Application No. 2223/25

PI1 Name: Adi Stern

**Trauma matters: Development of a trauma-informed care framework for allied health professionals working with children and youth**

**Research Program**

Trauma experienced during childhood and adolescence can significantly impact development, hindering cognitive, emotional, and social growth, and limiting the ability of children to fulfil their potential. Research has demonstrated that interactions with significant caregivers and professionals play a crucial role in shaping how children and youth interpret and cope with traumatic experiences. Allied health professionals (occupational therapists, physiotherapists, speech therapists, and dietitians) regularly encounter children and youth in their clinical practice, providing treatment and supporting their development. However, allied health professionals, who are not mental health experts, may not recognize the behaviors traumatized children and youth exhibit as connected to trauma because they are unfamiliar with this subject. Moreover, the indirect exposure of the professional to trauma due to their relationship with traumatized individuals, may lead them to experience secondary traumatic stress (STS). There is an urgent need to advance basic knowledge on the acquisition and implementation of trauma-informed care (TIC) among these professionals by identifying and understanding the various underlying factors and the relationships between them, in addition to exploring which factors can serve as protectors from STS. A mixed-methods sequential explanatory design will be employed, starting with qualitative research to identify key factors related to TIC acquisition and implementation, followed by quantitative research to analyze associations between these factors. The findings will serve as a basis for designing a TIC framework tailored for allied health professionals working with children and youth, ensuring they can provide appropriate, sensitive, and effective care to traumatized children and youth to support their development.

**Scientific Background**

Approximately 340,000 children aged 0 to 18 years in Israel are at risk of experiencing a traumatic event, meaning that one in every five children in Israel suffers from abuse and neglect (The Israel National Council for the Child, 2023). The ongoing challenges of the COVID-19 pandemic and regional conflicts have only exacerbated the psychological burden on children and youth. A *trauma* is an event, series of events, or circumstances that are experienced as emotionally or physically harmful and have an enduring impact on someone mentally, emotionally, physically, socially, and/or spiritually and neurobiologically (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). When trauma occurs during childhood or adolescence—critical periods for development—it can disrupt the normal trajectory of growth and maturation, leading to profound and long-lasting impacts across various domains of functioning.

*Adverse childhood experiences* (ACEs) include all early traumatic events that occur before the age of 18 years that could have lasting negative effects on a person’s health and well-being (Felitti et al., 2019). They include maltreatment (neglect or physical, emotional, or sexual abuse) and household dysfunction (parental separation, domestic violence, mental illness, substance abuse, and incarceration; Boullier & Blair, 2018; Gilbert et al., 2009). Studies have shown that ACEs and other traumatic experiences can negatively affect children's and adolescents' development and well-being, including their physical, emotional, cognitive, and social capabilities (Balistreri, 2015; Wade et al., 2018; Webster, 2022). Children and youth may face motor, sensory, language, and cognitive difficulties; behavioral issues; physical illnesses requiring medical care; and other problems, such as difficulties with sleep and appetite (Balistreri, 2015; Balistreri & Alvira-Hammond, 2016; Cronholm et al., 2015; Kan et al., 2020; Lanier et al., 2018; Wade et al., 2018; Walker et al., 2011; Webster, 2022). Allied health professionals (e.g., occupational therapists, speech therapists, dietitians, and physical therapists), often treat these children and youth according to the individual consequences these experiences leave behind (Gerber, 2019; Goddard, 2021; Layne et al., 2014; Qu et al., 2023; Webster, 2022). Failing to provide the appropriate treatment that takes into consideration these traumatic experiences can lead to significant impairments in cognitive, emotional, and social development, leading to struggles in school performance, self-regulation, and the ability to form healthy relationships, with long-lasting effects into adulthood (Fratto, 2016; Lucio & Nelson, 2016).

The wide-ranging effects of early adversity and trauma, together with the understanding that professionals’ responses influence the long-term impact of traumatic events, have led to the development of a trauma-informed approach to care (TIA; Gerber, 2019; Matthew et al., 2022; Wilson et al., 2013). TIA is distinct from trauma-specific services or trauma systems. It is inclusive of trauma-specific interventions, whether assessment, treatment or recovery supports, yet it also incorporates key trauma principles into the organizational culture (SAMHSA, 2014). This approach acknowledges that health care organizations and care teams need a complete picture of a patient’s life situation—past and present—to provide effective health care services with a healing orientation. Adopting trauma-informed practices can potentially improve patient outcomes and increase staff satisfaction (National Council on Behavioral Health, 2019; SAMHSA, 2014). *Trauma-informed care* (TIC) is a framework for minimizing the effects of trauma by addressing distress and offering emotional support to facilitate resilience and recovery (Marsac et al., 2016; Wilson et al., 2013). It involves creating a safe, supportive environment that empowers individuals to engage in their own healing process rather than retraumatizing them (Holmes et al., 2023) and emphasizes the importance of understanding the patient's experience and how it led to a physical or psychological effect (Gerber, 2019; Matthew et al., 2022).

Studies have increasingly shown that TIC can enhance patient outcomes, reduce retraumatization, and support healing across diverse populations (Gerber, 2019; Matthew et al., 2022). However, despite these promising findings, there is still limited empirical research on the specific application of TIC principles within allied health professions, especially in child and youth services (Steen et al., 2022). Current models often lack comprehensive integration of TIC principles in clinical practice, particularly in non-mental health fields, highlighting the need for more foundational studies to inform such integration. Moreover, TIC is usually not part of the basic training of allied health professionals, thus most of them do not perceive the behaviors of traumatized children and youth as obviously connected to trauma. Hence, before TIC can be integrated into the training and professional development of allied health professionals, it is necessary to understand what such professionals know about TIC, what needs they have, and what factors may affect their ability to acquire and implement TIC with traumatized children and youth.

TIC not only provides a framework for addressing the needs of traumatized children and youth, but also establishes best practices for protecting therapists from the consequences of exposure to trauma. It has become increasingly clear that the adverse sequelae of trauma exposure may extend beyond survivors or perpetrators (Gottfried & Bride, 2018). This indirect trauma, which may affect medical professionals and health care providers who care for traumatized children and youth, is known as *secondary traumatic stress* (STS) or compassion fatigue (Gottfried & Bride, 2018; Jee et al., 2020; Newell et al., 2016). STS consists of behavior and emotions arising from the desire to help a person experiencing a traumatic event. It is defined as indirect exposure to trauma due to a professional relationship with individuals who experience a traumatic event (American Psychiatric Association, 2013; Bride et al., 2004; Figley et al., 1999).

