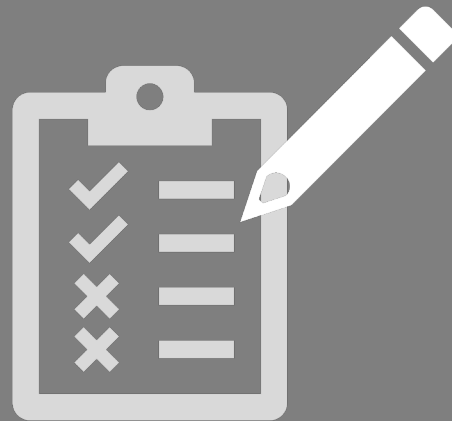


Evaluation

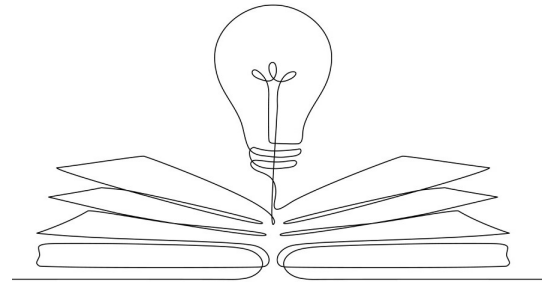
Protocol to Evaluate
Thinking for a Change 5.0



Evaluation Protocol for T4C 5.0

Background

The **Thinking for a Change 5.0 (T4C 5.0)** curriculum is an integrated cognitive behavioral change program designed to reduce criminal behavior. Using cognitive approaches to changing behaviors, T4C 5.0 focuses on specific skills to support cognitive restructuring and skills in a practical manner. T4C 5.0 is composed of three groups of modules; **Social Skills, Cognitive Self-Change, and Problem-Solving**, each of which targets specific skills and behaviors.



Cognitive Self-Change teaches individuals a concrete process for self-reflection aimed at uncovering antisocial thoughts, feelings, attitudes, and beliefs.

Social Skills instruction prepares group members to engage in pro-social interactions based on self-understanding and consideration of the impact of their actions on others.

Problem-Solving skills integrate the learnings from the other two sections to provide group members with an explicit step-by-step process for addressing challenging and stressful real-life situations.



