

Organizational Trauma-Informed Care: Associations With Individual and Agency Factors

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In response to the growing awareness of the high rates of potentially traumatic experiences and their potential adverse impacts, health and human service providers have increasingly focused on implementing trauma-informed care (TIC). However, studies focusing on effective implementation have been limited. In this study, we explored the relationship of individual and agency characteristics to the level of organizational TIC. With data collected from a sample of 345 providers from 67 agencies, we used the TICOMETER, a brief measure of organizational TIC with strong psychometric properties, to determine these associations. We found weak relationships between individual factors and TICOMETER scores and stronger associations for agency-level factors. These included agency type, time since last trauma training, and involvement of service users. These findings highlight the importance of robust cultural changes, service user involvement at all levels of the organization, flattening power differentials, and providing ongoing experiential training. This analysis fills an important gap in our knowledge of how best to ensure agency-wide provision of TIC.

Keywords: trauma-informed care, implementation, human services, competency training, organizational effectiveness

Health and human service providers have become increasingly aware of the alarmingly high rates of potentially traumatic events, including exposure to violence, and its devastating impact. Almost 90% of 2,953 respondents in a national study reported at least one potentially traumatic event in their lifetime, and multiple exposures were the norm (Kilpatrick et al., 2013). Among children, victimization rates are nearly as high; 71% of respondents to The Victimization of Children and Youth survey, a national sample of 2030 children and youth aged 2–17, reported at least one victimization experience in the last year, and nearly 22% reported four or more different kinds of victimizations (e.g., physical assaults, sexual assaults, maltreatment, and bullying; Finkelhor, Ormrod, Turner, & Hamby, 2005).

Various subgroups report even higher rates. Research on adversity shows that the vast majority of low-income children and families receiving homeless services have experienced potentially

traumatic events (Bassuk et al., 1996; Hayes, Zonneville, & Bassuk, 2013), as have the majority of children in the child welfare system (Aarons, Brown, Hough, Garland, & Wood, 2001; Ko et al., 2008). In a national sample of youth in residential care, 92% reported multiple potentially traumatic events (Briggs et al., 2012). In addition, 90% of people diagnosed with serious mental illness and using public mental health services had been exposed to potentially traumatic experiences (Mueser et al., 2004). Almost all (97%) homeless women with serious mental illness have experienced severe physical and sexual abuse; 87% of these individuals reported these experiences as both children and adults (Goodman, Johnson, Dutton, & Harris, 1997).

Traumatic responses are complex psychological reactions to stressful experiences in which a person feels helpless, overwhelmed, and unable to cope (Herman, 1997; Terr, 2003). The impact of traumatic stress can be damaging and long-lasting. Potential adverse effects include neurobiological changes, medical and mental health problems, difficulty regulating affect, problems forming and sustaining supportive relationships, compromised functioning, and challenges accessing essential services (Cook et al., 2005; National Scientific Council on the Developing Child, 2005; van der Kolk, 2005). The Adverse Childhood Experiences Study (ACE) documented a significant connection between childhood exposure to 10 potentially traumatic events, grouped into maltreatment and household dysfunction, and increased rates of serious medical and mental health outcomes during adolescence and adulthood (Felitti & Anda, 2010; Felitti et al., 1998). Despite

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the intensity of various stressful events, it is important to keep in mind that some people develop minimal symptoms. An individual's response is determined by many complex factors including environment, temperament, coping skills, nature of support networks, and prior adverse experiences (Bonanno, 2004; Masten, 2015). In other words, many people are resilient and able to "maintain a stable equilibrium" in the face of adversity (Bonanno, 2004, p. 20). The term "resilience" generally describes both the capacity for individuals to maintain healthy functioning after potentially traumatic events and to move forward while experiencing trauma-related symptoms (Southwick, Bonanno, Masten, Panter-Brick, & Yehuda, 2014). Various studies have documented that some children remain resilient even in the face of unrelenting, severe stress (Huntington, Buckner, & Bassuk, 2008; Masten, 2015). However, given the high rates of exposure to potentially traumatic events in the population, health and human service organizations have embraced the importance of implementing trauma-informed care. Trauma-informed approaches can help foster resilience by responding to the unique needs of people who have experienced trauma.

