

FROM THE DSP PERSPECTIVE: EXPLORING THE USE OF PRACTICES THAT ALIGN
WITH TRAUMA INFORMED CARE IN IDD ORGANIZATIONS

John M. Keesler

Corresponding Author:

John M. Keesler, PhD

jkeesler@iu.edu

Indiana University Bloomington

School of Social Work

1105 E. Atwater

Bloomington, Indiana 47401

From the DSP Perspective: **Exploring the Use of Practices that Align with Trauma-Informed Care in IDD Organizations**

Direct support professionals (DSPs) comprise the central workforce for organizations that support individuals with intellectual and developmental disabilities (IDD). Given the vast responsibilities of their positions – from activities of daily living to fulfillment of individual goals - DSPs are vulnerable to work-related stress (Bogenschutz, Hewitt, Nord, & Hepperlen, 2014; Hickey, 2014). Extensive research has identified the association between organizational factors and stress among DSPs, including: organizational dysfunction and understaffing, insufficient orientation and training, lack of teamwork and support from management and coworkers, lack of clarity regarding role and organizational mission, excessive work responsibilities and low pay (Bogenschutz et al., 2014; Chung & Harding, 2009; Hall & Hall, 2002; Kormann & Petronko, 2004; Mascha, 2007; Skirrow & Hatton, 2007). Trauma-informed care (TIC) has emerged as a model for organizational culture, with implications for clients *and* service providers (Fallot & Harris, 2008). Although Keesler (2014) proposed the integration of TIC with IDD organizations, there is a dearth of research regarding the extent to which IDD organizations generally utilize practices that are consistent with TIC with DSPs. The present study focuses on the use of trauma-informed practices from one angle: the perspective and experience of the DSP workforce.

Organizational Culture

Drawing from the broader literature, organizational culture refers to the beliefs, values, and norms embedded in the daily operations of an organization that guide employee actions (Aarons & Sawitzky, 2006; Glisson & James, 2002; Hemmelgarn et al., 2006). The culture is created by interactions among staff, clients, and administration, and shaped by leadership

(Conceicao & Altman, 2011; Giberson et al., 2009; Harrington, 2011). The culture of an organization influences its overall capacity, including the quality and outcomes of services, as well as staff commitment, satisfaction, and retention (Hemmelgarn et al., 2006; Glisson & Green, 2010; Shim, 2010).

Organizational culture can enhance or hinder DSP performance by buffering or exacerbating the effects of stress (Broadhurst & Mansell, 2007; Gillett & Stenfert-Kroese, 2003; Skirrow & Hatton, 2007). Research has noted the significant influence of organizational factors, beyond the impact of personal characteristics (e.g. age and education), on DSPs' work experiences and turnover (Choum, Kroger, & Lee, 2010; Disley, Hatton & Dagnan, 2012; Hewitt et al., 2008; Rose, 2009). DSPs' job satisfaction and commitment have been associated with organizational cultures that match their needs and that are congruent with personal values (Disley et al., 2012; Leiter & Maslach, 2009; Thompson & Rose, 2011). For example, organizations that foster communication and trust between DSPs and supervisors have been associated with lower rates of burnout and higher engagement with individuals with IDD (Giberson et al., 2009; Mansell, Beadle-Brown, Whelton, Beckett, & Hutchinson, 2008). Notably, considerations such as communication and trust are fundamental to TIC.

Trauma-informed Care

Trauma-informed care is a specific model for organizational culture that was developed in response to a growing awareness of the prevalence and impact of trauma across the lifespan, especially early life adversity and its association with compromised wellbeing later in life (Anda et al., 2006; Bloom, 2006; Butler, Critelli, & Rinfrette, 2011; Fallot & Harris, 2008). It emphasizes a reduction in re-traumatization that frequently arises from traditional organizational structures, dynamics, and practices (Bloom, 2006; Butler et al., 2011). Harris and Fallot (2001)

defined TIC as an organizational culture and system-wide approach based upon five principles: choice, collaboration, empowerment, safety and trustworthiness. These principles are intended to be exemplified in practices throughout and across organizational policies, practices and dynamics, with implications for both service users and staff members (Bloom, 2006; Brown, Baker, & Wilcox, 2012; Fallot & Harris, 2008).

The foundation and conceptualization of TIC are grounded in earlier theories of trauma (Janoff-Bulman, 1989; Herman, 1997) and related to symptoms associated with trauma and post-traumatic stress disorder (American Psychiatric Association, 2013). Given the nature of trauma (i.e. unpredictable, overwhelming, and unavoidable), a person is often left feeling unsafe and disempowered following a traumatic experience. The person may feel violated, unable to make sense of the event(s), and avoid experiences that are perceived as unsafe or untrustworthy (Saakvitne, Gamble, Pearlman, & Tabor Lev, 2000). Thus, TIC focuses on re-establishing fundamental aspects of the human experience (i.e. safety, trustworthiness, choice, collaboration, and empowerment) that were compromised by any traumatic experiences a person may have had (Fallot & Harris, 2008; Hales, Kusmaul, & Nochajski, 2017). By promoting emotional and physical safety for staff, enhancing opportunities for their autonomy, and fostering their participation in decision-making, TIC has the potential to increase staff psychological wellness and staff productivity (Hales et al., 2017; 2019).

In the general population, TIC has been associated with considerable benefits for those receiving services, including: reduced use of restraints and seclusion among youth in psychiatric care (Azeem, Aujla, Rammerth, Binsfield & Jones, 2011; Bloom et al., 2003); increased client satisfaction, increased staff consistency in approach and decreased counter-aggressive actions between clients and staff (Bloom et al., 2003); and, increased ability among staff to support

clients with trauma histories (Giller, Vermilyea & Steele, 2006). Although TIC has historically been perceived as client-focused, emerging evidence has highlighted the benefits of trauma-informed organizational practices for staff members. Thus, TIC has been associated with increased professional quality of life among workers, more favorable experiences between staff and management, increased awareness of personal trauma and need for self-care, and greater sense of comradery and support among colleagues (Damian, Gallo, Leaf, & Mendelson, 2017; Hales, Nochajski, Green, Hitzel, & Woike-Ganga, 2017).

