

Journal of the Pennsylvania Counseling Association

Volume 27, Number 1

Article 2

Spring, 2025

DOI: https://doi.org/10.71463/OBPV1681

Adult Play Activities: Utilizing Concepts of Trauma-Focused Therapy to Work with Distressed Clients

Yuh-Jen Guo¹ Shu-Ching Wang² Nicole Bloch³

 ¹ Department of Counselor, Leadership, and Special Education, Auburn University at Montgomery
 ² AUM Counseling & Health Promotion Services, Auburn University at

Montgomery

³ Department of Counselor, Leadership, and Special Education, Auburn University at Montgomery

Author Note

Correspondence concerning this article should be addressed to Yuh-Jen Guo, Department of Counselor, Leadership, and Special Education, Auburn University at Montgomery, College of Education, P.O. Box 244023, Montgomery, AL 36124-4023, United States. Email: <u>yguo1@aum.edu</u>



Journal of the Pennsylvania Counseling Association

Adult Play Activities: Utilizing Concepts of Trauma-Focused Therapy to Work with Distressed Clients

Yuh-Jen Guo¹, Shu-Ching Wang², and Nicole Bloch³

¹ Department of Counselor, Leadership, and Special Education, Auburn University at Montgomery, ² AUM Counseling & Health Promotion Services, Auburn University at Montgomery, and ³ Department of Counselor, Leadership, and Special Education, Auburn University at Montgomery

Abstract

Trauma-induced distress leads to client dysregulation and hypervigilance. Impaired cognitive processing and selfregulation undermines the collaboration and empowerment in counseling sessions. Counselors may adopt the bottomup approach and principles of trauma-focused therapies to engage distressed adults. Counselors can help these clients restore a sense of safety and self-regulation with activities that are rich in sensorimotor experience. Therefore, we developed adult play activities to help clients self-regulate and be empowered to enhance therapeutic process.

Keywords: Adult play activities, Bottom-up approach, Self-regulation

Adult Play Activities: Utilizing Concepts of Trauma-Focused Therapy to Work with Distressed Clients

In past decades, mental health has continued to decline, and it also encountered a more severe challenge during the 2020 COVID-19 pandemic (Killgore et al., 2020; World Health Organization [WHO], 2022). Mental illness has a prevalence of more than 20% in adults in the United States (National Institute of Mental Health [NIMH], 2023). Psychosocial stress, anxiety and depression exhaust personal mental health resources and generate a tremendous cost of socioeconomic loss (Knapp & Wong, 2020). With these problems in mind, it is vital for mental health professionals to explore the critical factors that impact individuals' mental health. Among college students, for example, stress relates to wellbeing and mental health disorders such as anxiety and depression (Acharya et al., 2018; Denovan & Macaskill, 2017; Krendl, 2023).

In recent studies with college students, the COVID-19 pandemic was found to significantly elevate psychological distress and worsen the emotional well-being of college students from a single or multiple campuses (Chen et al., 2023; Elkins et al., 2024; Halliburton et al., 2023; Wattick et al., 2021). Chen et al. (2023) studied a nationwide sample to compare two groups of college students, each group with more than 33,000 individuals, pre and during COVID-19 and documented a significant increase of depressive symptoms such as fatigue, loss of pleasure and hope, and anxiety symptoms of

nervousness, inability to relax, and irritability. Psychological distress in the COVID-19 era had surged to a higher level of intensity than the level prior to the pandemic. Counselors should be aware of this aggravated mental health status in clinical practice.

In addition to psychological stress, trauma has also been identified as a major factor in adult mental health. Trauma occurs in 55-69% of adults and 43-89.6% of young adults (Smyth et al., 2008). A lifetime prevalence rate of traumatic experiences reaches 26-92.2% in males, 17.7-87.1% in females, and 48.5% of college students (Moser et al., 2007). The COVID-19 pandemic significantly contributed to the increase of trauma due to intensified psychological distress (MacDonald, 2024). The horror of COVID-19 struck harder on individuals with a trauma diagnosis with an increase of 10% risk to contracting COVID-19 and 34% higher risk for hospitalization after contraction of COVID-19 (Baranova et al., 2024). The pandemic also brought about severe damage on livelihood and caused a worsened traumatic response. Sommer et al. (2021) analyzed an online survey of 1,018 individuals in Canada to report that individuals perceived COVID-19 as the most stressful trauma because of the disease and its destruction on basic needs, such as employment and social support, of a normal life. Currie (2021) further confirmed the traumatic nature of COVID-19 in a sample of 933 Canadian adults when there existed a 15.4% of high pandemic-related PTSD, and younger adults (age 18-34) had a three-time increase of reporting PTSD symptoms. Moreover, the traumatic impact of COVID-19 remains in the post COVID era when the high levels of distress, anxiety, depression and PTSD symptoms can be detected in the college student population (Wang et al., 2022). The high prevalence rate of trauma and the traumatic impacts of COVID-19 pandemic indicate that counselors are likely to work with a

client with at least one traumatic experience and who operates under influences of trauma.

