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Assessing Baseline Knowledge and Practices on Trauma-Informed Care across Workforce Sectors

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Abstract

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By

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April 9, 2020

INTRODUCTION: Adverse childhood experiences (ACEs) are traumatic exposures that have a profound impact in children's lives. The Kaiser-CDC ACE Study was instrumental to informing the SAMHSA trauma-informed care (TIC) framework. Building trauma-informed ecosystems in family and child-serving sectors is critical, especially given that ACEs are widespread. However, there remains a lack of information on baseline knowledge and practices across various sectors.

AIM: The purpose of this study is to explore the baseline knowledge and practices of trauma-informed care among adults working in four different sectors: child welfare, education, healthcare, and law enforcement in Georgia.

METHODS: The present study utilizes secondary evaluation data from participants who took *The Why and How of Trauma-Informed Care*© from 2017-2018. The data were collected as a baseline evaluation assessment for the workforce training and includes the following sectors: healthcare; child welfare, advocacy, and justice; and educational sectors. In total, 148 individuals responded to the baseline questionnaire. Analysis was conducted using SAS 9.4 to calculate the proportion who had knowledge and/or education. Chi-square statistics were used to examine differences in knowledge and practice across sectors using an alpha of $p<.05$.

RESULTS: Examination of sectors in aggregate indicated that a quarter of participants don't know or do not think it is applicable that there be education or training to help staff members talk about a crisis after it happens (29.64%). Additionally, close to a quarter (24.03%) indicated that they did not know or thought it was not applicable to discuss self-care topics in team meetings. Other findings of importance included that 80% had previously received education or training on what is traumatic stress.

CONCLUSION: Given the findings, baseline knowledge and training appear to be highly evident in most of the workforce who took part in the study. However, an area that appears to need more attention includes the aspects about self-care in the context of secondary trauma. Also, more work needs to be done to ensure universal education and training across sectors.

ASSESSING BASELINE KNOWLEDGE AND PRACTICES ON TRAUMA-INFORMED CARE
ACROSS WORKFORCE SECTORS

by

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AUTHOR'S STATEMENT

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Chapter I: Introduction

1.1 Background

It is estimated that lifetime exposure to at least one adverse childhood experience (ACE) has occurred in about 50% to 90% of the population. These estimates are based on both population and clinical samples (Bryant, 2019) (Hornor, 2015) (Heinzelmann & Gill, 2013). ACEs are traumatic exposures that have a profound impact in children's lives. These traumas fall into many different categories such as, child abuse, child neglect, and related household challenges. When individuals have traumatic life events leading to a crisis, more severe traumatic events follow. (Breckenridge, 2009). Both young girls and young boys are vulnerable to being exposed to adverse childhood experiences.

According to Broaddus-Shea (2019), 18% of girls and 8% of boys will experience some form of sexual abuse during childhood. Children exposed to this form of trauma have a wide range of developmental problems that include behavioral and emotional difficulties (Broaddus-Shea, 2019). Adult survivors of childhood sexual abuse (CSA) also have significant adverse health outcomes. Dube et al (2005), found that the outcomes associated with CSA were similar for both adult female and adult male CSA survivors. Some of the harmful impacts that CSA survivors experience later in life include anxiety, depression, substance abuse, and other mental and behavioral health problems (Broaddus-Shea, 2019; Dube et al, 2005). Therefore, it is critical that children who have been exposed to CSA or other forms of trauma receive early and effective intervention. Any system working with children will play a pivotal role to properly identify their exposures and ensure safety and support.

The recognition that trauma-informed care (TIC) is needed in systems working with children has increased significantly. As a result, implementation of training in schools, child welfare agencies, and other sectors who work with children and families has increased. TIC practices, if delivered with fidelity, can provide support, safety, and nurturance within systems of care for children which can then

transcend into their lives outside of the systems. Trauma-informed care is an approach of principles and practices that aims to reduce harmful effects of childhood trauma. There are three pillars of TIC; safety, connections, and managing emotions (Bath, 2008). The first pillar of safety is comprised of concepts from Erikson's trust vs. mistrust stage, Maslow's primary survival needs, and Bowlby's attachment studies. Traumatic experiences trap an individual in the fight or flight state, which creates a sense of panic and danger: "The defining experience of any child who has experienced complex trauma is that of feeling unsafe." (Bath, 2008).