Although early findings indicate that workers' perceptions of trauma-informed practices are unrelated to personal characteristics, education and position within an organization may be important to consider (Kusmaul, Wilson, & Nochajski, 2015). Kusmaul and colleagues noted that persons with higher levels of education and higher positions (i.e. leadership) had more favorable perceptions of the organization. Further, they found differences between the principles of TIC, organizations did well at ensuring safety but were less often successful with collaboration between leadership and staff.

For IDD organizations, the integration of TIC was first discussed in 2014 as a viable response to a growing awareness of trauma and adversity among individuals with IDD and consistent with current philosophies and practices in IDD services (Keesler, 2014). Initial research identified an association between TIC and a reduction in challenging behavior, as well as decreased use of physical restraints and PRN medications, among individuals with IDD, as well as an association with increased DSP work satisfaction (Keesler, 2016; Keesler & Isham, 2017). However, despite increased attention to adversity and trauma in the lives of individuals with IDD and DSPs (Keesler, 2018; Mason-Roberts et al., 2018; Santoro, Shear, & Haber, 2018; Wigham & Emerson, 2015), there remains a lack of knowledge regarding the degree to which

IDD organizations use practices that align with the principles of TIC. Although IDD organizations may not explicitly identify practices as *trauma-informed*, they may inadvertently follow the principles of TIC (Wolf, Green, Nochajski, Mendel & Kusmaul, 2013). The current study explores the extent to which IDD organizations implement trauma-informed practices with DSPs. More specifically, this study sought to answer the following questions:

- (a) Do IDD organizations use practices that align with TIC with DSPs?
- (b) Does the presence of TIC practices within organizations differ by principle (i.e. safety, choice, collaboration, empowerment, and trustworthiness)?
- (b) Are DSPs' perceptions of trauma-informed organizational culture associated with their personal demographics?

Methodology

An online survey, comprised of demographic items and multiple measures, was created to understand individual and organizational factors that potentially influenced the experiences of DSPs working in IDD organizations. One measure within the survey assessed organizational culture using a TIC framework through the perception and experiences of DSPs. The data from that measure is the focus of the current study. The research was reviewed and approved by the Institutional Review Board at the researcher's university.

Measurement. The trauma-informed organizational culture measure is comprised of 36 items across five subscales that reflect each of the five principles of TIC as defined by Fallot and Harris (2001): choice, collaboration, empowerment, safety, and trustworthiness. The original authors developed the measure in consultation with Roger Fallot (Kusmaul, Wilson, & Nochajski, 2015). Examples of items include: "Staff members from different levels participate in committees", and, "If I am upset at work, I know that other staff and supervisors will be

understanding.” All items are displayed in Table 2. Item responses are based on a 5-point Likert-type scale with “5” being most favorable (i.e. “strongly agree”). Several studies have explored the psychometric properties of the measure. Kusmaul et al. (2015) noted that the measure demonstrated good reliability across subscales with alpha coefficients ranging from .721 to .830 (Kusmaul et al., 2015). A subsequent study obtained similar findings, with alpha coefficients ranging from .61 to .84 for the subscales, and .94 for the full scale (Hales, Kusmaul, & Nochajski, 2017). Through a series of factor analyses and structural equation modeling, Hales and colleagues (2017) identified strong relationships between the principles of TIC and noted the possible utility of a single construct for TIC.

For the present study, three of the 36 items on the measure were excluded (i.e. two items were duplicates and one item lacked clarity). In addition, 12 of the remaining 33 items were revised with permission from the original authors to be more positively worded as, during the preliminary stages of this study, administration at several agencies expressed concern that items were too negative (e.g. original item: “I fear for my safety while at work.”; revised item: “I feel safe while at work.”). Alpha coefficients for the subscales using the revised items in the present study ranged from .760 to .867, thus demonstrating similar yet slightly improved reliability compared with the original measure (Kusmaul et al., 2015).

Data collection. Using a cross-sectional design, purposive and snowball sampling were used to recruit prospective survey respondents from eight agencies serving individuals with IDD (i.e. 7 in New York State and 1 in Alaska) with which the researcher had prior communication and two online social media groups for DSPs (i.e. one at the state-level and the other at the national-level). The inclusion criteria required survey respondents to have been employed as a DSP for at least 30 days and to have worked in a certified/licensed setting for individuals with

IDD (e.g. residential, day, and educational services). Given the research interest on organizational culture, participation was restricted to these work environments rather than including all possible settings within which DSPs work (e.g. private family homes).

The researcher worked with a single point of contact (i.e. a designated member of the leadership team) at each agency to identify the best method for disseminating study information to recruit DSPs. As such, a few different methods were used (e.g. flyers sent electronically via email and hard-copy flyers attached to paychecks). The point of contact disseminated recruitment information twice within a given agency and the primary researcher made monthly online posts with the two targeted social media groups. Recruitment and data collection lasted for 6 months. Respondents provided electronic consent to affirm that they met the inclusion criteria and agreed to voluntarily participate in the research. Survey participation was incentivized by a drawing in which respondents were eligible to win one of 75 gift cards (i.e. \$25 each) by providing their contact information via a separate link at the end of the survey. Utilizing a separate link ensured anonymity of their responses to the survey items.

Data analysis. All data were downloaded from the online platform (i.e. SurveyMonkey) and analyzed using IBM SPSS Statistics 25. Frequencies were calculated to summarize DSP demographic data. Scores for individual items on the organizational culture measure were recoded to contrast DSPs who *agreed* (i.e. scores of 4 and 5) with those who *disagreed* (i.e. scores of 1 and 2). A series of 10 paired t-tests with Bonferroni adjustment ($p < .005$) were calculated to identify potential differences between the five principles of TIC using corresponding subscale scores (i.e. the mean of raw responses to items on a given subscale). Effect sizes (i.e. Cohen's d) were calculated for significant differences (Cohen, 1988). A regression model was estimated to ascertain the relationship between demographic variables and

the total organizational culture score calculated from the mean of all item responses. Race was recoded for the regression analysis to compare DSPs who identified as White with DSP who represented diverse ethnic groups (e.g. African American, Hispanic, and Asian) given the predominance of DSPs who identified as White.

