Appendix

Contents

Supplemental Table 1. Survey 1 Inter-Rater Reliability and Consensus Statistics

	Krippendorff's α (Inter-Rater Reliability)	**Variation Ratio (Consensus)**
All Recommendations	**0.273**	**0.390625**
Developmental Mechanisms	***0.265***	***0.359375***
Heightened emotional reactivity	-0.0212	0.2969
children (age 8-12)	*-0.0312*	*0.25*
adolescents (age 13-15)	*-0.0312*	*0.34375*
Emotion regulation difficulties	-0.0214	0.4063
children (age 8-12)	*-0.0312*	*0.40625*
adolescents (age 13-15)	*-0.0312*	*0.40625*
Blunted reward processing	-0.0308	0.3906
children (age 8-12)	*-0.0312*	*0.375*
adolescents (age 13-15)	*-0.0312*	*0.40625*
Social information processing biases	-0.0289	0.3438
children (age 8-12)	*-0.0312*	*0.375*
adolescents (age 13-15)	*-0.0312*	*0.3125*
Symptom Types	***0.25***	***0.421875***
Disruptive behavior	0.00478	0.1875
children (age 8-12)	*-0.0312*	*0.09375*
adolescents (age 13-15)	*-0.0312*	*0.28125*
Depressive symptoms	-0.0261	0.4531
children (age 8-12)	*-0.0312*	*0.46875*
adolescents (age 13-15)	*-0.0312*	*0.4375*
Anxiety symptoms	-0.0279	0.4688
children (age 8-12)	*-0.0312*	*0.4375*
adolescents (age 13-15)	*-0.0312*	*0.5*
Posttraumatic stress symptoms	-0.0266	0.5781
children (age 8-12)	*-0.0312*	*0.53125*
adolescents (age 13-15)	*-0.0312*	*0.625*

Supplemental Table 2. Survey 1 Overall Inter-Rater Reliability and Consensus by Role and Expertise

	Krippendorff's α (Inter-Rater Reliability)	**Variation Ration (Consensus)**
All Participants	**0.273**	**0.273**
Study Role		
Study Investigators	0.359	0.265625
Study Consultants	0.229	0.3333333
External Experts	0.265	0.3825
Research Expertise*		
Treatment	0.276	0.3897059
Mechanisms	0.217	0.4131944
Dissemination and Implementation	0.288	0.3616071
Childhood Adversity	0.223	0.3993056
Prevention	0.18	0.4330357

* Participants could select multiple areas of expertise

Survey 1

The following is an electronic survey that should take 30-60 minutes of your time. It is your choice whether or not to click below to continue to the electronic survey. You will be asked to provide basic information about your relevant expertise and will have the option to provide responses about your own demographic information. Answering such questions about potentially identifying information will all be optional.

PLEASE READ ALL THESE INSTRUCTIONS COMPLETELY AND CAREFULLY BEFORE PROCEEDING TO THE SURVEY QUESTIONS.

For the following survey subsections, you will be asked to recommend intervention strategies that you would expect to help adversity-exposed youth.

For all recommendations, you will be asked initially to select one intervention principle from FIRST, a transdiagnostic treatment for children and adolescents developed by John Weisz and Sarah Kate Bearman. FIRST is based on five core treatment principles that can each be applied to a wide range of clinical problems in youth. We are planning to adapt FIRST to be used in our prevention program, given that it uses broad transdiagnostic principles and it has proven effective when delivered in very brief formats.

You'll be asked about the five FIRST strategies a lot in this survey, so please take a moment to familiarize yourself with the skills each principle covers.

- **Feeling Calm:** includes techniques related to self-calming and relaxation, such as progressive muscle relaxation and quick calming strategies (e.g., deep breathing) for reducing tension and regulating emotions
- **Increasing Motivation:** involves strategies for making adaptive behaviors more rewarding than maladaptive behaviors (e.g., strengthening the caregiver-child relationship by building skills in positive interaction, attending to and praising adaptive behaviors; using incentives for good behavior and consistent consequences for unwanted behavior)
- **Repairing Thoughts:** involves identifying and restructuring biased or distorted cognition that might lead to maladaptive behaviors and/or negative emotions (e.g., identifying thoughts; considering the evidence for and against thoughts, changing attributions for ambiguous peer interactions)
- **Solving Problems:** involves learning how to use sequential steps of problem solving to address, rather than feel overwhelmed by, everyday problems (e.g., identify the problem; identify possible solutions; weigh the pros and cons of each, choose the best one, try it)
- **Trying the Opposite:** includes identifying and practicing activities that are inconsistent with the behavioral and/or emotional problem being addressed (e.g., exposures for anxiety, behavioral activation for sadness or depression, role playing ‘positive opposites’ of misbehavior that has gotten the young person in trouble)

To confirm you are sufficient familiarity with the FIRST strategies, please match them here.

	Feeling Calm	Increasing Motivation	Repairing Thoughts	Solving Problems	Trying the Opposite
identifying the problem and possible solutions; weigh the pros/cons of each one	○	○	○	○	○
exposures, behavioral activation, role playing 'positive opposites'	○	○	○	○	○
positive caregiver-child interaction skills, e.g., praising; rewarding; rules	○	○	○	○	○
deep breathing; progressive muscle relaxation	○	○	○	○	○
identifying unhelpful thoughts; considering the evidence & reframing them	○	○	○	○	○

The remaining survey questions are organized into two subsections.

In the first subsection, you will also be asked to recommend intervention strategies to address four **developmental processes** that are commonly **disrupted in response to early life adversity exposure:**

- **Blunted reward processing**
- **Heightened emotional reactivity**
- **Emotion regulation difficulties**
- **Social information processing biases**

In the second subsection, you will also be asked to recommend intervention strategies to address **four types of symptoms** that can develop after early life adversity exposure:

- Depressive symptoms
- Anxiety symptoms
- Posttraumatic stress symptoms
- Disruptive behavior problems

We will provide each of the above definitions at the beginning of each respective section. In addition, it will be useful for you to have the glossary below open to reference throughout the survey. Please open this glossary of definitions in a separate tab: GLOSSARY

☐ I have opened the glossary

You are now entering the first subsection on developmental mechanisms.

Developmental Mechanism #1

Heightened emotional reactivity: heightened emotional and physiological responses to stressors, stimuli that are perceived as negative, or could signal the presence of threat.

Adversity Exposure: Children exposed to ***physical, emotional, or sexual abuse; domestic violence; community violence;*** and ***corporal punishment*** are at elevated risk of exhibiting heightened emotional reactivity.

Examples of heightened emotional reactivity would be a child or teen who... is described by a credible caregiver as often "overreacting", having "meltdowns" in response to small things, “having a short fuse”, or being “overly sensitive” reports very easily becoming emotional or getting their feelings hurt is often bothered by things that other children do not seem to react to has moods that can change very quickly (e.g., shifts from happily laughing with friends to being irate after a single off-putting comment) is quickly consumed by strong and intense emotions (e.g., bursts into tears often; describes difficulty “thinking straight”) experiences immediate intense emotional reactions in their body (e.g. jumps/shrieks when something surprises them) exhibits intense anger and frustration (e.g., slams their bedroom door; curses; screams) in response to minor setbacks, disappointments, or provocations (e.g., someone interrupting them while focusing on a task)

Now we are interested in what kind of intervention strategies you would recommend to such a child/adolescent. Some things to keep in mind: **All families will have already received case management** related to adversity exposure to facilitate connection to relevant community-based services before moving on to learning strategies and skills. We are developing a ***preventive*** **intervention**, rather than a treatment-level intervention. **There is no single correct answer** for skills recommendations; we are simply interested in gathering a variety of perceptions. Please pick a single answer that you feel best matches, even if there are other recommendations that you might also make. **After recommending a strategy from the FIRST principles you will have the opportunity to elaborate** on other/additional clinical interventions or risk reduction strategies you would recommend. **Refer to the** GLOSSARY as needed.

Which FIRST principle would you recommend for **children (age 8-12)**...

as a primary skill? (1)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)
OPTIONAL: as a secondary skill? (2)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)

Which FIRST principle would you recommend for **adolescents (age 13-15)**...

as a primary skill? (1)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)
OPTIONAL: as a secondary skill? (2)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)

Would you have recommended any other preventive interventions for this youth? Explain here what risk-reduction strategy, strength-promotion strategy, or other clinical intervention strategy you would recommend. Please also indicate if your recommendation here would be your first-line approach *instead* of the above FIRST skills, or rather *in addition to*. Feel free to clarify if your recommendations would differ for children versus adolescents.

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Would your recommendations above change for youth/adolescents of certain demographics? Please elaborate for specific identities relates to race, ethnicity, immigrant status, religious background, gender identity, or sexual orientation.

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Developmental Mechanism #2

Emotion regulation difficulties: difficulty modulating the intensity or duration of emotional reactions and disengaging from negative emotional content.

Adversity Exposure: Children exposed to ***high family conflict; emotional, physical, and sexual abuse; domestic violence; community violence; corporal punishment; and untreated parental psychopathology or substance abuse*** are more likely to exhibit emotion regulation difficulties.

Examples of emotion regulation difficulties would be a child or teen who... is described by a credible caregiver as being "out of control" or "inconsolable" when feeling emotional has difficulty returning to baseline after experiencing a negative emotion continues to feel upset for hours after a frustrating or disappointing event (e.g., doing poorly on an exam, not getting invited to a party) when upset, focuses on past times they felt sad / scared / angry and doubts they will ever feel better gets stuck blaming self or others when a small mistake has been made or focuses on other mistakes or faults they have / others have expresses negative emotions behaviorally (e.g., crying, yelling, pouting, stomping around, and/or breaking things) for an extended period of time has difficulty calming down after becoming upset perseverates in thinking about scary / frustrating / sad events (e.g., replays recent upsetting events over again in their head; asks unending questions about an upcoming daunting event)

Which FIRST principle would you recommend for **children (age 8-12)**...

as a primary skill? (1)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)
OPTIONAL: as a secondary skill? (2)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)

Which FIRST principle would you recommend for **adolescents (age 13-15)**...

as a primary skill? (1)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)
OPTIONAL: as a secondary skill? (2)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)

Would you have recommended any other preventive interventions for this youth? Explain here what risk-reduction strategy, strength-promotion strategy, or other clinical intervention strategy you would recommend. Please also indicate if your recommendation here would be your first-line approach *instead* of the above FIRST skills, or rather *in addition to*. Feel free to clarify if your recommendations would differ for children versus adolescents.

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Would your recommendations above change for youth/adolescents of certain demographics? Please elaborate for specific identities relates to race, ethnicity, immigrant status, religious background, gender identity, or sexual orientation.

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Developmental Mechanism #3

Blunted reward processing: low motivation or engagement in behaviors directed towards obtaining rewards or positive reinforcement from the environment and reduced positive emotions in response to pleasant or rewarding situations.

Adversity Exposure: Children exposed to ***untreated parental depression, emotional and physical neglect,*** and ***food insecurity*** are at elevated risk exhibiting blunted reward processing.

Examples of blunted reward processing would be a child or teen who... has low motivation to participate in pleasant activities, like artistic hobbies, sports, etc. is withdrawn and disinterested in socializing with peers and family members is relatively disengaged during conversations and social interaction (e.g., often responds with "whatever" or "shrugs") doesn't laugh at jokes or at funny movies shows little emotion in response to positive events (e.g., good news, an unexpected gift) demonstrates little interest in school, chores, or other activities, even if they perform well or are offered incentives is unphased by novel experiences (e.g., traveling for vacation) often reports being bored experiences positive emotions with low intensity (e.g., rarely experiences joy, exuberance, or excitement) engages in risky activities (e.g., playing with fire, substance use) in order to feel excitement or positive emotion

Which FIRST principle would you recommend for **children (age 8-12)**...

as a primary skill? (1)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)
OPTIONAL: as a secondary skill? (2)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)

Which FIRST principle would you recommend for **adolescents (age 13-15)**...

as a primary skill? (1)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)
OPTIONAL: as a secondary skill? (2)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)

Would you have recommended any other preventive interventions for this youth? Explain here what risk-reduction strategy, strength-promotion strategy, or other clinical intervention strategy you would recommend. Please also indicate if your recommendation here would be your first-line approach *instead* of the above FIRST skills, or rather *in addition to*. Feel free to clarify if your recommendations would differ for children versus adolescents.

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Would your recommendations above change for youth/adolescents of certain demographics? Please elaborate for specific identities relates to race, ethnicity, immigrant status, religious background, gender identity, or sexual orientation.

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Developmental Mechanism #4

Social information processing biases: the tendency to interpret neutral or ambiguous social situations as reflecting potential threat

Adversity Exposure: Children exposed to ***physical, emotional, or sexual abuse; domestic violence; community violence; and corporal punishment*** are more likely to exhibit social information processing biases.

Examples of social information processing biases would be a child or teen who...
frequently interprets accidents as reflecting intentional hostility (e.g., being bumped on the playground by a peer) is described by a credible caregiver as often "personalizing" social interactions reports that peers are teasing, targeting, or “out to get” them, but provides ambiguous evidence (e.g., “they always look at me funny”) is overly sensitive to subtle aspects of other people’s behavior that could signify anger or hostility (e.g., facial expression, eye contact, tone of voice, body language) often misinterprets negative emotions in others as anger often checks in to see if others are angry at them frequently characterizes events and experiences with reference to threatening attributes (e.g., describes a movie’s plot with excessive focus on the villain)

Which FIRST principle would you recommend for **children (age 8-12)**...

as a primary skill? (1)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)
OPTIONAL: as a secondary skill? (2)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)

Which FIRST principle would you recommend for **adolescents (age 13-15)**...

as a primary skill? (1)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)
OPTIONAL: as a secondary skill? (2)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)

Would you have recommended any other preventive interventions for this youth? Explain here what risk-reduction strategy, strength-promotion strategy, or other clinical intervention strategy you would recommend. Please also indicate if your recommendation here would be your first-line approach *instead* of the above FIRST skills, or rather *in addition to*. Feel free to clarify if your recommendations would differ for children versus adolescents.

