Mental Health Connection /  
Karyn Purvis Institute of Child Development  
Trust-Based Relational Intervention® (TBRI®) Pilot Project  

Data Summary for the 12-month Follow-up Survey and Implementation Interviews  

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Executive Summary

This report summarizes the data collected during the 12-month follow-up survey and monthly implementation interview calls.

Follow-up Survey and Implementation Interview Data Collection

- Approximately 1,253 individuals from 25 organizations/programs have participated in surveys so far.
- 12-month Follow-up data collection occurred in February and March 2019.
- 851 individuals from 23 programs participated in the 12-month follow-up survey and consented to participate in research.
- The overall response rate for the 12-month follow-up survey was 71%.
- 20 organizations are participating in implementation data collection.

Results

- TBRI familiarity among survey completers has increased over time.
- Little change has been observed in the types of behavior management strategies being used.
- Repeated measures analyses examining agencies with a TBRI Practitioner at baseline versus no TBRI Practitioner at baseline indicated the following.
  - Staff at agencies with a TBRI Practitioner at baseline reported more positive attitudes towards trauma-informed practices.
  - Perceived influence at work improved across all agencies.
  - Perceived team cohesion was slightly higher for agencies with a TBRI Practitioner at baseline, but overall cohesion decreased slightly over time for both groups.
  - Agencies with a TBRI Practitioner reported higher leadership engagement at both baseline and follow-up, but those without a TBRI Practitioner reported a significant increase in leadership engagement from baseline to follow-up.
- Looking at relationships between baseline and follow-up measures, the following results were observed.
  - Unexpectedly, resiliency at baseline was not related to burnout at follow-up.
  - Greater leadership engagement at baseline predicted better communication, less burnout, and better job satisfaction at follow-up.
  - Other predictors of job satisfaction included a greater sense of mission and greater job autonomy.
  - Greater team cohesion and job autonomy predicted better communication at follow-up.
  - More office instruction at baseline was related to lower job satisfaction, a decreased sense of mission, lower team cohesion, lower job autonomy, and greater burnout at follow-up.
  - Greater leadership engagement was related to increased meeting discussions about new practices.
  - An improved sense of personal expression was predicted by higher leadership engagement and higher perceived influence.
- Agencies are continuing to focus on training and have been diligently working towards goal completion. They are reporting more use of TBRI with clients, incorporation of TBRI into agency environments, the addition of TBRI training, training materials, assessments, and tracking tools.

Ongoing data collection for year 2 continues to examine change within and between organizations participating in the project. Regular implementation interviews will continue in order to record each organization's steps toward implementing TBRI during year 2. Year 2 follow-up surveys are scheduled to be deployed beginning January 2020.
Data Collection Methods

Measures

Attitudes Related to Trauma Informed Care (ARTIC-10 HS; Baseline and 12-month Follow-up)
A 10-item questionnaire measuring individual attitudes about facets of trauma-informed care.
The ARTIC-10 HS uses a 7-point response option where 2 opposing ideas are presented on either side of a continuum represented by 7 points. Selecting an option closer to one statement or the other indicates a preference for one of the two ideas (figure below). Item responses are averaged and scores range from 1 to 7.

Behavioral Practices (Baseline, Training Follow-up, and 12-month Follow-up)
A questionnaire that measures the prevalence of common behavior management methods (TBRI and non-TBRI) among individuals and observed among colleagues.

TCU Survey of Organizational Functioning (SOF) and Workshop Assessment Follow-up (WAFU; Baseline and 12-month Follow-up)
Scales from the SOF and WAFU (TCU Institute of Behavioral Research) were adapted to examine organizational functioning and staff attributes. Scales include perceived influence among colleagues/within the program, mission congruence (i.e., having a clear, well-understood mission), team cohesion, organization communication, on the job stress, individual job satisfaction, autonomy on the job, job burnout, and leadership engagement in implementation.
SOF and WAFU scale items use a 5-point Likert scale response option (Disagree strongly = 1, Disagree = 2, Uncertain = 3, Agree = 4, and Agree strongly = 5). To score these scales, the average value of the responses is computed and then multiplied by 10 resulting in a range of scores from 10 to 50.