Results

Sample

Sample demographics are displayed in Table 1. The sample was comprised of 380 DSPs (84.2% women; 81.8% White) from a total of 138 organizations supporting individuals with IDD. Most DSPs were younger than 40 years of age (62.3%) and had a college degree (55%). In addition, a majority worked fulltime (85.5%) and in residential settings (65.8%). More than half of DSPs (51.2%) had been in their position for two years or less.

Do IDD Organizations Use TIC Practices?

The first aim of the study was to determine if IDD organizations used practices that aligned with TIC. A contrast of DSP responses (i.e. agreed vs. disagreed) to items on the trauma-informed organizational culture measure is displayed in Table 2. The percentages of DSPs agreeing with each item ranges from a low of 31.7% (i.e. administration shares decision-making with staff) to a high of 90.2% (i.e. every day at work, I have the chance to make a real difference). The five items that DSPs most often endorsed reflected their ability to make a difference and their sense of physical safety while at work. In contrast, the five items that DSPs least often agreed with centered around leadership (e.g. evaluating and supporting staff; listening to and including staff).

Are there Differences Between the Principles of TIC within IDD Organizations?

The second aim of the study was to determine if organizational practices differed

between the five principles of TIC. The mean score for each subscale, from highest to lowest, are: safety ($M = 3.80$, $SD = .68$); empowerment ($M = 3.66$, $SD = .83$), trustworthiness ($M = 3.45$, $SD = .87$), choice ($M = 3.42$, $SD = .88$), and collaboration ($M = 3.12$, $SD = .96$). A series of paired t-tests were calculated to identify any significant differences between subscale scores. The results of the t-tests are displayed in Table 3. All subscale comparisons were statistically significant ($p < .005$), except for the comparison of the trustworthiness and choice subscales ($p > .10$). The mean for the safety subscale was significantly higher than all other subscale means. Likewise, the mean for the empowerment subscale was significantly higher than trustworthiness, collaboration, and choice subscales. Effect sizes for significant differences ranged from .23 to .94, thus suggesting small to very large observable differences, respectively (Cohen, 1988). The largest effect sizes were observed for differences between safety and collaboration ($d = .94$), as well as empowerment and collaboration ($d = .94$).

Are DSPs' Perceptions of TIC Influenced by Personal Demographics?

The third aim of the study was to determine if DSPs' characteristics influenced their perceptions of organizational culture. A multiple regression model was estimated to ascertain if DSP demographic variables predicted their perception of the organizational culture using the total scale score. Results are displayed in Table 4. The model accounted for about 4% of variance in DSPs' perception of organizational culture. Individual demographics, as measured in this study, had little influence on DSPs' perception of the organizational culture. Only ethnicity was a significant predictor ($p = .023$). DSPs who were **racially diverse** had more favorable perceptions of the organizational culture ($M = 3.71$; $SD = 0.77$) than DSPs who were White ($M = 3.47$; $SD = 0.70$).

Discussion

Previous literature has recommended the integration of TIC within IDD organizations (Keesler, 2014), however, there has been a lack of research exploring the extent to which these organizations generally use practices that are consistent with TIC. Although TIC has most often been associated with people receiving services, the present study queried trauma-informed organizational practices with the workforce (i.e. DSPs). To the author's knowledge, this is the first time such an inquiry of broad organizational practices has been made within the IDD field. It is worth noting, however, that similar studies have been conducted among the workforce in non-IDD organizations (Kusmaul et al., 2015; Hales, Nochajski, et al., 2017; Hales et al., 2019).

The results of this study suggest that IDD organizations use, to *some* extent, practices that align with the principles of TIC with DSPs. Survey responses demonstrated a range of experiences across individual items on the measure and across the five principles of TIC. Only 6 items were favorably endorsed by 75% or more of DSPs. These items were from 3 different principles and were associated with DSPs' sense of safety in their work environment, having the ability to make a difference through their work, and confidentiality of personal information. Based on the results, it is evident that organizations are strongest in the areas of safety (e.g. physical and emotional safety) and empowerment (e.g. the ability to make a difference each day and that their experience matters). Although practices defined as *trauma-informed* often overlap with best practices (e.g. promoting safe environments and being strengths-based), situating the present findings within the broader context of IDD services may provide additional insight (Hanson & Lang, 2016). Individuals with IDD can be at risk of increased vulnerability and repeated victimization (Keesler, 2014; Wigham & Emerson, 2015), and as such, the importance of physical and emotional safety are likely well-engrained in organizational practices and may have a carry-over effect with DSPs. Further, the nature and critical role of direct support work

may lead to a greater sense of empowerment among DSPs (Hickey, 2010, 2014; Lunsky, Hastings, Hensel, Arenovich, & Dewa, 2014).

In contrast, less than 50% of DSPs positively endorsed items on the collaboration subscale. DSPs felt least positive about leadership and administration sharing decision-making with them, listening to them, and valuing their input. Similarly, findings suggest a greater need for involvement of people from across an organization on committees and the use of a consistent method for evaluating staff performance. It is important to query the extent to which such perceived lack of collaboration between leadership and DSPs might impact DSPs' job satisfaction, quality of work, and subsequent retention. Although this is beyond the scope of the present study, there is a stark contrast between DSPs feeling that they can make a difference each day to not being part of the decision-making process in their organization.