Trauma-informed care (TIC) is a strengths based approach grounded in understanding and responding to the potential impacts of trauma and creating opportunities for people to rebuild their sense of agency and control (Fallot & Harris, 2014; Guarino, Soares, & Konnath, 2007; Hopper, Bassuk, & Olivet, 2010). Trauma-informed organizations provide all services through the lens of trauma—a strategy that requires that all staff understand trauma and its consequences (Guarino, Soares, Konnath, Clervil, & Bassuk, 2009; Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). Implementation of TIC often requires transformation of the organization's culture and staff attitudes. TIC implies a leveling of power differentials, encouragement of choice and autonomy, primacy of trusting relationships, and inclusion of service users in governance of the organization—an approach that affirms the valuable perspective of service users and that they are experts in their own care (Hopper et al., 2010).

Although there is some consensus about the essential components of TIC, there is not a single definition nor a robust evidence base with fidelity measures, and implementing organizational trauma-informed care can be a challenging process with multiple barriers that must be addressed (Hopper et al., 2010; Yatchmenoff, Sundborg, & Davis, 2017). Although research in this area is limited, considerable attention has been focused on initial implementation activities—often beginning with the formation of a TIC workgroup that becomes the backbone and driver of the change process (Lang, Campbell, Shanley, Crusto, & Connell, 2016; Yatchmenoff et al., 2017). The workgroup develops a rigorous framework for assessment, planning, and evaluation that is actively supported by administrative leadership, includes all levels of the organization, and respects the voices of service users (Bryson et al., 2017; Jahn Moses, Glover Reed, Mazelis, & D'Ambrosio, 2003).

Bloom emphasizes that an essential part of the implementation process is for organizations to understand how they have been impacted by trauma. A critical part of this process is working through potential levels of mistrust and resistance to cultural change that have sometimes been created by past organizational practices (Bloom, 2007). Bloom discusses the importance of un-

derstanding how trauma has impacted leadership styles and group and individual performance:

A program cannot be safe for clients unless it is simultaneously safe for staff and safe for administrators. Lacking such a process and despite well-intentioned training efforts, there will be no true system transformation in systems that are now for the most part, "trauma organized" repeating, rather than healing, the injuries previously experienced by clients and staff. (Bloom, 2007, p. 2)

For organizations adopting TIC, evaluating implementation and monitoring progress are critical components of building best practices and creating an adequate infrastructure to support these activities. Despite the importance of this component and growing awareness of the value of evaluating trauma-informed service delivery and implementation, studies are limited, and few measures are available to systematically assess organizational TIC. The tools that exist (Chadwick Center for Children & Families, 2013; Fallot & Harris, 2014; Guarino et al., 2009; Hopper et al., 2010; National Council for Behavioral Health, 2014; SAMHSA, 2014; THRIVE, 2012) are primarily useful for initiating a process that guides the implementation of TIC. Most of these tools are lengthy, and with the exception of the THRIVE (2012) assessment (for children's behavioral health agencies), their psychometric properties have not been fully tested.

Standardized tools give organizations the ability to evaluate the relationship between specific approaches to care and service user outcomes. Recently, the Center for Social Innovation (C4) developed the TICOMETER, a brief instrument consisting of 35 items to address the need for measures with strong psychometric properties that assess the level of organizational TIC (Bassuk, Unick, Paquette, & Richard, 2017). Health and human service organizations can use the TICOMETER to measure the degree to which they are providing TIC across five domains (see measures below; Bassuk et al., 2017). In the original study, individual characteristics, such as demographics and job category, and agency level characteristics, such as agency size and number of months since the last trauma training, were collected with the aim of assessing the relative influence of these variables on the level of organizational trauma-informed care.