Policy Communication Index (PCI; Baseline and 12-month Follow-up)
Scales from this measure were adapted from the work of Dr. Canary (2013) to assess how policy is communicated within organizations.
The PCI scales used here are meeting discussions, office instruction, and personal expression. Items use a 5-point Likert scale response option indicating how often each type of policy communication item occurs at work (Never = 1, Rarely = 2, Occasionally = 3, Somewhat Often = 4, and Very Often = 5). Sub-sections are scored by averaging responses from each item (range 1 – 5).

Adult Personal Resilience (Baseline)
A questionnaire created by Dr. Taormina (2015) that measures the level of resilience in individuals along 4 subscales – determination, endurance, adaptability, and recuperability.
Adult Personal Resilience items use a 5-point Likert scale (Strongly disagree = 1, Somewhat disagree = 2, Neither agree nor disagree = 3, Somewhat agree = 4, Strongly agree = 5). Scores are computed by averaging responses from the items in each scale (range 1 – 5).
Participant Demographics & Survey Response Rates

Demographic distributions represent everyone who has participated in the surveys thus far. Not all participants provided demographic data.

Table 1. Education Background

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate's Degree</td>
<td>4.83%</td>
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<tr>
<td>Bachelor's Degree</td>
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<tr>
<td>Doctoral Degree (e.g., MD, PsyD)</td>
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<td>High School Diploma or Equivalent</td>
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<td>Master's Degree</td>
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<td>Some College, No Degree</td>
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<tr>
<td>Other / No High School Diploma</td>
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Table 2. Age Range

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<td>30s</td>
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<td>40s</td>
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<td>50s</td>
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<td>60s</td>
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</tr>
<tr>
<td>70s</td>
<td>0.31%</td>
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Table 3. Race/Ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian/Alaska Native</td>
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</tr>
<tr>
<td>Black or African American</td>
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</tr>
<tr>
<td>Asian</td>
<td>1.96%</td>
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<td>Hispanic</td>
<td>16.16%</td>
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<td>More than one race</td>
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<tr>
<td>Native Hawaiian/Pacific Islander</td>
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</tr>
<tr>
<td>Other / Unspecified</td>
<td>1.51%</td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>55.44%</td>
</tr>
</tbody>
</table>

Table 4. Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>86.52%</td>
</tr>
<tr>
<td>Other</td>
<td>0.76%</td>
</tr>
<tr>
<td>Male</td>
<td>12.73%</td>
</tr>
</tbody>
</table>

Response Frequencies across Surveys

- 193 participants completed the baseline only
- 81 participants completed the mid-year only
- 18 participants completed the training follow-up only
- 182 participants completed the 12-month follow-up only
- 206 participants completed all of the surveys
- 400 participants completed both the baseline and 12-month follow-up surveys
12-month Follow-up Survey Results

TBRI Familiarity

From the baseline to the 12-month follow-up, TBRI familiarity among participants rose markedly. The graph below shows that the percentage of participants reporting they are familiar with TBRI versus those who are not familiar with TBRI increased from 64% to 90%.

![Graph showing TBRI familiarity from baseline to 12-month follow-up]

Behavior Management Measures

These items were used to determine what behavioral management practices are most commonly used among participants. If participants indicated they were familiar with TBRI, then items asked about TBRI skills they use regularly. If participants indicated they were not familiar with TBRI, they were asked about practices commonly used in the field without TBRI-specific language. For each practice, participants indicated how often they use them with clients.

OVERALL: The following were the top 3 behavior management practices and TBRI-based skills reported across all surveys (i.e., these were reported as the most frequently used practices).