The present findings with regard to collaboration are supported by previous research (Micke, 2015; Edelstein & Seavey, 2009). Given that DSPs are immediately involved with the individuals that these organizations support and are strong advocates for individuals with IDD (Bogenschutz et al., 2014; Friedman, 2018), it is arguably of critical importance for DSPs to be involved at all levels of the organization and be engaged in decision-making. Although leadership may need to be more intentional in their efforts to include DSPs, it may be the dispersion of program sites across a geographic region that creates a barrier to DSPs feeling heard and involved (Edelstein & Seavey, 2009). Nonetheless, ongoing advances in technology might be the foundation for improved communication and a vehicle through which leadership can provide additional support to DSPs.

Using the same measure as the current study, Kusmaul and colleagues (2015) explored workforce experiences across non-IDD organizations, including: community action, mental

health and chemical dependency, hospitals, schools, and social services. They noted that subscale means for the five principles of TIC ranged from 3.61 to 4.05, compared with 3.12 to 3.80 in the present study. (The rank order of subscale means was consistent between studies, with safety being the highest and collaboration being the lowest.) Although their findings suggest a greater utilization of trauma-informed practices than the present study, the reasons for such differences are unclear. It is possible that the emphasis on TIC at the federal level by organizations such as Substance Abuse and Mental Health Services Administration (SAMHSA, 2014) has had a greater influence on non-IDD organizations, particularly given the frequent division between mental health services and IDD services.

The differences between subscale means (e.g. safety vs. empowerment) in the present study are consistent with Kusmaul et al. (2015). In both studies, safety was significantly higher than all other subscale means, and empowerment was significantly higher than trustworthiness, choice, and collaboration. Although Kusmaul et al. observed differences associated with education level, such that staff members with graduate level degrees perceived the organizational culture more favorably, education in the present study was unrelated with the overall perception of the organizational culture. Further, Kusmaul et al. noted that persons in leadership positions had more favorable perceptions than direct care staff. This is important to note as incongruence between the perspective of leadership and that of the direct workforce can result in tension and differences in prioritization and allocation of organizational resources. For example, if leadership does not identify concerns with some aspect of the organizational culture, they are less likely to respond with strategies toward resolution or improvement. In contrast, leadership can foster more favorable organizational cultures by understanding the perceptions of individual staff members (Shim, 2010; Zohar & Luria, 2010). Although the present study only considered

the perspectives of DSPs, it is important for future research to consider the perspectives of leadership as well.

DSPs' perceptions of organizational culture were largely unrelated to their demographic characteristics, except for ethnicity. DSPs of diverse ethnic groups expressed more favorable perceptions of the organizational culture than DSPs who identified as White. Previous research on trauma-informed organizational culture did not consider differences associated with ethnicity because a lack of diversity in their samples (Hales et al., 2017; Kusmaul et al., 2015). However, related research has identified differences in perception associated with persons' ethnicity (Ely & Thomas, 2001; Konold, Cornell, Shukla, & Huang, 2017; Singh, Winkel, & Selvarajan, 2013). Ely and Thomas (2001) noted that when organizations valued diversity in their practices, diverse employees felt valued and demonstrated commitment to the organization. Although the measure used in this study did not consider an organization's value of diversity, it is possible that the broader context of an IDD organization, imbued with person-centered planning and inclusion for people with IDD, may have an impact on DSPs' sense of inclusion associated with diversity. Additional research with a more diverse sample is warranted to better understand the ethnic differences.

Limitations

It is important to consider the results of the present study within the context of its limitations. The psychometric properties of the TIC measure are emergent; as such, it is unclear if what was measured truly reflects the five principles of TIC as defined by Fallot and Harris (2001). Further, despite a difference in focus, the measure demonstrates similarities with other TIC measures that have recently emerged in the literature [e.g. TICOMETER and the Attitudes Related to Trauma-Informed Care (ARTIC)], including an emphasis on relationships, self-

efficacy, and support at work (Bassuk, Unick, Paquette, & Richard, 2017; Baker, Brown, Wilcox, Overstreet, & Arora, 2016). Although the current measure was developed in collaboration with Falot and based on previous theoretical framework, future research should work towards further establishing its psychometric properties (e.g. construct validity; Western & Rosenthal, 2003).

Various recruitment methods were used in the study and, as a result, the findings reflect the perspectives of DSPs who likely provide different levels of support and services across multiple organizations in the IDD field. Although this study is preliminary and provides an overview of DSPs' perspectives, it does not allow for an in-depth analysis of organizational culture at a given agency or the influence of differences across the DSP workforce. In addition, the inclusion criteria for the study afforded only DSPs who worked in certified/licensed settings such as group homes, day programs and vocational settings to participate. It is important to note that many DSPs work in other settings, such as private family homes or individual's apartments, and their perception of organizational practices may be influenced by distance or other factors.

This study did not consider whether DSPs had received training in TIC or if their organizations espoused to be trauma-informed. However, given that TIC in the field of IDD is relatively new (Keesler, 2014), it is plausible that formal efforts to become trauma-informed have been marginal among IDD organizations. Further, although the study describes the presence of practices consistent with TIC, it does not identify the implications of such practices for DSPs (e.g. employment satisfaction and retention) or the quality of life for individuals with IDD. Future inquiry should consider the experiences and perspectives of individuals with IDD and organizational leadership, as well as the proximal and distal impact of TIC on outcomes for DSPs and individual. Thus, additional research, particularly studies using experimental and

longitudinal designs, is warranted to understand the full impact of a trauma-informed organizational culture in IDD services.

Conclusion

Organizations have a responsibility to promote the wellbeing of their workforce (Grant & Kinman, 2014). As such, an emphasis on practices that align with TIC may be an appropriate response among IDD organizations, particularly given the increased risk of adversity and trauma among individuals with IDD and DSPs (Isobel, 2016; Keesler, 2018; Wigham & Emerson, 2015). The present study highlights a foundation for TIC in the current utilization of trauma-informed practices with DSPs. However, the extent to which trauma-informed practices are used with individuals with IDD and the proximal and distal effects of TIC for an entire organization have yet to be fully understood. Nonetheless, from DSPs' perspectives, safety and empowerment are the principles of TIC that are most strongly noted in organizational practices and likely mirror the broader foci in IDD services. The results of this study suggest a particular need for emphasis on collaboration between leadership and DSPs, should organizations consider initiatives to adopt or promote trauma-informed practices.