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Would your recommendations above change for youth/adolescents of certain demographics? Please elaborate for specific identities relates to race, ethnicity, immigrant status, religious background, gender identity, or sexual orientation.

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You are now entering the second subsection on sub-/clinical symptoms.

For this next subsection, you will also be asked to recommend intervention strategies to address four domains of **psychological symptoms** that are more likely to develop in children who experienced early life adversity. In the context of our prevention program, these symptoms may presentation as subclinical or as clinically meaningful. Although we expect that you are well acquainted with the symptom categories described below, we will still provide our standard definitions and some examples at the beginning of each section.

- **Depressive symptoms**
- **Anxiety symptoms**
- **Posttraumatic stress symptoms**
- **Disruptive behavior problems**

Adversity Exposure: Children exposed to ***any types of adversity*** are more likely to have onset of any of these symptoms.

Reminder: These definitions are provided in the glossary.

Symptom #1

Disruptive behavior (i.e., conduct problems): an array of functionally impairing behavior problems, including disobedience, defiance, arguing, yelling, threatening, aggression, property destruction, and serious violation of social rules and standards (including laws).

Examples of disruptive behavior problems would be a child or teen who... often loses temper; if often touchy or easily annoyed; is often angry and resentful often argues with authority figures or, for children and adolescents, with adults often actively defies or refuses to comply with requests from authority figures or with rules deliberately annoys others; Is spiteful or vindictive often blames others for his or her mistakes or misbehavior bullies, threatens, or intimidates others lies to obtain goods or favors or to avoid obligations has stolen items of nontrivial value stays out at night despite parental prohibitions has been truant from school

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Now we are interested in what kind of intervention strategies you would recommend to a youth/adolescent with this kind of sub/-clinical symptoms. Some things to keep in mind: **All families will have already received case management** related to adversity exposure to facilitate connection to relevant community-based services before moving on to learning strategies and skills. We are developing a ***preventive*** **intervention**, rather than a treatment. **There is no single correct answer** for skills recommendations; we are simply interested in gathering a variety of perceptions. Please pick a single answer that you feel best matches, even if there are other recommendations that you might also make. **After recommending a strategy from the FIRST principles you will have the opportunity to elaborate** on other/additional clinical interventions or risk reduction strategies you would recommend. **Refer to the** GLOSSARY as needed.

Which FIRST principle would you recommend for **children (age 8-12)**...

as a primary skill? (1)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)
OPTIONAL: as a secondary skill? (2)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)

Which FIRST principle would you recommend for **adolescents (age 13-15)**...

as a primary skill? (1)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)
OPTIONAL: as a secondary skill? (2)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)

Would you have recommended any other preventive interventions for this youth? Explain here what risk-reduction strategy, strength-promotion strategy, or other clinical intervention strategy you would recommend. Please also indicate if your recommendation here would be your first-line approach *instead* of the above FIRST skills, or rather *in addition to*. Feel free to clarify if your recommendations would differ for children versus adolescents.

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Would your recommendations above change for youth/adolescents of certain demographics? Please elaborate for specific identities relates to race, ethnicity, immigrant status, religious background, gender identity, or sexual orientation.

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Symptom #2

Depressive symptoms: persistently elevated levels of sadness, or difficulty enjoying things, that gets in the way of everyday functioning (e.g., feeling hopeless or alone, lethargic, stopping activities that used to be pleasurable).

Examples of depressive symptoms would be a child or teen who... has depressed or irritable mood most of the time (e.g., feels sad, empty, hopeless; appears tearful) shows diminished interest or pleasure in activities that they used to enjoy (e.g., interacting with peers) had weight loss/gain or decrease/increase in appetite. has insomnia or hypersomnia has psychomotor agitation or retardation is fatigued or low energy feels worthlessness, hopelessness, or guilty has poor concentration or difficulty making decisions has chronically low self-esteem

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Which FIRST principle would you recommend for **children (age 8-12)**...

as a primary skill? (1)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)
OPTIONAL: as a secondary skill? (2)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)

Which FIRST principle would you recommend for **adolescents (age 13-15)**...

as a primary skill? (1)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)
OPTIONAL: as a secondary skill? (2)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)

Would you have recommended any other preventive interventions for this youth? Explain here what risk-reduction strategy, strength-promotion strategy, or other clinical intervention strategy you would recommend. Please also indicate if your recommendation here would be your first-line approach *instead* of the above FIRST skills, or rather *in addition to*. Feel free to clarify if your recommendations would differ for children versus adolescents.

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Would your recommendations above change for youth/adolescents of certain demographics? Please elaborate for specific identities relates to race, ethnicity, immigrant status, religious background, gender identity, or sexual orientation.

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Symptom #3

Anxiety symptoms: persistently elevated levels of fear or worry that lead to maladaptive avoidance—i.e., intentionally avoiding feared activities or situations that pose little or no real risk—or excessive reassurance-seeking. The behavior gets in the way of everyday functioning and development (e.g., avoiding social, learning, or other activities that are part of normal adaptation and skill-building for young people).

Examples of anxiety symptoms would be a child or teen who... has developmentally inappropriate fear about separation from a primary attachment figure has marked fear or anxiety about social situations in which they might be evaluated is afraid of specific situations (e.g., animals, enclosed spaces) exhibits avoidance and distress of feared situations has frequent stomach aches and headaches has episodes of hyperventilating experiences uncontrollable worry is often restless, keyed up, or on edge has difficulty with concentrating or mind going blank is easily irritable has frequent muscle tension experiences sleep disturbance (difficulty falling or staying asleep, or restless, unsatisfying sleep)

Which FIRST principle would you recommend for **children (age 8-12)**...

as a primary skill? (1)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)
OPTIONAL: as a secondary skill? (2)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)

Which FIRST principle would you recommend for **adolescents (age 13-15)**...

as a primary skill? (1)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)
OPTIONAL: as a secondary skill? (2)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)

Would you have recommended any other preventive interventions for this youth? Explain here what risk-reduction strategy, strength-promotion strategy, or other clinical intervention strategy you would recommend. Please also indicate if your recommendation here would be your first-line approach *instead* of the above FIRST skills, or rather *in addition to*. Feel free to clarify if your recommendations would differ for children versus adolescents.

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Would your recommendations above change for youth/adolescents of certain demographics? Please elaborate for specific identities relates to race, ethnicity, immigrant status, religious background, gender identity, or sexual orientation.

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Symptom #4

Posttraumatic stress symptoms: Changes in affect or behavior following exposure to a traumatic event (e.g., violence, abuse, war, serious accident or injury). Many young people with post-traumatic stress suffer from hyper-arousal, “re-experiencing” the traumatic event, avoidance of everyday situations or objects, and emotional numbing.

Examples of posttraumatic stress would be a child or teens who shows... distressing memories, dreams, or flashbacks of the traumatic event(s) psychological distress and/or physiological reactions to internal or external cues that symbolize or resemble an aspect of the trauma(s) efforts to avoid distressing memories, thoughts, feelings about, or external reminders (people, places, conversations, activities, objects, situations) closely associated with the traumatic event(s) inability to remember an important aspect of the traumatic event(s) exaggerated negative beliefs about oneself, others, or the world (e.g., “I am bad,” “No one can be trusted,” “The world is completely dangerous,” “I will never be normal again”) exaggerated blame of self or others persistent negative emotional state (e.g., fear, horror, anger, guilt, or shame) and inability to experience positive emotions (e.g., happiness, satisfaction, or loving feelings) diminished interest or participation in activities that they used to enjoy feelings of detachment or estrangement from others irritable behavior and angry outbursts reckless or self-destructive behavior hypervigilance; exaggerated startle response problems with concentration sleep disturbance (e.g., difficulty falling or staying asleep or restless sleep)

Which FIRST principle would you recommend for **children (age 8-12)**...

as a primary skill? (1)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)
OPTIONAL: as a secondary skill? (2)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)

Which FIRST principle would you recommend for **adolescents (age 13-15)**...

as a primary skill? (1)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)
OPTIONAL: as a secondary skill? (2)	▼ **F**eeling calm (self-calming/ relaxation) (1) ... **T**rying the opposite (behavioral activation/ exposure/ anger control skills) (5)

Would you have recommended any other preventive interventions for this youth? Explain here what risk-reduction strategy, strength-promotion strategy, or other clinical intervention strategy you would recommend. Please also indicate if your recommendation here would be your first-line approach *instead* of the above FIRST skills, or rather *in addition to*. Feel free to clarify if your recommendations would differ for children versus adolescents.

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Would your recommendations above change for youth/adolescents of certain demographics? Please elaborate for specific identities relates to race, ethnicity, immigrant status, religious background, gender identity, or sexual orientation.

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In addition to case management and teaching skills for the child / adolescent, **we will also be teaching some parenting skills to caregivers**. Given that we are expecting to deliver skills within limited sessions (up to ~6 sessions), we are considering three main categories of parenting practices to teach caregivers.

Keep in mind, some of these families will be screening into our prevention program based on caregiver-related adversities (e.g., caregiver substance use, harsh disciplining practices, untreated caregiver mental illness), whereas other families will be screening in based on other adversities (e.g., food insecurity, neighborhood violence exposure).

For a brief preventive intervention for adversity-exposed **children (ages 8-12)**, which type of caregiver skills would you most recommend? Rank from 1-3 in order of importance (1 being the highest).

_____ Increasing Positive Reinforcement (e.g., praise, attending) (1)
_____ Decreasing Caregiver Criticism and Hostility (e.g., effective communication skills) (2)
_____ Parent Coaching of Emotional Competence (e.g., observing and labeling of child's emotions by caregiver) (3)

For a brief preventive intervention for adversity-exposed **adolescents (ages 13-15)**, which type of caregiver skills would you most recommend? Rank from 1-3 in order of importance (1 being the highest).

_____ Increasing Positive Reinforcement (e.g., praise, attending) (1)
_____ Decreasing Caregiver Criticism and Hostility (e.g., effective communication skills) (2)
_____ Parent Coaching of Emotional Competence (e.g., observing and labeling of child's emotions by caregiver) (3)

Would your recommendations above change for youth/adolescents exposed to certain types of adversity? For example, caregiver-related adversities or otherwise

..for youth/adolescents of certain demographics? Please elaborate for specific identities relates to race, ethnicity, immigrant status, religious background, gender identity, or sexual orientation.

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Any final comments or recommendations?

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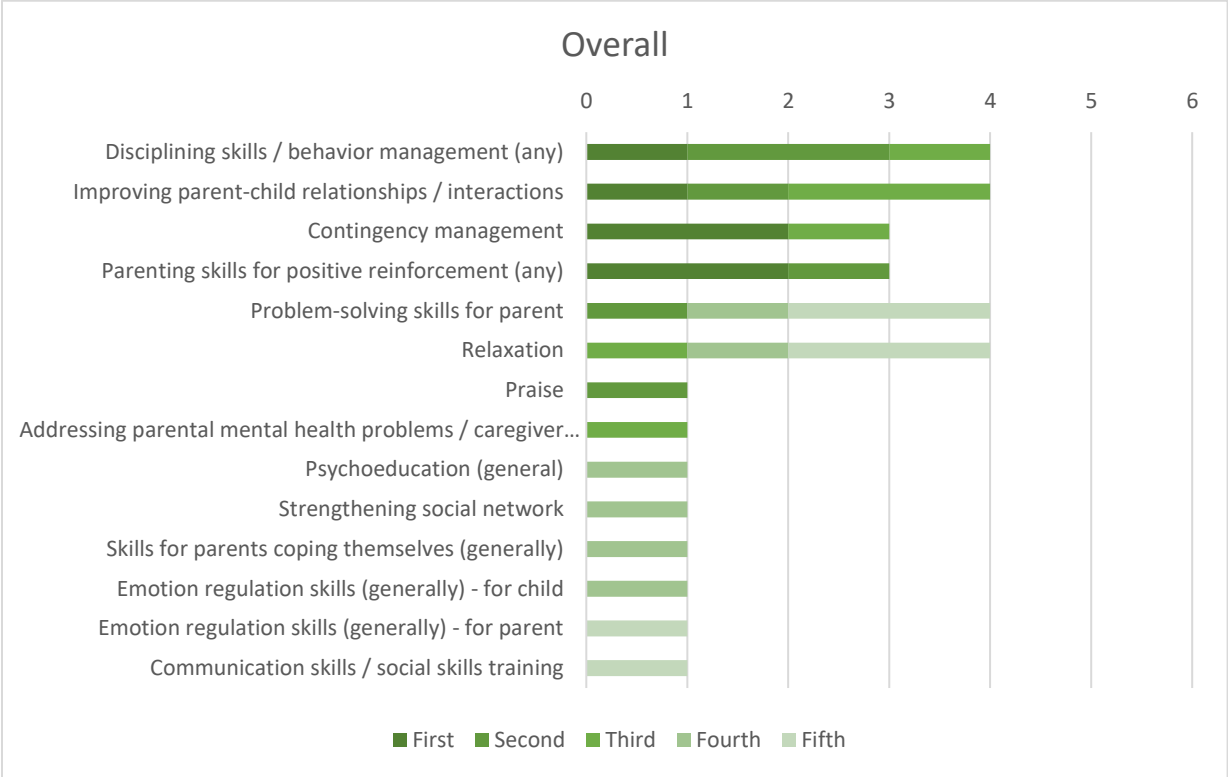
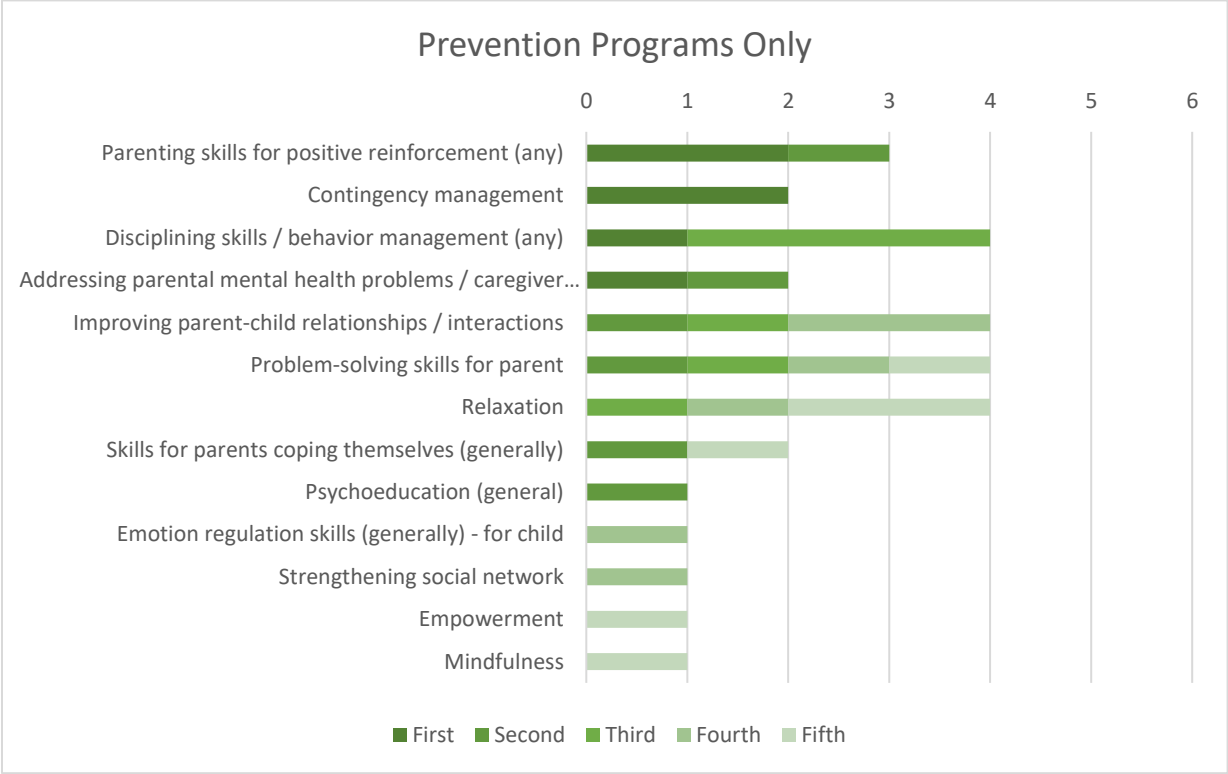
Thank you for providing your recommendations! **Click forward if you have finished providing your answers and are ready to exit.** You will be automatically redirected to confirm your compensation.