**Behavior Management strategies**

1. Positive Reinforcement
2. Redirecting Behavior
3. Ignoring Bad Behavior

**TBRI skills**

1. Voice Quality
2. Schedules*
3. Mindful Awareness

- Punishment, grounding, level systems, time outs, and medicating for behavior are rarely used.
- Physical restraints are reported as almost never used
• In general, those familiar with TBRI were more likely to use positive reinforcement, redirecting behavior, ignoring bad behavior and other behavioral strategies than those with no familiarity with TBRI.
• *This is a change from the last report, where the top 3 were Voice Quality, Playful Interactions, and Mindful Awareness.
• There was a difference between those familiar with TBRI and those not familiar with TBRI. For those familiar with TBRI, the most commonly used TBRI-based skills were Voice Quality, Playful Interactions, and Life Value Terms. For those not familiar with TBRI the 3 most commonly used TBRI like principles were Voice Quality, Schedules, and Levels of Response
• Those familiar with TBRI used Healthy Touch, Behavioral Scripts, Playful Interactions, and Life Value Terms more often.

Survey Scales

At baseline and the 12-month follow-up, participants completed items comprising scales from the Attitudes Related to Trauma-Informed Care (ARTIC), the TCU Survey of Organizational Functioning (TCU SOF), the TCU Workshop Assessment Follow-up (TCU WAFU), and the Policy Communication Index (PCI).

The following graph shows the cross-sectional means for each of the SOF and WAFU scales at baseline (Time 1) and the 12-month follow-up (Time 2).

- Perceived influence within an agency, on-the-job stress, job autonomy, burnout, and leadership engagement in new practices implementation increased slightly from baseline to the 12-month follow-up.
- Sense of agency mission, team cohesion, agency communication, and job satisfaction decreased slightly from baseline to the 12-month follow-up.
The following graph shows the cross-sectional means for each of the PCI scales at baseline (Time 1) and the 12-month follow-up (Time 2). Overall, meeting discussion and personal expression increased slightly while office instruction decreased slightly.

![Cross-Sectional Policy Communication Scale Means at Baseline and the 12-month Follow-up](image)

To examine the impact of having a TBRI Practitioner at an agency prior to the beginning of the project, repeated measures ANOVA models were conducted to examine paired cases (cases where a participant completed both the baseline and 12-month follow-up surveys). Results from repeated measures ANOVA and subsequent post hoc tests revealed the following.

- Staff in agencies with a TBRI Practitioner at baseline reported a more positive attitude towards trauma-informed care than those in agencies without a TBRI Practitioner at baseline (LS Means Time 1 $M_{(Practitioner)} = 6.05$, $M_{(No \ Practitioner)} = 5.63$, $f(1, 307) = 17.87$, $p < .001$; LS Means Time 2 $M_{(Practitioner)} = 5.97$, $M_{(No \ Practitioner)} = 5.70$, $f(1, 307) = 5.97$, $p < .05$).
- Regardless of group, staff reported an overall increase in perceived influence in their agencies ($M(T1) = 36.42$, $M(T2) = 37.40$, $t(378) = 3.33$, $p < .001$).
- Perceived team cohesion was marginally different between groups at baseline such that agencies with a TBRI Practitioner reported higher team cohesion (LS Means Time 1 $M_{(Practitioner)} = 39.33$, $M_{(No \ Practitioner)} = 37.79$, $f(1, 303) = 3.03$, $p = .0826$). Team cohesion decreased overall regardless of group ($t(379) = -2.76$, $p < .01$, $M(T1) = 38.78$, $M(T2) = 37.82$).
- As the table below indicates, perceived leadership engagement was greater for agencies with a TBRI Practitioner at baseline at both baseline and follow-up; however, agencies without a TBRI Practitioner at baseline reported a significant increase in leadership engagement over time.