Complexity of Trauma

Traumatic experiences may happen to a person at different phases of the lifespan, come in many forms, and leave profound impacts on one's health. Felitti et al. (1998) reported a 93% likelihood for a person to experience two traumatic experiences and 74% for more than two. Their report indicated that individuals who experienced four or more types of childhood trauma will develop up to 12 times more risk for addiction, depression, suicide attempts, four times greater incidence of smoking, and 1.6 times for severe obesity. The study also revealed that experiencing multiple types of childhood trauma, also known as Adverse Childhood Experiences (ACEs), is associated with higher risk of adult diseases, such as heart, lung, liver diseases, and cancer. Research showed that different combinations of ACEs result in a variety of behavioral problems and psychopathological issues (Adams et al., 2018; Gama et al., 2021).

The diagnostic systems of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR; American Psychiatric Association [APA], 2022) and the International Classification of Diseases (ICD; WHO, 2016) use the term posttraumatic stress disorder (PTSD) to describe specific symptoms associated with exposure to past trauma which have lasting impact on mental health. Howell and Itzkowitz (2016) argued that DSM views Post-Traumatic Stress Disorder through the lens of acute traumatic events known as objective trauma. Kleber (2019) warned that trauma includes a multitude of potential experiences that can lead to traumatic reactions. A multi-national study with 68,894 participants in 24 countries explored 29 types of traumatic events and showed that over 70% of respondents experienced at least one type of trauma (Benjet et

al., 2016). Therefore, scholars argued that a simple PTSD diagnosis could not reflect the complexity of features that can result from trauma such as in ACEs and complex trauma (Cook et al., 2005; Herman, 1992; Hill, 2020; Howell & Itzkowitz, 2016).

Shapiro (2018) proposed two types of traumatic experiences, the big-T and small-t. The big-T trauma describes extremely harmful and life-threatening events, which can be directly associated with the diagnosis of PTSD, while minor incidents, such as humiliation and rejection make up the small-t trauma. Both big-T and small-t contribute to negative influences on information processing and learning (Brown & Shapiro, 2006). Herman (1992) contended that there exists "a complex form of post-traumatic disorder in survivors of prolonged, repeated trauma" (p. 377). Complex trauma results from continuous traumatization and a state of captivity and/or control. In this model, the psychological damages come from both the traumatizing event/state and the fear of control. Complex trauma is associated with the development of difficulties in attachment, affective regulation, depression, somatic symptoms, dissociation, personality disorders, behavior control, and selfconcept (Cook et al., 2005; Herman, 1992; Maercker et al., 2022). Complexity of trauma leads to a wide variety of potential trauma impacts on various domains and developmental processes. Counselors may want to view trauma from multiple lenses to see beyond diagnostic criteria and acknowledge the complexity of trauma through its types, severity, contexts, frequencies, and developmental impacts. It may be further helpful for counselors to educate themselves on the different understandings of trauma, from both acute trauma perspectives and from trauma existing on a spectrum.

Neurobiological Concepts in Traumafocused Therapy

The complexity of trauma is reflected through its impacts on various phases of neurobiological development, continuous developmental influences, and trauma-induced behavioral reactions (Van Der Kolk, 2006). Trauma has interrupted brain development and helped the creation of neurological networks, which lead to trauma-induced responses through the mechanisms of physiology, neuroendocrinology, neuroendocrine systems and to generate difficulties in emotional and behavioral regulation (Hosseini-Kamkar et al., 2023; Liberzon & Martis, 2006; Perry & Dobson, 2013; Shin et al., 2006; Van Der Kolk, 2000, 2003; Wu et al., 2023). Trauma-related neurobiological reactions involve interrelated and interdependent functioning in different brain structures such as the brainstem, limbic system, and neocortex. It also involves psychophysical, hormonal, and neurochemical operations such as the functions of neurotransmitters (Van Der Kolk, 2000; Van Der Kolk & Saporta, 1991).

The common symptoms of trauma, such as hypervigilance, flashbacks, emotional numbing, and memory disturbance become the consequence of stress responses initiated by a complex neurobiological system in our central nervous system (CNS), which has been referred as physioneurosis (Van Der Kolk, 2000). Van Der Kolk (2006) highlighted the challenges in working with traumatized clients:

> The fact that reminders of the past automatically activate certain neurobiological responses explains why trauma survivors are vulnerable to react with irrational-subcortically initiatedresponses that are irrelevant, and even harmful, in the present. Traumatized individuals may blow up in response to

minor provocations; freeze when frustrated, or become helpless in the face of trivial challenges. Without a historical context to understand the somatic and behavioral residues from the past, their emotions appear out of place and their actions bizarre. (p. 277-278)

When working with clients who are distressed due to trauma-induced neurobiological responses, counselors must keep vigilant and refrain from assessing or diagnosing emotional and behavioral symptoms without accessing clients' history of traumatic experiences (Perry, 2014, 2019; Van Der Kolk, 2006).

Bottom-Up and Sensorimotor Activities for Trauma Work

А bottom-up approach applies neurobiological concepts to direct the therapeutic process that attends to clients' autonomic nervous system and helps them regulate trauma-induced reactions (Ogden et al., 2012; Van Der Kolk, 2014). When clients' behavior reflects a state of trauma-induced reactions. the use of sensorimotor stimulation and the control of breathing becomes effective in calming hypervigilance (Costello & Short, 2021; Perry, 2009; Scotland-Coogan & Davis, 2016; Van Der Kolk, 2006). Sensorimotor and playful activities serve as the skills that improve clients' capacity for self-regulation (Dhaese & Gaskill, 2024; Gaskill & Perry, 2014, 2017; Malchiodi, 2020; Perry, 2009).