Recent research has suggested that the principles of TIC are strongly correlated and supported by a common factor. As such, progress in one domain will likely lead to enhancement in others (Hales et al., 2017). This is an important consideration as organizational change can be a daunting task. As such, as organizations move forward with becoming trauma-informed, they might strategize their efforts and focus on aspects of TIC – such as collaboration between leadership and DSPs - at a given time. By doing so, the process of becoming trauma-informed becomes more manageable for organizations that might otherwise be overwhelmed by daily operations.

Motivation and readiness to adopt TIC are critical to the success of organizational change efforts and have been significantly correlated with persons' attitudes toward TIC (Marvin & Robinson, 2018). Providing persons at all levels of an organization, particularly leadership, with education on TIC and its benefits for individuals receiving services and those providing them can be an essential strategy to increase personnel buy-in (Marvin & Robinson, 2018). Additional factors to consider, include: prioritization of TIC by leadership, providing ongoing training and supervision to staff, assessing and reviewing data for ongoing improvement, aligning policies and practices within a trauma-informed framework, and interprofessional and interorganizational collaboration and sharing of information (Bryson et al., 2017; Hanson & Lang, 2016).

Given the challenges with recruitment of prospective DSPs, it is prudent for organizations to do what they can to retain DSPs once they hire them. Although the full impact of TIC has yet to be realized and additional research is needed to more rigorously define and evaluate its efficacy (Becker-Blease, 2017), it may be important to consider how TIC might be part of the solution to the historic and ongoing struggle with DSP burnout and turnover.

References

- Aarons, G., & Sawitzky, A. (2006). Organizational climate partially mediates the effect of culture on work attitudes and staff turnover in mental health services. *Administration and Policy in Mental Health and Mental Health Services Research, 33*, 289-301. Doi: 10.1007/s10488-006-0039-1
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: Author.
- Anda, R. F., Felitti, V. J., Walker, J., Bremner, J. D., Perry, B. D., Dube, S. R., & Giles, W.H. (2006). The enduring effects of abuse and related adverse experiences in childhood: A convergence of evidence from neurobiology and epidemiology. *European Archives of Psychiatry and Clinical Neurosciences, 56*(3), 174-186. Doi: 10.1007/s00406-005-0624-4
- Azeem, M. W., Aujla, A., Rammerth, M, Binsfeld, G., & Jones R. B. (2011). Effectiveness of six core strategies based on trauma informed care in reducing seclusions and restraints at a child and adolescent psychiatric hospital. *Journal of Child and Adolescent Psychiatric Nursing 24*, 11–15. Doi: 10.1111/jcap.12190
- Baker, C. N., Brown, S. M., Wilcox, P. D., Overstreet, S., & Arora, P. (2016). Development and psychometric evaluation of the Attitudes Related to Trauma-Informed Care (ARTIC) scale. *School Mental Health, 8*, 61-67. Doi: 10.1007/s12310-015-9161-0
- Bassuk, E. L., Unick, G. J., Paquette, K., & Richard, M. K. (2017). Developing an instrument to measure organizational trauma-informed care in human services. *Psychology of Violence, 7*(1), 150-157.

- Becker-Blease, K. A. (2017). As the world becomes trauma-informed, work to do. *Journal of Trauma and Disassociation, 18*(2), 131-138. Doi: 10.1080/15299732.2017.1253401
- Bloom, S. L. (2006). *Organizational Stress as a Barrier to Trauma-Sensitive Change and System Transformation*. National Association of State Mental Health Program Directors. Retrieved from <http://www.nasmhpd.org/publications.cfm>
- Bloom, S. L., Davis, M., Farragher, B., McC orkle, D., Martini, K., Wellbank, K. (2003). Multiple opportunities for creating sanctuary. *Psychiatric Quarterly, 74*, 173-190. Doi: 10.1023/a:1021359828022
- Bogenschutz, M. D., Hewitt, A., Nord, D., & Hepperlen, R. (2014). Direct support workforce supporting individuals with IDD: Current wages, benefits, and stability. *Intellectual and Developmental Disabilities, 52*(5), 317-329. doi:10.1352/1934-9556-52.5.317
- Broadhurst, S. & Mansell, J. (2007). Organizational and individual factors associated with breakdown of residential placements for people with intellectual disabilities. *Journal of Intellectual Disability Research, 51*, 293-301. Doi: 10.1111/j.1365-2788.2006.00876.x
- Brown, S. M., Baker, C. N., & Wilcox, P. (2012). Risking connection trauma training: A pathway toward trauma-informed care in child congregate care settings. *Psychological Trauma: Theory, Research, Practice, and Policy*, 1-9. Advance online publication. doi: 10.1037/a0025269
- Bryson, S.A., Gauvin, E., Jamieson, A., Rathgeber, M., Faulkner-Gibson, L., Bell, S., Davidson, J., Russel, J., & Burke, S. (2017). What are effective strategies for implementing trauma-informed care in youth inpatient psychiatric and residential treatment settings? A realist systematic review. *International Journal of Mental Health Systems, 11*(36). Doi: 10.1186/s13033-017-0137-3

- Butler, L. D., Critelli, F. M., & Rinfrette, E. S. (2011). Trauma-informed care and mental health. *Directions in Psychiatry, 31*, 197-209.
- Choum, Y., Kroger, T., & Lee, Y. (2010). Predictors of job satisfaction among staff in residential settings for persons with intellectual disabilities: A comparison between three residential models. *Journal of Applied Research in Intellectual Disabilities, 23*, 279-289.
- Chung, M.C., & Harding, C. (2009). Investigating burnout and psychological well-being of staff working with people with intellectual disabilities and challenging behavior: The role of personality. *Journal of Applied Research in Intellectual Disabilities, 22*, 549-560.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. New York, NY: Routledge Academic.
- Conceicao, S. C. O., & Altman, B. A. (2011). Training and development process and organizational culture change. *Organization Development Journal, 29*, 33-43.
- Damian, A., Gallo, J., Leaf, P., and Mendelson, T. (2017). Organizational and provider factors in implementation of trauma informed care after a city wide training: an explanatory mixed methods assessment. *BMC Health Services Research, 17*(1), art. No. 750.
Doi:10.1186/s12913-017-2695-0
- Disley, P., Hatton, C., & Dagnan, D. (2012). Inputs and outcomes: What do staff in services for people with intellectual disabilities perceive they bring to and receive from their work-based relationships? *Journal of Intellectual Disabilities, 16*(4), 297-306.
- Edelstein, S., & Seavey, D. (2009). *The need for monitoring the long-term care direct service workforce and recommendations for data collection*. Washington, DC: National Direct Service Workforce Resource Center.