Many studies point to the contribution of health professionals’ emotional characteristics to their ability to handle STS. Some suggest that *resilience*, the ability to adapt in the face of tragedy, trauma, adversity, hardship, and ongoing significant life stressors (Newman, 2005), may prevent STS (e.g., Harker et al., 2016; Ludick & Figley, 2017). Others indicate that *self-compassion*, the ability for self-acceptance, kindness, and self-understanding during times of suffering, failure, or personal inadequacy (Neff, 2003), might effectively mitigate STS (e.g., Rushforth et al., 2023; Yazıcı & Özdemir, 2023). Finally, *empathy*, the ability to understand and share the emotional experiences of those who directly experienced trauma (Gibbons, 2011), is presented as a key feature in reducing STS among health professionals, indicating that education in good empathy skills might assist as a protective factor against STS (Ludick & Figley, 2017; Ogińska-Bulik et al., 2023).

Organizational and environmental factors also play a critical role in shaping the effectiveness of healthcare delivery, particularly in the context of TIC. Successful implementation of TIC requires not only individual knowledge and attitudes but also supportive organizational structures, including leadership commitment, adequate resources, and a culture that prioritizes trauma-sensitive practices (Bowen & Murshid, 2016; SAMHSA, 2014). Furthermore, a supportive work environment that fosters continuous learning and provides opportunities for professional development has been shown to enhance the ability of allied health professionals to recognize and respond to trauma (Green, 2015; Mancini & Marek, 2004). Despite these insights, there remains a significant gap in understanding the specific organizational factors that most influence TIC adoption.

In conclusion, further research is needed to explore the basic factors that underlie the acquisition and implementation of TIC in allied health professionals, to outline the relationships between them, and to identify factors related to STS. This basic theoretical understanding will bridge the knowledge gaps and serve as a foundation for developing a novel framework that systematically integrates TIC into allied health interventions, addressing the unique needs of traumatized children and youth, while offering comprehensive support for allied health professionals.

**Research Objectives**

The proposed research will be conducted in three phases:

***Phase 1 - Qualitative study.*** This phase will deepen our understanding of the preliminary results from our initial survey (Ghanem et al., under review), and identify facilitators and barriers to the acquisition and implementation of TIC in allied health professionals.

***Phase 2 - Quantitative study.*** This phase will include a cross-sectional survey to assess identified factors related to TIC acquisition and implementation. The final study variables will be determined based on the findings from Phase 1.

***Phase 3 – TIC framework development and formative evaluation.*** This phase will include the development of a TIC framework for allied health professionals working with children and youth as a basis for future practice. Finally, a formative evaluation will be conducted to finalize the framework.

**Expected Significance**

Currently, there is a clear theoretical and practical gap in the clinical field: while the importance of TIC is widely acknowledged, there is a lack of a theoretical framework and tools to support its implementation. This gap leaves professionals unable to fully respond to the complex needs of traumatized children and youth. Failing to address this need not only compromises the quality of care but may also create a sense of helplessness among allied health professionals, as they are aware of the need but lack the resources to address it effectively. The anticipated impact of the proposed research includes gaining a deeper understanding of the factors underlying the limited use of TIC among allied health professionals and the relationships between those factors. This understanding will form the foundation for developing a comprehensive TIC framework that enhances allied health professionals' ability to identify and address trauma, ultimately leading to more effective care and improved long-term outcomes for traumatized children and youth. Moreover, given their ethical commitment to providing adequate support to children and youth in various contexts, it is crucial to equip these professionals with the necessary skills and strategies to meet these needs. Additionally, by addressing STS and providing coping strategies, the application of this framework will help mitigate the emotional toll on allied health professionals. Finally, this research will drive organizational change by embedding TIC into the everyday practices of the healthcare system. By reducing trauma-related complications and addressing provider burnout, the application of this framework will contribute to long-term cost savings and efficiency, ultimately strengthening the overall healthcare system.

**Detailed Description of the Proposed Research**

**Working Hypotheses**

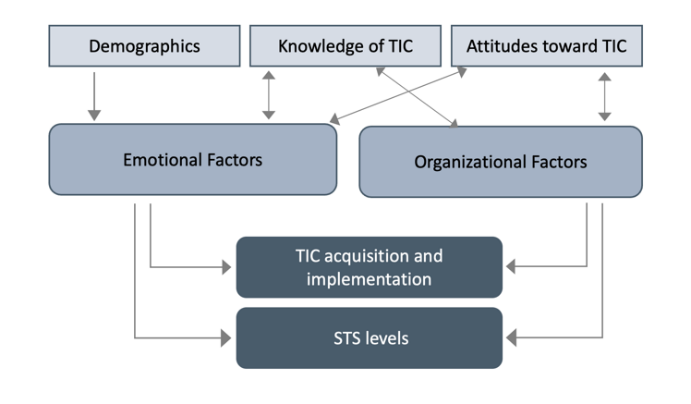
***Phase 1 - Qualitative phase:***

1. Factors that facilitate or impede the acquisition and implementation of TIC will be identified and will serve as the basis for developing a TIC framework for allied health professionals working with children and youth.

***Phase 2 - Quantitative phase*** (final variables will be determined based on the findings from Phase 1):

1. Significant associations will be found between baseline variables (demographics, knowledge of TIC, attitudes towards TIC), emotional factors (resilience, self-compassion, empathy), organizational factors, acquisition and implementation of TIC, and STS. Figure 1 presents an initial proposed model describing the hypothesized factors and the associations between them.
2. Emotional factors (resilience, self-compassion, and empathy) and organizational factors will each act as mediating variable between knowledge of, and attitudes towards, TIC, and TIC acquisition and implementation and STS.
3. No significant differences will be found between professional groups in knowledge of TIC, attitudes towards TIC, emotional factors (resilience, self-compassion, empathy), organizational factors, acquisition and implementation of TIC, and STS.

**Figure 1.** *Proposed**Model of Associations Between Emotional Factors, Organizational Factors, TIC, and STS*



***Phase 3 – TIC framework development and formative evaluation***

1. The formative evaluation will help to identify both strengths of the framework and areas for improvement , leading to the refinement of a final framework tailored to promote wider acquisition and implementation of TIC among allied health professionals working with children and youth.

**Research Design and Methods**

The proposed study will use a mixed-methods sequential explanatory design (a qualitative phase followed by a quantitative phase), allowing for a comprehensive understanding of the complex factors influencing TIC acquisition and implementation and the associations between them. Integrating both qualitative insights and quantitative data to address multifaceted research questions is more effective than either method alone (Creswell & Plano Clark, 2018). This method captures the nuanced experiences of allied health professionals while also providing measurable evidence to inform the development of an evidence-based framework.

***Phase 1 - Qualitative Phase***

**Aims.** The objectives of this qualitative phase are to: (1) Identify the facilitators of and barriers to the acquisition and implementation of TIC among allied health professionals working with children and youth in various clinical settings; and (2) Identify shared needs across all allied health professions alongside the unique needs specific to each profession.

