or present sources of adversity, that are stressors. If there are enough of these red boxes, the accumulation can cause toxic stress – and this stress response can lead to negative outcomes and inhibit an individual’s ability to lead a healthy, thriving life. It may not be possible to assign a weight to a particular source of adversity, because the “weight” is relative to each person’s pre-conditions.

To illustrate this idea, the following examples depict how three different individuals may have been disparately impacted by the same source of adversity – the COVID-19 pandemic and its ripple effects in their lives.

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15 This reference to “Ungar scale” is short-hand for the individual resilience measures developed by Dr. Michael Ungar. The Child and Youth Resilience Measure (CYRM-R) and the Adult Resilience Measure (ARM-R) are self-report measures of social-ecological resilience widely used by practitioners and researchers.
Example A: An individual with high resilience, pre-COVID

This individual had a high level of resilience prior to the COVID-19 pandemic. She was employed, married, and owned a home with her spouse. They had a strong social network of friends and family to look to for support. However, the pandemic had a negative effect on a number of these previously supportive factors, ultimately making them...

1 Pre-COVID pandemic

Prior to the COVID pandemic, protective factors outweighed sources of adversity, supporting resilience

Skills and abilities

Seasonal depression
Elderly mother with dementia

Spouse employed
Regularly attends fitness class at gym
Owns home
Works retail part-time
Has close friends
Has savings
Two school-aged kids
Married
Good relationship with family

2 During COVID pandemic

During the COVID pandemic, sources of adversity outweigh protective factors, limiting resilience

Skills and abilities

Spouse very stressed about work
Seasonal depression
Gym closes -- no physical outlet for stress
Anxiety about loved ones’ health
Retail store closes, loses part-time job
Elderly mother with dementia
Managing Zoom school for two kids

Regularly attends fitness class at gym
Works retail part-time
Has close friends
Has savings
Two school-aged kids
Married
Good relationship with family

Fulcrum shifts
Example B: An individual with **medium** resilience, pre-COVID

This individual had a medium level of resilience prior to the COVID-19 pandemic. She was enrolled in college, played soccer in her free time, and had a good relationship with her father and extended family. Her relationships and healthy activities helped balance her personal challenges, including her struggles with disordered eating and problems in her family. However, the pandemic meant she wasn’t able to access many of her supports and the impact of her sources of adversity became more pronounced.

1. **Pre-COVID pandemic**

   - Mother in active alcohol addiction
   - Anxiety
   - History of disordered eating
   - Parents divorced during high school
   - High social media use

   **Skills and abilities**

   - Summer camp counselor
   - Achieves good grades
   - Attends college
   - Intramural soccer
   - Lives with close friends while at school
   - Best friends with cousin
   - Good relationship with father
   - In recovery from eating disorder for 4 years

2. **During COVID pandemic**

   - Has to move home when college shuts down
   - Summer camp is cancelled – no job
   - No soccer
   - Doesn’t attend online Al-Anon
   - Mother in active alcohol addiction
   - Anxiety
   - Disordered eating behavior reemerges
   - Grades slip
   - Parents divorced

   **Fulcrum shifts**

   - Intense feelings of loneliness from only interacting on social media
   - In recovery from eating disorder for 4 years
   - Achieves good grades
   - Attends college
   - Intramural soccer
   - Lives with close friends while at school
   - Best friends with cousin
   - Good relationship with father
Example C: An individual with low resilience, pre-COVID

This individual had a low level of resilience prior to the COVID-19 pandemic. He was earning some income from odd jobs, was utilizing the local food bank frequently, and relying on a few close friends for support – but also faced significant sources of adversity, including a hard childhood and current mental health challenges and substance abuse. However...