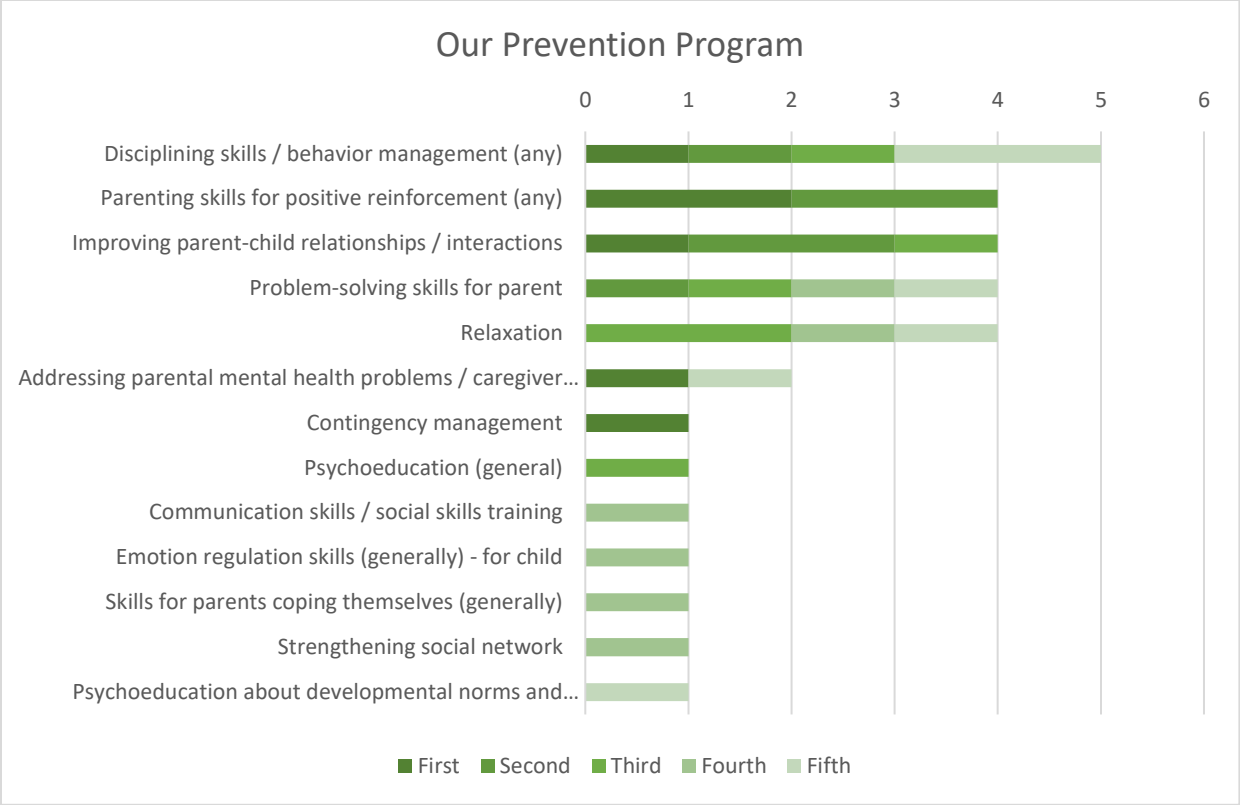
Aggregated Results Packet (Circulated to Participants Prior to Survey 3)

Meta-Analysis Review Survey (*n* = 6)

Which intervention strategies had the strongest evidence?

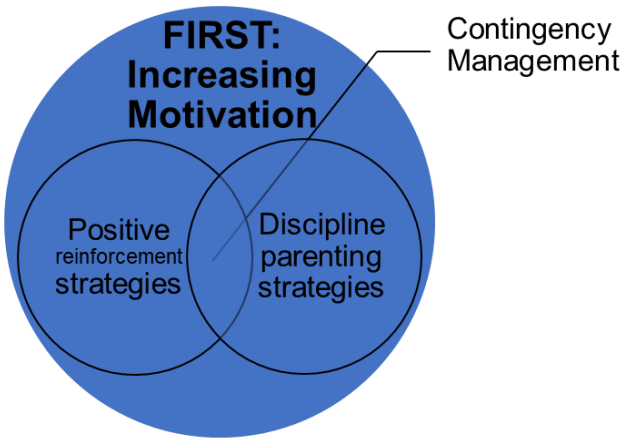






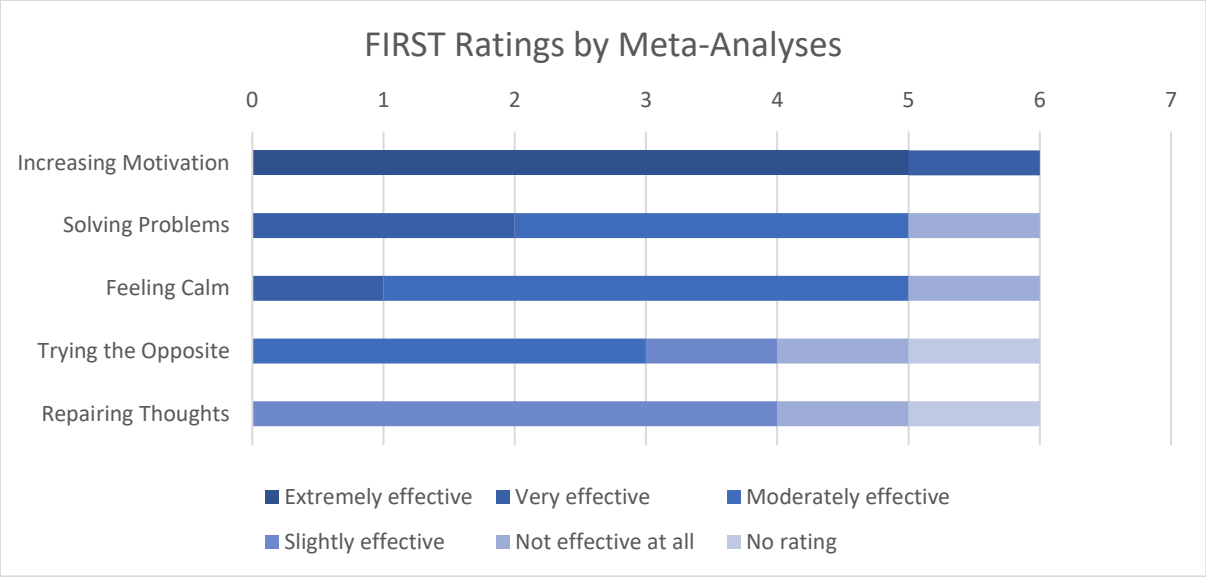
Qualitative

- **I noticed that for meta-analyses focused on younger children, there was more evidence supporting skills like parent-child interactions, contingency management, and general parenting practices for positive reinforcement and effective discipline. In a way, these can all be conceptualized as skills that improve the consistency with which a child's behavior are responded to by others, which helps them internalize interpersonal expectations for good vs bad behaviors.**



- For older children and adolescents, there was then evidence supporting interpersonal therapy, relationship functional analysis, and bias modification, and still parent-child interactions. So these skills felt like more developmentally advanced skills for the same mechanism (healthy behavioral/-relationship contingencies).

- Finally, there was evidence for parents learning coping /regulation skills (including "relaxation") and for the child/adolescent learning relaxation skills ("stress management = relaxation exercises"; "mindfulness and relaxation"). Thus, I think relaxation skills could be taught to caregivers and youth together, so they both learn it as a coping skill to calm down.
- Note: "emotion regulation" skills for child was tested only by 2 meta-analyses, and found no significance
- Some of these strategies are listed at a level of detail that is more specific than what can be gleaned from the meta-analysis (e.g., time out, natural consequences are both examples of effective discipline practices) - not all the meta-analyses report results with enough detail to say beyond the broad category of effective discipline practices...Alternatively, some of the categories are more specific than what was presented on in the meta-analyses (e.g., youth-focused behavioral interventions were identified as most effective in single session interventions - this encompasses both BA and exposure, etc but the response options don't have a broad behavioral intervention category and list BA and exposure as separate options). I selected emotion regulation skills for the child as I thought it was closes to capturing a broad set of behavioral interventions...but I'm not sure that is how others will classify things
- I did not rate exercise or third wave therapies, because both of those effects were based on a single trial...so they are not really "meta-analysis findings."
- My recommendation was most strongly informed by effect sizes. I focused more on prevention programs, and weighted the ones more similar to our intervention more heavily.
- This was a lot of information to absorb, and my stats background is not that strong. I'm also probably biased from my own clinical understanding of working with early/ middle childhood.
- I combined thinking about the meta-analytic evidence on effects of the different skills plus thinking about what can be done within a small number of visits, and also considering the fact that the parents will not have initially been seeking help. It's a bit difficult to do this in a broad, generic way, since the skills most needed and likely to be helpful may differ widely depending on what concerns and problems the parents want to have addressed--e.g., very different skills if dealing with child conduct problems than if dealing with child anxiety or depression.