The purpose of this article is to add to our understanding of TIC implementation by examining the relationship between individual staff and agency characteristics and level of organizational TIC using data from the development of the TICOMETER. A few hypotheses drove the analyses. Given the importance of understanding trauma to implementing TIC, we hypothesized that agencies with less time since the last trauma training would have higher scores on the TICOMETER. We also hypothesized that agencies specializing in mental health and behavioral health services would show higher scores than other agency types. Finally, because the purpose of the TICOMETER is to measure organizational TIC rather than individual knowledge and skills, we hypothesized that scores would relate more strongly to agency factors than to individual factors. The following analyses provide critical information about which factors may be most important for successful implementation—filling an important gap in our knowledge of the barriers and facilitators to organizational TIC.

Method

Overview of Study Design

This is a secondary data analysis of a sample collected for the purpose of developing and psychometrically testing items that resulted in the TICOMETER, a five-domain measure of organizational trauma-informed care (Bassuk et al., 2017). In addition to asking the prospective TICOMETER items, the instrument development survey asked participants to answer questions about individual and agency characteristics. The individual respondents were then used to construct a three-level model with the five TICOMETER domains nested in individuals who were nested in agencies. The individual responses were then used to construct a three level statistical model. The five TICOMETER domains (the first level) are nested in individuals (the second level) are nested in agencies (the third level). This statistical model was then used to quantify the association between individual and agency level characteristics and an individual's assessment of their agency's level of trauma-informed care. All data analysis procedures were reviewed by the University of Maryland Intuitional Review Board.

Participants and Recruitment Procedure

The sample was recruited over a 3-month period through e-mail and telephone outreach, leveraging the networks of the TICOMETER instrument development team and an expert panel (Bassuk et al., 2017). The population of interest was staff working in the field of health and human services, including: addiction, mental health, and behavioral health; homelessness and housing; health care (community health centers, outpatient care, and hospitals); child welfare and foster care; domestic violence agencies; soup kitchens; and criminal justice institutions. The only agency inclusion requirement was to agree to help recruit up to 10 individuals from their agency to complete an online survey up to two times. In addition to the list of organizational contacts (123 sites total) generated by the Expert Panel and C4 staff, a recruitment letter was sent by e-mail to subscribers to C4's training institute, which at the time had approximately 6,000 contacts.

Sixty-seven agencies from across 22 U.S. states participated, representing a range of service settings including: substance use, mental health, and behavioral health; homelessness and housing; health care (i.e., community health centers, outpatient care, and hospitals); child welfare and foster care; and domestic violence agencies.

Sample

For this study, we analyzed the responses of 345 service providers from 67 agencies who had completed answers to the 35 items that were selected for the TICOMETER and had complete data with respect to the demographic and agency related questions. Sixty-one of the 79 individuals excluded because of missing data did not answer any individual or agency questions and so multiple imputation would not be appropriate. Analyses of the likelihood of missingness found that being White versus non-White was associated with having complete data. TICOMETER scores, other demographics, and agency characteristics were not associated with having missing data.

Measures

All data was collected through an online survey administered using Survey Monkey. Level of organizational trauma-informed care was

measured using the TICOMETER, a psychometrically validated instrument designed for use in health and human service organizations (Bassuk et al., 2017). The final 35 items of the TICOMETER were selected from a battery of 189 test items that were piloted with 424 providers (Bassuk et al., 2017). In developing the instrument, approximately 20% of participants from the initial sample of 424 were asked to retake the survey with the final set of 35 items to ensure test-retest reliability. The 35-item TICOMETER is divided into five domains: (a) building trauma-informed knowledge and skills; (b) establishing trusting relationships; (c) respecting service users; (d) fostering trauma-informed service delivery; and (e) promoting trauma-informed procedures and policies. This instrument provides domain-level scores based on the ratings of individual items by staff at all levels of an agency. The five domains have high item fit, reliability, and face and construct validity. The five domain-level scores can be combined into an overall score, although the psychometrics are strongest at the domain level. Each item is rated on a 4-point scale, indicating the extent to which respondents agree that their organization complies with the specific item (see Bassuk et al., 2017 for more information on the instrument development and its psychometric properties).