The use of body movement and sensorimotor activities has been seen in trauma-focused therapies (Fisher, 2011, 2019; Ogden et al., 2012). For example, the eye movement desensitization and reprocessing (EMDR) "targets the unprocessed memories that contain the negative emotions, sensations, and beliefs" to reprocess the "old memories" (Shapiro, 2012, p. 6). EMDR utilizes bilateral stimulation as a method to activate the system of information processing and allow memory retrieval for reprocessing (Shapiro, 2018). This bilateral body movement serves as an essential feature to help clients process trauma and cope with overwhelmed disturbances.

Polyvagal theory focused on the study of vagal nerve system and the operations of the autonomic nervous system (ANS), which regulates homeostasis via the sympathetic nervous system (SNS) for stress responses and the parasympathetic nervous system (PNS) for restoration/calming (Porges, 2022, 2023). Neuroception, a neurological process, operates to assess for environmental risks and engage nervous systems to activate situation-dependent physiological states, such as fight-flight or social engagement, and the corresponding psychological states (Porges, 2007). However, the ANS could also react to trauma-related triggers and activate defensive responses, which dimmish one's awareness of the present (Fisher, 2011, 2019; Ogden et al., 2012). Sociality and coregulation are minimized in survival mode where behavior reflects the neurobiological functions of trauma, whether that comes in the form of a fight or flight/freeze response (Porges, 2023). A sense of safety is a prominent feature that prevents individuals from shutdown or dissociation and enables interpersonal engagement in therapy (Porges, 2022; Wagner, 2016).

Neurosequential model of therapeutics (NMT) is guided by neuroscience to provide a neurodevelopmental framework on the sequential development and information processing of the brain (Gaskill & Perry, 2012; Perry, 2014, 2019). NMT requires counselors to first establish an indepth developmental history and determine the sequence of treatment with the healing of trauma occurring sequentially from the lower brain regions and later into the use of cognitive processing in higher brain regions (Perry, 2014, 2019; Van Der Kolk, 2014). Understanding that traumatic impacts disrupt emotional regulation and cognitive processing in mid-brain and cortex, NMT advocates for the initial establishment of self-regulation through somatosensory activities, which fit the processing pattern of the lower brain region (Gaskill & Perry, 2014; Perry, 2009).

Continuous developments in the field of neuroscience will bring more advanced and integrative theories and tools for counselors working with trauma. This bottom-up approach recognizes the importance of including body movement and sensorimotor activities in trauma therapy. It provides us a foundation to develop therapeutic activities for traumatized and distressed clients.

Adult Play Activities

Counselors can be challenged by the unpredictable nature of clients' traumatic reactions, especially when complex trauma creates difficulties for a simple classification of trauma types and reactions (Perry & Dobson, 2013). The difficulties emerge from the neurological operation of traumatic reactions, which involve the complex mechanisms of various brain circuits (Ogden et al., 2012). Neurological mechanisms can impair or eliminate cognitive processing and minimize the treatment effectiveness of therapeutic models. which primarily engage cognitive processing and operation (Allene et al., 2021; Fisher, 2011, 2019; LeDoux & Pine, 2016). Besides helping clients verbally process trauma-related emotional issues, the approach of body-oriented activities may access and address underlying neurological mechanisms that are operating under trauma influences (Fisher, 2019; Ogden et al., 2012). Counselors may want to utilize therapeutic skills that include body movement and sensorimotor experiences for traumatized clients, as these

approaches may enable the ability to address trauma which expresses itself non-verbally.

The Use of Play Activities

Play therapy is a form of psychotherapy that utilizes play and games in therapeutic processes (Kottman, 2011; Seymour, 2016). The use of "the power of play" (Nash & Schaefer, 2011, p. 3) as a therapeutic tool has been the essential feature of play therapy. Although many activities of play therapy are designed for children and adolescents, adult play activities, such as card and board games, magic tricks, drama, and interactive games can increase playful engagement with adult clients in individual, couple and group counseling (Frey, 2015; Kaduson, 2015; Price & Swan, 2020; Schwarz & Braff, 2012).

Principles of Adult Play Activities

While experimenting with adult play activities for distressed clients, we have adopted essential principles from trauma therapies and the bottomup approach to guide the use of these clinical skills. Bath (2008) suggested safety, connections, and managing emotions as three pillars of trauma work. Hobfoll et al. (2007) proposed five elements, promote sense of safety, promote calming, promote sense of self- and collective efficacy, promote connectedness, and promote hope for trauma work. These principles, such as sense of safety, connectedness, and selfregulation also exist in the concepts of many trauma therapies (Fisher, 2019; Gaskill & Perry, 2014; Ogden et al., 2012; Perry, 2009; Porges, 2022; Wagner, 2016). When clients are trapped in the hyperarousal and hypervigilance of traumatic reactions, they will need a feeling of safety to return to calmness, regulation, and sociality (Hobfoll et al., 2007). Perry (2009) clearly illustrated this initial step and advocated the use of "patterned, repetitive somatosensory activities" for improving self-regulation (p. 252). His next step addressed relational and emotional issues with play activities to improve the

counselor-client interaction. With the establishment of self-regulation and sociality, counselors will be able to proceed with therapeutic techniques, which require cognitive processing of verbal communication and the promotion of insights (Perry, 2009). Our activities incorporate these principles to focus the use of body movement, sensorimotor experiences, and repetitive actions for promoting a sense of safety, self-regulation and sociality.