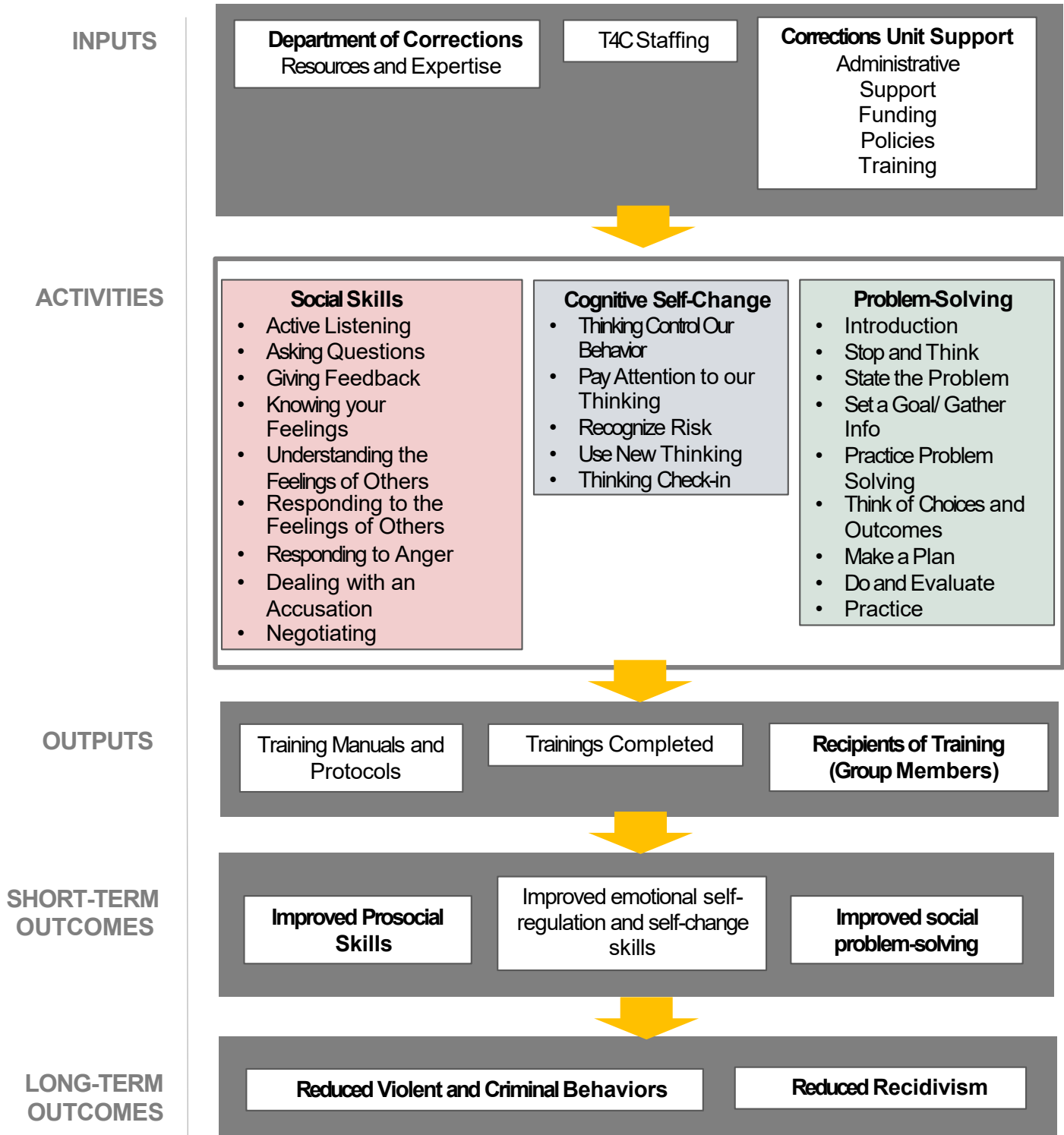
Design and Framework

To evaluate the effectiveness of T4C 5.0, we are adopting a pragmatic evaluation design that focuses on assessing the adoption of improved **Social Skills, Emotional Self-Regulation, and Problem-Solving**. The focus is early outcomes rather than longer-term outcomes because we do not have an extended follow-up period to assess long-term criminal behaviors.

The logic model overleaf depicts the sequential steps to evaluate the effectiveness of T4C 5.0. Inputs include the support and resources from the Department of Corrections, T4C staffing, funding, policies, and training. The programmatic activities of T4C 5.0 is the content of each of the three training modules. For outcome evaluation, we will focus on the early indicators of impact – measures of improved **Social Skills, Emotional Self-Regulation, and Problem-Solving** skills.

Evaluation

Logic Model



Evaluating T4C 5.0

Survey Items

We will employ a pre-/post-intervention quasi-experiment of people under correction authority who receive Thinking for a Change 5.0. A baseline (pre-intervention) and an immediate post- intervention survey will be administered to measure changes in short-term behaviors. To increase response rates, we have designed brief surveys (no more than 10 minutes) that would be likely feasible and accepted by participants.

Survey items were selected by first reviewing all the content of the three modules of T4C 5.0 (social skills, cognitive self-change, and problem-solving) and identifying the specific skills and behaviors that each module specifically targets. We employed an iterative process of reviewing constructs and validated published instruments with the program director (R. Prince). Our first iteration included the following constructs: problem-solving, prosocial behaviors, self-concept, impulsiveness, interpersonal skills, conflict resolution, emotional regulation, and consequential thinking. For our final iteration, the following were selected:

1. Three of the six-item emotional regulation questionnaire (Preece et al.,2023)
2. A total of 12 of 21 items from the Interpersonal Problem-Solving Measurement (IPSM) (Jurich, 2003). Two novel items were created by the evaluator to measure skills in making plans/practicing for problem-solving – a skill taught by T4C 5.0 but not captured in the IPSM.
3. A total of 6 novel items created by the program director (R. Prince) and evaluator (M. Ramirez) created to capture social skills (active listening, negotiating, self-awareness)

The total survey contains 24 items. All items use a 4-point scale where each item can be scored according to the category selected by respondents for each question.