Because TIC is expected to be delivered by adults who work with children, there is an increased effort to provide workforce training to agencies and organizations responsible for child welfare, education, healthcare, and law enforcement. Understanding baseline knowledge and practices of the workforce provides a foundation for understanding what the gaps are to delivering trauma-informed care. Trauma-informed practitioners who incorporate changes in their practice have seen an improvement in staff and organizational health as well as the patient's health (Strait, 2016).

At the state level, there has been movement to establish legislation and policies to promote the use of trauma-informed care: "State and territorial policymakers play a key role in preventing ACEs and mitigating the impact of ACEs when they do occur" (Kramer, 2017). Washington was the first state to reference ACEs in legislation, and a few other states followed with legislation incorporating ACEs. However, policy and legislation influenced by ACEs in Georgia is lacking.

1.2 Purpose of Study

The purpose of this study is to explore the baseline knowledge and practices of trauma-informed care among adults working in four different sectors in Georgia: child welfare, education, healthcare, and law enforcement. The research questions include:

1) What is the level of baseline knowledge on specific topics of trauma-informed care across the four sectors that work directly with children?

2) What is the level of trauma-informed care practices across the four sectors working directly with children?

3) Do the level of trauma-informed care knowledge and practices differ across sectors?

Chapter II: Literature Review

2.1 ACE Study

The leading causes of mortality in the United States are largely due to chronic diseases. In 2017, the top two leading causes of death were heart disease and cancer. These chronic diseases are related to unhealthy behaviors such as poor diet, lack of exercise, smoking, and drinking. Research over the past 20 years has led to groundbreaking findings demonstrating that adverse childhood experiences (ACE) increase the risk of adult unhealthy behaviors leading to increased risk of disease. For example, the ACE study demonstrated the long-term impact of abuse and household dysfunction during childhood on adult disease, such as the leading and actual causes of death (Felitti); early initiation of alcohol use and adult alcohol problems (Dube et al;), early initiation of illicit drug use and adult drug use (Dube et al); suicide attempts in adolescence and adulthood (Dube); depression and anxiety (ACE); HIV and STDs (ACE). The ACE study divided ACEs into categories: abuse, household challenges, and neglect. In the abuse category, the study found that 10.6% of participants experienced emotional abuse, 28.3% experienced physical abuse, and 20.7% experienced sexual abuse. Almost two thirds reported at least one ACE, and more than one in five reported three or more ACEs. Levy-Carrick et al. (2019) notes that individuals with six or more ACEs died 20 years earlier than those with no ACEs. This statistic is alarming, and there needs to be further research conducted to determine ways to intervene.

There have been some studies conducted on adverse childhood experiences. According to Felitti's (1998) study, both the prevalence and risk increased for smoking, severe obesity, physical inactivity, depressed mood, and suicide attempts as the number of childhood exposures increased, and when an individual with four categories of exposure was compared to those with none, the odds ratio ranged from 1.3 for physical inactivity to 12.2 for suicide attempts. Also, the prevalence and risk of alcoholism, use of illicit drugs, more than 50 intercourse partners, and history of a sexually transmitted disease also increased as the number of childhood exposures increased. The odds ratio of someone with

4 or more childhood exposures compared to those with none was 2.5 for sexually transmitted diseases, 7.4 for alcoholism, and 10.3 for injected drug use. These increased health risk factors for people who have adverse childhood exposures show that there is a strong relationship between ACEs and health risk factors, especially for suicide attempts and injected drug use. Therefore, it is important for individuals working in fields with children to understand the long-term health implications of childhood abuse and the wide range of related adverse childhood exposures.

In another study, Bryant (2019) looks at screening in primary care settings for adverse childhood experiences. In the pre and post-test evaluation, Bryant (2019) looked at the provider's awareness of resources for positive screening tools. He found that there was a statistically significant improvement in the provider's awareness of resources from the pre to post test. A similar study by Szilagyi et al. (2016) found that 80% of providers were familiar with ACEs. According to Szilagyi (2016), while most pediatricians (84%) agreed that stable and supportive adult relationships can lessen the negative effects of persistent childhood stress, 61% did not ask the children's parents about any of their child's ACEs. These studies show that continuing education curriculums should include ACEs to increase the provider's awareness and that the primary care providers should also utilize their role as patient advocates outside of the healthcare setting to reach a wider population. Further research should be conducted to determine the effects of trauma-informed care on ACEs.