Examples of Adult Play Activities

While engaging clients in a distressed emotional and hypervigilant state, we realized that we could not help utilizing cognitive processing techniques, such as reasoning and verbal comforting. We found the need to apply therapeutic tools to help clients return to a calm and regulated state that did not rely solely on verbal and/or cognitive techniques. As trained play therapists, we have started to develop play activities that adopt the concepts of traumafocused therapy. The play activities we have developed involve sensorimotor experiences for helping clients become regulated (Allene et al., 2021; Fisher, 2011, 2019; Malchiodi, 2020; Ogden et al., 2012; Perry, 2009; Van Der Kolk, 2014). These regulating processes enable us to reengage clients in therapeutic process. It is important to ensure that the implementation of these techniques follows proper ethical guidelines and informed consent processes.

Activity One: Deep Breathing with Bubbles

In our clinical practices, there were times when deep breathing was utilized. Distressed clients can benefit from practicing deep breathing to learn how to regulate and calm dysregulated emotions (Costello & Short, 2021; Scotland-Coogan & Davis, 2016; Van Der Kolk, 2006). This is a much-needed process because clients in distressful conditions lose cognitive ability to process information through rational thinking (Gaskill & Perry, 2012, 2014, 2017). At times, clients might be so severely distressed and hypervigilant that they could not hold breathing patterns or follow verbal guidance when deep breathing became necessary to restore calmness and self-regulation.

Goal of Activity

The goal of this activity is to introduce the deep breathing when clients are not able to maintain necessary breathing patterns with counselors' guidance. Blowing bubbles is introduced to help clients gradually regain the ability to practice deep breathing.

Instruction

Counselors will ask clients to practice deep breathing when blowing bubbles. Counselors may have to demonstrate bubble blowing when clients are distressed. Counselors then hand the wand or blowing device to clients and guide clients to first blow bubbles, and then to slowly increase the time of inhaling and decrease the time of exhaling until the breathing patterns achieve the pattern of deep breathing or desired breathing rates.

Materials

Counselors need to prepare several bottles of bubble water and wands for blowing bubbles.

Activity Two: Bilateral Finger Drawing

The use of art in trauma therapy has been well studied in literature (Elbrecht, 2018; Malchiodi, 2020). Art stimulates complex brain processing across hemispheres and zones (Malik, 2022). When clients experience overwhelming emotions (e.g., anxiety, sadness, or anger), their ability to cognitively process in the frontal cortex becomes impaired; however, the use of sensorimotor activities may calm the lower brain regions to enhance emotional regulation (Allene et al., 2021; Van Der Kolk, 2014). In EMDR, the bilateral stimulation provides a sense of safety through activities such as bilateral tapping (Potgieter, 2022). The following activity utilizes art, sensorimotor experience, and bilateral stimulation in play.

Goal of Activity

Bilateral drawing combines the bilateral stimulation from EMDR and the sensorimotor experience of creating artwork to increase sensorimotor integration and self-regulation in order to assist clients in achieving a sense of safety and self-regulation.

Instruction

Counselors prepare two pieces of drawing papers on clients' left and right sides and then guide clients to use fingers of each hand to draw on the two sides of papers one side a time. Counselors will also ask clients to gradually slow their breathing patterns by drawing long strokes, lines or circles. When facing emotionally disturbed and distressed clients, counselors could demonstrate drawing first and then ask clients to repeat the drawing behavior.

Materials

Counselors will prepare two pieces of drawing papers or reusable water painting paper/cloth (divide the drawing area to left and right sides), and water paints (or water for reusable materials).

Activity Three: Goldfish Breathing

Breathing is an automatic regulatory function associated with heart rate wherein heart rate variability (HRV) relates to respiratory sinus arrhythmia (RSA). Control of breathing can help individuals regulate heart rate (Fisher et al., 2022; Porges, 2007; Sahar et al., 2001). It is also known that clients could return to calmness and selfregulation through sensorimotor and play activities (Gaskill & Perry, 2014, 2017; Perry, 2009). The following activity intends to combine the breathing, sensorimotor activity and play together to assist in self-regulation.

Goal of Activity

Goldfish breathing uses breathing and sensorimotor experience in play activity to help clients regain calmness and self-regulation. Counselors will ask clients to hold breaths while inflating their cheeks to resemble the look of a goldfish. Counselors and clients imitate the swimming of a fish and can move around in the room. This breathing and sensorimotor activity intends to help distressed clients manage irregulated breathing and return to a better regulated state.

Instruction

Counselors show clients how to inhale and hold the breath to blow up the cheeks. Counselors then tell clients that we are going to swim like a goldfish. Clients are guided to first inhale and hold the breaths in before they slowly exhale after the swimming exercise. Repeat this swimming activity few times until clients return to normal breathing patterns. The swimming exercise can be done sitting or standing, and counselors and clients can also walk in the room with the swimming behavior (using hands as fish fins).

Activity Four: Folding Paper Airplanes

Repetitive behavior works with the lower brain regions to restore regulation in the basic functioning of the brain (Perry, 2029). This is a much-needed process with distressed clients because the regulation of lower brain operation will help clients regain calmness and selfregulation. Folding paper airplanes requires repetitive behavior with sensorimotor experience, and the flying of paper airplanes brings fun and body movement to help clients re-connect with counselors.