**Study design.** The study employs a qualitative research design, utilizing a reflexive thematic analysis approach, which allows for identifying, analyzing, and interpreting patterns of meaning (themes) within qualitative data (Braun & Clarke, 2020). This approach emphasizes the researcher's active role in the theme development process, involving deep reflection, subjective interpretation, and flexibility. This approach was chosen for its reflective nature; it facilitates an in-depth exploration of barriers and facilitators to TIC acquisition and implementation, ensuring that findings are both descriptive and interpretative. Additionally, this approach can be used to systematically identify and interpret complex patterns within qualitative data while allowing flexibility in capturing both shared and unique experiences across allied health professions.

**Participants.** About eight participants from each profession (occupational therapists, physiotherapists, speech therapists, and dietitians), currently working with children and youth, will be recruited through key informant connections as part of a purposeful sample. This sample size will allow us to provide sufficient diversity and depth of insights while maintaining manageable data collection and analysis.

**Assessment tools.** An in-depth semi-structured interview guide will be developed for this phase. The interview guide will include questions that refer to opportunities and challenges in meeting traumatized children and youth, facilitators of and barriers to TIC acquisition, facilitators of and barriers to TIC implementation, general and profession-specific needs of each allied health profession, current coping strategies used to deal with trauma-related situations, and the response of healthcare organizations to the needs of professionals with reference to a TIA.

**Procedure.** After receiving ethics approval from the University of Haifa and Ben-Gurion University ethics committees, we will contact potential participants via email or phone, present the research aims and importance, and invite them to participate in interviews. Participants will be asked to sign an informed consent prior to the interview. Interviews will be held in-person or online using Zoom/Google Meet in accordance with the availability and the preference of participants. The interviews will last between 45 and 60 minutes. Interviews will be taped and transcribed, while erasing any identifying details. This process will enable a complete and accuraterecord of the interviews as the basis for data analysis.

**Challenges in recruiting subjects and coping methods.** Allied health professionals often have busy schedules, making it difficult to find time for interviews. We will offer flexible scheduling options, including evenings, and provide the option for online interviews to remove travel time. In addition, potential participants may not appreciate or understand the direct benefit of participating in the study or find the research topic irrelevant to their work. Therefore, we will clearly communicate the importance and potential impact of the research on their professional practice and the field, as well as highlighting any direct benefits, such as contributing to knowledge that could improve workplace practices or patient outcomes.

**Data Analysis.** The data will be analyzed using reflexive thematic analysis, as outlined by Braun and Clarke (2020), including familiarizing with the data, generating initial codes, searching for potential themes, reviewing and refining themes, defining and naming the themes, and finally writing a report to present a cohesive narrative supported by the data. To facilitate the analysis, we will use ATLAS.ti (Friese, 2019) to organize and manage the data systematically.

***Phase 2 - Quantitative Phase***

**Aims.** To explore and gain measurable evidence of the complex associations between the variables that emerged in Phase 1 in addition to: (a) baseline variables (demographics, knowledge of TIC, attitudes towards TIC), (b) emotional factors (resilience, self-compassion, empathy), (c) organizational factors, (d) acquisition and implementation of TIC, and (e) STS.

**Study design.** A cross-sectional quantitative study with a convenience sample. This phase will include an online survey of allied health professionals working with children and youth aged 0 to 18 years. This design enables us to collect measurable data from a large sample within a relatively short timeframe and is particularly suited for examining complex relationships and patterns across multiple factors, which will emerge from Phase 1.

**Participants.** According to a sample size calculation using G-Power, based on a medium effect size (*f*2= .15), an error size of .01, and power of .95, the sample will include approximately 200 allied health professionals (occupational therapists, physiotherapists, speech therapists, and dietitians) who work with children aged 0 to 18 years in Israel. It will include a minimum quota for each professional category, ensuring both adequate representation and the ability to perform meaningful comparisons across professions. All participants should have at least one year of experience working with this population. Participants will be recruited by advertising on social media interest groups and professional and organizational mailing lists.

**Assessment tools.** The survey will include several questionnaires in a sequence under one link. The final assessment tools included in the survey will be determined according to the results of Phase 1. The initial proposed assessment tools are:

1. *Demographic Questionnaire.* This questionnaire includes questions about gender, age, nationality, religious affiliation, professional specialty, seniority (general and with children), organization affiliation (e.g., Ministry of Health, Ministry of Education, or community services), and geographic work area.
2. The *Attitudes Related to Trauma-Informed Care (ARTIC) Scale* (Kring et al., 2016)is a tool designed to measure the attitudes of professionals and organizations towards TIC. The primary goal of the questionnaire is to assess the readiness, beliefs, and commitment of individuals or teams to implementing trauma-informed practices in their work, particularly within settings that involve supporting individuals who have experienced trauma. The scale helps to identify potential barriers and areas where further training or support may be needed to effectively adopt trauma-informed approaches. The Hebrew translation of the ARTIC is currently in process by the authors of this research proposal.
3. *Trauma-Informed Approach Questionnaire (TIAQ).* The TIAQ was developed for the current study by Dr. Adi Stern and Dr. Liron Lamash based on a survey developed by Rupert and Bartlett (2022) and a trauma-oriented organization questionnaire developed by the Haruv Institute (https://haruv.org.il). Seven professional experts on TIC from various disciplines reviewed the initial TIAQ version. The researchers developed and approved a final version according to the experts’ feedback. The final version includes four sections. The first section consists of 17 items assessing the extent of the knowledge the participants have on trauma in general, rated from 1 (*very limited*) to 5 (*extensive*). The second section includes seven items referring to the participants' perceptions of the relevance of trauma-related topics to their clinical practice with children, rated from 1 (*not relevant*) to 5 (*highly relevant*). The third section includes 11 items about the extent to which the participants apply TIC in their clinical practices, rated from 1 (*not at all*) to 5 (*consistently*). The fourth section includes 16 items related to a TIC intake interview, and participants mark whether they address each in their intake interviews. The TIAQ has shown high internal consistency (.96 for all items and .67–.96 for the occupational therapy sections).
4. *The Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003)*. The CD-RISC is a widely recognized and extensively used self-report measure that assesses level of resilience, defined as the ability to adapt and recover from adversity, stress, and life's challenges. The CD-RISC consists of 25 items capturing various aspects of resilience, including adaptability, emotional strength, and the capacity to cope effectively with stress and setbacks. Respondents rate their agreement with each item on a Likert scale from 0 (*not true at all*) to 4 (*true nearly all the time*); higher scores indicate higher resilience. The CD-RISC has demonstrated good reliability and validity in numerous studies and has been translated into multiple languages. It also demonstrated good internal consistency in various studies, with a Cronbach's alpha coefficient around .85 or higher in different populations. The CD-RISC has shown strong evidence of construct validity; it is positively correlated with measures of positive psychological functioning and negatively correlated with measures of psychological distress (Connor & Davidson, 2003).
5. *Self-Compassion Scale (SCS; Neff, 2003)*. The SCS is a widely used self-report instrument assessing an individual's capacity for self-compassion and self-kindness. It includes 26 items rated on a scale from 1 (*almost never*) to 5 (*almost always*) to measure the three core components of self-compassion: self-kindness versus self-judgment, common humanity versus isolation, and mindfulness versus overidentification. The total score and individual component scores are obtained by calculating their items' average score; higher scores indicate greater self-compassion. The SCS has been found to have good internal consistency. In various studies, the Cronbach's alpha coefficient for the overall scale has typically ranged from .86 to .92. Some studies showed moderate to high stability over time, suggesting good test–retest reliability (Neff, 2003; Neff & Vonk, 2009). The SCS has content validity based on Neff's theoretical framework of self-compassion, including the three core components (self-kindness, common humanity, and mindfulness; Neff, 2003) and construct validity with negative correlations with self-criticism and self-judgment measures and positive correlations with psychological well-being and positive mental health measures (Neff et al., 2007).
6. *Interpersonal Reactivity Index (IRI; Davis, 1980)*. The IRI is a widely recognized and extensively used self-report designed to assess an individual's dispositional empathy, defined as the capacity to understand and share the feelings and perspectives of others. It comprises 28 items rated on a scale of 1 (*does not describe me well*) to 5 (*describes me very well*). The items are divided into four subscales, each targeting a different aspect of empathy. The four subscales are (a) *fantasy*, the tendency to identify with fictional characters; (b) *perspective taking*, the ability to adopt another person's point of view; (c) *empathic concern*, the degree of emotional responsiveness and compassion for others; and (d) *personal distress*, an individual's emotional discomfort in response to the suffering of others. Scoring the IRI involves summarizing responses to individual items on each subscale; higher scores indicate higher empathy dispositions. The IRI has demonstrated good internal consistency, with Cronbach's alpha coefficients ranging from .70 to .80 or higher for its four subscales (fantasy, perspective taking, empathic concern, and personal distress) and reasonable test–retest reliability over time. The IRI has strong evidence of construct validity and convergent validity with other measures of empathy and related constructs, supporting its ability to assess the intended aspects of empathy (Davis, 1980).
7. The *TICOMETER*© (Bassuk et al., 2017) is a psychometrically validated assessment tool designed to measure the implementation of TIC within health and human service organizations. Developed with input from an expert panel, the TICOMETER© originally comprised 189 items across five key domains, which were later refined to 35 items based on their psychometric strength. These domains include safety, trustworthiness, peer support, collaboration, and empowerment, all essential aspects of TIC. The TICOMETER© has demonstrated high reliability, with strong internal consistency across its domains, as well as good test-retest reliability. The Hebrew translation of the *TICOMETER*© is currently in process by the authors of this research proposal.
8. *Secondary Traumatic Stress Scale* (STSS; Bride et al., 2004). This scale is a structured self-report questionnaire designed to evaluate the presence and severity of STS symptoms in individuals who might be exposed to the traumatic experiences of others, such as healthcare providers, social workers, and counselors. The STSS consists of 17 items, divided into three subscales that correspond to the core dimensions of STS: intrusion, avoidance, and arousal. Each item is rated on a 5-point Likert scale, ranging from 1 (*never*) to 5 (*very often*), indicating the frequency with which the respondent has experienced each symptom. The total and subscales scores on the STSS are calculated by summing the items’ scores, with higher scores indicating greater levels of STS. The STSS has demonstrated strong construct validity and good to excellent internal consistency of .93 for the total scale and .80-.87 for the subscales (Bride et al., 2004).

**Procedure.** After receiving ethics approval from the University of Haifa and Ben-Gurion University ethics committees, an advertisement will be posted to relevant professional interest groups on social media, including a link to the study description and an explanation of thes importance of the study. Allied health professionals who agree to participate in the research by signing an informed consent form will then be able to access the online survey. The survey will be anonymous, and there will be no way for the researchers to identify the participants.

**Challenges in recruiting subjects and coping methods.** We do not anticipate difficulty in recruiting participants for an anonymous survey. However, we will monitor the sample during the data collection to verify there are enough participants from each profession. If needed, we will increase the advertising to dedicated groups on social media. We will also use relevant distribution lists (e.g., lists of academic department graduates or allied health professionals in health and education systems and professional associations).

**Data Analysis.** Data analyses will be performed using IBM SPSS and AMOS (version 27). Descriptive statistics will be used to describe sample characteristics and the ranges, means and standard deviations of key variables. Structural Equation Modeling (SEM) will be used to examine the association between the variables, with a focus on understanding both direct and indirect effects, offering a deeper understanding of how these variables interact. The analysis will include evaluating the model's goodness-of-fit indices, such as the Chi-square test, Root Mean Square Error of Approximation (RMSEA), and Comparative Fit Index (CFI), to provide insights into the strength and direction of the relationships among the variables as a basis for the theoretical model. Multivariate Analysis of Variance (MANOVA) will be used to test differences between professional groups in knowledge of TIC, attitudes towards TIC, emotional factors, organizational factors, acquisition and implementation of TIC, and STS.

***Phase 3 – TIC framework development and formative evaluation***

**Aims.** Based on Phases 1 and 2, a TIC framework for allied health professionals will be developed. A formative evaluation will be conducted to evaluate the proposed framework's strengths and weaknesses and refine its various aspects (Elwy et al., 2020) to produce the final TIC framework for allied health professionals, with specific adjustments for each profession, if needed.

**TIC framework development.**The proposed framework will define the key components underlying TIC acquisition and implementation, based on theoretical models and the findings of previous phases. The TIC framework’s core elements will include, as is customary, the following components: definition of the problem and goals, description of key concepts, description of the framework components and their interrelationships, applicability and limitations (Klaic et al., 2022).

**Study Design.**A formative evaluation based on descriptive qualitative methods from interviews with stakeholders. This approach allows for an in-depth examination of the proposed TIC framework’s strengths and weaknesses, providing rich, context-specific feedback from key stakeholders (Elwy et al., 2020). This method is particularly suitable for refining and improving the framework based on real-world perspectives and experiences, ensuring it is tailored to the needs of allied health professionals. By using qualitative interviews, the study can capture nuanced insights and identify practical considerations that may not emerge from quantitative methods, ultimately leading to a more effective and relevant TIC framework.

**Participants.** The study will include about 10-15 experts in the relevant fields, selected based on their deep theoretical knowledge and practical experience with TIC. Participants will include professionals with specialized expertise in the different professions, as well as stakeholders and policymakers with a direct influence on the implementation of TIC frameworks. The internal diversity of the sample will be ensured by selecting individuals with varied roles, bringing unique insights regarding the theoretical foundations and practical applications of TIC. This diverse composition will enable a comprehensive evaluation of the framework’s feasibility from both theoretical and practical perspectives.