BRFSS is a behavioral risk survey. This survey looked at health risk behaviors and overall health. The findings reveal that there is a large geographic variation in the prevalence of health risk behaviors and chronic health conditions. The 2015 prevalence is higher than the Healthy People 2020 goal of less than 12%. Also, 11.2%-26% of adults engaged in binge drinking within 30 days of participating in the survey. The proportion of adults who reported no leisure time physical activity during the preceding month was large, 25.5% (Pickens, 2015). All these health risk behaviors lead to poor overall health and may lead to some chronic diseases. A sedentary lifestyle may lead to obesity,

high blood pressure or diabetes. In 2015, 16.1 million US adults had one or more major depressive episode (Pickens, 2015). Engaging in health risk behaviors may increase the likelihood of a depressive episodes and/or other mental health issues.

2.2 Trauma-Informed Care

After two decades of research on ACEs, there is a significant amount of effort to translate the research findings. The Substance Abuse and Mental Health Services Administration (SAMHSA) uses trauma-informed care to address trauma related health issues. According to SAMHSA, "trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional, or spiritual well-being." Trauma-informed care (TIC) emphasizes the need for behavioral health practitioners and organizations to recognize the prevalence of trauma and the impact trauma has on behavioral health. To be trauma-informed is to understand the ways in which traumatic experiences affect individual's lives and to apply that understanding to their healing and recovery (Carello, 2015). By recognizing that traumatic experiences are associated with behavioral health problems, front line professionals and community-based programs can practice trauma-informed care. TIC is an approach to patient care that provides an alternate lens for professionals: "It is a model of care based on respecting patients by ensuring safety through four key practices: realizing the widespread effect of trauma, recognizing the signs and symptoms of trauma, responding by fully integrating trauma knowledge into practices and procedures, and seeking to actively resist retraumatization" (Li, 2018). However, there is still a gap in incorporating TIC into medical settings. Often, trauma is not addressed in appointments with health care providers. 92% of women who have been abused by a partner do not discuss the abuse with their physician, and only 32% of sexual assault survivors are seen and treated (by who, medical professionals? Anyone?) (Levy-Carrick et al., 2019). Trauma-informed care works to reduce this gap by ensuring health professionals have necessary tools to screen for individuals who have

been exposed to trauma. Key factors of trauma-informed care include safety and security for those dealing with trauma. Since adverse childhood experiences are so prevalent and they have been shown to have long term associations with adult health risk behaviors, health status, and diseases, it is essential to bring more attention to primary, secondary, and tertiary prevention strategies. In addition to patients benefiting from TIC, research shows that educating professionals on trauma may reduce the adverse effects of exposure to patient's trauma also known as secondary trauma (Cannon, 2020).

Although the framework for trauma-informed care has been in existence for close to 6 years, there is little information about knowledge and practices used by various sectors that work with children. Dube has developed a multi 2-generational model (Dube & Rishi, 2017; Dube, 2019) to address and prevent ACEs, and she uses it to inform her training, *The Why and How of Trauma-Informed Care©*. As part of her trainings, she provides organizations a baseline assessment of organizational knowledge and practices related to trauma-informed care. Dr. Bloom, a practitioner who incorporates trauma-informed approaches, explains that simply learning about the psychobiology of stress and trauma alone makes a significant positive impact (Strait, 2016). According to Strait's (2016) study, students voluntarily assessing their ACE score are significantly more likely to understand the scientific and clinical findings of the ACE Study and TIC. Based on Ginsburg's book Building Resilience in Children and Teens, being trauma-informed as a professional position you to serve more effectively and prevents your own burnout. It allows us to learn to hold people's pain without owning their pain. Knowing how to protect our boundaries may increase our professional longevity (Strait, 2016). This encompasses the advantage that trauma-informed care provides, and more professionals should be acquiring trauma-informed practice techniques to better the lives of the patients as well as the lives of providers and the organization structure.

Trauma exposure often occurs within contexts of socioeconomic disparities. Policies and programs can either magnify or mitigate public health concerns. There is little to no policy on TIC. The

lack of policy is partially due to the lack of consensus about how best to screen for trauma in medical settings. Another reason for the lack of policy is the discussion on how best to integrate knowledge of the impact of traumatic experiences that also improve the clinical experience and medical outcome (Levy-Carrick et al., 2019).

Chapter III: Methods

The present study utilizes secondary evaluation data from *The Why and How of Trauma-Informed Care*$^©$ (*WHOTIC*$^{©)}$ training developed by Shanta Dube). The *WHOTIC*$^©$ curriculum is comprised of research findings on ACEs and health outcomes. It also includes other articles and videos that Dube has developed which are focused on understanding the impact of ACEs on health and learning and the importance of adult self-care. The experiential and self-reflective activities were all developed by Dube using adult learning theories and evidence-based practices for promoting self-awareness. Dube utilizes her advanced training and knowledge in Mind-Body Medicine to provide several experiential activities that are included in the adult and child "How" module.