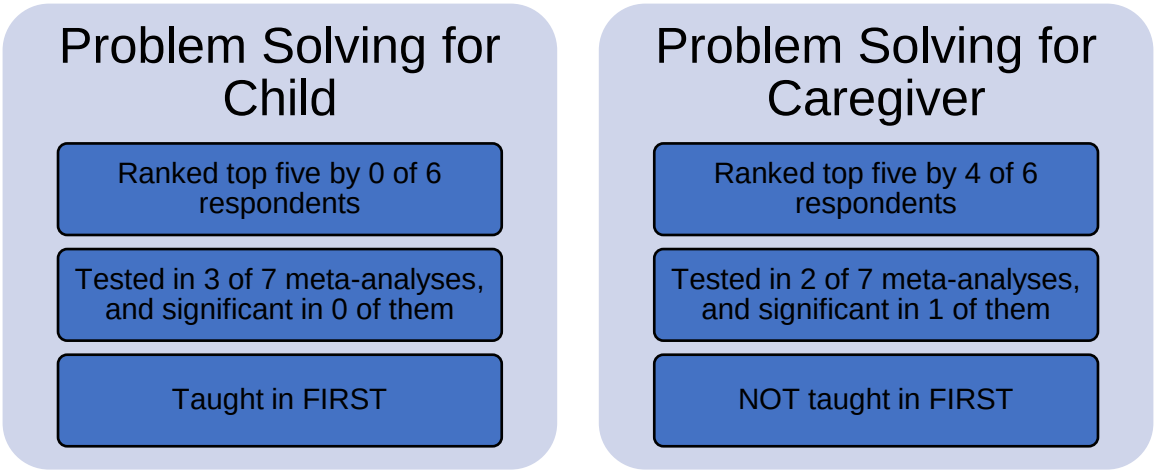


Qualitative

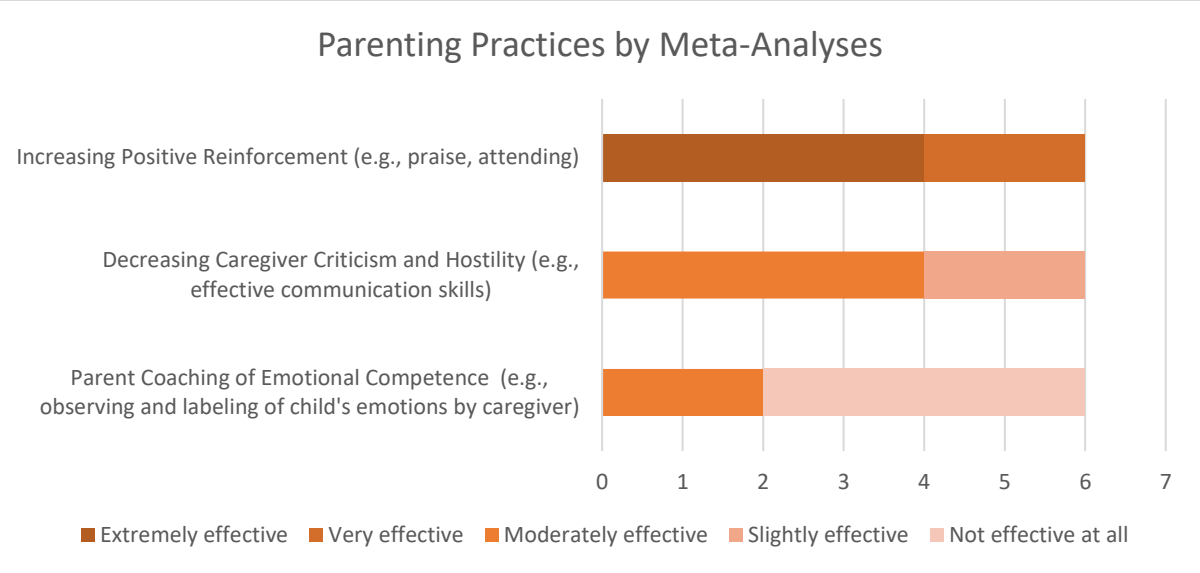
- These takeaways, to me, highlight the key difference for *preventive* intervention, as opposed to the skills we consider great for *treatment*
- For the Schleider meta-analysis, I didn't count it towards any FIRST principles, as it's not possible to tell which specific practices were supported, because the intervention procedures were grouped within broad categories--e.g., "youth-focused behavioral." It's virtually certain that some FIRST principles will have support within these studies, but the analyses were not done at such a specific level.
- I'm not very confident in my responses but am looking forward to seeing the final results/ discussing with the team.
- For "increasing motivation" and positive reinforcement parenting strategies, these have the most support. All but one of meta-analyses (6 of 7 meta-analyses) provided support for some skill that would fall under here (attending, discipline practices, positive reinforcement, time out, family focused behavioral therapy, contingency management, etc).
- For "Feeling Calm", relaxation was tested in 2 of 7, both of which showed strong effects: Caldwell ("mindfulness and relaxation") and Singa ("Stress Management (e.g., progressive muscle relaxation, visualization and guided imagery, breathing exercises, etc.). I'm also including "physical exercise" (significant) from Caldwell here.
  For "Repairing Thoughts", I'm saying "slightly" because none of the meta-analysis found support for straight cognitive skills, but there was slight support for caregiver cog skills training (Singla), strong for "CBT" as a modality overall (Caldwell, Schleider), and some support bias modification (Caldwell). Otherwise, cog skills were only directly test by 1 (Singla) and found non-sig.
- For "trying the Opposite", there wasn't any good direct evidence, but I'm counting "exercise" (Caldwell) towards it, and mostly counting the fact the the Schleider meta-analysis found largest effects for "youth-focused behavioral" interventions. However this,

"behavior-only therapy" included exposure and behavioral activation collapsed, as well as other things like CBT broadly, psychoed, etc. Otherwise, exposure was directly tested in only 1 meta-analysis (no significance), and behavioral activation directly in none.

- **For "Solving Problems", child problem solving was tested in 3 of 7 meta-analyses, and none showed it being significant. The only time I saw problem solving with support it was as a *caregiver* skill, so I'm not counting that. Moreover, caregiver problem solving was also only significant in 1 of 2 meta-analyses that tested it.**



- The last two questions ask about how "strongly supported" the various parenting practices and FIRST principles are. But the rating scales ask how "effective" each one is. Those are pretty different. The questions seem to refer to the evidence we reviewed in the meta-analyses, so I've tried to rely on that evidence in doing "effectiveness" ratings. But, just to be clear, my *true* beliefs about effectiveness are informed by the accumulation of evidence from many studies and reviews over the years, not only by the meta-analyses I read for this survey. Because those meta-analyses were so varied in their inclusion criteria, their ways of labeling and grouping intervention procedures, doing analyses, and organizing and presenting their findings, they may not have given us the most complete picture.



Qualitative

- parenting coaching of emotional awareness / empathy / emotion identification skills = only tested in two (Leiijten, Singla), not significant in either
- decreasing criticism/hostility tested directly in 0, but I'm counting Singla (Parent-Adolescent Interaction e.g., improve communication, positive 1-on-1, attending to adolescent) and Leijten (Invest in building a positive parent-child relationship, through play and empathy), and Filene (discipline-related communication skills)
- I'm assuming that most parenting skills programs would include increasing positive reinforcement and reducing criticism and hostility, so I recommend those 2 for parenting practices above.

Part 1. Larger Expert study (*n* = 32)

	N	%
Age		
26-35 years old	3	9.4
36-45 years old	9	28.1
46-55 years old	9	28.1
Over 55 years old	11	34.4
Gender Identity		
Female	18	56.3
Male	14	43.8
Other	0	
Race*		
Asian	3	9.3
Black or African American	3	9.3
Native American or Alaska Native	1	3.1
White	24	75.0
Middle Eastern	2	6.3
Multiple racial groups	1	3.1
Hispanic or Latinx	2	6.3
Highest Education Completed*		
Doctoral degree (e.g., Ph.D, Psy.D)	28	88.0
Doctor of Medicine (e.g., MD, DO)	5	15.6
Master's degree (e.g., MS, MSW) alone	1	3.1
Research Expertise*		
Dissemination and Implementation Science	14	43.8
Prevention Science	14	43.8
Mechanisms-focused Research	18	56.3
Research on Childhood Adversity	18	56.3
Treatment-focused Research	17	53.1

* Respondents could select multiple so percentages may not add to 100%

Overall Inter-Rater Reliability and Consensus

Both statistics can range from 0 to 1. Higher alpha values = better. Lower FI values = better.

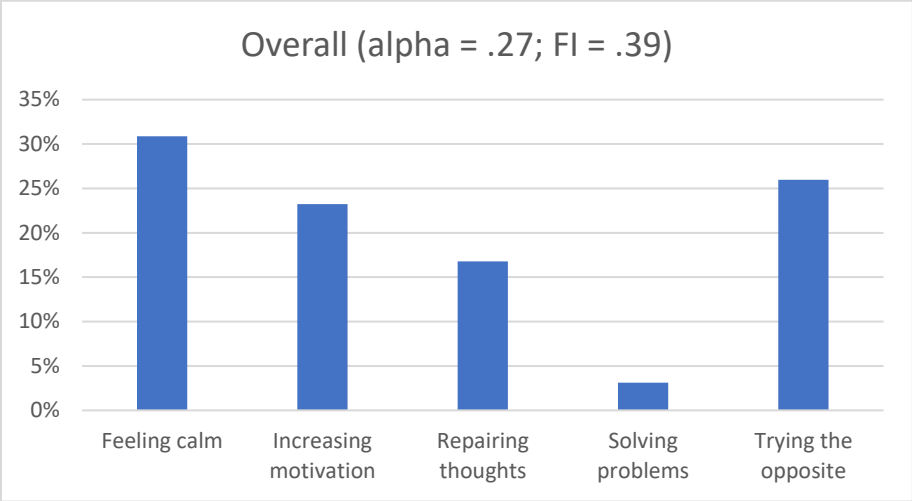
	Krippendorff's α (Inter-Rater Reliability)	Freeman's Index (Agreement / Consensus)
Everyone	0.27	0.39
Study Investigators	0.36	0.27
Study Consultants	0.23	0.33
External Experts	0.27	0.38
Treatment	0.28	0.39
Mechanisms	0.22	0.41
D&I	0.29	0.36
Childhood Adversity	0.22	0.40
Prevention	0.18	0.43

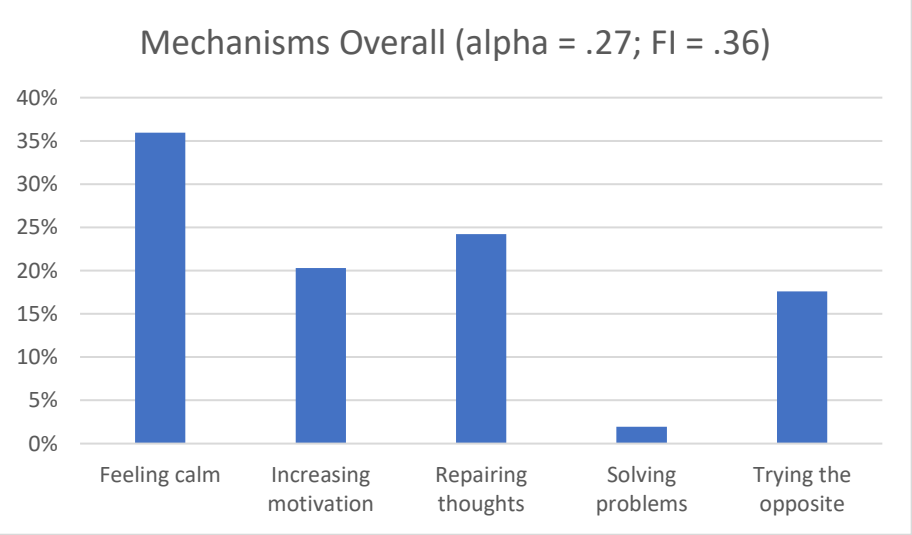
Study Investigators seem to have higher inter-rater reliability and lower disagreement on recommendations.

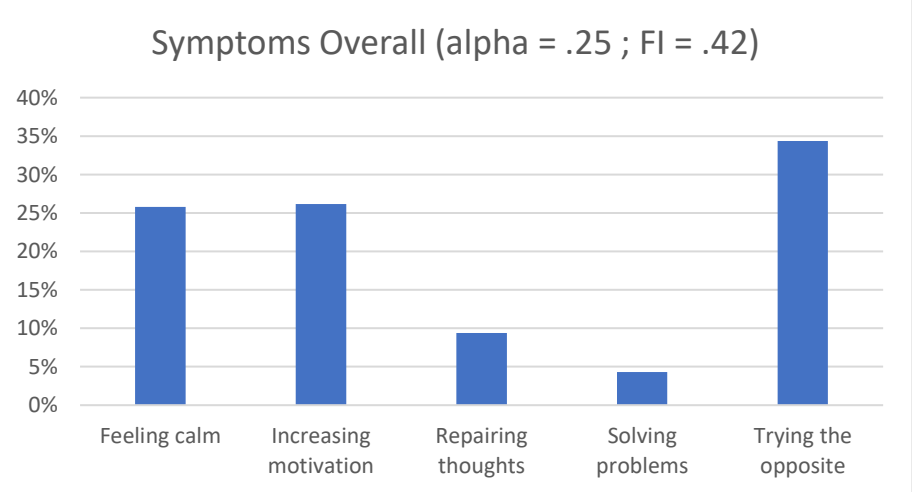
Preliminary analyses

- **Primary versus Secondary Recommendations**. Secondary Recommendations had worse agreement (Freeman's Index: average = .72, range = .67 to .75) than that of Primary Recommendations (Freeman's Index: average = .39, range = .19 to .58). Therefore, collapsing primary and secondary recommendations would not improve the level of agreement for recommendations. As such, we only present primary recommendations in this results packet.
- **Recommendations for younger versus older youth.** Chi-squared analyses (or Fisher's exact tests, in cases of low cell counts) were run comparing recommendations for each of the eight sections by younger versus older. There were no significant differences (all *p*s < .05). Therefore, presenting recommendations by either age group would not provide meaningful information. As such, we present results combining younger and older recommendations.
- **Recommendations by expertise type.** As seen in the table above, agreement overall was not notably higher for respondents of any self-reported expertise type. We calculated separate values by expertise type for all eight subsections (see the supplemental table at the end). Upon visual inspection, no clear trends emerged to explain higher agreement on specific recommendations by any expertise type. Thus, we do not believe that different recommendations were being consistently made within expertise type. As such, instances of moderate or low agreement for mechanism or symptom recommendations were not due to divergence in expertise.