Goal of Activity

With repetitive behavior and body movement, this activity focuses on helping clients reduce agitated emotion and improve cognitive functioning. The simple and repetitive folding

Adult Play Activities

behavior will bring clients out of distress. While clients re-focus on hands-on and repetitive behavior, they will be able to become grounded in the present and enjoy this activity with counselors.

Instruction

Counselors can first fly the paper airplanes to clients to attract clients' attention. The activity can start with flying and retrieving the airplanes. Counselors will invite clients to fold airplanes and fly them. Counselors will give clients a piece of paper and guide them through folding the paper into an airplane shape. A breathing instruction can be added. Counselors can ask clients to breath slowly in folding or flying behavior.

Materials

Counselors will provide papers, such as regular printing papers, for this activity. Counselors can either mark papers with lines indicating where the client will make folds, or have their own paper so that they can demonstrate making an airplane and have the client repeat with their own paper. Papers with a variety of colors and patterns can add more fun. Counselors can also prepare tapes to tape parts of the paper airplanes for better flying experience.

Activity Five: Making Origami Lucky Stars

The bottom-up approach focuses on functions of lower brain where sensorimotor processing and self-regulation occurs first (Van Der Kolk, 2014). While traumatic symptoms are associated with the processing dysfunction of somatic and sensory experiences in the lower brain region, the repetitive behavior, may aid the regulation and recovery of calmness in activated brain regions (Kearney & Lanius, 2022; Perry, 2009). Origami is an artwork which involves folding papers into complex shapes. Clients will be able to experience the repetitive behavior of folding and the fun of crafting interesting shapes and designs.

Goal of Activity

To promote the regulation in the lower brain region, this activity utilizes the art of origami in making origami "lucky stars" with repetitive folding of paper strips. Counselors will provide the pre-cut paper strips and teach the folding process. This hands-on activity provides sensorimotor sensation and repetitive behavior to assist clients' return to a regulated state. This luck star activity is used to bring clients out of emotional dysregulation and/or behavioral disturbance and place them in a stable state.

Instruction

In step one, tie a knot near one end of a paper strip and gradually tighten the knot to make a shape of a flat pentagon.

In step two, tuck the short end into the pentagon.

In step three, flip the strip over and wrap the long end of the trip around the pentagon. Follow the edges of the pentagon to fold in the long end. Repeat the folding behavior until the long end becomes a short tip.

Step four starts from tucking the remaining of the long end into the pentagon (trim the strip shorter if necessary). Glue or tape can be applied to the tip of the long end in order to secure the tucked-in strip. Finally, use your fingernails to squeeze in each edge of the pentagon shape to rise up the flat shape into a 3D star (see Figure 1).

Continue to make more stars if necessary. Counselors can use colorful strips and prepare a transparent container to store the stars and give the container to clients as an encouragement.

Figure 1

Steps for making Lucky Stars



Materials

Counselors will prepare pre-cut colorful paper strips of half inch wide and ten or eleven inches long (or cut the strips from an A4 size paper), scissors and glue or tape. Do not use thick papers because these papers make the final step (squeezing in sides of the pentagon) difficult.

Implications for Counselors

Working with traumatized and distressed clients presents a challenge for the traditional talk therapy counseling process. When clients are emotionally activated by past trauma or current emotional disturbance, they disconnect from the capacity of rational thinking and cognitive processing (Goddard, 2021; Ogden et al., 2012; Perry, 2009). Traditional therapeutic modalities tend to engage clients through their cognitive ability in order to help them resolve difficulties (Ogden et al., 2012). This "top-down" approach may be limited in its effectiveness due to clients' impaired neurobiological function in cognitive processing and emotional regulation when past trauma is reactivated (Van Der Kolk, 2014). Thanks to contemporary studies of neurobiology, new therapeutic approaches are constructed to utilize principles and concepts of neuroscience in understanding and addressing the underpinnings of dysregulated emotions and behavior (Perry, 2019; Van Der Kolk, 2014).

Understanding the underlying neurological functions of traumatic reactions and integrating this knowledge into the counseling process is crucial to effective treatment for clients with past trauma. We created and implemented these play activities by combining neuroscience and trauma therapy approaches into specific, repeatable techniques. Counselors can use these play activities with clients to increase self-regulation and promote a calm and safe state before the use of traditional therapeutic modalities. While play therapy typically is used with children, play techniques can also help adult clients when they are severely distressed and unable to proceed with traditional talk therapy (Perry, 2009). These play activities can serve as a transitional process wherein clients will return to a regulated state and can be engaged in cognitive processing. These activities are simple and easy to implement without specialty training. Counselors may find these activities useful when facing distressed clients who respond poorly to therapeutic approaches that focusing on cognitive processing.

Conclusion

Trauma treatment and the understanding of the influence of traumatic experiences have entered a new era that involves the advancement of knowledge from neurobiology and the creation of new neurodevelopment-based therapeutic approaches. Complexity of trauma has perplexed researchers due to the influences of both environmental and genetic factors when diagnosis relies solely on client interview (Verbitsky et al., 2020). Current trends in neurobiological studies bring new perspectives in decoding the complexity of trauma and developing new therapeutic approaches for trauma therapy. With this exciting progress in trauma therapy, counselors still need to comprehend the implications of neurobiological principles in clinical practice and continue to engage clients with trauma-induced emotional disturbance and challenging behavior. Knowing the challenges counselors are facing with distressed clients, our article intends to provide an immediate relief with play activities that can be implemented in clinical practice quickly, and without need for special training with traumatized and distressed clients.