<table>
<thead>
<tr>
<th>Leadership Engagement at Baseline (Time 1) and Follow-up (Time 2) for Agencies with and without a TBRI Practitioner at the Beginning of the Project</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TBRI Practitioner</strong></td>
</tr>
<tr>
<td><strong>M(SD)</strong></td>
</tr>
<tr>
<td><strong>Time 1</strong></td>
</tr>
<tr>
<td>Leadership Engagement</td>
</tr>
</tbody>
</table>

*$t(169) = 6.66$, $p < .001$
Multiple regression models were conducted to examine the relationships between multiple baseline and follow-up measures. The following results were observed.

- It was expected that greater resiliency would be related to lower burnout; however, that was not the case. Resiliency at baseline was not related to burnout at follow-up. Only adaptability was marginally related, and the results indicated that higher adaptability was potentially related to increased burnout ($\beta = 1.43, t(1) = 1.80, p = .0723, SE = .80$).

- Results indicated that engaged leadership may have a positive impact on staff. Greater leadership engagement at baseline predicted better communication ($\beta = .11, t(1) = 2.42, p < .05, SE = .05$), less burnout ($\beta = -.08, t(1) = -2.24, p < .05, SE = .04$), and better job satisfaction ($\beta = .08, t(1) = 2.48, p < .05, SE = .03$) at follow-up.

- To examine what factors predicted increased job satisfaction, baseline measures were modeled together to predict satisfaction at follow-up. Among those, only a greater sense of mission ($\beta = .14, t(1) = 2.42, p < .05, SE = .06$) and greater job autonomy ($\beta = .10, t(1) = 1.69, p = .0923, SE = .06$) were related.

- To estimate which measures contributed to improved communication, baseline measures were modeled together to predict communication at follow-up. Results indicated that greater team cohesion ($\beta = .12, t(1) = 1.80, p = .0723, SE = .07$) and job autonomy ($\beta = .22, t(1) = 2.95, p < .01, SE = .07$) predicted better communication at follow-up.

- Examining the relationships between policy communication measures and organizational functioning, results from analyses revealed that increased office instruction at baseline was related to lower job satisfaction ($\beta = -1.26, t(1) = -2.59, p < .05, SE = .48$), a decreased sense of mission ($\beta = -1.45, t(1) = -2.87, p < .01, SE = .50$), lower team cohesion ($\beta = -1.72, t(1) = -3.15, p < .01, SE = .55$), lower job autonomy ($\beta = -1.28, t(1) = -2.92, p < .01, SE = .44$) and greater burnout ($\beta = .94, t(1) = 1.81, p = .0714, SE = .52$).

- As expected, leadership engagement was related to policy communication measures. Results indicated that greater leadership engagement was associated with increased meeting discussions ($\beta = .04, t(1) = 6.21, p < .001, SE = .01$).

- Greater leadership engagement was also associated with an improved sense of personal expression ($\beta = .02, t(2) = 2.71, p < .01, SE = .01$), as was greater perceived influence ($\beta = .03, t(1) = 4.53, p < .001, SE = .01$).
Implementation Interviews Summary

Agencies are at various stages of goal attainment. At this time, three agencies are still in the planning stage, five have completed less than 50% of their goal(s), nine have completed over 50% of their goals, and three have completed their goal(s) and are in the maintenance and/or improvement phase.

Many new programs and practices have been put into place over the past year, which mainly include (1) more use of TBRI strategies directly with clients, (2) more TBRI-inspired changes to the agency environment, (3) more in-house TBRI-based training and materials, and (4) more TBRI assessment/tracking.

More use of TBRI directly with clients – Agencies are reporting the addition of nurture groups and applying nurture group/TBRI techniques to counseling groups, TBRI practices added to in-home services, and the addition of summer camps.

Incorporation of TBRI into agency environments – Agencies are reporting the modification of their lobbies/waiting areas to better meet ecological, physical, and sensory needs, and to disarm fear (snacks, water, games, sensory items); addition of TBRI elements to forensic interview rooms; addition of TBRI posters on walls, and addition of TBRI language to websites.