Respondents were also asked to report individual demographics and information about their organization. In addition to their age, gender, race/ethnicity, and education, they were asked about their job category and years of experience (see Table 1). Respondents were asked a series of questions about their organizations including: type of agency, number of employees, number of months since the last staff trauma training, history of completing TIC self-assessments, changes based on the results of the self-assessment, and whether the organization has a formal process for ongoing assessment. Items were chosen based on consultation with the Expert Panel and knowledge gained from the literature review that informed the development of the instrument.

Data Analysis

Data cleaning, data checks, univariate and bivariate analysis, and TICOMETER scoring were conducted in Stata 15 (StataCorporo, 2017). The TICOMETER's five domains were separately scored using a Graded Response Model with empirical Bayes means estimation of the latent dimensions with means fixed at 0 and SDs freely estimated (Samejima, 1997). To test the bivariate relationships between variables and the TICOMETER, we estimated analysis of variance (ANOVA) models testing the association between the demographic and agency characteristic and a mean of the five TICOMETER domains.

These dimensions and other variables were converted into a long dataset and then transferred to an R data frame. To estimate the effect of individual and agency characteristics on the TICOMETER, we estimated a three-level model with the five domains nested in individuals and individuals nested in agencies. To estimate this model, we used Bayesian estimation techniques as operationalized in rstanarm (Stan Development Team, 2017). We used a normal distribution with mean 0.00 and SD of 2.00 for the priors of the β parameters (e.g., regression coefficients), and a Cauchy distribution with a mean 0.00 and scale parameter of 5 for the model variance parameter (Gelman, Jakulin, Pittau, & Su, 2008). These priors represent reasonable values for parameter estimates and did not substantively change the results when compared with less informative priors. Bayesian estimation

Table 1
Characteristics of the TICOMETER Sample

Variable	Frequency	Percent	<i>p</i> -value (relation to TICOMETER)
Gender			.36
Female	282	77	
Male	69	19	
Other gender	15	4	
Race/ethnicity			.48
White	289	80	
Black	54	15	
Latinx/Hispanic	32	9	
Other	27	7	
Education			.89
Graduate degree	211	58	
Bachelor's degree	96	26	
Some college	39	11	
High school	5	1	
Job description			.01*
Case manager	106	29	
Administrator	97	27	
Clinical supervisor	48	13	
Mental health practitioner	48	13	
Clinician (RN, NP, MD)	27	7	
Social worker	27	7	
Other	11	4	
Type of agency			.00**
Mental health/behavioral health	215	51	
Homelessness/housing	158	37	
Addiction and substance use	76	18	
Community health center/healthcare	45	11	
Child welfare/foster care	34	8	
Domestic violence	30	7	
Hospital	18	4	
Other	37	9	
Agency size			.76
Less than 50 employees	124	29	
More than 50 but less than 500 employees	208	49	
More than 500 employees	89	21	
Last trauma training			.00**
Month	101	24	
3 Months	129	31	
6 Months	72	17	
1 Year	50	12	
Over a year	35	8	
Never	35	8	
Trauma self-assessment			
Agency completed a trauma self-assessment	153	36	.03*
Changes made following self-assessment	136	32	.04*
All administrators and staff participated	126	30	.04*
Service users participated	81	19	.03*

Note. RN = registered nurse; NP = nurse practitioner; MD = medical doctor. For type of agency and race, participants could select all that apply.

