

## BACKGROUND

Research indicates that a significant percentage of school-aged children have been exposed to trauma, or adverse childhood experiences (Gonzalez et al., 2016; Porche et al., 2016). This is particularly concerning, as exposure to trauma and family adversity in childhood is associated with compromised functioning that inhibits educational success and has also been identified as a predisposing factor for a myriad of deleterious health outcomes across the lifespan (Perfect et al., 2016; Shonkoff et al., 2012). A public health systems approach to mitigating the widespread impacts of trauma and adversity in childhood has prompted schools to adopt trauma-informed approaches (Chafouleas et al., 2015; Mendelson et al., 2015; SAMHSA, 2014). Competent and confident educators are a key component of creating trauma-informed schools: "They embody and model healthy, attuned and responsive relationships with their children. Teachers in trauma informed schools are confident in their ability to meet children's needs even when those needs are challenged by external stressors and adversity." (Shamblin, Graham, & Bianco, 2016, p. 190).

One of the key processes through which trauma is linked to emotional and behavioural problems is through impaired self-regulation. Evidence-based social and emotional learning (SEL) and mindful awareness have emerged as one avenue for enhancing children's self-regulation (Durlak et al., 2011; Weare, 2013; Zenner, Herrleben-Kurz, & Walach, 2014). Emerging research examining the effectiveness of school-based mindfulness interventions in populations with known trauma exposure or increased risk of multiple adversities have found similar benefits for children and youth (Black & Fernando, 2014; Mendelson et al., 2010; Sibinga et al., 2016; Viafora, Mathieson, & Unsworth, 2016). Despite relative consensus in the literature regarding the conceptual framework of trauma-informed care, operationalization is considerably more variable, and to date, few studies have evaluated the use of trauma-informed approaches, due in part to the lack of valid psychometric measures (Baker et al., 2015).

## PRESENT STUDY

As part of a larger pilot to implement a classroom-based, mindfulness-focused social and emotional learning program, MindUP, within an over-arching trauma-informed framework, this poster presents results of educators pre- and post attitudes of a trauma-informed approach to the implementation of MindUP.

TIF Training (Baseline)      MindUP Training (1 month)      MindUP Implementation (5 months)

Time A: ARTIC Survey

Time B: ARTIC Survey

Time C: ARTIC Survey

## METHODS

### Participants

Eighteen out of 22 participants (14 Kindergarten Teachers and 8 Early Childhood Educators) completed pre-Trauma-Informed Training (Time A) and post-program Implementation (Time C) surveys. All participants were female, educators from 7 different elementary schools in a Catholic school board in southwestern Ontario. Fourteen of the participating teachers (N=9) and Early Childhood Educators (N=5) completed the Educator Demographic Form. Of these, 71.4% identified their race/ethnicity as white, 7.1% as Aboriginal/First Nations/Metis, 7.1% as Latin-American, and 14.5% identified as "Other". Four out of the fourteen educators indicated their highest level of education as having completed a college diploma, one a Bachelor Degree (Arts/Sci), Seven Bachelor of Education, 2 Master's of Education. Four out of the fourteen educators indicated their highest level of education as having completed a college diploma, one a Bachelor Degree (Arts/Sci), Seven Bachelor of Education, 2 Master's of Education.

### Procedure

As part of a larger, 5 year, mixed methods study, educators completed the Attitudes Related to Trauma-Informed Care-35 (ARTIC-35) scale prior to attending a half day professional development session on trauma-informed training in the classroom. Educators also completed training in a social-emotional learning and mindful awareness curriculum, MindUP and implemented the program in their Kindergarten classrooms over a 5 month period. Following program completion, educators again completed the ARTIC-35. This poster reports on the pre-post measurement of the ARTIC-35. The ARTIC is used to measure trauma-informed care relevant attitudes in educators working in schools, and is a psychometrically sound measure developed by Baker et al. (2015) to look at differences in attitudes across time. The ARTIC-35 consists of 5 scales, 2 of which were the focus of this poster. Items are assessed on a 7-point Likert dimensional scale of educator's personal beliefs during the past two months. The Underlying Causes of Problem Behaviour and Symptoms subscale emphasizes perception of problem behaviour as malleable versus intentional and fixed. The Self-Efficacy at Work subscale is related to feeling able to meet the demands of working with a traumatized population versus feeling ineffective or unable to do so. Post surveys also included three open-ended questions related to possible benefits of trauma-informed training to the delivery of MindUP and changes recognized by educators to either their approach to teaching or classroom atmosphere.