Primary Recommendations: Overall and for Overall Subtypes





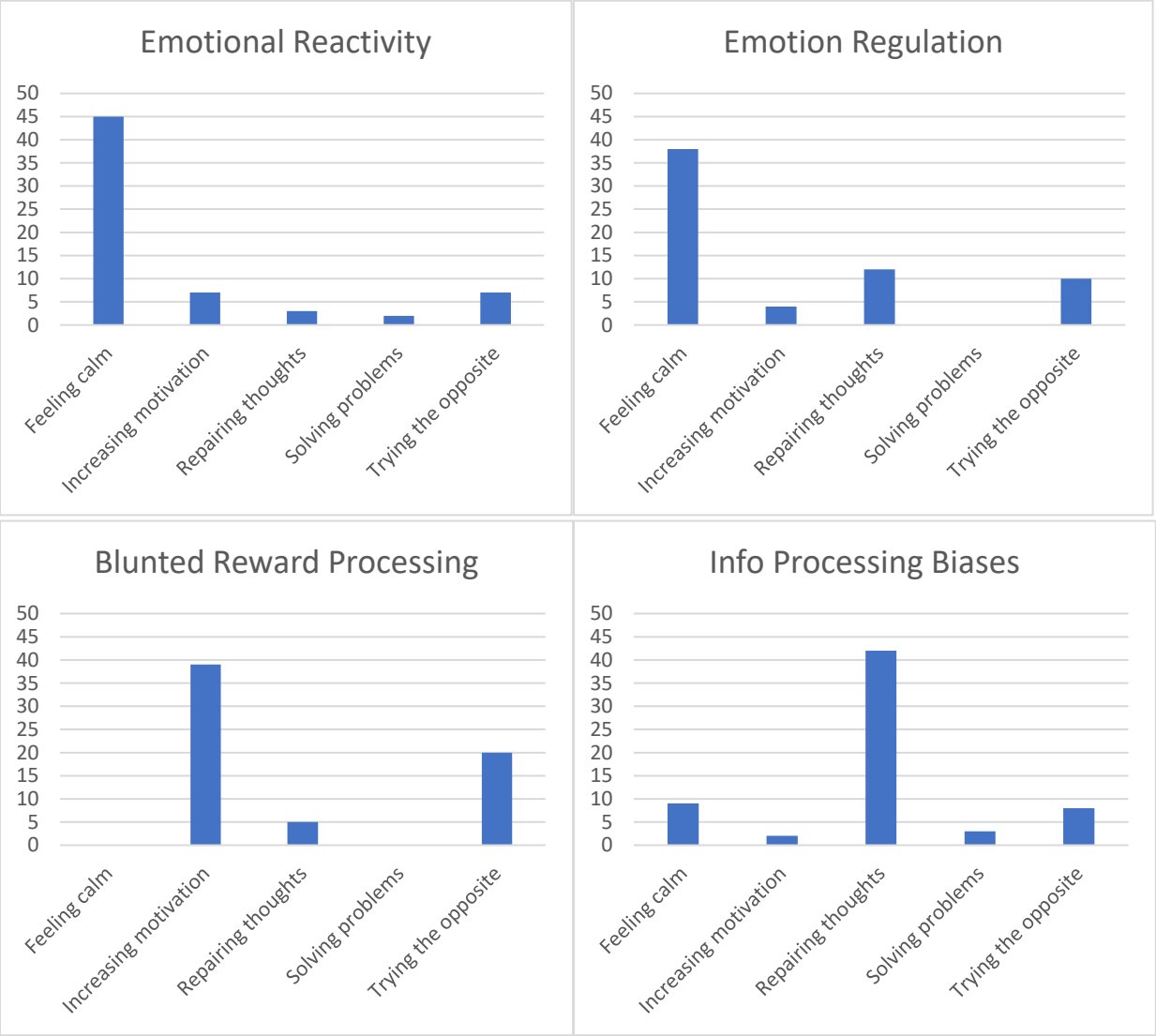


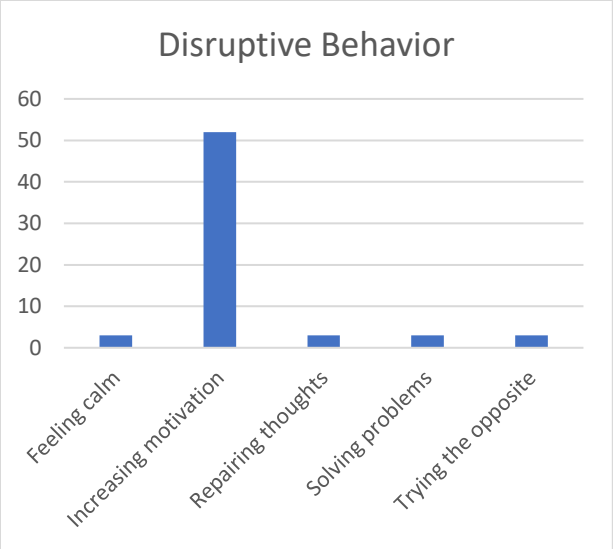
Overall Qualitative Feedback

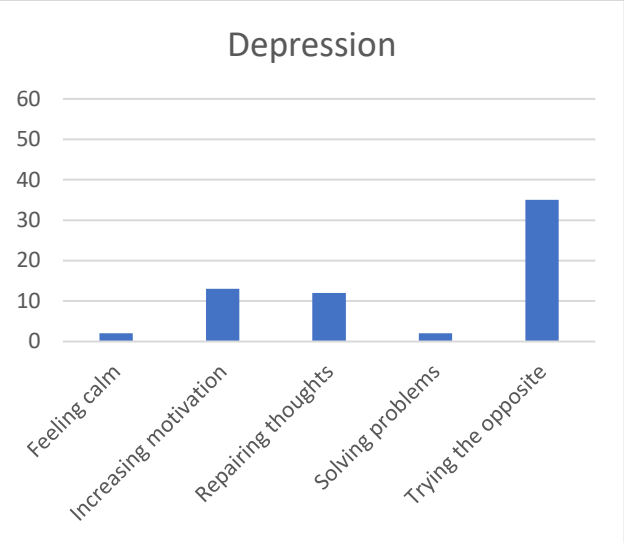
- Thank you for the opportunity!
- It is excellent that you are doing this!
- Excellent ideas.
- Very interesting intervention program--looking forward to hearing about the results
- Wonderful study! Kids and caregivers need this! Wishing you the very best and happy to help in any other way that I can.
- This seems like exciting work!
- Really interesting project. Good luck on all of it!
- Good luck!
- This was very interesting and thought provoking. I'd love to see you downward extend it to even younger children! All the best.
- I believe there is very little evidence, if any, that psychiatric disorders (or if you want to call them emotional and behavioral problems) can be prevented. Lots of folks have already tried and it doesn't work that way. Most post-traumatic symptoms start on day 1; there is no such thing as a prevention window. The other symptoms you described, which I indicated earlier are not caused by adverse experiences, by definition have no prevention window. If I understand correctly what you are trying to accomplish, my expert advice is abort. It sound like you are trying to create an intervention for ACES, which I do not believe in, for a disorder, complex PTSD, which has no diagnostic validity. You may be able to show an intervention effect but it will be due to the subset who are motivated and with the types of problems that are treatable (not preventable). We do not need a new intervention for that; we need new ways to get therapists to use existing treatments that work and new ways to get families to take advantage of existing treatments.
- Communication Skills may be a helpful prevention skill to incorporate.
- Acknowledging one's role in trauma as a parent -- if the parent is a perpetrator of maltreatment -- is important, and in my experience, hard to do well. Some may consider this a more psychodynamic or attachment oriented approach, although behaviorally oriented programs that focus on building a positive relationship can likely get much of the way there. However, I can't help but wonder if there is a missing piece: having some parental acknowledgement of their mistakes, taking ownership and apologizing, and committing to making a better effort on the future that can be very healing.
- It is hard to choose just one or two FIRST skills, I think that a combination of these skills would have the potential to be incredibly effective for youth and families exposed to adversity.
- I'm glad to see the parenting skill approaches brought in at the end. This is admittedly a bit more complicated, but I would give some consideration to community partners who could implement these techniques and continue to be role models/guides/coaches in the community for youth and families. This may include teachers, pastors, community orgs like Boys and Girls Club, etc. This gives the whole community a chance to carry these skills on for themselves
- Prior to interventions listed above, I would recommend both (a) child (and parent) psychoeducation to discuss the thoughts-feelings-behaviors relationship (to provide some reasoning/motivation to the family about why we are doing F and T and (b) self-monitoring. Regarding self-monitoring, it is my opinion that this skill frequently is a precursor for the youth to even know when they need to implement skills in the first place.
- Most likely for youth of ethnic minority or first or second generation immigration status, I would recommend even more psychoeducation (to not only go over thoughts-feelings-behaviors) but also discuss the youth's, parents', and therapist's role in treatment.

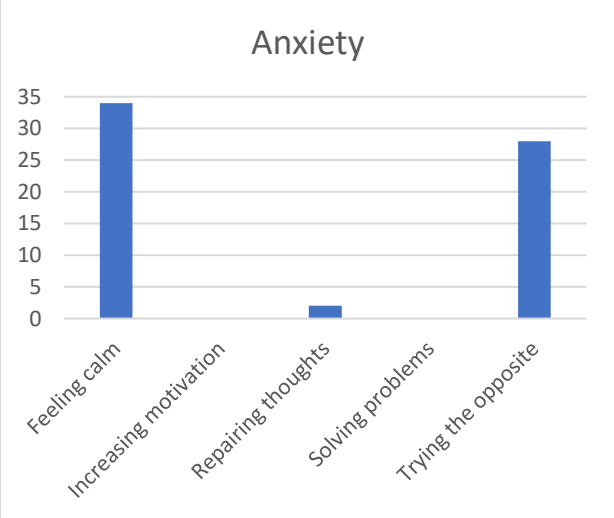
- Overall comment here- skills like those in FIRST are great and universal and case management helps a lot BUT we cannot forget we are treating kids in context and sometimes real world problems that kids face require more of a compassionate, your are not alone, i see you, i validate you, i support you approach (attachment/acceptance/mindfulness literature)
- These questions are very circumstantially dependent, so it's difficult to pin down a specific strategy that would fit all
- I would suggest taking an culturally informed approach, as there may be things that one would recommend for some youth that you would not for others (e.g., youth in a certain religious context might benefit from preventative interventions involving positive aspects of their religious community, while those not embedded in such communities might not find such suggestions helpful.
- If identity factors resulted in other issues coming to the foreground, would definitely want to address (e.g., sexual or gender identity, race...). Especially for the framing of the activities for engagement and acceptability.
- This recommendation would apply to young kids and teens, the only change would be the type of activity or metaphor to teach the skills. For ethnic minority youth and LGBTQ you, I would include normalization and validation of events and why it makes sense they feel this way (often time these kids are told to use these skills without a broader discussion about racial and system mistrust, validation of traumatic experiences).
- Some baseline acknowledgement that experiences of adversity are not randomly distributed in the population and that unfortunately some groups are more likely to experience adversity given structural/systemic issues may help with validation and getting adolescents "on board".
- For marginalized youth (e.g. racial/ethnic/LGBTQ minorities) I think it would be very important to get stakeholder input from them, and ideally a therapist of similar background/experiences working with them
- For certain cultural or religious groups it could be helpful to bring in historical/family practices such as praying, spiritual beliefs, etc
- If youth is of any minority status, I would teach skills in a way that does not set them up to reframe or repeat exposure to re-traumatizing / discriminatory experiences. There would thus need to be a differentiating step before applying the FIRST skill
- What options are available to the youth will very much depend on their identity and context, so that suggestions needed to be adapted appropriately.
- In these populations I would do even more extensive screening for ongoing discrimination, bullying, or abuse from peers/others. If there is ongoing trauma, this absolutely needs to be addressed before any of the skills/approaches above. And careful attention to confounding factors such as sleep impairments and sleep environment

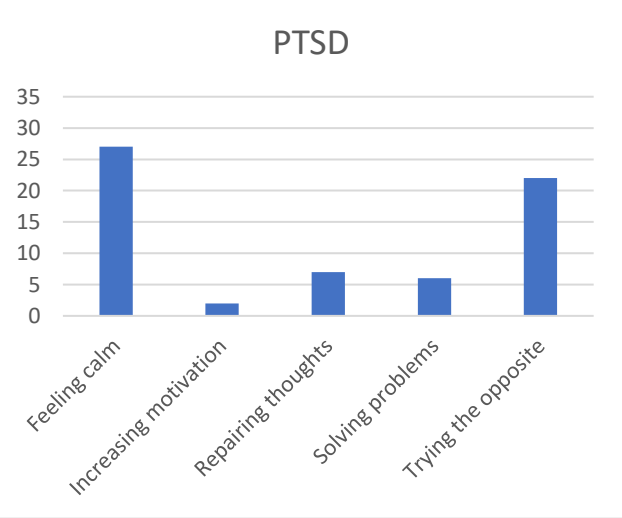
Recommendations by Section



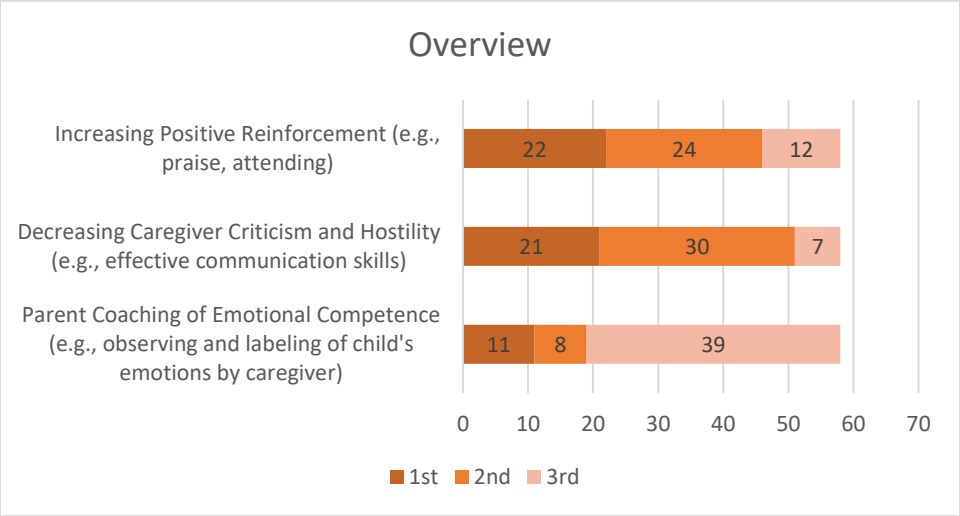

Disruptive Behavior
60
50
40
30
20
10
0
Feeling calm
Increasing motivation
Repairing thoughts
Solving problems
Trying the opposite

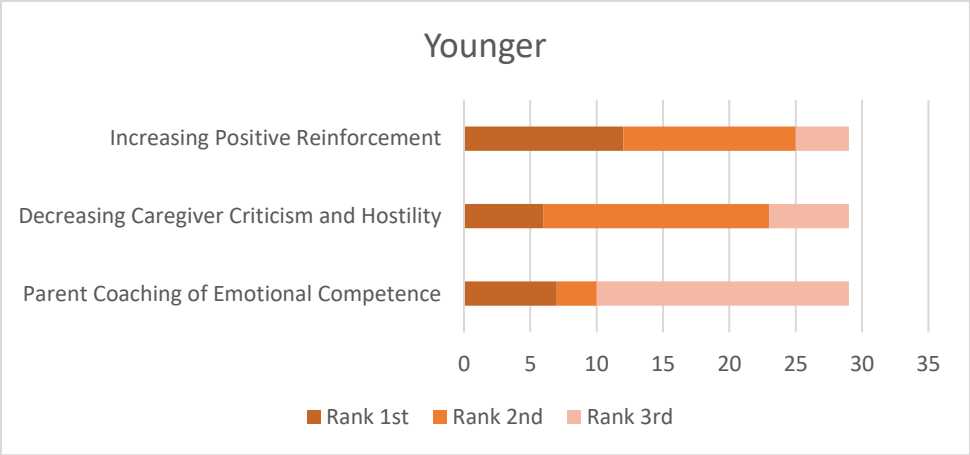

Depression
60
50
40
30
20
10
0
Feeling calm
Increasing motivation
Repairing thoughts
Solving problems
Trying the opposite