Prior to the COVID pandemic, sources of adversity outweighed protective factors, limiting resilience

1 Pre-COVID pandemic

Some opioid abuse
Past conviction for petty theft
Low self-esteem
Severe anxiety
Diabetes
Multiple foster homes as child
In and out of temporary shelter
Few consistent relationships
Inconsistent employment
Occasional odd jobs for cash
A few friends
Access to food bank
In contact with foster sister
Skills and abilities

During the COVID pandemic, hardships were exacerbated, with even more sources of adversity limiting resilience

2 During COVID pandemic

Heavy opioid use
Unable to visit food bank regularly
Low self-esteem
Severe anxiety
Challenges accessing insulin
Friend dies of COVID
Past conviction for petty theft
Few consistent relationships
Severe anxiety
Inconsistent employment
Multiple foster homes as child
Limited shelter capacity forces him to sleep on streets more often
Occasional odd jobs for cash
A few friends
Access to food bank
In contact with foster sister
Fulcrum shifts
Skills and abilities
FUNDERS’ PERSPECTIVES ON THE UTILITY OF THE RESILIENCE SCALE

The AFWI’s theory of change is to work with “upstream” change agents (e.g., funders, policymakers) in tandem as the AFWI supports “downstream” actors to drive change in their organizations (e.g., non-profit leaders, frontline care providers). Thinking “upstream,” the AFWI was interested in also learning how the resilience scale might be of use to funders. Potential uses they envisioned included using the scale to organize their strategy and to share with their grantees and further seed use of it in the field beyond what the AFWI might be able to do alone.

To gauge funders’ potential uses of the resilience scale, FSG spoke with leaders from three private funders in the province: Calgary United Way, the Alberta Children’s Hospital Foundation, and the Calgary Foundation. These leaders expressed openness to organizations that they fund using the resilience scale in a variety of ways, including a visual for use with clients, for organizing programming, and for evaluating their own work. The leaders interviewed mentioned that they had already or could see themselves recommending the scale to their grantees for such uses. They voiced support for grantees’ use of the scale during reporting back to funders, whereby grantees would describe how they helped identify and reduce clients’ sources of adversity, added positive supports for clients, and helped clients build their skills and abilities, increasing clients’ resilience on an individual level and in the aggregate.

While interviewees from private funding organizations saw promise in the resilience scale, they saw it more potentially applicable to their grantees’ work than to their own as a funder. Interviewees did not see themselves requiring use of the resilience scale for a variety of reasons, including internal movements away from requiring things of grantees in general and that their organization funded work where the resilience scale might not apply and they preferred to have a common reporting frame.

These conversations suggest that in addition to organizations providing services and programming to children and families, funders also see the value of the resilience scale as an organizing framework and communications tool. As the AFWI further clarifies what it envisions for use of the resilience scale as a clinical tool and as examples of organizations using the scale in practice emerge, the AFWI should share back with funders. If a groundswell of grantees begin using the resilience scale in similar ways, it is possible that funders might embrace it more as well.

THE MINISTRY OF CHILDREN’S SERVICES CONTINUES TO LEAD ON RESILIENCE

The Alberta Ministry of Children’s Services has taken significant steps over the past several years to adopt brain science-aligned policy, leading to shifts in contracted organizations as well. Today, the system is more coherent as a result of consistent alignment with the Brain Story knowledge. A major effort codifying core messages from the Brain Story and resilience in particular was the Ministry’s development of Well-being and Resiliency: A Framework for Supporting Safe and Healthy Children and

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16 See definitions of “upstream” and “downstream” in a health context: https://nccd.ca/glossary/entry/upstream-downstream.
Families in 2019. This framework supports staff from the Government of Alberta, Indigenous communities, and organizations that provide prevention and early intervention programming by articulating the government’s approach, defining a clear model of well-being and resiliency, identifying desired outcomes, and elevating a common understanding of how adversity impacts child development. The Ministry also developed an Evaluation Framework for assessing implementation and effectiveness, as well as the miyo resource, which outlines a model for delivering culturally responsive services in Indigenous communities and measuring outcomes in ways that honor indigenous beliefs and worldviews.