It is not surprising that different traumafocused therapies emphasize the creation and maintenance of a sense of safety to enhance clients' ability to self-regulate at the beginning of the treatment process (Bath, 2008; Porges, 2022; Wagner, 2016). Without pursuing extensive training in these trauma-focused therapies, counselors can still implement the fundamental principles of safety and self-regulation to help stabilize amidst trauma-induced clients symptoms. This implementation will create an opportunity to assist clients working through influences of past trauma and current distress. This opportunity also allows the therapeutic process to transition to traditional talk therapies or modalities that are not effective with clients who temporally lose the ability in thinking rationally or accessing higher-level cognitive processing.

Sensorimotor stimulation and the control of breathing have been mentioned in literature for their effectiveness with trauma-induced reactions (Costello & Short, 2021; Fisher, 2019; Ogden et al., 2012; Perry, 2009; Scotland-Coogan & Davis, 2016; Van Der Kolk, 2006). Our play activities incorporate these neurodevelopmental principles into playful exercises that counselors can easily utilize in sessions with clients to establish selfregulation and a sense of safety. Counselors are also encouraged to adapt these activities or other existing ones to enhance the effectiveness in working with clients' individual reactions to their trauma.

Disclaimer

The authors indicated that there is no financial conflict in regard to this project, and we had followed the proper procedures of ethical guidelines approved by the Institutional Review Board.

References

- Acharya, L., Jin, L., & Collins, W. (2018).
 College life is stressful today–Emerging stressors and depressive symptoms in college students. *Journal of American College Health*, *66*(7), 655–664.
 https://doi.org/10.1080/07448481.2018.1451
- Adams, J., Mrug, S., & Knight, D. C. (2018). Characteristics of child physical and sexual abuse as predictors of psychopathology. *Child Abuse & Neglect, 86,* 167–177. <u>https://doi.org/10.1016/j.chiabu.2018.09.019</u>
- Allene, C., Kalalou, K., Durand, F., Thomas, F., & Januel, D. (2021). Acute and post-

Adult Play Activities

traumatic stress disorders: A biased nervous system. *Revue Neurologique*, *177*(1–2), 23–38.

https://doi.org/10.1016/j.neurol.2020.05.010

American Psychiatric Association. (2022). Diagnostic and statistical manual of mental disorders (5th ed., text rev.). <u>https://doi.org/10.1176/appi.books.97808904</u> 25787

Baranova, A., Fu, L., Song, Y., Cao, H., & Zhang, F. (2024). Causal Associations between Posttraumatic Stress Disorder and COVID-19. *Journal of Integrative Neuroscience, 23*(4), 68. <u>https://doi.org/10.31083/j.jin2304068</u>

Bath, H. (2008). The three pillars of traumainformed care. *Reclaiming Children and Youth*, *17*(3), 17–21.

Benjet, C., Bromet, E., Karam, E. G., Kessler, R. C., McLaughlin, K. A., Ruscio, A. M., Shahly, V., Stein, D. J., Petukhova, M., Hill, E., Alonso, J., Atwoli, L., Bunting, B., Bruffaerts, R., Caldas-de-Almeida, J. M., de Girolamo, G., Florescu, S., Gureje, O., Huang, Y., ... Koenen, K. C. (2016). The epidemiology of traumatic event exposure worldwide: Results from the World Mental Health Survey Consortium. *Psychological Medicine*, *46*(2), 327–343. https://doi.org/10.1017/S0033291715001981

Bratton, S. C., Ray, D., Rhine, T., & Jones, L. (2005). The efficacy of play therapy with children: A meta-analytic review of treatment outcomes. *Professional Psychology: Research and Practice, 36*(4), 376–390. <u>https://doi.org/10.1037/0735-7028.36.4.376</u>

Brown, S., & Shapiro, F. (2006). EMDR in the treatment of borderline personality disorder.

Clinical Case Studies, 5(5), 403–420. https://doi.org/10.1177/1534650104271773

Chen, C., Jew, A., Chui, C., Horn, J., Kim, E., Melkonian, D., & Eisenberg, D. (2023).
Impact of the COVID-19 pandemic on college students' mental health and lifestyle factors. *Journal of American College Health*, 1–9. Advance online publication.
<u>https://doi.org/10.1080/07448481.2023.2266</u> 000

Cook, A., Spinazzola, J., Ford, J., Lanktree, C., Blaustein, M., Cloitre, M., DeRosa, R., Hubbard, R., Kagan, R., Liautaud, J., Mallah, K., Olafson, E., & Van Der Kolk, B. (2005). Complex trauma in children and adolescents. *Psychiatric Annals*, 35(5), 390–398. <u>https://doi.org/10.3928/00485713-20050501-</u>05

Costello, C. M., & Short, B. A. (2021). *Healing* from clinical trauma using creative mindfulness techniques: A workbook of tools and applications. Routledge.