* $p < .05$. ** $p < .001$.

produces draws from the posterior distribution for each of the estimated parameters. While not producing traditional p values, these techniques do allow for a more natural interpretation of parameters and credible intervals (McElreath, 2016). In a Bayesian context, the probability of a particular parameter value is directly observed through sampling from the estimated posterior distribution. We used four chains and 1,000 draws per chain after burn-in, resulting in 4,000 observations per parameter. We then created a summary file with the 2.5%, 25%, mean, 75%, and 97.5% values of the parameter estimates drawn from the posterior distribution. We then plotted these values to show the mean and the range of the estimated parameter values.

Results

Characteristics of Participants

A total of 345 individuals from 67 agencies completed the survey items, the demographic items, and the agency characteristic questions and are included in the regression analysis. Number of respondents per agency ranged from one to 16 with an average of 6.1 respondents per agency. Table 1 shows the demographics of the sample. Consistent with human service sector demographics, the sample is primarily female and non-Hispanic White with a

mean age of 40 (*SD* 11.55 years). The sample is highly educated with 58% of the sample having a masters or doctorate degree and another 26% of the responding sample having a bachelor's degree. The majority of respondents in the sample reported that their job was primarily direct service or clinical, with case manager (29%) being the most frequently reported job by respondents. In addition to direct service roles, 27% reported being an administrator and another 13% reported having clinical supervisory roles. The ANOVA models testing the relationship between the TICOMETER and demographics suggest that only job descriptions are associated with differences in the scores on the five domains.

Characteristics of Agencies

Individual respondents were asked to classify their organization into one of several types of health and human service agencies. Table 1 shows the frequency and percent of individuals who endorsed characteristics of their agencies. About half (51%) of the sample reported working for a mental health/behavioral health agency, 37% for homelessness and housing agencies, followed by 18% for addiction and substance use agencies. Most individuals reported working for mid-sized agencies with between 50 and 500 employees. Most individuals reported having a trauma training in the last 3 months and only 8% reported never having a trauma training at their agency. This is not surprising given that the participating agencies all were interested in assisting with the development of this trauma-informed care instrument. More than a third (36%) of respondents reported that their agency had undergone a trauma-informed care self-assessment; however, only 19% reported that service users were part of that self-assessment. Thirty-two percent of the sample reported that they believed that their agency made changes following the self-assessment. Type of agency, timing of the last trauma training, and trauma self-assessment variables were all associated with differences in TICOMETER scores.

Multivariate Analysis

To evaluate the effect of person characteristics and agency characteristics, we estimated a Bayesian multilevel model with the five TICOMETER domains nested in individuals and individuals nested in agencies. The results from the final model are displayed in Figure 1. Compared with traditional maximum likelihood approach, Bayesian models require more detailed checking of the estimations convergence. This final model had the best predictive out of sample accuracy as estimated by the loo package (Vehtari, Gelman, & Gabry, 2017). Visual assessment of the trace plots and the autocorrelation plots for each of the parameters support good convergence of the model. Also, all parameters had potential scale reduction factor *R*hat values at 1.00 (the target value) and there was no evidence of divergent behavior from the Hamiltonian Monte Carlo estimating algorithm, providing further evidence that the chains converged (Betancourt, 2017).

Figure 1 shows the results of the estimation with the thin gray bar representing the 95% credible interval, the thicker black bar representing the 50% interval, and the dot representing the mean of the parameter draws. The benefit of Bayesian estimation is that these estimates have a natural interpretation: 95% of the estimated parameter values fell within the gray bars, 50% within the black