**Assessment tools.**A semi-structured interview guide will be developed to refine the initial TIC framework. The interview guide will include closed and open questions that refer to the framework’s components, as well as the implementation and sustainability of the framework (e.g., acceptability, fidelity, and feasibility).

**Procedure.** After receiving ethics approval from the University of Haifa and Ben-Gurion University ethics committees, participants will be recruited by direct addressing. Participants will be asked to sign an informed consent prior to the interview. Following a presentation of the suggested TIC framework, the participants will be asked about the components and content of the framework and the implementation and sustainability aspects of it. Interviews will be held in-person or online using Zoom/Google Meet in accordance with the availability and the preference of participants. The interviews will last between 30 and 45 minutes. Interviews will be taped and transcribed, while erasing any identifying details. This process will enable a complete and accuraterecord of the interviews as the basis for data analysis.

**Challenges in recruiting subjects and coping methods.** As mentioned in phase 1; to accommodate the participants' potentially busy schedules, we will offer a variety of options for conducting the interviews.

**Data Analysis.**A directed content analysis approach will be applied, guided by existing theory and research to address prespecified interview topics while remaining open to new themes that may emerge. This method improves clinical implementation and ensures a systematic and structured evaluation of the data (Hsieh & Shannon, 2005; Elwy et al., 2020).

**Preliminary Results**

The preliminary results stem from a pilot study conducted on allied health professionals. The pilot study aimed to: (a) investigate the presence of gaps in knowledge of trauma, attitudes toward the relevance of TIC to allied health professionals' clinical practice, and TIC implementation level, and (b) explore the correlations between knowledge of trauma, TIC relevance and implementation, and emotional factors related to STS (self-compassion, resilience and empathy).

This cross-sectional pilot study was conducted with 176 Israeli allied health professionals recruited via social media and interest groups. Sixty (34%) were occupational therapists, 62 (35%) were speech therapists, 44 (25%) were physical therapists and 11 (6%) were dietitians. Their ages ranged from 23 to 67 years (*M*= 35 years, *SD*= 8.9), and they had a mean of 10 years (*SD* = 8.0) of experience working with children and youth. The online survey included the: (1) Trauma-Informed Approach Questionnaire(TIAQ, Stern & Lamash, 2023), to assess the participants’ knowledge, relevance perception, and TIC implication level in their work; (2) Self-Compassion Scale (SCS; Neff, 2003) to evaluate participants’ capacity for self-compassion and self-kindness; (3) Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003) to assess various facets of resilience; and (4) Interpersonal Reactivity Index (IRI; Davis, 1980) to measure dispositional empathy. ANOVA was used to assess differences between knowledge, attitudes, and implementation. Pearson correlations were used to assess relationships with emotional factors.

The results indicated significant differences between trauma knowledge, TIC relevance perception, and TIC implementation across the entire sample, F(2, 352) = 127.5, p < .001, η² = 0.43. Perception of TIC relevance was higher than knowledge of trauma (p < .001) and TIC implementation (p < .001). Positive correlations were found between resilience and knowledge of trauma (r = .22, p < .01), TIC perception relevance (r = .17, p < .05), and TIC implementation (r = .23, p < .05). Self-compassion was positively correlated with knowledge of trauma (r = .18, p < .05) and TIC implementation (r = .22, p < .01). Perspective-taking (empathy) was positively correlated with knowledge of trauma (r = .15, p < .05), perception of TIC relevance (r = .39, p < .01), and TIC implementation (r = .31, p < .01), and empathic concern was positively correlated with perception of TIC relevance (r = .33, p < .01).

The findings from this preliminary study highlight the limited knowledge and understanding of trauma in this population, emphasizing the absence of TIC training. However, there was a notable discrepancy: Participants expressed high perceptions of TIC's relevance for their practice. These findings further emphasize allied health professionals’ unpreparedness or lack of ability to identify and care for children and youth who may have experienced trauma, aligning with previous research findings (Jee et al., 2020; Kerker et al., 2016). The complexity of treating traumatized children and youth and the lack of well-established TIC teaching and training models for allied health professionals in Israel underscore the need for a TIC framework for this population. Moreover, resilience, self-compassion, and empathy among allied health professionals can be strategies used to cope with treating children and youth who have experienced trauma and can prevent STS.

**Resources**

*Background and Qualifications of the Researchers*

Both researchers hold senior faculty positions in the Occupational Therapy Departments, Dr. Adi Stern at Ben-Gurion University and Dr. Liron Lamash at the University of Haifa, and both have extensive experience in supervising master's and doctoral students, which will facilitate various stages of the study. As leading occupational therapists, they possess extensive expertise in child and youth development as well as trauma-related interventions. Dr. Stern specializes in mental health, with a particular focus on trauma. She has served as a consultant for the Haruv Institute and is recognized as an expert in TIC and is currently working at a special clinic for adolescents with mental health disorders and co-morbid addictions. Dr. Stern is familiar with various research methods. She has used qualitative methods in her PhD study (see Stern & Maier, 2014) and SEM in her postdoctoral studies (see Stern et al., 2018; 2020). Dr. Stern actively trains and supervises allied health professionals. As a member of the Supreme Council of Occupational Therapy, Dr. Stern maintains connections with key organizations such as the Ministry of Health and health maintenance organizations, which will be valuable for participant recruitment and engaging experts in the study. She also leads the Laboratory for the Research of Functional Aspects in Mental Health, offering an innovative space for the research activities. Dr. Lamash specializes in child and youth development, with expertise in assessing and addressing developmental challenges in educational settings. She has extensive experience training educational staff and developing evaluation programs for children and youth with a variety of developmental difficulties (see Lamash et al., 2023). Dr. Lamash is familiar with different quantitative research methods and has used SEM in her research (see Fogel & Lamas, 2021). Her background in the educational system, combined with her experience in training allied health professionals, brings a unique perspective on integrating TIC within educational settings. She is the head of the Technological Laboratory to Promote Autonomy and Participation (Tech-AP), which provides an accessible and innovative space for conducting interviews and focus groups.

*Research Collaborations*

Both researchers are actively engaged in collaborations with researchers from related departments at Ben-Gurion University and the University of Haifa, such as physiotherapy, speech therapy, public health, and social work. They also collaborate with researchers from other occupational therapy departments at multiple institutions across Israel. Additionally, this research will be conducted in partnership with the prominent team at the Haruv Institute, a hub for local and international professionals, clinicians, and researchers in the field of child maltreatment. The clinic director, Mrs. Stav Dekel Amir, is an occupational therapist and PhD student. The clinic’s team includes a child psychiatrist, pediatric neurologist, occupational therapist, speech pathologist, nutritionist, and social worker, each a specialist in childhood trauma. *Prof. Asher Ben-Arieh*, the former chair of Haruv Institute, has agreed to serve as a consultant to the current research as well as *Prof. Paula Feder-Bubis*, an associate professor at the Faculty of Health Sciences at Ben Gurion University, an expert in qualitative research (see collaboration letters).