Through the *WHOTIC*$^©$ curriculum, the adult learner engages in explicit learning – direct knowledge acquisition; the knowledge that can be verbally explained. Most importantly, the adult learner engages in implicit learning – acquisition of knowledge that will feed into the practices, or "how" we deliver TIC. Competency to deliver TIC can only occur through the implicit knowledge gained, which starts with self-awareness, self-reflection, and understanding one's own stress response.

The Components of the Training include:

INTRODUCTION: Overview of the training and training ground rules.

MODULE 1: The Why of Trauma-Informed Care$^©$ – Overview of Adverse Childhood Experiences (ACEs) Study and the research science to promote awareness and acceptance of ACEs science.

MODULE 2: The How of Trauma-Informed Care$^©$: Part 1-- Principles and Strategies of TIC Practices for Adults to promote acceptance and adoption of the ACEs science and trauma-informed care.

MODULE 3: The How of Trauma-Informed Care$^©$: Part 2-- Using Grounding Techniques when Working with Children to promote acceptance and adoption of the ACEs science and trauma-informed care.

The data for the present analysis includes baseline assessments on knowledge and practices related to ACEs, trauma-informed care, and organizational policies prior to the delivery of the curriculum. Post-data are not included, because training is ongoing currently in some of the sites. All secondary data are de-identified and GSU IRB approved the use of the data for research.

3.1 Data Source and Sample

The data utilized for the present study was collected as a baseline evaluation assessment for the training between 2017-2018 and includes the following sectors: healthcare; child welfare, advocacy, and justice; and education (0-5 and K-12). In total, 148 individuals responded to the baseline questionnaire. These individuals work across sectors that interact with children and families in Georgia. Some of the professions include teachers, adult health professionals, students, nurses, child advocacy, juvenile justice court staff, and child welfare staff. Data from all sectors were combined into an Excel spreadsheet, which was imported into SAS 9.4.

3.2 Measures

The baseline evaluation questionnaire included items about knowledge regarding the stress response; the occurrence of trauma; the contribution of trauma to specific behaviors or outcomes; awareness about one's own stress response; self-care; organizational practices and policies. The data also included an indicator for stratification by sector to conduct comparative analysis. Groupings were created by combining 0-5 and K-12 into one education group due to small n. Child welfare and justice were combined to create another group, and healthcare was the third group. These three groups were looked at in order to compare education, welfare, and healthcare. Chi square analysis was then performed to compare differences between each of the three groups.

3.3 Statistical Analysis

All analyses were conducted in SAS 9.4. Descriptive analyses were conducted to examine the distribution of responses across each item on knowledge or practice. Table 2 stratified groups into "Agree" and "Disagree". "Don't Know or Not Applicable" was combined with "Disagree". Stratified analysis was conducted to examine if differences between sectors were observed for each of the items on knowledge and practice. Chi Square tests were performed to compare differences between the sectors.

Chapter IV: Results

Respondents comprise of 39.86% in justice and welfare; 31.08% in education; and 29.05% in healthcare. All respondents focus on initiatives in Georgia across the three sectors.

Overall, a high percentage of participants consistently marked the agree category for the topics asked in the survey (Table 1). Three topics that scored the highest for "strongly disagree" for receipt of training and education among sector workforce were "De-escalation strategies" (i.e. ways to help people calm down before reaching the point of crisis) (7.52%), "Topics related to self-care are addressed in team meetings" (10.85%), and "How to develop safety and crisis prevention plans" (8.27%) (Table 1). Additionally, 39% of participants disagree that their staff at all levels have received training and education on "How to help clients identify triggers." A high percent (36%) also disagree that their staff at all levels have received knowledge and education on "How to help clients manage their feelings" and on "How to help clients identify triggers" (39.10%). The highest score in the agree category was that staff at all levels receive training and education on how to establish and maintain healthy professional boundaries (57.89%).

The "Don't know" or "Not applicable" category in Table 1 was alarming. Some of the highest percentages for this category include "There is a written statement that includes a commitment to understanding trauma and engaging in trauma-informed and trauma-responsive practices" (37.70%), "There are supports in place to help staff members talk about a crisis after it happens" (29.64%), and "Topics related to self-care are addressed in team meetings" (24.03%).