Currie, C. L. (2021). Adult PTSD symptoms and substance use during Wave 1 of the COVID-19 pandemic. *Addictive Behaviors Reports*, *13*, 100341. <u>https://doi.org/10.1016/j.abrep.2021.100341</u>

- Denovan, A., & Macaskill, A. (2017). Stress and subjective well-being among first year UK undergraduate students. *Journal of Happiness Studies*, 18, 505–525. <u>https://doi.org/10.1007/s10902-016-9736-y</u>
- Dhaese, M. J., & Gaskill, R. L. (2024). Helping depressed, dissociative, and withdrawn children: Integrating holistic expressive play therapy and polyvagal theory. In P. Goodyear-Brown & L. A. Yasenik (Eds.),

Polyvagal power in the playroom (pp. 150–165). Routledge.

- Elbrecht, C. (2018). *Healing trauma with guided drawing: A sensorimotor art therapy approach to bilateral body mapping.* North Atlantic Books.
- Elkins, R., McDade, R., & Kaiser, J. L. (2024).
 An Examination of the Impact of COVID-19 on Student Emotional Well-Being. *Research Directs in Psychology and Behavior, 4*(1), Article 3.
 https://doi.org/10.53520/rdpb2024.107114
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., & 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. <u>https://doi.org/10.1016/S0749-</u> <u>3797(98)00017-8</u>
- Fisher, J. (2011). Sensorimotor approaches to trauma treatment. Advances in Psychiatric Treatment, 17(3), 171–177. <u>https://doi.org/10.1192/apt.bp.109.007054</u>
- Fisher, J. (2019). Sensorimotor psychotherapy in the treatment of trauma. *Practice Innovations*, 4(3), 156–165. <u>https://doi.org/10.1037/pri0000096</u>
- Fisher, J. P., Zera, T., & Paton, J. F. (2022).
 Respiratory–cardiovascular interactions. In
 R. Chen, & P. G. Guyenet (Eds.), *Handbook* of clinical neurology (Vol. 188, pp. 279– 308). Elsevier. <u>https://doi.org/10.1016/B978-0-323-91534-2.00006-0</u>

- Frey, D. (2015). Play therapy interventions for adults. In D. A. Crenshaw, & A. L. Stewart (Eds.), *Play therapy: A comprehensive guide to theory and practice* (pp. 452–464). The Guilford Press.
- Gama, C. M. F., Portugal, L. C. L., Gonçalves, R. M., de Souza Junior, S., Vilete, L. M. P., Mendlowicz, M. V., Figueira, I., David, I. A., de Oliveira, L., & Pereira, M. G. (2021). The invisible scars of emotional abuse: a common and highly harmful form of childhood maltreatment. *BMC Psychiatry*, 21(1), Article 156. <u>https://doi.org/10.1186/s12888-021-03134-0</u>
- Gaskill, R. L., & Perry, B. D. (2012). Child sexual abuse, traumatic experiences, and their impact on the developing brain. In P. Goodyear-Brown (Ed.), *Handbook of child* sexual abuse: Identification, assessment, and treatment (pp. 29–47). John Wiley & Sons, Inc.
- Gaskill, R. L., & Perry, B. D. (2014). The neurobiological power of play. In In C. A. Malchiodo & D. A. Crenshaw (Eds.), *Creative arts and play therapy for attachment problems* (pp. 178–194). Guilford Press.
- Gaskill, R. L., & Perry, B. D. (2017). A neurosequential therapeutics approach to guided play, play therapy, and activities for children who won't talk. In C. A. Malchiodo & D. A. Crenshaw (Eds.), What to do when children clam up in psychotherapy: Interventions to facilitate communication (pp. 38–66). Guilford Press.
- Goddard, A. (2021). Adverse childhood experiences and trauma-informed care. *Journal of Pediatric Health Care, 35*(2),

145–155.

https://doi.org/10.1016/j.pedhc.2020.09.001

- Halliburton, A. E., Hill, M. B., Hightower, J. M., Harrison, T. L., & LaFever, C. R. (2023). Mental health during COVID-19: College students' need for structure. *Journal of American College Health*, 1–8. Advance online publication. <u>https://doi.org/10.1080/07448481.2023.2277</u> <u>195</u>
- Herman, J. L. (1992). Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *Journal of Traumatic Stress*, 5(3), 377–391.
 <u>https://doi.org/10.1002/jts.2490050305</u>
- Hill, M. D. (2020). Adaptive information processing theory: Origins, principles, applications, and evidence. *Journal of Evidence-Based Social Work*, 17(3), 317– 331. <u>https://doiorg.spot.lib.auburn.edu/10.1080/26408066.2</u> 020.1748155
- Hobfoll, S. E., Watson, P., Bell, C. C., Bryant, R. A., Brymer, M. J., Friedman, M. J., Friedman, M., Gersons, B. P. R., de Jong, J. T. V. M., Layne, C. M., Maguen, S., Neria, Y., Norwood, A. E., Pynoos, R. S., Reissman, D., Ruzek, J. I., Shalev, A. Y., Solomon, Z., Steinberg, A. M., & Ursano, R. J. (2007). Five essential elements of immediate and mid–term mass trauma intervention: Empirical evidence. *Psychiatry: Interpersonal and Biological Processes*, 70(4), 283–315. https://doi.org/10.1521/psyc.2007.70.4.283
- Hosseini-Kamkar, N., Farahani, M. V., Nikolic, M., Stewart, K., Goldsmith, S., Soltaninejad, M., Rajabli, R., Lowe, C., Nicholson, A. A., Morton, J. B., & Leyton, M. (2023). Adverse

life experiences and brain function: A metaanalysis of functional magnetic resonance imaging findings. *JAMA Network Open*, *6*(11), e2340018. <u>https://doi.org/10.1001/jamanetworkopen.20</u> 23.40018