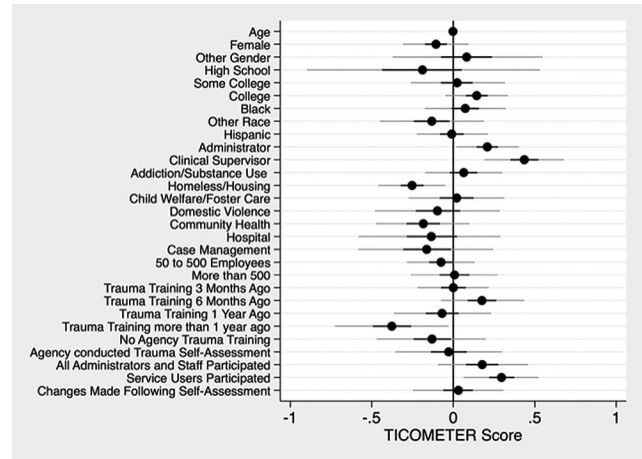


Figure 1. Regression model for TICOMETER scores. Dots represent the mean of coefficients across the samples, dark black lines represent the 75% credible interval and the light gray bar represents the 95% credible interval.

bars, and the mean across all 4,000 draws is at the black dot. The zero line represents no effect of the parameter on the scores of the TICOMETER. In the baseline model (not shown) with the nesting structure included but no covariates, the *SD* for the total variance of the TICOMETER was 0.82. The interclass correlation was calculated from the draws of the baseline model. Agencies accounted for 11% of the observed variance and persons 59% of the variance.

Age was unrelated to TICOMETER scores with almost all parameter draws at 0, while being female rather than male was associated with lower TICOMETER scores in 75% of the draws and higher scores in 25% of the draws. Most of the personal characteristics were unrelated or weakly related to TICOMETER scores, with the exception of education. Individuals with a college degree had an estimated mean of 0 or negative values in fewer than 10% of the draws, and the mean TICOMETER scores for this group were 0.15 higher, compared with those that had a graduate degree (representing a small effect size of 18% of a *SD* units). Administrators similarly had TICOMETER scores that averaged 0.2 points higher than clinical line staff, with less than 2.5% of the parameter draws at or above 0. Clinical supervisors had a mean parameter estimate of 0.44 units higher than clinical line staff, which is a medium effect size of 54% of a *SD* unit and no parameter draws at or below 0.

In general, agency characteristics were more strongly associated with differences in TICOMETER scores than individual characteristics. We used mental health agencies as the baseline for our analyses. Other than addiction/substance use agencies and child welfare/foster care agencies, all agencies had mean parameter values below those of mental health agencies, but in most cases the distribution of parameter estimates overlap with 0. The exception is for homelessness/housing agencies. Homeless agencies typically had negative parameter estimates suggesting lower TICOMETER scores compared with mental health agencies. Less than 1% of the parameter draws for homeless agencies were at or above 0, and the mean parameter estimate was -0.25 , representing a small effect size. Agency size did not affect TICOMETER scores.

Length of time from the last trauma training was associated with TICOMETER scores, but the results are somewhat inconsistent. Agencies that had a trauma training in the last month were used as the baseline. More recent trauma trainings were associated with higher scores. Agencies that had a training 6 months ago had 75% of the parameter draws with a positive value, compared with agencies that had a training 1 month ago, and had a mean of 0.18 higher TICOMETER scores compared with agencies that had a training in the last month—with over 90% of the parameters estimates having a positive value. Conversely, agencies that had trauma training 1 year ago or longer all had negative mean parameter values. When compared with agencies that had a training in the last month, agencies that had trauma trainings more than 1 year ago had a mean parameter estimate of -0.38 and over 95% of the parameter draws with a negative value. Similarly, agencies that had all administrators and staff participate in trauma self-assessments had higher mean parameter estimates (0.18), and over 75% of the draws had positive parameter values, when compared with agencies that did not include all administrators and staff in self-assessments. Agencies that had service users participate in the past trauma-informed care organizational self-assessments, according to individual staff self-report, had all positive parameter estimate draws and a mean TICOMETER score of 0.3 units higher compared with agencies that did not have service user participation, and fewer than 1% of draws at or below 0. This represents a small to medium effect size.