Most participants agree they are taught what traumatic stress is (80%), about the human stress response (79%), how traumatic stress affects the brain and body (80%), the relationship between mental health and trauma (81%), how trauma affects a child's development (81%), and how to establish and maintain healthy professional boundaries (76%) (Table 2). Participants are split about their knowledge

of de-escalation strategies with 50% agreeing; knowledge of how to develop safety and crisis prevention plans (53% agree); and staff having the opportunity to provide input into the early childhood education program practices (50%). Participants disagree or do not know if there is a written statement that includes a commitment to understanding trauma and engaging in trauma-informed and trauma responsive practices, if outside consultants with expertise in trauma provide ongoing education and consultation, and whether or not there are policies established based on an understanding of the impact of trauma on clients and providers.

Table 3 shows the participants stratified by sectors: child welfare and law, education, and healthcare. Most participants in child welfare/law have received training and education on what is traumatic stress (92%). Within the healthcare sector, three-quarters (76%) of participants agree they received training and education on what is traumatic stress. Among the education sector cohorts (early learning and K-12), 67% agree that they received training and education on what is traumatic stress.

Statistical differences were tested between three groups: healthcare, education, and child welfare and law. For example, significant differences were observed between healthcare, education, and child welfare and law for knowledge about what is traumatic stress $X^2(DF=2, N=105)=10.05, p<.05$ and the relationship between mental health and trauma $X^2(DF=2, N=108)=7.3, p<.05$. For knowledge about what is traumatic stress, child welfare/law mostly agreed (92%), educators agreed (67%) and healthcare agreed (76%). There were significant differences between the three sectors regarding child's development $X^2(DF=2, N=108) =29.47, p<.05$. While child welfare/law mostly agreed (96%), education mostly agreed (88%) that they were trained and educated on how trauma affects a child's development, only about half of healthcare agreed (53%). Child welfare/law (51%) and healthcare (39%) did not feel like they were trained and educated in how to develop safety and crisis prevention plans while educators did think they were mostly properly trained and educated (69%). The chi square tests showed that there were significant differences between the three sectors regarding their knowledge

on this question $X^2(DF=2, N=71) =7.22, p<.05$. There were also significant differences between the three sectors regarding knowledge of de-escalation strategies $X^2(DF=2, N=67)=6.53, p<.05$, and whether the staff has the opportunity to provide input into the early childhood education program practices $X^2(DF=2, N=65)=6.7, p<.05$.

Table 1- Distribution of aggregate data on responses to baseline questionnaire on knowledge and practices of TIC, 2016-2018

Staff at all levels receive training and education on the following topics:	Strongly Disagree Freq (%) (N=148)	Disagree Freq (%)	Agree Freq (%)	Strongly Agree Freq (%)	Don't Know/Not Applicable Freq (%)
What is traumatic stress.	7 (5.30)	14 (10.61)	60 (45.45)	45 (34.09)	6 (4.55)
The human stress response	5 (6.25)	9 (11.25)	44 (55)	19 (23.75)	3 (3.75)
How traumatic stress affects the brain and body.	4 (3.01)	18 (13.53)	67 (50.38)	40 (30.08)	4 (3.01)
The relationship between mental health and trauma.	5 (3.76)	14 (10.53)	66 (49.62)	42 (31.58)	6 (4.51)
The relationship between substance use and trauma.	5 (3.76)	19 (14.29)	63 (47.37)	37 (27.82)	9 (6.77)
How trauma affects a child's development.	4 (3.01)	17 (12.78)	66 (49.62)	42 (31.58)	4 (3.01)
How trauma affects a child's attachment to his/her caregivers.	5 (3.76)	20 (15.04)	66 (49.62)	37 (27.82)	5 (3.76)
Different cultural issues (e.g. different cultural practices, beliefs, rituals).	5 (3.76)	32 (24.06)	60 (45.11)	31 (23.31)	5 (3.76)
Cultural differences in how people understand and respond to trauma.	5 (3.76)	40 (30.08)	63 (47.37)	19 (14.29)	6 (4.51)
How the trauma and stress of persons we work with can affect staff.	7 (5.26)	38 (28.57)	56 (42.11)	28 (21.05)	4 (3.01)
How to help clients identify triggers (i.e. reminders of dangerous or frightening things that have happened in the past).	8 (6.02)	52 (39.10)	45 (33.83)	20 (15.04)	8 (6.02)
How to help clients manage their feelings (e.g. helplessness, rage, sadness, terror).	9 (6.77)	48 (36.09)	46 (34.59)	19 (14.29)	11 (8.27)
De-escalation strategies (i.e. ways to help people to calm down before reaching the point of crisis).	10 (7.52)	47 (35.34)	45 (33.83)	22 (16.54)	9 (6.77)
How to develop safety and crisis prevention plans.	11 (8.27)	41 (30.83)	53 (39.85)	18 (13.53)	10 (7.52)
How to establish and maintain healthy professional boundaries.	2 (1.50)	23 (17.29)	77 (57.89)	24 (18.05)	7 (5.26)
Staff members have regular team meetings.	3 (2.33)	23 (17.83)	47 (36.43)	28 (21.71)	28 (21.71)
Topics related to stress and trauma are addressed in team meetings.	10 (7.75)	45 (34.88)	31 (24.03)	10 (7.75)	33 (25.58)
Topics related to self-care are addressed in team meetings (e.g. burn out, stress reducing strategies).	14 (10.85)	40 (31.01)	36 (27.91)	8 (6.20)	31 (24.03)
Staff members receive individual supervision from a supervisor who is trained in understanding trauma.	11 (8.53)	37 (28.68)	36 (27.91)	12 (9.30)	33 (25.58)