1 Strongly Disagree	2 Disagree	3 Agree	4 Strongly Agree
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Social Skills Survey Items

1 Strongly Disagree	2 Disagree	3 Agree	4 Strongly Agree
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1. I actively listen with interest and intent to hear what people are saying. (Active Listening)
2. I tune into my body to know what I am feeling. (Knowing your Feelings)
3. I ask questions to understand things that confuse me. (Asking Questions)
4. It is hard for me to share with others what is bothering me. (Giving Feedback)
5. I pay attention to non-verbal cues, like facial expressions and body language of others. (Active Listening)
6. I work with others to come up with a shared agreement on what to do. (Negotiations)

A total score can be generated by summing values of responses across the 6 items. The range of possible scores is from 6 to 24. Standardize score by dividing score by 6.



Problem-Solving Survey Items

1 Strongly Disagree	2 Disagree	3 Agree	4 Strongly Agree
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8. I tend to react without thinking of consequences. (Reverse) (Impulse Control)
9. I can easily perceive when someone is getting angry with me. (Empathy)
10. I try to get my thoughts in order before reacting. (Impulse Control)
11. To solve a problem, I usually take time to think about my choices. (Impulse Control)
12. I know how to keep control in tough situations. (Confidence) (New Thinking)
13. When I have to deal with a problem, I take time to think through. (Impulse Control)
14. I know how to learn from my mistakes. (Responsibility) (Recognize Risk)
15. I tend to consider the consequences of my actions before reacting. (Impulse Control)
16. I usually can think of a number of ways to solve a problem. (Impulse Control)
17. I usually don't consider how the other person feels. (Reverse) (Empathy)
18. I don't like to take time to think through my problems, I just react. (Reverse) (Impulse Control)
19. I have difficulty thinking about different ways to solve a problem. (Reverse) (Impulse Control)
20. I break down complex problems into small, manageable action steps. (Planning/Practice)
21. I can improve my problem-solving skills through training and practice. (Planning/Practice)

A total of 12 items from the Interpersonal **Problem-Solving** measurement were selected for this evaluation. The original 21 items were developed specifically for criminally involved populations and address four dimensions of **Problem-Solving**, impulsivity, empathy, responsibility, and self-confidence. It is based on a strong theoretical foundation of interpersonal problem-solving that involves cognitive and emotional processing and aligns with the T4C 5.0 framework of skill building and problem-solving. Eight items from the impulse control dimension were selected, two from the empathy dimension, one from confidence, and one from responsibility. Two novel questions were created focused on practice and planning. Total items=14.

For scoring – **Reverse Score** the items that are labeled as such. For example, if a respondent selects strongly disagree (score=1) for item 18 (I have difficulty thinking about different ways to solve a problem), reverse score this to be a “4”.

A total **Problem-Solving** score can be generated by summing the values of responses across items. The range of possible scores is from 14 to 56. Standardize score by dividing by 14.

Cognitive Self-Change

This emotional regulation questionnaire is a six-item scale that assesses the ability to control emotions through cognitive reappraisal and emotional suppression (Peerce et al., 2023). Based on the skills taught by T4C 5.0, we focused on the three items related to cognitive reappraisal focused on emotional regulation. We also generated a new item (recognizing risk/use new thinking) based on the T4C 5.0 cognitive self-change module and included duplicate items from the IPSM questionnaire.

1 Strongly Disagree	2 Disagree	3 Agree	4 Strongly Agree
---------------------------	---------------	------------	------------------------

- 22. When I want to feel more *positive* emotion (such as joy or amusement), I *change the way I'm thinking* about the situation. (Cognitive Reappraisal).
- 23. When I want to feel less negative emotion (such as sadness or anger), I *change the way I'm thinking* about the situation. (Cognitive Reappraisal)
- 24. I control my emotions by *changing the way I think* about the situation I'm in. (Cognitive Reappraisal)
- 7. I think about how my actions could get me into trouble. (Recognizing Risk)
- 14. I know how to learn from my mistakes. (Responsibility) (Recognize Risk)*
- 20. I break down complex problems into small, manageable action steps. (Planning/Practice)*
- 21. I can improve my problem-solving skills through training and practice. (Planning/Practice)*

Emotional regulation can be obtained by summing scores for items 22-24. Standardize score by dividing by 3. Self-Change skills in recognizing risk and practicing/planning can be obtained by summing items 7, 14, 20 and 21. Standardize score by dividing by 4. Items 14, 20, and 21 are from the IPSM scale. Total self-change score can be obtained by summing scores for items 22-24, 7, 14, 20 and 21. Standardize self-change score by dividing this value by 7.