- Ely, R. J., & Thomas, D. A. (2001). Cultural diversity at work: The effects of diversity perspectives on work group processes and outcomes. *Administrative Science Quarterly*, 46, 229–273. doi:[10.2307/2667087](https://doi.org/10.2307/2667087)
- Fallot, R., & Harris, M. (2008). Trauma-informed approaches to systems of care. *Trauma Psychology Newsletter*, 3(1), 6–7.
- Friedman, C. (2018). Direct Support Professionals and Quality of Life of People with Intellectual and Developmental Disabilities. *Intellectual and Developmental Disabilities*, 56(4), 234-250. <https://doi.org/10.1352/1934-9556-56.5.234>
- Giberson, T. R., Resick, C. J., Dickson, M. W., Mitchelson, J. K., Randall, K. R., & Clark, M.A. (2009). Leadership and organizational culture: Linking CEO characteristics to cultural values. *Journal of Business Psychology*, 24, 123-137. Doi: 10.1007/s10869-009-9109-1
- Giller, E., Vermilyea, E., & Steele, T. (2006). Risking connection: Helping agencies embrace relational work with trauma survivors. *Journal of Trauma Practice*, 5, 65-82. Doi: 10.1300/j189v05n01_05
- Gillett, E., & Stenfert-Kroese, B. (2003). Investigating organizational culture: A comparison of a 'high' - and a 'low' - performing residential unit for people with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*, 16, 279-284. Doi: 10.1046/j.1468-3148.2003.00170.x
- Glisson, C., & Green, P. (2010). Organizational climate, services, and outcomes in child welfare systems. *Child Abuse and Neglect*, 35, 582-591. Doi: 10.1016/j.chiabu.2011.04.009
- Glisson, C., & James, L. R. (2002). The cross-level effects of culture and climate in human service teams. *Journal of Organizational Behavior*, 23, 767-794. Doi: 10.1002/job.162
- Grant, L. & Kinman, G. (2014). Emotional resilience in the helping professions and how it can

- be enhanced. *Health and Social Care Education*, 3(1), 23-34. Doi: 10.11120/hsce.2014.00040
- Hales, T., Green, S., Bissonette, S., Warden, A., Diebold, J., Koury, S. P., and Nochajski, T. H. (2019). Trauma-informed care outcome study. *Research on Social Work Practice*, 29(5), 529-539.
- Hales, T., Kusmaul, N., & Nochajski, T. (2017). Exploring the dimensionality of trauma-informed care: implications for theory and practice. *Human Service Organizations: Management, Leadership, & Governance*, 41(3), 317-325. Doi: 10.1080/23303131.2016.1268988
- Hales, T., Nochajski, T. Green, S., Hitzel, H. K., & Woike-Ganga, E. (2017). An association between implementing trauma-informed care and staff satisfaction. *Advances in Social Work*, 18(1), 300-312.
- Hall, P., & Hall, N. (2002). Hiring and retaining direct-care staff: After fifty years of research, what do we know? *Mental Retardation*, 40, 201-211. Doi: 10.1352/0047-6765(2002)040<0201:hardcs>2.0.co;2
- Hanson, R.F. & Lang, J. (2016). A critical look at trauma informed care among agencies and systems serving maltreated youth and their families. *Child Maltreatment*, 21(2), 95-100. Doi: 10.1177/1077559516635274
- Harrington, A. (2011). Affecting the environment. *Occupational Health*, 63 (2), 1-4.
- Harris, M. E., & Fallot, R. D. (2001). *Using trauma theory to design service systems*. San Francisco, CA: Jossey-Bass.

- Hemmelgarn, A. L., Glisson, C., & James, L. R. (2006). Organizational culture and climate: Implications for services and interventions research. *Clinical Psychology: Science and Practice, 13*, 73-89. Doi: 10.1111/j.1468-2850.2006.00008.x
- Herman, J. L. (1997). *Trauma and recovery*. New York: BasicBooks.
- Hewitt, A., Larson, S., Edelstein, S., Seavey, D., Hoge, M., & Morris, J. (2008). *A synthesis of direct service workforce demographics and challenges across intellectual/ developmental disabilities, aging, physical disabilities, and behavioral health*. Minneapolis, MN: University of Minnesota, Institute on Community Integration, Research and Training Center on Community Living.
- Hickey R. (2010). *Core Competencies Pilot Evaluation: Initial Report*. Queen's University, Kingston
- Hickey, R. (2014). Prosocial Motivation, Stress and Burnout Among Direct Support Workers. *Journal of Applied Research in Intellectual Disabilities, 27*(2), 134–144. Doi: 10.1111/jar.12058
- Isobel, S. (2016). Trauma informed care: a radical shift or basic good practice? *Australasian Psychiatry, 24*(6), 589-591. Doi: 10.1177/1039856216657698
- Janoff-Bulman, R. (1989). Assumptive worlds and the stress of traumatic events: Application of the schema construct. *Social Cognition, 7*(2), 113-136.
- Keesler, J. M. & Isham, C. (2017). Integrating trauma-informed care with developmental disability services: An initial conceptualization and preliminary assessment. *Journal of Policy and Practice in Intellectual Disabilities, 14*(2), 164-175. Doi: 10.1111/jppi.12206