TBRI-based training and materials – Agencies are reporting the creation of a parent education curriculum; adapting TBRI-based manuals to older age groups; adding TBRI to new employee training and ongoing staff training; creating TBRI information sheets for staff; using champions as consultants for staff; and using practitioners to train agencies outside of the collaborative.

TBRI-based assessment and tracking – Agencies are reporting the tracking of staff usage of TBRI strategies, creation of a TBRI-based conference tool for monthly supervision meetings, use of the ARTIC to measure staff attitudes on trauma-informed care, and use of the Strengths and Difficulties Questionnaire (SDQ) with clients.

There are a number of factors that facilitated or hindered the progress of agencies toward reaching their goals. Whether a factor facilitated or hindered progress could vary from month to month within the same agency and varied from agency to agency. Agencies reported how each factor facilitated or hindered their TBRI implementation progress:

- Number of staff
  - Hindered: lack of practitioners, limited number of staff and support staff, difficulty managing a large number of staff with fidelity.
- Staff time
  - Facilitated: allocating more staff time/positions for help with TBRI, staff having time to start a study group.
  - Hindered: management & staff turnover, vacations and leave, adjusting responsibilities of staff, competing with other people/projects (fundraisers, accreditation, etc.), needing more time for staff training/coaching, staff working mainly outside the office making getting everyone together a challenge, getting time from leadership for meetings, etc.
- Budget/Funding
  - Facilitated: scholarships for training, departments working within their means, budgeting for supplies, using additional funds for TBRI, receiving more funds/grants, finding creative ways to acquire funds.
- Hindered: funding for practitioner training, waiting on leadership to allocate funds for TBRI, lack of funds/resources.

- Leadership buy-in
  - Facilitated: agency board interest in TBRI, leadership support and going to trainings, executive director creating a budget that includes TBRI.
  - Hindered: leadership change and needing leadership buy-in.

- Service coordination
  - Facilitated: different departments/managers working together to support the goal, getting other agencies into the TBRI/trauma conversation, and getting help from other agencies to implement nurture groups.
  - Hindered: needing more training for volunteers, and difficulties getting everyone on the same page.

- Equipment
  - Facilitated: having TBRI materials and DVDs, using laptops in sessions made documentation easier.
  - Hindered: not having enough DVDs, training room size, needing more space for sensory rooms and training rooms.

- Collaboration between agencies
  - Facilitated: positive collaboration between agencies in the collaborative, and having people to reach out to if help is needed.

- Other
  - Hindered: building renovation and/or moving locations, and delays in getting training.
Conclusion & Acknowledgements

Data collected during the 12-month follow-up survey indicate that TBRI is disseminating through the network and organizational functioning remains fairly stable over time with a few key changes. Agencies are focusing on getting training and taking the first steps towards TBRI implementation. While cross-sectional data represent snapshots of the environment at different points in time (fluctuations may represent turnover and staff change at different points in time), the repeated measures results represent changes for individuals who have remained with their agencies for the duration of the first year of the project. Those results indicated that leadership engagement in new practice implementation may be key to maintaining and/or improving the agency environment.

In general, participation in research remains strong and is greatly appreciated. The KPICD research team is extremely grateful to everyone who has participated in data collection for the first full year of the research component of the project. Without your help, the team would not have the evidence to begin to tell the story of what is happening in Tarrant County, and we would not be able to learn from the incredible efforts of so many to make this happen.

We would especially like to thank our program liaisons for working with us to keep track of the goal attainment and gains agencies are making each month. Those efforts and the information we have been able to gather are so valuable! Thank you, also to Patsy Thomas for your leadership on this project and everything you do in the community. We are also very grateful for our KPICD teammates.

If you have any questions for the research team about this report, data collection plans for subsequent years of the project, or anything related, please contact us at our team account (kpict.research@tcu.edu) or via Dr. Sheri Parris (s.r.parris@tcu.edu) or Dr. Rachel Crawley (r.d.crawley@tcu.edu).