**Expected Results**

Children and youth in Israel are exposed to trauma at a higher rate than most children in other Western countries. Thus, TIC must be an integral part of the core knowledge and training for Israeli allied health professionals working with children and youth, given the profound impact trauma can have on their development. However, many allied health professionals are not adequately equipped with the necessary knowledge to effectively implement TIC. Furthermore, the foundational academic programs for allied health professionals in Israel do not provide sufficient education or practical training on trauma and TIC principles. The findings from the current study will serve as a basis for developing a TIC conceptual model and training framework. This model will incorporate essential elements for effective acquisition and implementation in both academic and clinical settings, as well as promote protective factors against STS. Future research can investigate the application and integration of these TIC programs to allied health professionals working with children and youth.

**Pitfalls and Alternatives**

We have identified the specific challenges we may face for each phase of the study above. Based on our experiences conducting similar studies with high response rates, we anticipate no difficulties recruiting the sample for the survey. If necessary, we will increase advertisements for research participation with dedicated mailing lists of health care, education, and academic institutions. In case of difficulty recruiting participants for the interviews and/or experts for the formative evaluation, we will apply for assistance from the relevant authorities in the Ministry of Health and the Ministry of Education and relevant associations. Additionally, we will use our collaboration with the Haruv Institute, Israel’s leading body in the field of children who are victims of abuse and neglect.