One component of the Well-being and Resiliency Framework is establishing Family Resource Networks (FRNs) that use a hub and spoke model to “offer a full continuum of prevention and early intervention services, including universal, targeted, and intensive services and supports based on the needs of families and children and youth aged 0-18 years.” The FRN Expression of Interest (EOI) application launched in November 2019, and the new hub and spoke model launched in spring 2020. As part of the contract with Children’s Services, organizations funded through the FRNs need to ensure that within the first year of the grant, all staff providing direct services to children, youth and their families have Brain Story Certification offered by the Alberta Family Wellness Initiative. This requirement means that staff across contracted agencies will have the common base of understanding and shared language that the Brain Story provides, including about resilience. This makes the cohort of FRN agencies ripe to potentially test out uses of the resilience scale in practice with clients in a way similar to the AFWI’s community of practice.

Though the Children’s Services is still determining how to evaluate resilience and wellbeing, those we spoke with saw the potential of the resilience scale as a common, foundational tool that would resonate across the province, upon which measurement and evaluation schema could be built. In fact, an October learning meeting for staff from contracted agencies delved into the resilience scale, and FRN Specialists delivered a 15-minute presentation about resilience and the resilience scale using resources from the AFWI as supporting materials. In smaller breakout rooms, FRN agencies discussed how the concepts in the resilience scale resonated with them and ways in which they were already using the resilience scale in practice or could see doing so. Several organizations mentioned current use of the resilience scale among staff and with clients, including:

- **Sharing the short video clip from the AFWI about the resilience scale with patients**, 20
- **Discussing the various components of the resilience scale with youth patients**, including youths’ personal “red boxes” and “green boxes” as well as how their actions or decisions could impact the balance of the scale, and
- **Reviewing the resilience scale in staff meetings to focus attention on how staff are helping add positive supports** to clients’ scales and supporting them to build their skills.

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19 Family Resource Network Spoke Services Contract Agreement Template, Alberta Government. Page 2: “Ensure, within the first year of this grant, all staff providing direct services to children, youth and their families have Brain Story certification offered by the Alberta Family Wellness Initiative.” Received June 23, 2020.
The examples of the ways that FRN agencies are using the resilience scale visual are similar to those of the organizations engaged in the AFWI’s community of practice. Given the Ministry of Children’s Services focus on resilience, this suggests opportunities for further partnership between the AFWI and the Ministry to potentially spread and scale use of the resilience scale as a visual tool in clinical practice.

CONCLUSION

The Resilience Scale metaphor has proved to be a powerful simplifying frame for helping a variety of stakeholders, including clients and patients, practitioners, agency leaders, academics, and funders, understand the core concepts of resilience and how it can be built. The AFWI’s resilience scale community of practice provided a supportive structure for developing and beginning to implement various uses of the resilience scale in clinical practice and learn from peers along the way. While the challenges associated with the COVID-19 pandemic as well as some design and execution aspects of the community of practice hindered organizations’ plans for the resilience scale, some early learnings emerged from this experience, as well as ideas for next steps in learning about use of the resilience scale.

Early learnings from organizations using a dynamic, interactive visual or physical model of the scale in practice suggest that it can be a powerful way to communicate about the components of resilience and how it is built. The beauty of the resilience scale metaphor is that it provides a simplifying frame for the complex scientific concepts embodied in it, and it is effective across stakeholder groups, including frontline staff, clients or patients, and funders. Organizations interested in a resource for supporting conversations about resilience can look to the resilience scale for this purpose, and share learnings about doing so with the AFWI.
APPENDIX A: CASE STUDY METHODS

The learnings captured in this case study draw primarily upon the interviews FSG conducted with a total of 18 individuals from 12 different organizations. One group of interviewees consisted of 13 staff members from eight organizations participating in the AFWI’s community of practice (CoP), with whom we spoke to for insight into their experiences with their respective resilience scale pilot projects in summer 2020 and a broader perspective about the CoP as a structure for peer learning and information sharing. FSG also observed eight community of practice (CoP) sessions, facilitated by the AFWI’s Scientific Director Nicole Sherren.

The second group of interviewees consisted of five individuals representing four major funders of organizations providing programs and services to children and families in the province. These interviews probed funders’ potential uses of the scale in their work internally (e.g., as a framework for evaluating the impact of their work) or externally with grantees (e.g., requiring prospective grantees to use the scale).