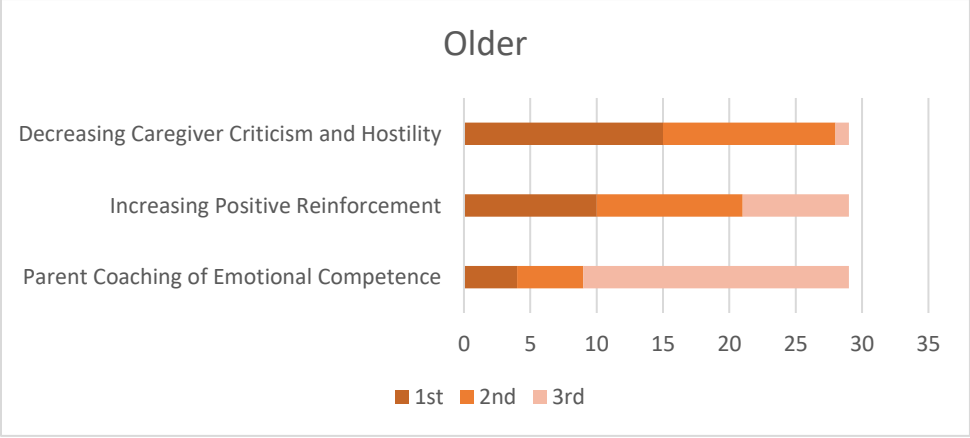

Anxiety
35
30
25
20
15
10
5
0
Feeling calm
Increasing motivation
Repairing thoughts
Solving problems
Trying the opposite


PTSD
35
30
25
20
15
10
5
0
Feeling calm
Increasing motivation
Repairing thoughts
Solving problems
Trying the opposite

Parenting Practice Recommendations







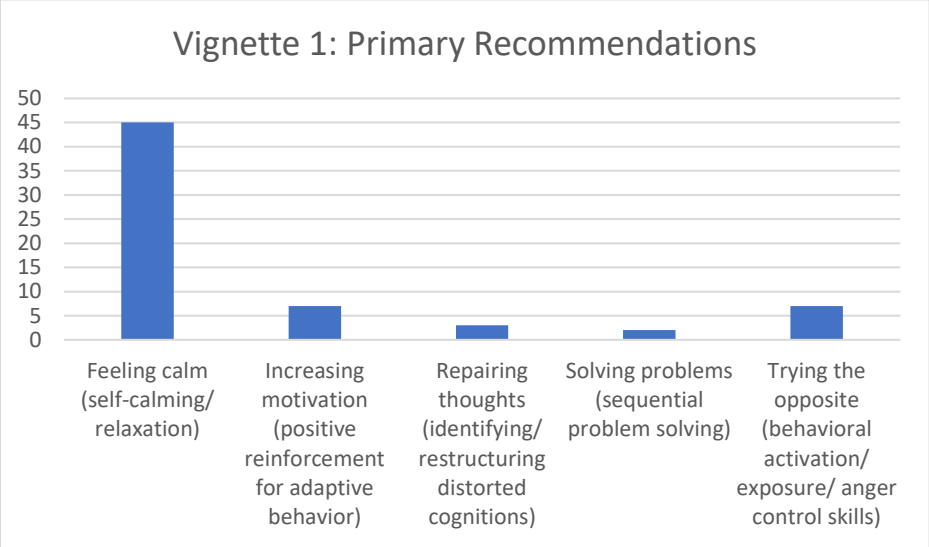
- My judgment of how to rank order the parenting skills would actually depend on the kind of behavior the child was showing, not on what adversity the child had experienced, because similar patterns of diversity can be followed by very diverse patterns of child behavior--each requiring an appropriate intervention.

- (1) if caregivers had been the person abusing the youth/adolescent, I would always prioritize decreasing criticism/hostility. (2) if the adversity was IPV towards the presenting caregiver or the presenting caregiver had extensive trauma HX themselves, I would not expect them to have the same readiness for accurate emotion labelling skills
- Add psychoeducation for caregivers
- It is hard - if the caregiver is the source of adversity, then without changing the caregiver's behavior, it seems very hard to recommend any of these, as it would seem to de-legitimatize the child's experience. Thus, it would seem key to also focus on having the caregiver perpetrator be able to recognize their contribution to the situation, which is highly challenging.
- "Would employ a ""catching-them-when-they-are-good"" approach, positively reinforcing parents for demonstrating positive parenting skills, including not only in terms of being responsive to children/adolescents through praise and attending, but also proactively structuring school-age children's and adolescents' activities in the home (e.g., sleep, meal schedule) and extracurricular activities to promote social behavior. Research suggests that positive reinforcement leads to lower rates of hostile/rejecting parenting, but that harsher/hostile parenting is not related to rates of positive parenting (e.g., Sitnick et al. 2017, JCCAP).
- Regarding caregiver-related adversities, one might need to use comparable strategies suggested earlier for children with parents if there is resistance to adopting new parenting strategies because of past trauma based on exposure to adversities. Thus, one might need to change gears from working on parenting to individual-based issues to repair cognitions or hyper-reactivity to emotionally-charged situations.
- Yes, in terms of working on culturally-specific or gender/sexual orientation specific issues."
- I think the key here is coaching caregivers on observing and labelling their children's emotions (a way of mindfulness if you will). Then helping caregivers "Catch kids being good" is the key step. Finally, teaching parents how to praise their kids with specific labelled praise. I would also add- teaching caregivers how to notice the inevitable frustration, tension, anger, that will show up in them the first times they try this and their kid snaps back (emotional intelligence for themselves) so that they can notice (Be mindful), breathe (calm) and act in a values consistent manner.
- Not all of these parenting behaviors may be congruent with the values of parents from different cultures so this would need to be carefully considered during delivery of the program
- I might prioritize decreasing caregiver criticism for children and adolescents in cases where caregiver-related adversities are prominent.
- Generally my tendency would be to try to strengthen the relationship with their caregiver. However, as adolescents become more independent (and the changes of maladaptive parenting being remedied diminish) I put less focus on the parent–child relationship in these recommendations.
- if youth were exposed to adversity related to parental abuse, I would prioritize decreasing caregiver criticism and hostility and teach parents to increase positive reinforcement as a way to strengthen the parent child relationship
- All three are essential! I think there are important considerations about caregiver preparation to enact these skills and dosing considerations are important given different caregiver baseline characteristics which may covary with nature of family adversity as well as cultural and educational background.
- "I wonder about Parent Coaching of Emotional Competence - would that be a concern when the adversity is a direct result of caregiver actions (parental abuse).
- I think Communication Skills would be important in this situation, for parents and youth (especially adolescents). "
- for Black children, would rank emotional second and positive reinforcement third.

- If caregiver had a history of trauma, I would try to address that before involving them in the prevention program as their own struggles could interfere with their ability to be fully involved, particularly in a short term preventive effort..
- For sexual orientation and gender identity, I think there needs to a be a clear family focused approach on acceptance and support of the child. Also in cases of a parent being a perpetrator of abuse towards the child the above skills need to be considered carefully, with no expectation of the child having to reunite or forgive the parent

Detailed Qualitative Data by Section

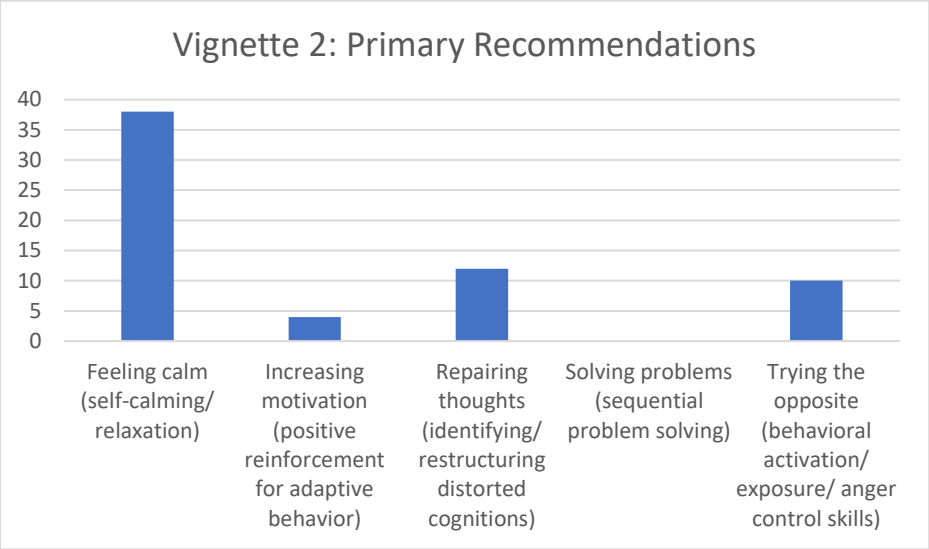
Emotional Reactivity



- These are my prevention focused strategies- but given experiences that lead to heightened emotional reactivity, in addition/or if taking a more treatment approach, I might be thinking of trying the opposite (exposure to traumatic memories).
- for younger clients, work more with the parents
- I think it would be useful for teens in particular to help them identify triggers and situations that are more likely to provoke these enhanced emotional responses so that they can proactively plan to avoid or cope with them. This is related to problem solving and repairing thoughts, but could be more explicit.
- For children 8-12, would emphasize parental reactions to child's overreactivity to help both parent and child learn to down-regulate, as parent could exacerbate child's overeactivity. However, also important to give child/adolescent some self-calming skills if intervention is preventive in nature. Trying the opposite also could be helpful.
- Present moment awareness (i.e., mindfulness) training that is developmentally adapted. Teaching kids to notice what they feel in their bodies using their 5 senses and then teaching self-soothing/calming skills. I would recommend this in conjunction with Feeling Calm from FIRST skills.
- The cognitive component would need to be adapted across children and adolescents as teens would be more likely to have developed cognitive biases associated with their emotional reactions that may need to be dealt with during the exposures
- For a preventive intervention, psychoeducation would likely be important here too. Feeling calm would still be my first intervention, but I would want to make sure to provide a rationale linking childhood adversity exposure to heightened emotional reactivity.
- In addition to those above, and it may be part of increasing motivation, is to engage in broader identity/future oriented thinking (e.g., who are you and what do you want for your life) as part of motivational work about engagement in the intervention (particularly for this older set).
- First-line approach instead of the above: behavior management for parents to learn how to anticipate the situations that annoy their children and how to help calm and distract their children. Emotional and physical dysregulation is often biologically based and teaching children self-help skills to control something they cannot control is a recipe for failure.

- Not totally sure if this is subsumed under Feeling calm, but emotion awareness training, observing emotion. Could focus more on differentiation and non-judgment with adolescents and labeling, describing, and locating emotion in the body in children.
- I think Feeling Calm would be a first line regardless - just to teach the child to regulate. Perhaps some self-monitoring might be helpful (keeping track of when the outbursts etc. occur) in order to identify triggers and ways to set up the environment to avoid the emotionally reactive responses.
- for adolescents, I would also employ repairing thoughts as an addition
- there are more strategies for 'feeling calm' but the principle is spot on
- Possibly TF-CBT. I also would recommend parental/caregiver active involvement for younger children.
- I didn't see this specifically mentioned in FIRST, but I would add a psychoeducation component that teaches kids about typical responses to adversity, both at a behavioral and biological level. And normalizing these responses (e.g. your brain/body is trying to protect itself). Content would need to be tailored for each developmental group.
- Also for adolescents I would consider adding in content, if not already addressed, about how to identify supportive vs. unhealthy friendships
- i see the approaches as fairly consistent across these demographics
- I would want to make sure that the psychoeducation provided validated the experience of heightened reactivity in light of childhood adversity and I would want to make sure to acknowledge experiences of adversity and/or invalidation related to identity, but the choice of Feeling Calm as the the first strategy would not change.
- For groups socialized toward emotion suppression, exploration of the values that underlie their current approach to emotion regulation, and relearning acceptance of emotion as an avenue toward acting on emotion in ways that are acceptable in context of family and community.
- For kids with a history of sexual abuse, feeling calm might be triggering. In which case I would start with Trying the Opposite and then Solving Problems. I am concerned about the use of Repairing Thoughts for children with adversity as it may feel invalidating.
- for Latinx and immigrant adolescents, would probably employ family involvement with increasing motivation as second. (also possibly for certain religions such as Jehovah Witness)