- Keesler, J. M. (2014), A call for the integration of trauma-informed care among intellectual and developmental disability organizations. *Journal of Policy and Practice in Intellectual Disabilities, 11*, 34–42. Doi: 10.1111/jppi.12071
- Keesler, J. M. (2014). Trauma through the lens of service coordinators: exploring their awareness of adverse life events among adults with intellectual disabilities. *Advances in Mental Health & Intellectual Disabilities, 8*(3), 151–164. Doi: 10.1108/AMHID-04-2013-0028
- Keesler, J. M. (2016). Trauma-informed day services for individuals with intellectual/developmental disabilities: Exploring staff understanding and perception within an innovative program. *Journal of Applied Research in Intellectual Disabilities, 29*(5), 481-492. Doi: 10.1111/jar.12197
- Keesler, J. M. (2018). Adverse childhood experiences among direct support professionals. *Intellectual and Developmental Disabilities, 56*(2), 119-132. Doi: 10.1352/1934-9556-56.2.119
- Konold, T., Cornell, D., Shukla, K., & Huang, F. (2017). Racial/Ethnic Differences in Perceptions of School Climate and Its Association with Student Engagement and Peer Aggression. *Journal of Youth & Adolescence, 46*(6), 1289–1303. Doi: 10.1007/s10964-016-0576-1
- Kormann, R., & Petronko, M. (2004). Community inclusion of individuals with behavioral challenges: Who supports the careproviders? *Mental Retardation, 42*, 223-228. Doi: 10.1352/0047-6765(2004)42<223:ciowb>2.0.co;2

- Kusmaul, N, Wilson, B., & Nochajski, T. (2015) The infusion of trauma-informed care in organizations: experience of agency staff. *Human Service Organizations: Management, Leadership & Governance*, 39(1), 25-37. Doi: 10.1080/23303131.2014.968749
- Leiter, M. P., & Maslach, C. (2009). Nurse turnover: The mediating role of burnout. *Journal of Nursing Management*, 17, 331-339. Doi: 10.1111/j.1365-2834.2009.01004.x
- Lunsky, Y., Hastings, R. P., Hensel, J., Arenovich, T., & Dewa, C. S. (2014). Perceptions of positive contributions and burnout in community developmental disability workers. *Intellectual And Developmental Disabilities*, 52(4), 249–257. Doi: 10.1352/1934-9556-52.4.249
- Mansell, J., Beadle-Brown, J., Whelton, B., Beckett, C., C., & Hutchinson, A. (2008). Effect of service structure and organization on staff care practices in small community homes for people with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*, 21, 398-413. Doi: 10.1111/j.1468-3148.2007.00410.x
- Marvin, A.F. & Robinson, R.V. (2018). Implementing trauma-informed care at a non-profit human service agency in Alaska: assessing knowledge, attitudes and readiness for change. *Journal of Evidence-Informed Social Work*, 15(5), 550-563. Doi: 10.1080/23761407.2018.1489324
- Mascha, K. (2007). Staff morale in day care centers for adults with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*, 20(3), 191-199. Doi: 10.1111/j.1468-3148.2006.00316.x
- Mason-Roberts, S., Bradley, A., Karatzias, T., Brown, M., Paterson, D., Walley, R., Truesdale, M., Taggart, L., & Sirisena, C. (2018). Multiple traumatisation and subsequent psychopathology in people with intellectual disabilities and DSM-5 PTSD: a preliminary

- study. *Journal of Intellectual Disability Research*, 62(8), 730-736.
Doi:10.1111/jir.12505.
- Micke, H. (2015). *Causes and solutions for high direct care staff turnover* (Master of Social Work Clinical Research Paper). St. Catherine University & University of St. Thomas, St. Paul, MN.
- Rose J. (2009). Staff stress and people who have mental health needs living in new models of service. *Advances in Mental Health and Learning Disabilities*, 3, 20–25. Doi: 10.1108/17530180200900016
- Saakvitne, K., Gamble, S., Pearlman, L., & Tabor Lev, B. (2000). *Risking connection: A training curriculum for survivors of childhood abuse*. Baltimore, MD: Sidran Press
- Santoro, A. F., Shear, S. M., & Haber, A. (2018). Childhood adversity, health and quality of life in adults with intellectual and developmental disabilities. *Journal of Intellectual Disability Research*, 62(10), 854-863. Doi: 10.1111/jir.12540
- Shim, M. (2010). Factors influencing child welfare employee's turnover: Focusing on organizational culture and climate. *Children and Youth Services Review*, 32, 847-856.
Doi: 10.1016/j.chilyouth.2010.02.004
- Singh, B., Winkel, D. E., & Selvarajan, T. T. (2013). Managing diversity at work: Does psychological safety hold the key to racial differences in employee performance? *Journal of Occupational & Organizational Psychology*, 86(2), 242–263. Doi: 10.1111/joop.12015
- Skirrow, P. & Hatton, C. (2007). 'Burnout' amongst direct care workers in services for adults with intellectual disabilities: A systematic review of research findings and initial normative data. *Journal of Applied Research in Intellectual Disabilities*, 20, 131-144.
Doi: 10.1111/j.1468-3148.2006.00311.x

- Substance Abuse and Mental Health Services Administration. (2014). *SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach*. HHS Publication No. (SMA) 14-4884. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Thompson, L., & Rose, J. (2011). Does organizational climate impact upon burnout in staff who work with people with intellectual disabilities? A systematic review of the literature. *Journal of Intellectual Disabilities, 15*, 177-193. Doi: 10.1177/1744629511419616
- Westen, D., & Rosenthal, R. (2003). Quantifying construct validity: two simple measures. *Journal of Personality and Social Psychology, 84*(3), 608-618.
- Wigham, S. & Emerson, E. (2015). Trauma and life events in adults with intellectual disability. *Current Developmental Disorders Reports, 2*(2), 93-99. Doi: 10.1007/s40474-015-0041-y
- Wolf, M. R., Green, S. A., Nochajski, T. H., Mendel, W. E., & Kusmaul, N. S. (2013). 'We're civil servants': The status of trauma-informed care in the community. *Journal of Social Service Research, 40*, 1-10. Doi: 10.1080/01488376.2013.845131
- Zohar, D., & Luria, G. (2010). Group leaders as gatekeepers: Testing safety climate variations across levels of analysis. *Applied Psychology: An International Review, 59*, 647-673. Doi: 10.1111/j.1464-0597.2010.00421.x