Staff members are aware of their own stress reactions.	13 (10.16)	32 (25)	39 (30.47)	9 (7.03)	35 (27.34)
Staff members understand how their stress reactions impact their work with clients.	10 (7.81)	39 (30.47)	33 (25.78)	11 (8.59)	35 (27.34)
There are supports in place to help staff members talk about a crisis after it happens.	9 (6.98)	33 (25.58)	36 (27.91)	13 (10.08)	38 (29.46)
The staff have the opportunity to provide input into the early childhood education program practices.	3 (2.33)	21 (16.28)	50 (38.76)	15 (11.63)	40 (31.01)
Outside consultants with expertise in trauma provide ongoing education and consultation.	11 (8.53)	41 (31.78)	31 (24.03)	10 (7.75)	36 (27.91)
There is a written statement that includes a commitment to understanding trauma and engaging in trauma-informed and trauma-responsive practices.	7 (5.74)	32 (26.23)	30 (24.59)	7 (5.74)	46 (37.70)
There are policies established based on an understanding of the impact of trauma on clients and providers.	5 (4.10)	31 (25.41)	33 (27.05)	6 (4.92)	47 (38.52)
There is a written commitment to demonstrating respect for cultural differences and practices.	4 (3.28)	23 (18.85)	45 (36.89)	13 (10.66)	37 (30.33)
There is a written policy to address potential threats to clients and staff from natural or man made threats (fire, tornado, bomb threat, hostile intruder).	2 (1.64)	16 (13.11)	46 (37.70)	17 (13.93)	41 (33.61)
There is a written policy outlining program responses to client crisis/staff crisis (i.e. self harm, suicidal thinking, and aggression towards others).	5 (4.10)	27 (22.13)	34 (27.87)	12 (9.84)	44 (36.07)
There are written policies outlining professional conduct for staff (e.g. boundaries, responses to consumers, etc).	NA	14 (11.48)	57 (46.72)	13 (10.66)	38 (31.15)

Freq= Frequency

Table 2- Distribution of consolidated responses to baseline questionnaire on knowledge and practices of TIC, 2016-2018

Staff at all levels receive training and education on the following topics:	Agree Freq (%) N=148	Disagree or Do not know Freq (%)
What is Traumatic Stress	105 (79.55%) Missing=16	27 (20.45%)
The human stress response	63 (78.75%) Missing= 68	17 (21.25%)
How traumatic stress affects the brain and body.	107 (80.45%) Missing= 15	26 (19.55%)
The relationship between mental health and trauma.	108 (81.20%) Missing= 15	25 (18.80%)
How trauma affects a child's development.	108 (81.20%) Missing= 15	25 (18.80%)
Different cultural issues (e.g. different cultural practices, beliefs, rituals).	91 (68.42%) Missing= 15	42 (31.58%)
De-escalation strategies (i.e. ways to help people to calm down before reaching the point of crisis).	67 (50.38%) Missing= 15	66 (49.62%)
How to develop safety and crisis prevention plans.	71 (53.38) Missing= 15	62 (46.62%)
How to establish and maintain healthy professional boundaries.	101 (75.94%) Missing= 15	32 (24.06%)
There are policies established based on an understanding of the impact of trauma on clients and providers.	39 (31.97%) Missing= 26	83 (68.03%)
The staff have the opportunity to provide input into the early childhood education program practices.	65 (50.39%) Missing= 19	64 (49.61%)
Outside consultants with expertise in trauma provide ongoing education and consultation.	41 (31.78%) Missing= 19	88 (68.22%)
There is a written statement that includes a commitment to understanding trauma and engaging in trauma-informed and trauma-responsive practices.	37 (30.33%) Missing= 26	85 (69.67%)