Organizations represented in data collection and the number of staff members with whom FSG spoke from each are listed below:

- Alberta Children’s Hospital Foundation (1)
- Alberta Children’s Services – Family Resource Network Division (2)
- The Calgary Foundation (1)
- Calgary United Way (1)
- Child and Adolescent Addiction, Mental Health and Psychiatry Program – CAAMHPP (1)
- CUPS (2)
- The Family Centre (1)
- Family Support (1)
- Fresh Start Recovery Centre (4)
- The Louise Dean Centre – Catholic Family Service (2)
- National Society for Prevention of Cruelty to Children – NSPCC (2)
- YW Calgary (2)

For secondary research, FSG reviewed several articles, publications, and other materials from the AFWI and its research partners. These include:

- Resources about resilience available from the Alberta Family Wellness Initiative and the Center on the Developing Child at Harvard University

FSG also engaged in several conversations with Nancy Mannix, Chair and Patron of the Palix Foundation, about her vision for the resilience scale and its practical applications between February and November 2020.
APPENDIX B. CONCEPT NOTE FOR ONGOING COMMUNITY OF PRACTICE FOR APPLICATION OF THE RESILIENCE SCALE

THE RESILIENCE SCALE METAPHOR: A PROPOSAL FOR COLLABORATIVE INVESTIGATION

BACKGROUND

With the early success of the Brain Story Certification Course and increasing leadership from change agents who are integrating it into their organizations, there is a timely and important opportunity to deliberately encourage and develop a more distributed leadership model for course uptake, knowledge application, data collection, and evaluation. Innovative new Brain Story based policy platforms in Alberta (e.g., Alberta Children’s Services Well-Being and Resiliency Framework) are also paving the way for this next phase of deeper collective work to standardize evaluation frameworks and develop common indicators and outcomes. With this in mind, AFWI recently launched a next phase in its strategy called “From Knowledge to Action: Using brain story science to improve outcomes for children and families in Alberta.” Using a two-pronged approach, convening symposia in November 2019 in Edmonton and January 2020 in Calgary and drafting a number of case study examples of integrating brain story science as fodder for discussions at these events, AFWI is aiming to play a role in helping organizations better understand and assess change based on the brain story knowledge and its contribution to better outcomes for children and families.

As presented at the From Knowledge to Action events in Edmonton and Calgary, the resilience scale metaphor (part of the Brain Story) provides a simple, universal framework for thinking about how to apply the brain story concepts in practices and policies across the prevention, intervention, and treatment sectors. While the scale concept illuminates factors that contribute to individual resilience, it can arguably also be applied to understanding what resilience means at the family, organizational, and community/system levels as well. It also elucidates possible indicators and outcomes to assess the difference adopting a brain science aligned approach can make. Feedback from participants at both events revealed a key spark of interest around using the resilience scale concept more deliberately in each of these ways.

To further explore these ideas, Palix Foundation consulted with several community agencies who have been leaders in applying brain story science in their organizations and services (YW Calgary, Catholic Family Service, CUPS, The Family Centre, UK’s National Society for the Prevention of Cruelty to Children (NSPCC), Child and Adolescent Addiction Mental Health and Psychiatry Program (CAAMHPP - Alberta Health Services), and Fresh Start Recovery Centre). The purpose of these meetings was to seek community input and gauge capacity and interest in using the resilience scale concept in one of four possible ways:

1. As a tangible, visual tool for use directly with clients, to more clearly understand how clients are showing up and explain what they need to do to build their own resilience, and to chart client progress as they engage with agency-level programs and services.

2. As a tool to understand how to better measure client outcomes, and what measures are pertinent to this goal.

3. As a tool to frame organizational theories of change, and better understand how organizations can more fully integrate brain story science for the benefit of their clients and staff.
APPENDIX B. CONCEPT NOTE FOR ONGOING COMMUNITY OF PRACTICE FOR APPLICATION OF THE RESILIENCE SCALE

4. As a tool to explore within- and cross-sector partnerships and client referral pathways that can provide more comprehensive, wrap-around supports than any one agency can provide alone.

During these meetings, the desire to continue thinking collectively about the resilience scale concept and its utility surfaced with force and passion. Each consulted agency expressed interest in being involved in further opportunities in this area.