Table 1

Sample Demographics

Characteristic	<i>n</i>	%
Gender		
Men	60	15.8
Women	320	84.2
Race ^a		
White	310	81.8
African American	43	11.3
Other ^b	26	6.8
Age ^c		
20-29 years	136	35.8
30-39 years	97	25.5
40-49 years	76	20.0
50-59 years	52	13.7
Education ^a		
High school/GED	54	14.3
Some college	116	30.7
Associate's degree	57	15.1
Bachelor's degree	110	29.1
Master's degree	41	10.8
Employment Status ^a		
Fulltime	324	85.5
Part-time	55	14.5
Program Type		
Residential	250	65.8
Vocational/Educational	130	34.2
Length of Time in Position ^a		
1 year or less	107	29.6
1-2 years	78	21.6
3-4 years	63	17.5
5-10 years	72	19.9
10+ years	41	11.4

Note. ^a Sum is less than 380 due to missing data. ^b Other is comprised of 2.6% Hispanic, 2.4% Asian, and 1.8% bi-racial, multi-racial, or unspecified. ^c 1% (*n* =4) under the age of 20; 3.9% (*n* =15) were over the age of 60.

Table 2

Endorsement of Items on Trauma-informed Organizational Culture Measure

Principle	Agree^a	Disagree^a
Safety		
I feel safe while at work. ^a	86.8	7.7
Signs within building clearly indicate exits, restrooms, and offices.	84.8	11.1
Areas within building sometimes make me feel trapped or unsafe. ^b	82.0	11.8
I feel emotionally safe at work.	70.7	14.8
I am often uncomfortable with a co-worker at work. ^b	68.9	22.9
The way this building is decorated has a calming, inviting effect.	65.6	21.0
If I am upset at work, others will understand.	61.9	19.8
Leadership is equally concerned with safety of individuals and staff. ^a	59.7	27.6
Trustworthiness		
Personal information about me is kept confidential.	77.0	9.6
The program operates with clear and reasonable expectations.	64.7	21.5
I can trust my supervisor to be fair in dealing with all staff.	58.0	29.3
I may disagree with administration, but I know where they stand.	50.0	24.0
I can trust my co-workers, supervisors, and administrators. ^a	49.5	26.5
The program lacks a consistent method for evaluating staff. ^b	40.4	42.4
Choice		
I feel like I have a great deal of control over my job satisfaction.	66.8	19.0
There is a lot of flexibility in how I do my job.	63.7	24.4
I don't have many choices when it comes to doing my job. ^b	56.3	29.6
Staff here have real choices about trying new methods.	55.1	30.1
I am uncomfortable voicing my thoughts to leadership. ^b	54.1	35.5
Both staff and individuals have freedom of choice within agency. ^a	52.0	31.9
Collaboration		
Staff input pertaining to program decision-making is often valued. ^a	47.2	34.0
Staff members from different levels participate in committees.	45.9	31.1
Committee members treat each other with equal regard/importance.	44.9	21.7
Leadership generally listens to all staff. ^a	38.9	40.1
Supervisor takes sufficient time to discuss my performance with me. ^a	31.8	57.7
Administration shares decision-making with staff. ^a	31.7	47.8
Empowerment		
Every day at work, I have the chance to make a real difference.	90.2	5.1
My knowledge and experience make a difference in this job. ^a	85.0	6.9
Leadership recognize my strengths and skills.	63.5	20.8
There are opportunities for me to gain skills through trainings.	54.5	23.3
Staff is supported when they try to find new/better ways to do things. ^a	52.6	30.2
Agency places importance on personal/professional development. ^a	52.0	26.4
Agency cares about staff getting what they need to do their jobs well. ^a	42.1	31.7

Note. ^a “Agree” reflects those DSPs who endorsed the item with a response of 4 or 5. “Disagree” reflects those DSPs who endorsed the item with a response of 1 or 2. Neutral responses (i.e. a score of 3) were omitted to simplify data presentation in the table.

Table 3

Paired T-tests for TIC Subscales

		SD	t	df	p	d
Pair 1	Safety – Trust	.610	11.21	379	.000	.57
Pair 2	Safety – Choice	.616	11.97	379	.000	.61
Pair 3	Safety – Collaboration	.725	18.33	377	.000	.94
Pair 4	Safety – Empowerment	.620	4.55	379	.000	.23
Pair 5	Trust – Collaboration	.640	9.98	377	.000	.51
Pair 6	Trust - Choice	.655	0.83	379	.410	-
Pair 7	Empowerment – Trust	.606	6.63	379	.000	.34
Pair 8	Empowerment – Collaboration	.573	18.25	377	.000	.94
Pair 9	Empowerment – Choice	.579	7.87	379	.000	.40
Pair 10	Choice - Collaboration	.635	9.28	377	.000	.48

Note. Bonferroni adjustments for the 10 paired *t*-tests ($p < .005$).

Table 4

Regression Analysis for Organizational Culture on DSP Demographics

Demographics	<i>B</i>	<i>SE B</i>	β	<i>p</i>
Gender	-.110	.108	-.055	.309
Ethnicity	.223	.102	.122	.023
Age	.014	.035	.023	.684
Education	-.033	.032	-.058	.292
Employment Status	.216	.113	.103	.056
Program Type	.147	.084	.096	.082
Length of Time in Position	-.030	.030	-.057	.316
R ²		.040		
F		2.05		.048

Note. (*N* = 380).