Freq= Frequency

Table 3- Differences Between Sector Among Participants Who Agree to Receiving Training and Education, Stratified by Professional Sector

Staff at all levels receive training and education on the following topics:	Child Welfare/Law Freq (%) N=59	Education Freq (%) N=46	Healthcare Freq(%) N=43	Chi Sq Test Stat
What is Traumatic Stress	49 (92.45%) Missing= 6	28 (66.67%) Missing= 4	28 (75.68%) Missing= 6	10.05 *
The human stress response	NA	31 (73.81%) Missing= 4	32 (84.21%) Missing=5	1.29
How traumatic stress affects the brain and body.	47 (88.68%) Missing= 6	33 (78.57%) Missing= 4	27 (71.05%) Missing=5	4.5
The relationship between mental health and trauma.	49 (92.45%) Missing= 6	31 (73.81%) Missing= 4	28 (73.68%) Missing=5	7.3*
How trauma affects a child's development.	51 (96.23%) Missing= 6	37 (88.10%) Missing= 4	20 (52.63%) Missing=5	29.47*
Different cultural issues (e.g. different cultural practices, beliefs, rituals).	32 (60.38%) Missing= 6	32 (76.19%) Missing= 4	27 (71.05%) Missing=5	2.88
De-escalation strategies	23 (43.40%) Missing= 6	28 (66.67%) Missing= 4	16 (42.11%) Missing=5	6.53*
How to develop safety and crisis prevention plans.	27 (50.94%) Missing= 6	29 (69.05%) Missing= 4	15 (39.47%) Missing=5	7.22*
How to establish and maintain healthy professional boundaries.	37 (69.81%) Missing= 6	35 (83.33%) Missing= 4	29 (76.32%) Missing=5	2.35
There are policies established based on an understanding of the impact of trauma on clients and providers.	16 (36.36%) Missing= 15	16 (38.10%) Missing= 4	7 (19.44%) Missing= 7	3.71
The staff have the opportunity to provide input into the early childhood education program practices.	29 (58%) Missing= 9	24 (57.14%) Missing= 4	12 (32.43%) Missing= 6	6.7*
Outside consultants with expertise in trauma provide ongoing education and consultation.	19 (38%) Missing= 9	15 (35.71%) Missing= 4	7 (18.92%) Missing= 6	4.01
There is a written statement that includes a commitment to understanding trauma and engaging in trauma-informed and trauma-responsive practices.	16 (36.36%) Missing= 15	15 (35.71%) Missing= 4	6 (16.67%) Missing= 7	4.52

Freq= Frequency
Chi sq= Chi Square
Combined education for chi square analysis to look at 3 sectors: welfare; education; and healthcare.
*= p >.05

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Chapter V: Discussion

The findings of this study indicate that educators receive training on what traumatic stress is, but a significant proportion reported not receiving training on ways to help clients calm down before reaching point of crisis; nor was training or education received on how to develop safety and crisis prevention plans. Psychological consequences may develop and persist even after the traumatic experience has been addressed (Bruce, 2018). Therefore, it is critical for educators to receive training and education on how to establish and maintain healthy professional boundaries since it is vital that staff make sure to create boundaries to protect themselves and clients.

Though the research study was small and non-representative, there were important findings. Table 1 indicates that 38% of participants do not know or do not think it is applicable regarding whether there is a written statement that includes a commitment to understanding trauma and engaging in trauma-informed and trauma-responsive practices. Also, a quarter of participants do not know or do not think it is applicable that there are supports in place to help staff members talk about a crisis after it happens (29.64%) and topics related to self-care are addressed in team meetings (24.03%). This is a huge portion of participants and it shows a large gap in the knowledge of TIC across sectors. Table 2 indicates that 68% of participants disagree that they have knowledge, or they do not know if there are policies established based on an understanding of the impact of trauma on clients and providers. This aligns with prior reports that Georgia currently lacks policies and legislation on ACEs and delivery of trauma-informed care. Other states that have addressed ACEs science and include legislative language include Alaska, Hawaii, Illinois, Virginia, California, New York, Missouri, Arizona, New Mexico, Oregon, Vermont, Texas, and Washington DC (Kramer, 2017). An example of legislation is New Mexico defining home visiting as a program strategy that is designed to promote child well-being and prevent adverse childhood experiences (Kramer, 2017). This is key to ensuring the impact of ACEs are reduced and eventually prevented altogether.