THE OPPORTUNITY: USING THE RESILIENCE SCALE METAPHOR TO GUIDE PRACTICE AND ASSESS CHANGE

Palix Foundation is proposing support for three targeted communities of practice (CoP) that could be convened virtually over the next several weeks and/or months while social distancing measures due to Covid-19 are in place.

Each CoP would be limited to a maximum number of agencies given the challenges and limitations associated with virtual convening, and the aforementioned agencies that provided input into this proposal will be given precedence for participation.

The CoPs will be staggered in terms of start date with additional CoPs coming online as agencies/participants gain familiarity with the use of the resilience scale concept, and as agency time and resources allow.

COP 1: USING THE RESILIENCE SCALE CONCEPT WITH CLIENTS

Purpose: This CoP will support agencies interested in piloting the use of the resilience scale directly with clients.

The CoP will help agencies plan their pilot project through group discussion, identify needed resources such as training and scripts, and facilitate the sharing of learnings and resources across agencies.

Each agency will have the ability to adopt the approach and practices that work best for their clients and staff. However, it is anticipated that most will opt to use a quality improvement approach, starting with only a few practitioners and clients, and use learnings from that to refine and optimize over time.

Palix will be responsible for convening this CoP on a mutually agreed upon timeline for the agencies involved. Palix will provide overall facilitation for these meetings, as well as one-on-one consultation and additional support as requested by the participants, wherever possible.

FSG, the organization that is conducting Palix’s developmental evaluation, will be contacting participating agencies as the pilot unfolds to determine how this approach has been helpful in practice.

Anticipated outcome: Agencies will have a new approach to better understand how to work with their clients, and how to more deeply motivate them to engage in programs and services for the purpose of leading to better health outcomes.¹

Timeline: Immediate start, end date TBD.

COP 2: USING THE RESILIENCE SCALE CONCEPT TO MEASURE CLIENT OUTCOMES

**Purpose:** This CoP will support agencies with internal capacity for evaluation to explore how the concept of the resilience scale can influence how they measure client, as well as potentially other, outcomes. Participating agencies will have a venue to discuss their current evaluation practices and challenges, generate new ideas and explore potential metrics for measurement, and share learnings and wisdom across agencies.

There are many tools currently available for evaluation and measurement and it is expected that each agency will continue to use the tools and practices that work best for them. However, this CoP may provide agencies with new insights on how to evaluate outcomes, as well as group support to pilot new metrics if desired.

Palix will be responsible for convening this CoP on a mutually agreed upon timeline for the agencies involved. Palix will provide overall facilitation for these meetings, as well as one-on-one consultation and additional support as requested by the participants, wherever possible. At key junctures, Palix may bring in outside consultation from evaluation experts such as Meg Hargreaves, a Senior Fellow with NORC, who has considerable experience evaluating community initiatives based on brain story science.

**Anticipated outcome:** Agencies will have a better understanding of how to measure outcomes at the client level and possibly beyond. A broader opportunity offered by this CoP includes the possibility of agreeing on some shared metrics, as well as leveraging the lessons learned from this work across other organizations and with government and other funders.

**Timeline:** Start date follows inception of CoP 1, at a time mutually determined by participating agencies, end date TBD.

COP 3: USING THE RESILIENCE SCALE CONCEPT TO MORE FULLY INTEGRATE BRAIN STORY SCIENCE INTO ORGANIZATIONS

**Purpose:** This CoP will support agencies interested in more fully integrating brain story science into their organizations. Participating agencies will have a venue to explore how and why they are meeting their clients’ needs. Discussions will focus on organizational and/or programmatic theories of change, strategic plans, and administrative policies.

Palix will be responsible for convening this CoP on a mutually agreed upon timeline for the agencies involved. Palix will provide overall facilitation for these meetings, as well as one-on-one consultation and additional support as requested by the participants, wherever possible.

**Anticipated outcome:** Agencies will have a better understanding of how they can integrate brain science more fully and strategically in their organizations.