Overall Score

Global Score

A global total score of T4C 5.0 short-term outcome effectiveness can be generated by summing the scores across all 24 items. You may impute values for missing data only if less than six total items are missing. To do so, you would need the mean for all the items in that construct. If six or more items are missing, you should drop the respondent and report this as missing. The range for the global score is 24 to 96.

To standardize scores, divide each score by the number of items.

Standardized Score

To standardize scores, divide each score by the number of items.



T4C 5.0 Survey

Throughout life, people face many situations that are difficult or challenging, such as losing a job or breaking up with a loved one. We call these situations “life problems.” We want to know how you deal with your everyday life problems to better understand you. Please, help us by answering the questions below as honestly as possible. Indicate how much you agree or disagree with each statement below by selecting the number to the right of the statement. The numbers indicate the following:

1: Strongly Disagree

2: Disagree

3: Agree

4: Strongly Agree

	Item	1-4
1	I actively listen with interest and intent to hear what people are saying.	
2	I tune into my body to know what I am feeling.	
3	I ask questions to understand things that confuse me.	
4	It is hard for me to share with others what is bothering me.	
5	I pay attention to non-verbal cues, like facial expressions and the body language of others.	
6	I work with others to come up with a shared agreement on what to do.	
7	I think about how my actions could get me into trouble.	
8	I tend to react without thinking of consequences.	
9	I can easily perceive when someone is getting angry with me.	
10	I try to get my thoughts in order before reacting.	
11	To solve a problem, I usually take time to think about my choices.	
12	I know how to keep control in tough situations.	
13	When I have to deal with a problem, I take time to think through.	
14	I know how to learn from my mistakes.	
15	I tend to consider the consequences of my actions before reacting.	
16	I usually can think of a number of ways to solve a problem.	
17	I usually don't consider how the other person feels.	
18	I don't like to take time to think through my problems, I just react.	
19	I have difficulty thinking about different ways to solve a problem.	
20	I break down complex problems into small, manageable action steps.	
21	I can improve my problem-solving skills through training and practice.	

T4C 5.0 Survey

We would like to ask you some questions about your emotional life, in particular how you control (that is, regulate and manage) your emotions. The questions below involve two distinct aspects of your emotional life. One is your *emotional experience*, or what you feel like inside. The other is your *emotional expression*, or how you show your emotions in the way you talk, gesture, or behave. Although some of the following questions may seem similar to one another, they differ in important ways. For each item, please answer using the following scale:

1: Strongly Disagree

2: Disagree

3: Agree

4: Strongly Agree

	Item	1-4
22	When I want to feel more positive emotion (such as joy or amusement), I change the way I'm thinking about the situation.	
23	When I want to feel less negative emotion (such as sadness or anger), I change the way I'm thinking about the situation.	
24	I control my emotions by changing the way I think about the situation I'm in.	

Social Skills Score

Add scores for items below.

Items 1, 2, 3, 4, 5, 6

Standardize score by dividing total by 6

Cognitive Self-Change Score

Items 22, 23, 24, 7, 14, 20, 21

Standardize score by dividing by 7.

Problem-Solving Score

Items 8 (R), 9, 10, 11, 12, 13, 14, 15, 16, 17 (R), 18 (R), 19 (R), 20

R= Reverse Code

Standardize score by dividing total by 14.

Emotional Regulation through Cognitive Appraisal Score

Items 22, 23, 24

Standardize score by dividing by 3.

Global Impact Score

Sum all items together. Each item is weighted equally. Note the Reverse Coding. Standardize score by dividing by 24.