**Bibliography**

1. American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425596
2. Arnsten, A.F., Raskind, M.A., Taylor, F.B., & Connor, D.F. (2015). The effects of stress exposure on prefrontal cortex: Translating basic research into successful treatments for post-traumatic stress disorder. *Neurobiology of Stress, 1*, 89-99. https://doi.org/10.1016/j.ynstr.2014.10.002
3. Asmussen, K., Drayton, E., Fischer, F., & McBride, D. (2020). Adverse childhood experiences: What we know, what we don’t know, and what should happen next. *Early Intervention Foundation*. https://www.eif.org.uk/ report/adverse-childhood-experiences-what-we-know-what-we-dont-know-and-what-should-happen-next
4. \*Atchison, B. J., & Suarez, M. (2021). Introduction to trauma and the role of occupational therapy. In A. Lynch, R. Ashcraft, & L. Tekell (Eds.), *Trauma, occupation, and participation: Foundations and population considerations in occupational therapy* (pp. 3–18). AOTA Press.
5. Balistreri, K. S. (2015). Adverse childhood experiences, the medical home, and child wellbeing. *Maternal and Child Health Journal, 19*(11), 2492–2500. https://doi.org/10.1007/s10995-015-1770-6
6. Balistreri, K. S., & Alvira-Hammond, M. (2016). Adverse childhood experiences, family functioning and adolescent health and emotional well-being. *Public Health, 132*, 72–78. https://doi.org/10.1016/j.puhe.2015.10.034
7. Bassuk, E., Unick, G., Paquette, K., & Richard, M. (2017). Developing an Instrument to Measure Organizational Trauma-Informed Care in Human Services: The TICOMETER. *Psychology of Violence*, 7, 150–157. https://doi.org/10.1037/vio0000030.
8. Bowen, E. A., & Murshid, N. S. (2016). Trauma-informed social policy: A conceptual framework for policy analysis and advocacy. *American Journal of Public Health, 106*(2), 223-229. https://doi.org/10.2105/AJPH.2015.302970
9. Boullier, M., & Blair, M. (2018). Adverse childhood experiences. *Paediatrics and Child Health, 28(*3), 132–137. https://doi.org/10.1016/j.paed.2017.12.008
10. Braun, V., & Clarke, V. (2020). *Thematic analysis: A practical guide.* SAGE Publications.
11. Bride, B. E., Robinson, M. M., Yegidis, B., & Figley, C. R. (2004). Development and validation of the secondary traumatic stress scale. *Research on Social Work Practice, 14*(1), 27–35. https://doi.org/10. 1177/1049731503254106
12. Chartier, M. J., Brownell, M. D., Isaac, M. R., Chateau, D., Nickel, N. C., Katz, A., ... & Taylor, C. (2017). Is the families first home visiting program effective in reducing child maltreatment and improving child development? *Child Maltreatment, 22*(2), 121-131. https://doi.org/10.1177/1077559517701230 Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor‐Davidson resilience scale (CD‐RISC). *Depression and Anxiety, 18*(2), 76–82. https://doi.org/10.1002/da.10113
13. Cronholm, P. F., Forke, C. M., Wade, R., Bair-Merritt, M. H., Davis, M., Harkins-Schwarz, M., ... & Fein, J. A. (2015). Adverse childhood experiences: Expanding the concept of adversity. *American journal of preventive medicine*, *49*(3), 354-361. https://doi.org/10.1016/j.amepre.2015.02.001
14. Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology, 10*, 85.
15. Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine, 14*(4), 245–258. https://doi.org/10.1016/S0749-3797(98)00017-8
16. Figley, C. R., Carbonell, J. L., Boscarino, J. A., & Chang, J. (1999). A clinical demonstration model for assessing the effectiveness of therapeutic interventions: an expanded clinical trials methodology. *International Journal of Emergency Mental Health, 1*(3), 155–164.‏
17. Fogel, Y., & Lamash, L. (2021). Role perception of occupational therapists Working in education systems: The part of self-efficacy and employability skills. *Occupational Therapy International,* Article 5531224. https://doi.org/10.1155/2021/5531224
18. Forkey, Griffin, J. L., & Szilagyi, M. (2021). Childhood trauma & resilience: A practical guide. *American Academy of Pediatrics*. https://doi.org/10.1542/peds.2021-052580.
19. Fraser, K., MacKenzie, D., & Versnel, J. (2019). What is the current state of occupational therapy practice with children and adolescents with complex trauma? *Occupational Therapy in Mental Health, 35*(4), 317–338. https://doi.org/10.1080/0164212X.2019.1652132
20. Frewen, P., Zhu, J., & Lanius, R. (2019). Lifetime traumatic stressors and adverse childhood experiences uniquely predict concurrent PTSD, complex PTSD, and dissociative subtype of PTSD symptoms whereas recent adult non-traumatic stressors do not: Results from an online survey study. *European Journal of Psychotraumatology, 10*(1), Article 1606625. https://doi.org/10.1080/20008198.2019.1606625
21. Fratto, C. (2016). Trauma-informed care for youth in foster care. *Archives of Psychiatric Nursing, 30*(3), 439-446. https://doi.org/10.1016/j.apnu.2016.01.007
22. Friese, S. (2019). *ATLAS.ti 8 for Windows User Manual.* ATLAS.ti Scientific Software Development GmbH.
23. Gerber, M. R. (Ed.). (2019). *Trauma-informed healthcare approaches: A guide for primary care.* Springer. ‏https://doi.org/10.1007/978-3-030-04342-1
24. Ghanem, N., Lamash, L., & Stern, A. (Under review). Exploring trauma-informed care among allied health professionals working with children and youth. *Psychological Trauma: Theory, Research, Practice, and Policy*.
25. Gibbons, S. B. (2011). Understanding empathy as a complex construct: A review of the literature. *Clinical Social Work Journal, 39*(3), 243–252. https://doi.org/10.1007/s10615-010-0305-2
26. Gilbert, R., Widom, C. S., Browne, K., Fergusson, D., Webb, E., & Janson, S. (2009). Burden and consequences of child maltreatment in high-income countries. *Lancet, 373*(9657), 68–81. https:// doi.org/10.1016/S0140-6736(08)61706
27. Gottfried, R., & Bride, B. (2018). Trauma-secondary, vicarious, compassion fatigue. *Encyclopedia of Social Work*. Retrieved October 25, 2023, from https://oxfordre.com/socialwork/view/10.1093/acrefore/9780199975839.001.0001/acrefore-9780199975839-e-1085
28. Green, B. L. (2015). The role of trauma-informed organizational practices in building resilience in children and families. *Journal of Family Strengths, 15*(1), Article 4. https://digitalcommons.library.tmc.edu/jfs/vol15/iss1/4
29. Harker, R., Pidgeon, A. M., Klaassen, F., & King, S. (2016). Exploring resilience and mindfulness as preventative factors for psychological distress burnout and secondary traumatic stress among human service professionals. *Work, 54*(3), 631–637. https://doi.org/ 10.3233/WOR-162311
30. Holmes, M. R., King, J. A., Miller, E. K., King-White, D. L., Korsch-Williams, A. E., Johnson, E. M., Oliver, T. S., & Conard, I. T. (2023). Innovations in trauma-informed care: Building the nation’s first system of trauma-informed recreation centers. *Behavioral Sciences, 13*(5), Article 394. https://doi.org/10.3390/bs13050394
31. Holmes, C., Levy, M., Smith, A., Pinne, S., & Neese, P. (2023). A model for creating a supportive trauma-informed culture for children in preschool settings*. Journal of Child and Family Studies, 27*(5), 1-13. https://doi.org/10.1007/s10826-023-05772-6
32. Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research, 15*(9), 1277-1288. https://doi.org/10.1177/1049732305276687
33. Hyter, Y. D. (2021). Childhood maltreatment consequences on social pragmatic communication: A systematic review of the literature. *Perspectives of the ASHA Special Interest Groups, 6*(2), 262–287.‏ https://doi.org/10.1044/2021\_PERSP-20-00222
34. The Israel National Council for the Child. (2023). *Children in Israel 2022: The statistical yearbook of the Council for Child Welfare*. https://www.children.org.il/wp-content/uploads/2023/02/%D7%9C%D7%A7%D7%98-%D7%A0%D7%AA%D7%95%D7%A0%D7%99%D7%9D-%D7%99%D7%9C%D7%93%D7%99%D7%9D-%D7%91%D7%99%D7%A9%D7%A8%D7%90%D7%9C-2022.pdf
35. Jee, S. H., Conn, A.-M., Milne-Wenderlich, A., Krafft, C., Chen, M., Steen, M., & Manly, J. T. (2020). Providing trauma-informed pediatric care for underserved populations: Reflections on a teaching intervention. *Developmental Child Welfare, 2*(1), 21–36. https://doi.org/10.1177/2516103219894599
36. Kan, K., Gupta, R., Davis, M. M., Heard-Garris, N., & Garfield, C. (2020). Adverse experiences and special health care needs among children. *Maternal and Child Health Journal, 24*, 552–560. https://doi.org/10.1007/s10995-020-02874-x
37. Kerker, B. D., Storfer-Isser, A., Szilagyi, M., Stein, R. E., Garner, A. S., O'Connor, K. G., Hoagwood, K. E., & Horwitz, S. M. (2016). Do pediatricians ask about adverse childhood experiences in pediatric primary care? *Academic Pediatrics, 16*(2), 154–160. [https://doi.org/10.1016/j.acap.2015.08.002](about:blank)