**Timeline:** Start date follows inception of CoP 1, at a time mutually determined by participating agencies, end date TBD.
APPENDIX C. CAAMHPP RESILIENCE INITIATIVE UPDATE

Initiative Update (12/10/20)

Child and Adolescent Addiction, Mental Health and Psychiatry Program
CAAMHPP Calgary Zone

Phase II ACE/TIC 2.0: Resilience

Phase II of the ACE/TIC 2.0: Resilience Initiative aligns with larger system priorities including the CAAMHPP Strategic Plan 2016-2021; the Valuing Mental Health Review; Alberta Health Services Trauma Informed Care Project and research on the impacts of toxic stress on the developing brain & the science of resilience.

Resilience Initiative Mission Statement: To provide world class mental health and addiction services from a trauma responsive lens that optimizes the health and well-being of children, youth and their families.

Resilience Initiative Goals: To expand on foundational work completed in Phase I that included reviewing available research; applying this research to our clinical practice; capturing and analyzing CAAMHPP ACE data; developing opportunities for knowledge translation and; developing system-wide service provision to target the reduction of the cumulative risks associated with high ACE scores.

In phase I of the ACE/TIC initiative, the CAAMHPP ACE/TIC advisory committee focused on providing training opportunities to build on the already extensive knowledge and skills within CAAMHPP on the impacts of trauma, adversity and resiliency on mental health. As part of building this knowledge base, we successfully implemented the systematic collection and documentation of ACE scores for all clients resulting in over 10,000 scores being collected over the past 5 years. The data has shown a stable distribution of ACE scores throughout Phase I revealing that 1/3rd of CAAMHPP clients have an ACE score of 4 or higher, with 1/10th of CAAMHPP clients having an ACE score between 7-10. A recent review of ACE scores broken down by age revealed a significant number of clients, aged five years or younger, had an ACE score of 7 or higher.

Through retrospective case reviews, clinician interviews, focus groups and patient advisor feedback, we found that children and youth with higher ACE scores:

- had presented to emergency departments & urgent care services for crisis management multiple times;
- had several inpatient admissions and;
- had involvement with numerous community supports and mental health services with little reported improvement in functioning or symptom reduction.

By gathering and analyzing this information throughout the initiative, it became apparent that CAAMHPP’s current service delivery model was not adequately meeting the needs of this client population and that we would need to re-design current services to address this.
Equipped with this knowledge, we are shifting focus in Phase II to concentrate on:

- bolstering client/family resilience through skill development/external supports, decreasing the burden of adversity and increase protective factors;
- intervening early to change the trajectory of ACE/trauma accumulation in early childhood;
- evaluating trauma interventions to see what works, with who and when (frequency, intensity, dosing, timing);
- creating, evaluating and scaling up clinical pathways and interventions for this population and;
- continuing knowledge translation and staff professional development to build overall trauma competence;
- strengthening our partnerships within Addiction & Mental Health as well as with other organizations/agencies who are also engaged in this work.
APPENDIX C. CAAMHPP RESILIENCE INITIATIVE UPDATE

Phase II ACE/TIC 2.0: Resilience Project Timeline

- Vision, Objectives, Goals
- Annual Initiative Review
- Annual Initiative Review
- Annual Initiative Review
- Overall Initiative Review

**Planning**
- Systematic Collection & Documentation of Resilience

**Strategy**
- Build Collective Knowledge - Resilience Community of Practice
- Partner with Researchers, Implement & Evaluate Clinical Interventions
- Create, Evaluate and Scale Up Care Pathways (e.g. Connection in the Community A&MH Pilot)
- Strengthen Partnerships within Addiction & Mental Health and Other Organizations/Agencies

**Service Development**
- Application of Collective Knowledge - Resilience Community of Practice
- Translational Research - Implementation, Evaluation & Scale Up Clinical Interventions
- Implementation and Evaluation of Acute @ Home Pathway
- A&MH Trauma Informed Care Training
- A&MH Building Trauma Competence & Trauma Specific Knowledge and Skills

**Evaluation/Research**
- Client, Service Provider, Partner/Stakeholder Evaluation; ACE & Resilience Measures; Training; Completion Rates; Service Utilization