Discussion

Over the past two decades, our understandings of the short and long-term impacts of potentially traumatic events and of traumatic stress reactions have sparked the design and implementation of organizational TIC. However, health and human service agencies tend to see a gap between research and practice (Institute of Medicine Committee on Quality of Health Care in America [IOM], 2001), and this gap is often most pronounced in underresourced settings. As more health and human service agencies adopt a trauma-informed approach, it is vital to document the factors associated with successful implementation. To build knowledge in this area, we conducted secondary data analyses to examine factors associated with higher levels of organizational TIC in health and human service settings that serve individuals, families, and children. We used data gathered during the development of the TICOMETER, a brief instrument with strong psychometric properties that measures level of organizational TIC across five domains (Bassuk et al., 2017). The study included a convenience sample involving agencies in 22 states. To our knowledge, this is the first study to use a validated instrument to isolate agency and individual factors that influence the implementation of trauma-informed care across a sample of geographically diverse agencies.

The findings from this study suggest that agency characteristics are more strongly associated with effective implementation of organizational TIC compared with individual staff characteristics. While most of the estimated variance in TICOMETER scores was at the level of individuals, individual characteristics such as demographic variables of staff were only weakly associated with the level of organizational TIC, with one minor exception: individual educational level was related to higher levels of TIC. When assessing the level of TIC in their agency, administrators and super-

visors tended to view the level as higher than frontline staff. When service users were involved in past organizational trauma-informed care self-assessments, TICOMETER scores were also higher. Training was a critical factor; length of time since last trauma training was related to higher TICOMETER scores with a peak around 6 months. Moreover, when both staff and service users participated in the training, scores were higher.

Various limitations should be borne in mind when considering the findings. First, the data were collected as part of a psychometric study for the purpose of developing the TICOMETER. Respondents answered many more items than those currently in the TICOMETER and so some of the respondents may have developed some biases associated with prompting or fatigue not associated with the 35 item TICOMETER currently in use. A second and related limitation is that the sample was selected for the purpose of developing the instrument, not for studying individual and agency characteristics of trauma informed care; thus, the generalizability of the sample to other human services agencies is unclear. Finally, missing data could affect the models. Having missing data was only related to being non-White, compared with White; the implications of this is unclear.

The study findings support the perspective that organizational TIC requires a systems intervention in which staff at all levels of the agency are involved in the process of change. Every member of the community incorporates an understanding of trauma that translates into how they respond to service users. Successful adoption of TIC may require a culture change and shift in staff attitudes and values, from persons at the front desk to the clinical director and administrators.

Our study documented that the supervisory and higher level staff, including administrators and executives, tended to rate the level of TIC higher than frontline staff. This is not surprising given the daily challenges faced by direct staff and their more intimate knowledge of organizational routines and activities. Staff that are more removed from the immediate and often unrelenting stresses faced by service users may not be aware of these challenges and are more likely to overrate the level of TIC. This finding provides further support of the need to adopt a systems perspective in which all members of the agency are involved in the process of implementation. It complements the experience of practitioners and consultants in the field (Bloom, 2007; Yatchmenoff et al., 2017). For example, the TIC Work Groups should include staff from all levels of the organization.

Our results also supported the importance of including service users in the transformation process. We documented a strong association between service user involvement in organizational self-assessment processes and high levels of TIC. Respecting the perspective of service users, involving them in shared decision making, encouraging their feedback, and including them in adapting practices and policies implies that the staff values their input and understands that people with “lived experience” and experiential knowledge are often experts in their own care. However, including service users in the governance of an organization and leveling power differentials can be very challenging. Families who previously may have been viewed as “difficult and oppositional”—sometimes leading to a “you-them” adversarial interaction, are seen in the context of adapting to traumatic stress. The linchpin of services and the capacity to transform the culture lies in forming trusting relationships based on a fundamental respect for service

users, understanding the context of their lives, and knowledge of the impact of trauma. Settings serving children and youth face the unique challenge of affording young people control and collaboration through a developmentally appropriate lens. Many examples and resources exist that can help organizations use and adapt these approaches (Monson & Thurley, 2011; Nelson, Lord, & Ochocka, 2001; van Draanen et al., 2013; Winarski, Dow, Hendry, & Robinson, 2011).