38. Klaic, M., Kapp, S., Hudson, P., Chapman, W., Denehy, L., Story, D., & Francis, J.J. (2022). Implementability of healthcare interventions: An overview of reviews and development of a conceptual framework. *Implementation Science, 17*, 10. https://doi.org/10.1186/s13012-021-01171-7
39. Kring, G. S., Green, B. L., Kearney, D. J., & Zeiger, M. L. (2016). Development and initial psychometric properties of the Attitudes Related to Trauma-Informed Care (ARTIC) Scale. *School Mental Health, 8*(1), 61-76. https://doi.org/10.1007/s12310-015-9161-0
40. Lanier, P., Maguire-Jack, K., Lombardi, B., Frey, J., & Rose, R. A. (2018). Adverse childhood experiences and child health outcomes: Comparing cumulative risk and latent class approaches. *Maternal and Child Health Journal, 22*(3), 288–297. https://doi.org/10.1007/s10995-017-2365-1
41. Lamash, L., Gal, E., Yaar, E., & Bedell, G. (2023). SPAN website for remote intervention with autistic adolescents and young adults: Feasibility and usability. *Children (Basel), 10*(9), Article 1514. https://doi.org/10.3390/children10091514
42. Ludick, M., & Figley, C. R. (2017). Toward a mechanism for secondary trauma induction and reduction: Reimagining a theory of secondary traumatic stress. *Traumatology, 23*(1), 112–123. https://doi.org/10.1037/trm0000096
43. Lum, J., Powell, M., & Snow, P. (2018). The influence of maltreatment history and out-of-home-care on children’s language and social skills. *Child Abuse & Neglect, 76*, 65–74. https://doi. org/10.1016/j.chiabu.2017.10.008
44. Lucio, R., & Nelson, T. L. (2016). Effective practices in the treatment of trauma in children and adolescents: From guidelines to organizational practices. *Journal of Evidence-Informed Social Work, 13*(5), 469-478. https://doi.org/10.1080/23761407.2016.1166839
45. Mancini, J. A., & Marek, L. I. (2004). Sustaining community-based programs for families: Conceptualization and measurement. *Family Relations, 53*(4), 339-347. https://doi.org/10.1111/j.0197-6664.2004.00040.x
46. Marsac, M. L., Kassam-Adams, N., Hildenbrand, A. K., Nicholls, E., Winston, F. K., Leff, S. S., & Fein, J. (2016). Implementing a trauma-informed approach in pediatric health care networks. *JAMA Pediatrics, 170*(1), 70–77. https://doi.org/10.1001/jamapediatrics.2015.2206
47. Matthew, A., Moffitt, C., Huth-Bocks, A., Ronis, S., Gabriel, M., & Burkhart, K. (2022). Establishing trauma-informed primary care: Qualitative guidance from patients and staff in an urban healthcare clinic. *Children, 9*(5), Article 616. https://doi.org/10.3390/children9050616
48. McNamara, M., Cane, R., Hoffman, Y., Reese, C., Schwartz, A., & Stolbach, B. (2021). Training hospital personnel in trauma-informed care: Assessing an interprofessional workshop with patients as teachers. *Academic Pediatrics, 21*(1), 158–164. https://doi.org/10.1016/j.acap.2020.05.019
49. Miller-Cribbs, J., Bragg, J. E., Isaacson, M., Nay, E. D., Howell, D., Rodriguez, K., ... & Coon, K. (2021). Evaluation of a simulation-based training program on childhood trauma with occupational therapy students. *Journal of Occupational Therapy Education, 5*(2), 9. https://doi.org/10.26681/jote.2021.050209
50. National Council on Behavioral Health. (2019). *Fostering resilience and recovery: A change package for advancing trauma-informed primary care*. https://www.bettercareplaybook.org/resources/fostering-resilience-and-recovery-change-package-advancing-trauma-informed-primary-care
51. Neff, K. D. (2003). The development and validation of a scale to measure self-compassion. *Self and Identity, 2*(3), 223–250. https://doi.org/10.1080/15298860390209035
52. Neff, K. D., & Vonk, R. (2009). Self‐compassion versus global self‐esteem: Two different ways of relating to oneself. *Journal of Personality, 77*(1), 23–50. https://doi.org/10.1111/j.1467-6494.2008.00537.x
53. Neff, K. D., Rude, S. S., & Kirkpatrick, K. L. (2007). An examination of self-compassion in relation to positive psychological functioning and personality traits. *Journal of Research in Personality, 41*(4), 908–916. https://doi.org/10.1016/j.jrp.2006.08.002
54. Newell, J. M., Nelson-Gardell, D., & MacNeil, G. (2016). Clinician responses to client traumas: A chronological review of constructs and terminology. *Trauma, Violence, & Abuse, 17*(3), 306–313. https://doi.org/10.1177/1524838015584365
55. Newman, R. (2005). APA's resilience initiative. *Professional Psychology: Research and Practice, 36*(3), 227–229. https://doi.org/10.1037/0735-7028.36.3.227
56. Ogińska-Bulik, N., Juczyński, Z., & Michalska, P. (2022). The mediating role of cognitive trauma processing in the relationship between empathy and secondary traumatic stress symptoms among female professionals working with victims of violence. *Journal of Interpersonal Violence, 37*(3–4), NP1197–NP1225. https://doi.org/10.1177/0886260520976211
57. Palfrey, N., Reay, R. E., Aplin, V., Cubis, J. C., McAndrew, V., Riordan, D. M., & Raphael, B. (2019). Achieving service change through the implementation of a trauma-informed care training program within a mental health service. *Community Mental Health Journal, 55*(3), 467–475. https://doi.org/10.1007/s10597-018-0272-6
58. Park, W. J., & Walsh, K. A. (2022). COVID-19 and the unseen pandemic of child abuse. *BMJ Paediatrics Open*, *6*, Article e001553. https://doi.org/10.1136/bmjpo-2022-001553
59. Rupert, A. C., & Bartlett, D. E. (2022). The childhood trauma and attachment gap in speech language pathology: Practitioners' knowledge, practice, and needs. *American Journal of Speech-Language Pathology, 31*(1), 287-302.https://doi.org/10.1044/2021\_AJSLP-21-00110
60. Rushforth, A., Durk, M., Rothwell-Blake, G. A., Kirkman, A., Ng, F., & Kotera, Y. (2023). Self-compassion interventions to target secondary traumatic stress in healthcare workers: A systematic review. *International Journal of Environmental Research and Public Health, 20*(12), Article 6109. https://doi.org/10.3390/ijerph20126109
61. Steen, M., Raynor, J., Baldwin, C. D., & Jee, S. H. (2022). Child adversity and trauma-informed care teaching interventions: A systematic review. *Pediatrics, 149*(3), e2021051174. https://doi.org/10.1542/peds.2021-051174
62. Stern, A., & Maeir, A. (2014). Validating the measurement of executive functions in an occupational context for adults with attention deficit hyperactivity disorder. *American Journal of Occupational Therapy, 68*, 719-728. http://dx.doi.org/ 10.5014/ajot.2014.012419
63. Stern, A., Agnew-Blais, J., Danese, A., Fisher, H.L., Jaffee, S.R., Matthews, T., Polanczyk, G., & Arseneault, L. (2018). Associations between abuse/neglect and ADHD from childhood to young adulthood: A prospective nationally-representative representative twin study. *Child Abuse & Neglect, 81*, 274-285. doi.org/10.1016/j.chiabu.2018.04.025.
64. Stern, A., Agnew-Blais, J., Danese, A., Fisher, H.L., Matthews, T., Polanczyk, G., Wertz, J., Arseneault, L. (2020). Associations between ADHD and emotional problems from childhood to young adulthood: A longitudinal genetically sensitive study. *Journal of Child Psychology and Psychiatry, 61*, 1234-1242. doi.org/10.1111/jcpp.13217.
65. Substance Abuse and Mental Health Services Administration. (2014). *SAMHSA’s concept of trauma and guidance for a trauma-informed approach*. https://calio.dspacedirect.org/handle/11212/1971
66. Sylvestre, A., Bussières, È. L., & Bouchard, C. (2016). Language problems among abused and neglected children: A meta-analytic review*. Child Maltreatment, 21*, 47–58. https://doi.org/10.1177/1077559515616703
67. Wade, T. J., Bowden, J., & Jane Sites, H. (2018). Child maltreatment and motor coordination deficits among preschool children. *Journal of Child & Adolescent Trauma,11*(2), 159–162. https://doi.org/10.1007/s40653-017-0186-4
68. Walker, B. H., Brown, D. C., Walker, C. S., Stubbs-Richardson, M., Oliveros, A. D., & Buttross, S. (2022). Childhood adversity associated with poorer health: evidence from the US National Survey of Children's Health. *Child Abuse & Neglect*, *134*, 105871. https://doi.org/10.1016/j.chiabu.2022.105871
69. World Health Organization. (2012). Early childhood development and disability: A discussion paper.
70. Wilson, C., Pence, D. M., & Conradi, L. (2013). Trauma-informed care. *Encyclopedia of Social Work*. https://doi.org/10.1093/acrefore/9780199975839.013.1063
71. Yazıcı, H., & Özdemir, M. (2023). Predictors of secondary traumatic stress in mental health professionals: Trauma history, self-compassion, emotional intelligence. *Journal of Rational-Emotive & Cognitive-Behavior Therapy,* *41*(1), 162–175. https://doi.org/10.1007/s10942-022-00458-y