In absence of state legislation, grassroots community efforts to deliver trauma-informed care has been the primary method for adopting ACEs science. Significant differences were observed in TIC training and education across sectors. Based on the questions regarding "staff having opportunity to provide input into the early childhood education program practices", "how to develop safety and crisis prevention plans", and "how trauma affects a child's development", participants working in healthcare had different responses than the other sectors. Healthcare had a much lower response to learning about "what is traumatic stress" and the relationship between mental health and trauma. Education had a slightly lower response to learning about how trauma affects a child's development and participants working in healthcare had a very low agreement to this. This is extremely important that professionals in early education have training and education on how trauma affects a child's development because they are working with children during their developing years. Also, many professionals in the healthcare sector are also seeing children during their developing years so this is crucial that they are trained and educated on this. As we can see from these results, there is no standardized trauma curriculum and different sectors have limited knowledge on TIC. Based on Li's (2008) study, nurses are often the first point of contact in healthcare settings and are likely to work with patients who experienced trauma. It is essential that nurses and other professionals in health care settings have education and training on TIC. Based on the chi square findings, our data shows that healthcare is lacking in some of the essential TIC education. It is vital that future programs work to emphasize TIC trainings in healthcare so the first points of contact can be aware of safety and crisis prevention plans as well as how trauma affects a child's development in order to give patients the best possible care and outcomes.

Also based on Table 3, there were significant differences between the three groups: healthcare, welfare, and education for the questions "what is traumatic stress", "the relationship between mental health and trauma", and "de-escalation strategies". This shows the divide in education and training between the three sectors and which topics should be emphasized more. These topics are essential to

working with children who have experienced trauma and protecting the workers from trauma who work with interact with them. If they have not had the proper training and education on these topics, they will be more likely to further hurt themselves and the individuals they work with.

5.1 Strength and Limitations

A strength of this study was the level of detail of the questions that were asked on the survey. The survey started off with the broad concept of whether or not the participants have had a training on traumatic stress and then went into details about boundaries, the staff's reactions, and coping mechanisms for working with clients who have experienced traumatic stress. Also, we included the don't know or not applicable in Table 2 because it is important to count this group since it demonstrates a lack of knowledge or the thinking that TIC is not applicable.

There were some limitations of this study. For example, this study had a small sample size and was based on convenience samples, therefore it cannot be generalized to all sectors examined. More educators should be included in future studies to see how the results would vary. Also, there was no demographic data in this study due to IRB restrictions. This made it difficult to compare the educators in the study to see if there were differences or similarities between gender, race, region, and years in education. Data were combined to include don't know with disagree which may have led to a slightly higher frequency and percentage. This affected the data when the don't know/not applicable category was especially high. However, Table 1 provided the distribution across response categories, so the actual percentage of don't know/not relevant was presented. For each of the questions, don't know/not relevant is important, because the premise of the trauma-informed care assessment is to gauge baseline knowledge and practices in its delivery. Don't know/not relevant provides a glimpse of the faction that have no awareness or don't believe it to be relevant to their work. Also, when the chi square analysis was performed, the p value was set at .05. This is large for this small sample size, and future research

should look at larger sample sizes with smaller p values. Finally, some of the sectors were combined when using inferential analysis: this limits the ability to get more granularity in the estimates.

5. 2 Implications and Future Directions

Given that ACEs are widespread, the preliminary data indicate that more training and education on trauma-informed care is needed for educators. There should be an extra emphasis on training the educators in team meetings about their own stress and about using trauma-informed care practices. Cannon (2020) notes that educating the providers on trauma and TIC practices has been shown to improve knowledge, attitude, and skill of the professionals. Unfortunately, most of the emphasis for TIC knowledge and training has been on nurses. Based on my research, we can determine that there is a large divide among sectors. Future work should be done to implement education and training on TIC into other sectors that work with high risk populations. It is essential that policies are implemented to ensure there is guidance on educator's knowledge and practice of trauma-informed care.

5.3 Conclusion

This research allows us to better understand the importance of ACEs and TIC and how we should incorporate these practices into our professional lives, across all sectors. Some sectors have done a good job of already educating professionals on these practices, but others need more education. The research shows that knowledge on TIC is essential and beneficial so making sure all sectors are educated on these practices would have a positive impact for the patients as well as the professionals. More groundwork is needed to incorporate TIC to all sectors.

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