Other findings indicated that compared with mental health agencies, respondents who described their organizations as related to homelessness or housing scored lower levels of TIC. This finding is also not surprising given that inadequate staffing, limited training and resources, and stigma threaten a program's ability to implement TIC (Mullen & Leginski, 2010; Olivet, McGraw, Grandin, & Bassuk, 2010). Comprehensive implementation requires funding for high quality, ongoing training for staff at all levels, time dedicated to rethinking policies and procedures, and resources for creating a safe and welcoming physical environment. A trauma-informed service milieu ensures service users have a voice and that they are treated respectfully and equally. Within residential settings, for example, this may be best accomplished by establishing a therapeutic milieu characterized by weekly community meetings in which staff and residents review interactions, practices, and policies. Meetings should encourage respectful interchanges in which conflicts are resolved and different perspectives—including cultural ones—are shared. Researchers and advocates have described best practices for implementing trauma-informed care in homeless service settings, and our findings support the need for additional work in this area (Guarino, 2014; Hopper et al., 2010).

Knowledge of trauma and its consequences are critically important for successfully implementing TIC in an organization. Ongoing staff training in the nature and impact of trauma and skills for responding to trauma survivors in ways that enhance feelings of control provide the foundation for most implementation approaches (Hopper et al., 2010). Our findings indicate that effective implementation increases over the first 6 months of training—peaking at 6 months and then beginning to decay continuously over the next year and after. Changes in the staff culture to support TIC seem to occur gradually over the first 6 months with reflection and practice. However, this is short-lived. Similar decays in knowledge and practice have been documented with various evidence-based practices (EBPs), including motivational interviewing (Barwick, Bennett, Johnson, McGowan, & Moore, 2012; Schwalbe, OH, & Zweben, 2014) and critical time intervention (Olivet, Zenger, Greene, Kenney, & Herman, 2016). Our findings and experience with various EBPs indicate the importance of ongoing training that can take many forms but are necessary to sustain the initial positive effects. Various programs have provided intermittent webinars, consultation, and trauma coaches who provide ongoing support on-site and/or virtually. Our findings suggest that without training that is ongoing, interactive and experiential, the gains of the initial training will diminish and may be lost.

Research has begun to show that trauma-informed service settings achieve better outcomes (Cocozza et al., 2005; Finkelstein et al., 2005; Morrissey et al., 2005; Noether et al., 2007; see Hopper et al., 2010 for a review). In addition, studies show positive impacts on staff. Hales, Nochajski, Green, Hitzel, and Woike-Ganga (2017) concluded that following implementation of TIC,

staff satisfaction increased, particularly regarding implementation of agency goals, relationships with other staff, connection to the workplace, and positive views of their work. These findings were related to increased collaboration, flattening of organizational hierarchies, and organizational commitment (Hales et al., 2017; Koys, 2001; Meyer, Stanley, Herscovitch, & Topolnysky, 2002). They hypothesized that this would decrease staff burnout, increase staff retention rates, and improve performance.

Conclusion

As more health and human service agencies adopt a trauma-informed approach, it is vital to integrate the factors associated with successful implementation to improve client outcomes and support positive working environments for staff. To our knowledge, this is the first study to use a validated instrument to isolate facilitators and barriers to trauma-informed care across multiple agencies. It highlights the importance of robust cultural changes, service user involvement at all levels of the organization, flattening power differentials, and providing ongoing experiential training. Our analyses were limited to variables available in a secondary data set, and additional research is critical for identifying other factors that support the implementation of high levels of TIC in health and human service organizations.

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