### Data Analysis

Using SPSS Version 24 software (IBM Corp, 2016), researchers calculated regression means to fill in any missing data points. Descriptive statistics for the ARTIC's Underlying Causes and Self-Efficacy variables for the 18 participating teachers and ECEs were computed. Both subscales were normally distributed using Shapiro-Wilk's scores and one outlying case was removed from the data for analysis of Underlying Causes t-test and bivariate correlations. Qualitative analysis was conducted using a deductive approach to create a codebook from which two authors coded the answers to the three open ended survey questions using Dedoose Version 7.5.16 web application. Qualitative responses were taken together and analyzed as one record response per participant.

## FINDINGS

### Participants experienced increases in self-efficacy in meeting the demands of working with children who have experienced trauma or adversity

Results indicated a significant increase in educator's efficacy for providing trauma informed approaches in their classrooms from Time A-Pre-training (M = 5.53, SD = 0.78) to Time C-Post-program (M = 5.89, SD = 0.63,  $t=-2.41$ ,  $p<.05$ ).

Figure 1 displays changes in educators' self-efficacy for providing trauma informed approaches in their classroom.

Results demonstrated that educators' perceptions of efficacy for providing trauma informed approaches at Time A was associated with a statistically significant increase to self-efficacy at Time C. This result is further supported by qualitative reports. Many participants identified changes that strengthened their capacity to respond to challenging behaviour in the classroom (n=7). For example, one participant stated, "I have implemented a greater plethora of strategies to de-escalate anxiety, tired, and stressed student behaviour" (Teacher, School 2).

Participants noted feelings of increased ability to meet the different needs of their students and increased confidence in ideal teaching and relationship skills (n=6), such as, "I have really learned to be present in the moment with what is happening with each of my students. This is a benefit to them because I feel I can meet their needs and then move on with them." (Teacher, School 6). Similarly, "I am learning to breathe and take a breath and become more centered when feeling stressed. Helping children self-regulate and give them options like breathing have become part of the way to teach children now. I am more mindful in my interactions and I am more eager to help children become more optimistic" (Teacher, School 4).

### Participants reported a trend toward an increased understanding of the causes of problem behaviour

Participants indicated that the Trauma-Informed Training was helpful in understanding the causes of problem behaviour and symptoms in their students (n=10). "It helped me to recognize even more that what students are dealing with at home hugely impacts the behaviours/learning I see at school." (Teacher, School 6)

Moreover, participants transferred their new knowledge and understanding into prioritizing certain needs of students.

"I have become more attuned to the emotional needs of my students. It is very important to me that the environment of my classroom be peaceful, calm and emotionally safe for all students. I am trying to be observant of the cues my students give me about their stress levels, concerns and fears at all times." (Teacher, School 5)

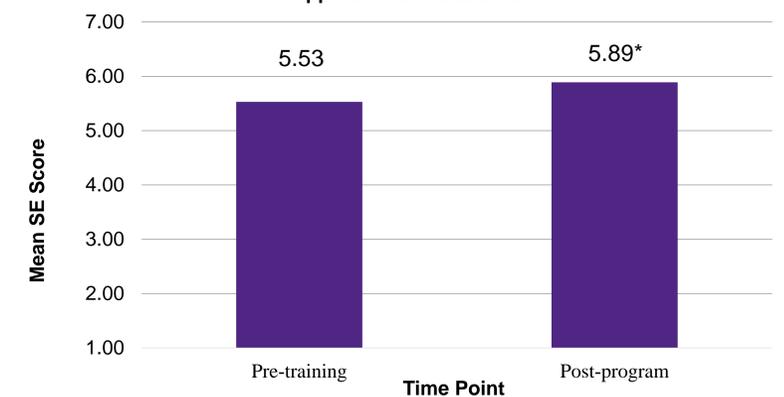
Although an increase in means scores from Time A to Time C was observed in educator's attitude towards the underlying causes of children's problem behaviours, this was not supported statistically.

## DISCUSSION

The trauma-informed training as a framework for delivery of MindUP demonstrated an increase in educator-reported self-efficacy- the feeling of being able to meet the demands of working with a traumatized population of students. This finding is important in the link between an educator's perceived ability to create a safe classroom for all children and to positively address the challenging behaviours of students who may have experienced adversity. The skills learned through delivery of a social-emotional learning and mindful awareness curriculum appear to be a key component related to this self-efficacy. This finding was aptly described by an educator, who highlighted the importance of Trauma-Informed Training in being able to understand and deliver MindUP by saying "The information was imperative to deliver the message of mindfulness and the mind up program" (ECE, School 2). Furthermore, although not statistically significant for this small sample, educators also reported a trend toward an increased understanding of the causes of problem behaviour as adaptable and often unintentional.

Clearly, these very preliminary findings, using a small number of participating schools, classrooms, and outcome measures reduces the generalizability across contexts. In future, we look forward to reporting on the data from our 5-year, multi-methods study.

Figure 1: Changes of Teacher Self-Efficacy for Providing Trauma-Informed Approaches in Classrooms



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