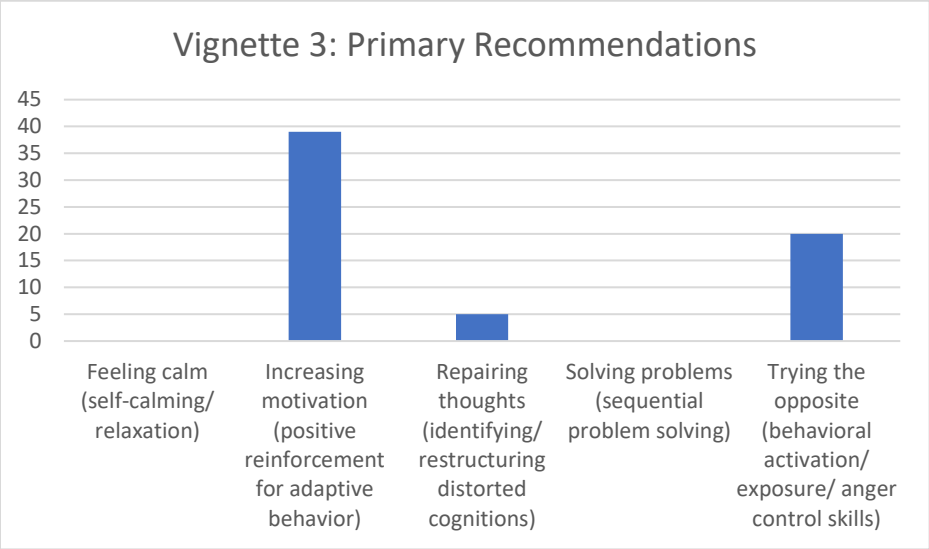
Emotion Regulation



- In addition- Increasing motivation- parenting skills specifically
- if there had been a lot of trauma, I would thoroughly and continuously screen for this, to make sure I'm not encouraging them to enter unsafe situations. If they have an invalidating family environment, I would NOT teach cognitive skills first-line
- As a tertiary recommendation after F and T, I would recommend R (repairing thoughts). So in all, if I had to choose FIRST interventions, it would be F, T, and R.
- I think it would be useful to identify "competing" behaviors, activities, and thoughts that help disrupt the cycle. This might really be trying the opposite, but I do not think it is always the opposite per se.
- Get parent-child relationship on more even keel with less reactivity between the 2-3 family members, and also work on child/adolescent's coping skills.
- Self-calming/relaxation + repairing thougths + increasing motivation all seem important here and very helpful. AND as a preventive intervention what I see missing is the component of self-awareness and learning to stop and notice thoughts, physical sensations, emotions SO THAT THEN we can address them. Mindfulness is key.
- Problem solving would be important to incorporate once they learn to regulate.
- As with the previous response, I would want to provide a clear rationale for the intervention and how it relates to adversity. I presume that Feeling calm would include a range of self-calming strategies. If it does not, then the additional recommendation would include mindfulness as an additional strategy. For adolescents, I would increase the focus on negative automatic thoughts that increase or prolong the emotion regulation difficulties.
- Emotion exposures are probably underutilized and more in-vivo work with this is an important priority across children with various symptom presentations. I like the idea of this as a focus linked to early adverse experience rather than diagnostic specific treatment.
- For adolescents perhaps a radical acceptance (DBT skill) may be helpful in this situation.
- for adolescents, would also add trying the opposite; for children, would add repairing thoughts
- Possibly TF-CBT and parental involvement for younger children
- I would add in a sleep assessment and intervention if needed, which would apply to both reactivity and regulation. If insufficient/fragmented sleep it will be difficult for youth to master and implement these skills

- I would still prioritize the Feeling Calm interventions. When introducing cognitive skills for minority youth, I would want to make sure to gather sufficient information to determine whether "unhelpful" thoughts are actually disorted or reflect their reality. If the latter, I would want to do more case work or work with the family to consider environmental interventions before restructuring thoughts.
- As previously mentioned, Feeling Calm could be triggering with kids with a history of sexual abuse. Consider Doing the Opposite as an alternative.
- for adolescents of color and sexual gender/minority would include family through increasing motivation

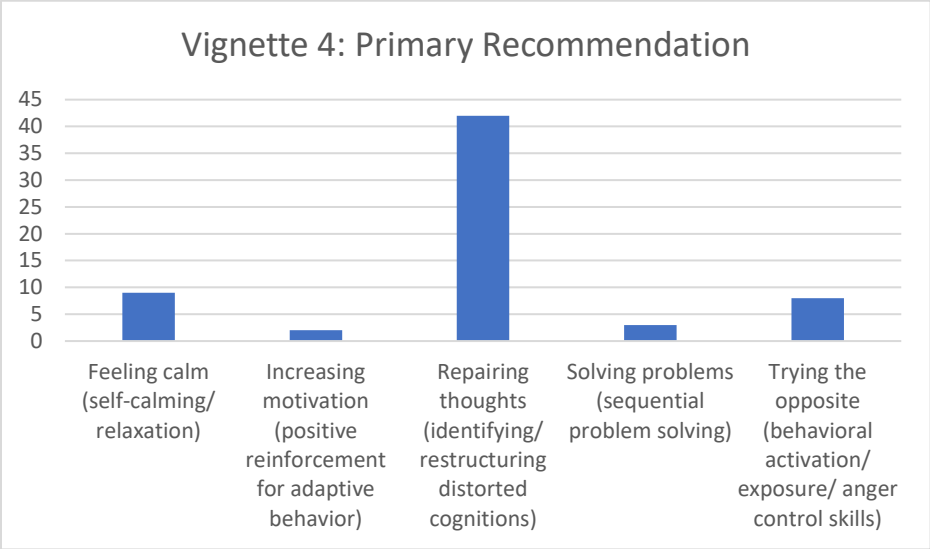
Blunted Reward Processing



- This one is harder- though I would likely approach it some like we do with depression, engage in activities that should bring pleasure, hoping we can build that (trying the opposite). I don't have alternative or really additional strategies to recommend, i just know less for this mechanism.
- I think you should consider developmentally adapted "savoring" interventions that help youth focused on positive sensations, emotions and experiences. It may also be important to examine whether there are cognitions (which may or may not be distorted) or concerns that interfere with enjoyment, and if so, repairing thoughts or problem solving may help. So for example, a child may not experience express joy about an upcoming event because in their experience there is unpredictability and that event may not actually happen, and they are trying to avoid disappointment by not getting excited about it.
- Although I see this issue as being more child-focused initially, getting cognitions that might drive child behavior and introducing some behavioral options (behavioral activation), might supplement this regimen with some family work to better understand hopefully improve parent involvement/reinforcement of child/adolescent activity.
- Values- an exploration of what matters, what do these kiddos want in life is warranted. We tend to jump into skills and problem solving without first exploring what moves this kid? what still gets them up in the morning? what do they wish and long for? values exploration may be a useful component here that is not included in FIRST. Particularly useful with teens and pre-teens.
- May need to teach how to self-reward.
- Your question is confusing. Most of the symptoms sound like depression, which is treatable. Some of the other symptoms sound like personality traits that are not very treatable. I am concerned that you believe that some of these behaviors are caused by adverse experiences when they are not and instead they are character traits of individuals who happen to be exposed to adversity.
- Savoring could be amplified with mindfulness based activities. May be important to clarify goals in terms of expected or needed changes in positive affect. It might be okay for child or adolescent to feel contentment, safe, and calm (low arousal positive affect) rather than exuberance, or jolly fun.
- I think any other intervention is covered under the umbrella of "trying the opposite". Getting physical activity, engaging in pleasant activities, etc.

- For adolescents will likely involve parents in trying the opposite which may also overlap increasing motivation
- As for reactivity the psychoeducation piece is likely to be important, i.e. there is a reason kids may act impulsively or seek short term rewards after adversity
- For children of ethnic minority background/immigrants it will be important to have an understanding of their family dynamics, parents views on rewards and punishment, access to rewards (not all families can purchase stickers or take kids out for a special dinner if chores are completed) and creatively problem solve around these issues. Exposure and behavioral activation is wonderful, but we need to be mindful of children growing up in violent or high crime neighborhoods who may not be safe to do so.
- I would want a thorough assessment of social and financial circumstances, to make sure that behavioral activation activities are realistic given neighborhood and family financial circumstances. For a preventive intervention, I would hope to develop a common list of activities that do not require money or special equipment/travel/resources.
- There are cultural differences in the valuation of high versus low arounsal positive affect. So language and goals in targeting blunted reward should be sensitive to cultural and temperamental differences.
- I would just make sure that there are free and accessible activities for youth in poverty under Trying the Opposite.
- appropriate self care skills would be added for Black adolescents

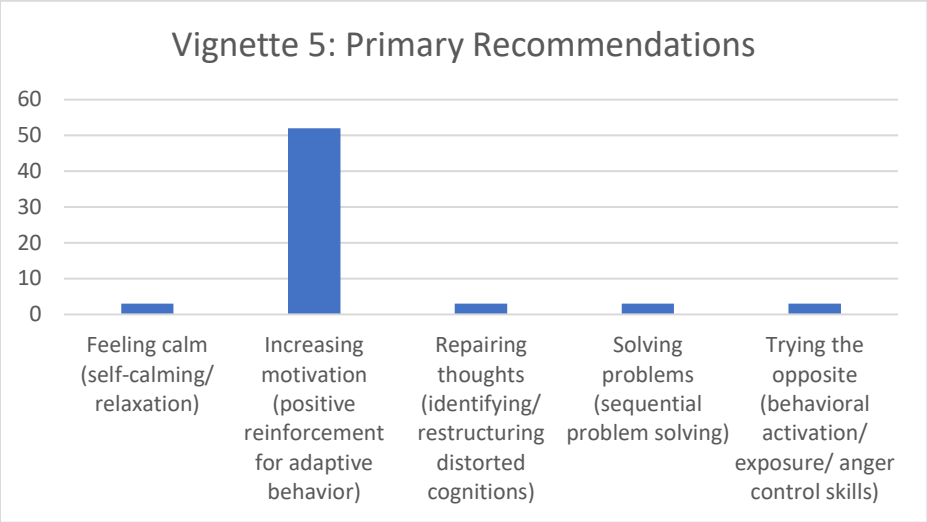
Information processing biases



- I think perhaps engaging in some perspective taking activities that help them determine when their concerns are realistic and when they may be over interpreting.
- Would address child SIP processing initially, then work with family to see how these play out and hopefully correct during interactions with parents. Might also introduce problem-solving for child's interactions with peers.
- Acceptance (willingness to hold on to a thought and not try to get rid of it or change it but rather carry it along with you while you move towards what matters)- not all thoughts will change. Some kids will resist reparing thougths because their experience tells them, in part, that this thought is "true." No evidence in the world may change this. We would benefit from including acceptance strategies into our approaches for when evidence for/against doesn't seem to help this kiddo out. Mostly this recommendation is aimed at teens.
- First, I note that you are implying that these social information processing biases are caused by adverse experiences. This sounds like you are describing complex PTSD which I believe has no diagnostic validity. You seem to be creating a treatment for a disorder that does not exist. Second, it is difficult for me to imagine an individual with these biases being a patient in psychotherapy. Psychotherapy is a voluntary activity and these types of patients are rarely able to use therapy.
- My selections above are canonical. Probably problem solving steps are relatively inert without practice. I find the distinction between the techniques in Trying the Opposite hard to prioritize amid the content of the other sections.
- I like to start with a behavioral skill for the younger kids because the cognitive stuff can feel a bit abstract and take a bit of time to get the hang of
- Possibly Interpersonal Psychotherapy for Adolescents for 13-15 year olds
- It could be helpful to include exercises that, in a social cognitive approach, ask the youth to explain possible interpretations in vignettes of others. Focusing on "other" kids and not themselves may provide an easier inroad into the social interpretation skills
- For minority status adolescents, would prioritize Solving Problems first
- This needs to be very much sensitive to a child's identity, and their previous experience with discrimination and bias. If a child has already had many experiences of people treating them poorly, it may be somewhat adaptive to be hyper vigilant to avoid problems.

- Same as above for other examples.
- The social context of the individual would need to be carefully considered when determining how the cognitions developed and the extent to which they are accurate (e.g., does the youth have a history of bullying).
- No, other than making sure I use guided discovery and collateral information to fully assess the extent to which perceptions are biased or reflect discrimination, bullying, lived experience etc.
- I would be very careful in this area in terms of BIPOC youth and their attributions of mistreatment or hostility as a function of racism. I wouldn't want to be in the business of telling Black and Brown children and youth that they are distorted in their cognitions about potential mistreatment or discrimination on the basis of their race or immigrant status or accent or other identity characteristics.
- Careful not to invalidate real experiences of marginalized communities when using "Repairing Thoughts"
- Children and adolescents of color, immigrants and gender and sexual minority would help them with identifying if these interpretations are accurate and do psychoeducation about discrimination/bias
- Discrimination/racism definitely needs to be taken into account for marginalized youth. They have likely experienced many instances of this so being careful not to assume their experiences/thoughts of hostility from others are necessarily distorted

Disruptive behavior

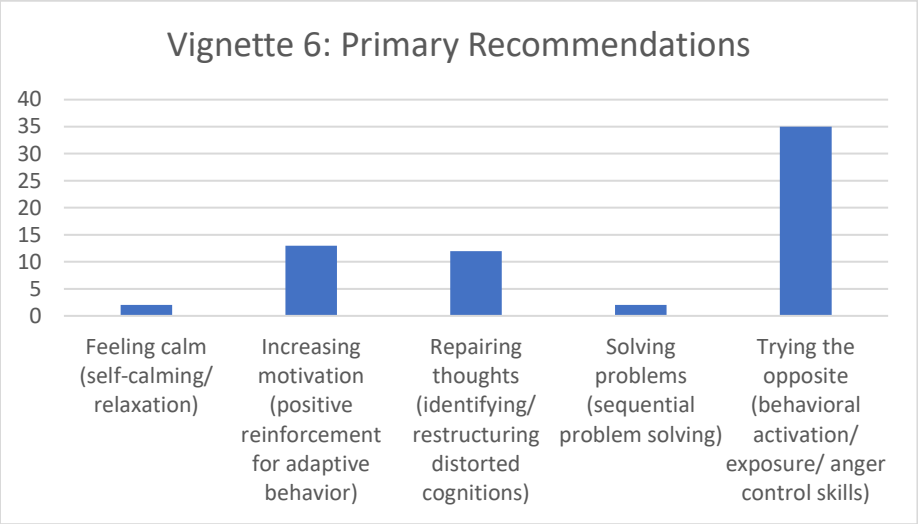


- With older children it may be very useful to try to understand "goals" or intentions of some of these behaviors. There are not always clear goals, but depending on the context, what we label as disruptive may be adaptive for the child in some situations.
- With both children and adolescents, would start with parents and youth, but focus more on problem-solving for school-age childe and internal distortions for adolescents.
- values- helping children identify what matters most and what would be worth doing even if they "don't feel like it" or "are angry".
- I would want to understand the function of the disruptive behavior if possible, before deciding whether increasing motivation interventions should be prioritized over cognitive and calming interventions. If this isn't possible, then I would begin with increasing motivation.
- social problem solving skills would also be helpful, in addition to parent training to teach parents to reward compliance (which is captured in the FIRST skill of increasing motivation), and to build a warmer parent-child relationship. So parent child relationship building and strengthening skills would be important and protective.
- You have lumped behaviors of ODD with behaviors of conduct disorder. The interventions for those are vastly different. You seem to have a fundamental misunderstanding of the differences between these problems. Again, you seem to be on some sort of complex PTSD pathway which I do not believe in. You will not be able to prevent these behaviors with any intervention because many of these behaviors are not caused by adverse experiences.
- It is difficult to address these problems without parent training for the younger kids. For older kids anger management (which can include parts of feeling calm, repairing thoughts, and even opposite action) would be helpful.
- for adolescents, I would also add problem solving.
- Parent management training (Barkley or similar methods) for children specifically. I would do this before the skills listed above (most of which are already included in PMT)
- Similar to above, I think it is important to assess the behaviors in context and to understand the motivations (aware or unaware) that may be driving the behavior and to examine whether there are contexts or situations in which the behavior is actually adaptive or helpful for the child.
- I would want to understand parent preferences and beliefs before suggesting interventions in the increasing motivation category. Even a general description of the range of parenting practices and an

explicit focus on why these specific parenting strategies are important in the context of disruptive behavior (not that they are preferred generally).

- Incorporating restorative justice approaches to understanding rule violation or conduct problems would be helpful. What is the context and structural factors that may be setting up the youth for conduct problems. We need to start considering this more as essential in preventive, trauma informed care in schools and other community settings.
- Just using realistic problems when teaching problem-solving - problems that reflect the youth's reality

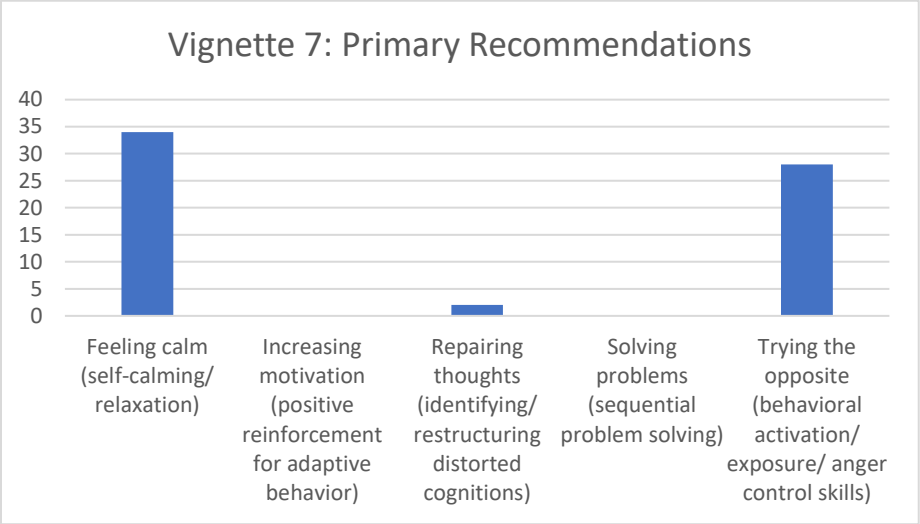
Depression



- For 8-12 year olds, after T and R, I would recommend I, S and F. For 13-15 year olds, after T and R, also recommend I, S, and F. Further, prior to interventions listed above, I would recommend both (a) child (and parent) psychoeducation to discuss the thoughts-feelings-behaviors relationship (to provide some reasoning/motivation to the family about why we are doing the recommended practices and (b) self-monitoring. Regarding self-monitoring, it is my opinion that this skill frequently is a precursor for the youth to even know when they need to implement skills in the first place.
- For older children you could consider approaches from Acceptance and Commitment therapy or other forms of mindfulness based strategies.
- Working primarily on internal states, would focus on CBT priniciples at first, but then move to problem-solving and if needed, behavioral activation.
- Behavioral activation (if not under increasing motivation) may need to be considered.
- Also would recommend the FIRST skill of increasing motivation.
- I think you are subsuming mindfulness activities into repairing thoughts, but that is not so explicit. But I have found that restructuring can be less effective with some youth than mindfulness - observing thoughts with less emphasis on fixing their 'incorrectness'
- "I think increasing motivation would also be important for teens, but they have the cognitive maturity to learn repairing thoughts so I would prioritize.
- I think problem-solving would also be important to include once trying the opposite has been established. "
- May also do problem solving for adolescents
- all other principles can be relevant depending on the formulation
- Interpersonal Psychotherapy for Adolescents
- I would consider parental depression and psychopathology, given existing evidence that CBT is not preventive for at risk youth when the parent currently has MDD.
- I think it is important to identify whether there are objective stressors or other barriers a child is facing - those may need to be addressed before depression related symptoms can be addressed.
- For immigrant populations- not over pathologizing real world preocupations (ICE raids, parents being deported) and normalizing these reactions. For LGBTQ youth- always validating that even if their core family does not accept them for who they are (if this is the case) that they can seek out a "chosen" family and connect them to support groups in the community.

- I would just want to understand the realities of these children and families before suggesting behavioral activation activities and I would want to understand their context to know whether environmental interventions might be better prioritized over cognitive interventions.
- Increased focus on the somatic aspects of depressive symptoms may be helpful for youth from interdependent cultural groups who may express fewer of the affective and cognitive features. Mindfulness focused on the body is helpful here.
- for Black and Latinx adolescents, I would do trying the opposite first
- Repairing thoughts needs to be approached carefully in these groups, as their perceptions of hostility from others may in fact be quite real, and even ongoing

Anxiety

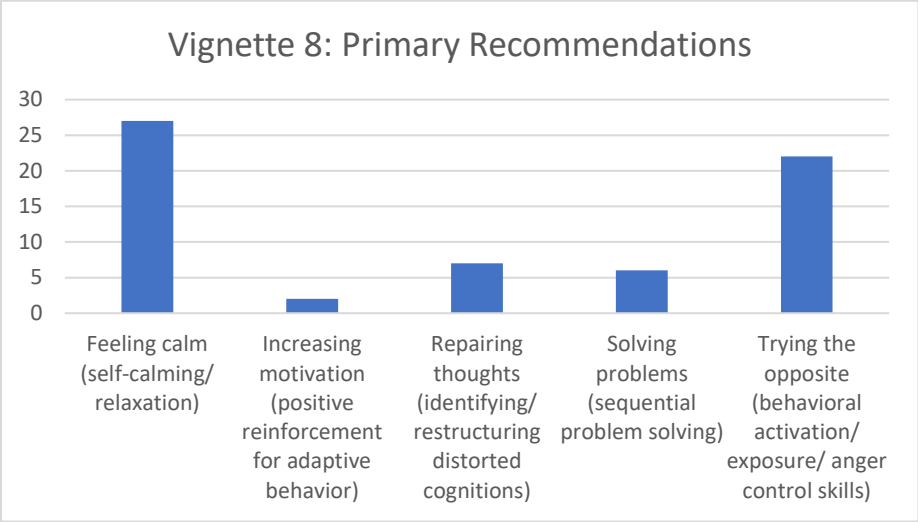


- I again would consider mindfulness based approaches.
- Might also try problem-solving as an addendum but only after using these first two strategies
- If there is enough time to provide the rationale for exposure, I would probably start there. However, I was thinking that for a preventive intervention it would be more challenging to fully develop an exposure hierarchy and to provide support in completing exposures over time. If there is an opportunity to provide support, then I would prioritize exposure. If not, then I would begin with feeling calm strategies. For adolescents I might introduce exposure and plan for ways to introduce exposure work on their own. This might be more successful for adolescents with lower levels of anxiety and high motivation.
- Wanted to clarify that I see relaxation skills and exposure being part of the same set here (used jointly)
- Also would be protective to teach self calming techniques. A combination of FIRST skills would be appropriate!
- hard to pick between relaxation/calming and increasing motivation pieces here. This is sensitive to role of caregivers and how much support and involvement they can offer.
- I would add problem-solving as it can be helpful as well. Nothing outside of FIRST that I can think of.
- For children, will also add family involvement with increasing motivation. For adolescents, will also add repairing thoughts.
- repairing thoughts and trying opposite could be relevant depending on formulation
- Possibly Coping Cat
- I really like these two strategies as prevention across youth ages. Having an initial focus on body identification and self awareness/regulation skills will be critical for adversity exposed youth
- I would again ensure that there are not objective threats/concerns that need to be addressed before trying to help a child deal with what might be legitimate concerns or worries.
- I would just want to assess how realistic (and safe) it would be to conduct in-vivo exposures in their settings
- COVID makes this part so complicated right now!! As do credible fears of race related harm, islamophobia, and LCGBT related violence. Important to be sensitive to all these being real risks of

harm in anxiety preventive interventions. When we do exposures and help youth tolerate discomfort in interactions we have to do so in a race conscious way.

- for children and youth in poverty and in communities with a great deal of violence, would adapt strategies to fit what they would need to live daily.
- Similar to previous, heightened index of suspicion for ongoing trauma which needs to be screened for repeatedly. I also think bringing in family/cultural/religious practices for calming could be very helpful

PTSD



- Trauma narrative for meaning making and increase positive sense of self. Grounding techniques
- If the youth had impairing levels of physiological reactivity during T, I would recommend F, but only if faced with that interference.
- Sorry to be a broken record .. but perhaps mindfulness based skills.
- might add opposite behavior as addendum to above regimen
- Again here I recommend incorporating mindfulness and values components. I am a clinical psychologist/researcher that specializes in trauma in youth and adults. I offer TF-CBT (kiddos) and PE (adults). I have found that incorporating these two components (Values at the beginning to create a reason for change) and mindfulness when i teach relaxation skills (learning to pay attention, on purpose, in the present moment to what my body and mind and soul are telling me) are key in helping create motivation for exposure work later on be it through trauma narratives (kids) or imaginals (adults).
- If there were not enough contact/time to do exposure work, I would prioritize feeling calm interventions. Also, if we are talking about non-clinical symptoms of PTSD then I would probably focus on feeling calm strategies and cognitive strategies to think about the traumatic event in a way that is more helpful and less distressing.
- As with the anxiety module -- I see exposure (to the trauma/trauma reminders) and relaxation to be intertwined.
- writing about or having opportunity to express feelings about traumatic events
- Leaning into the arts in trauma narrative can be very healing. Can also be very healing to share narratives to help others, adds to meaning-making and post-traumatic growth.
- A trauma narrative would be important.
- for adolescents, will also add doing the opposite
- TF-CBT
- Again making sure psychoeducation comes in early to normalize what youth may be feeling (i.e. in addition to these skills if not already incorporated)
- I again think you have to carefully look at the child's environment to determine whether there are ongoing triggers of trauma (or ongoing trauma) that need to be addressed.
- I work primarily with Hispanic youth and adults (mostly immigrants from central and latin america). I find that validating their experience and better understanding how their families and

communities address these experiences in their home countries helps be better understand the function of their current behaviors and to help build an alliance and buy in using these values and beliefs. I also find that offering these skills in their native language (I speak spanish) helps build rapport. Just thoughts to consider when thinking about implementation of FIRST (will you have bilingual providers, how will you address language access for youth who do not speak English? Will you have cultural adaptations?) future ideas for projects :)

- Attending and validating community race-based historical and collective trauma can be an inroads to the concept of trauma narrative for BIPOC youth.
- Consider youth who experience complex trauma (ongoing traumatic events) and how to help them. Repairing thoughts would probably be useful as well.
- for children and adolescents of racial/ethnic diverse groups would adapt repairing thoughts to fit their realities
- Similar to previous mentions, careful screening of ongoing discrimination, bullying, or trauma in these populations. And careful attention to confounding factors such as sleep impairments and sleep environment

Supplemental Table

	All Respondents	Treatment	Mechanisms	D&I	Childhood Adversity	Prevention
All Recommendations	0.39	0.39	0.41	0.36	0.40	0.43
Developmental Processes	0.36	0.38	0.40	0.35	0.39	0.40
Heightened emotional reactivity						
children (age 8-12)	0.25	0.29	0.44	0.21	0.39	0.36
adolescents (age 13-15)	0.34	0.35	0.50	0.21	0.50	0.36
Emotion regulation difficulties						
children (age 8-12)	0.41	0.35	0.44	0.43	0.33	0.50
adolescents (age 13-15)	0.41	0.41	0.44	0.43	0.39	0.50
Blunted reward processing						
children (age 8-12)	0.38	0.47	0.22	0.43	0.28	0.36
adolescents (age 13-15)	0.41	0.47	0.28	0.43	0.33	0.43
Social information processing biases						
children (age 8-12)	0.38	0.41	0.44	0.36	0.44	0.43
adolescents (age 13-15)	0.31	0.29	0.44	0.29	0.44	0.29
Symptom Types	0.42	0.40	0.42	0.38	0.40	0.46
Disruptive behavior						
children (age 8-12)	0.09	0.06	0.11	0.00	0.17	0.21
adolescents (age 13-15)	0.28	0.18	0.22	0.29	0.28	0.36
Depressive symptoms						
children (age 8-12)	0.47	0.47	0.67	0.43	0.61	0.57
adolescents (age 13-15)	0.44	0.35	0.67	0.29	0.61	0.64
Anxiety symptoms						
children (age 8-12)	0.44	0.53	0.33	0.50	0.22	0.36
adolescents (age 13-15)	0.50	0.47	0.39	0.43	0.28	0.43
Posttraumatic stress symptoms						
children (age 8-12)	0.53	0.59	0.44	0.57	0.44	0.50
adolescents (age 13-15)	0.63	0.53	0.56	0.50	0.56	0.64