Howell, E. F., & Itzkowitz, S. (2016). The everywhereness of trauma and the dissociative structuring of the mind. In E. F. Howell & S. Itzkowitz (Eds.), *The dissociative mind in psychoanalysis:* Understanding and working with trauma (pp. 33–43). Routledge. https://doi.org/10.4324/9781315679211

Kaduson, H. G. (2015). Play therapy across the life span: Infants, children, adolescents, and adult. In K. J. O'Connor, C. E. Schaefer, & L. D. Braverman (Eds.), *Handbook of Play Therapy* (2nd ed., pp. 327–341). Wiley. https://doi.org/10.1002/9781119140467.ch16

Kearney, B. E., & Lanius, R. A. (2022). The brain-body disconnect: A somatic sensory basis for trauma-related disorders. *Frontiers in Neuroscience*, 16, 1881. <u>https://doi.org/10.3389/fnins.2022.1015749</u>

- Killgore, W. D., Cloonan, S. A., Taylor, E. C., & Dailey, N. S. (2020). Loneliness: A signature mental health concern in the era of COVID-19. *Psychiatry Research, 290*, 113117. <u>https://doi.org/10.1016/j.psychres.2020.1131</u> <u>17</u>
- Kleber, R. J. (2019). Trauma and public mental health: A focused review. *Frontiers in Psychiatry*, 10, 451. <u>https://doi.org/10.3389/fpsyt.2019.00451</u>
- Knapp, M., & Wong, G. (2020). Economics and mental health: The current scenario. *World*

Psychiatry, *19*(1), 3–14. https://doi.org/10.1002/wps.20692

- Kottman, T. (2011). *Play therapy: Basics and beyond* (2nd ed.). American Counseling Association.
- Krendl, A. C. (2023). Changes in stress predict worse mental health outcomes for college students than does loneliness; evidence from the COVID-19 pandemic. *Journal of American College Health*, *71*(1), 40–43. <u>https://doi.org/10.1080/07448481.2021.1887</u> <u>198</u>
- Lanius, U. F., Paulsen, S. L., & Corrigan, F. M. (2014). Dissociation: Cortical deafferentation and the loss of self. In U. F. Lanius, S. L. Paulsen, & F. M. Corrigan (Eds.), Neurobiology and treatment of traumatic dissociation: Toward an embodied self (pp. 5–28). Springer.
- LeDoux, J. E., & Pine, D. S. (2016). Using neuroscience to help understand fear and anxiety: A two-system framework. *American Journal of Psychiatry*, 173(11), 1083–1093. <u>https://dx.doi.org/10.1176/appi.ajp.2016.160</u> <u>30353</u>
- Liberzon, I., & Martis, B. (2006). Neuroimaging studies of emotional responses in PTSD. *Annals of the New York Academy of Sciences, 1071*(1), 87–109. <u>https://doi.org/10.1196/annals.1364.009</u>
- MacDonald, H. Z. (2024). Risk and resilience factors associated with college students' psychological distress and PTSD symptoms during the COVID-19 pandemic. *Journal of American College Health*, 72(9), 3152–3166. https://doi.org/10.1080/07448481.2022.2155 053

- Maercker, A., Cloitre, M., Bachem, R.,
 Schlumpf, Y. R., Khoury, B., Hitchcock, C.,
 & Bohus, M. (2022). Complex posttraumatic stress disorder. The Lancet, 400(10345), 60–72.
- Malchiodi, C. A. (2015). Calm, connection, and confidence: Using art therapy to enhance resilience in traumatized children. In D. A. Crenshaw, R. Brooks, & S. Goldstein (Eds.), Play therapy interventions to enhance resilience (pp. 126–145). The Guilford Press.
- Malchiodi, C. A. (2020). Trauma and expressive arts therapy: Brain, body, and imagination in the healing process. Guilford Press.

Malik, S. (2022). Using neuroscience to explore creative media in art therapy: A systematic narrative review. International Journal of Art Therapy, 27(2), 48–60.
https://doi.org/10.1080/17454832.2021.1998 165

Moser, J. S., Hajcak, G., Simons, R. F., & Foa, E. B. (2007). Posttraumatic stress disorder symptoms in trauma-exposed college students: The role of trauma-related cognitions, gender, and negative affect. *Journal of Anxiety Disorders*, 21(8), 1039– 1049. https://doi.org/10.1016/j.janxdis.2006.10.009

- Nash, J. B., & Schaefer, C. E. (2011). Play therapy: Basic concepts and practices. In C.
 E. Schaefer (Ed.), *Foundations of play therapy* (2nd ed., pp. 3–13). Wiley.
- National Institute of Mental Health. (2023, March). Mental illness. U.S. Department of Health and Human Services, National Institutes of Health. https://www.nimh.nih.gov/health/statistics/m ental-illness

Ogden, P., Goldstein, B. & Fisher, J. (2012). Brain-to-brain, body-to-body: A sensorimotor perspective on the treatment of children and adolescents. In R. E. Longo, D.
S. Prescott, J. Bergman, & K. Creeden (Eds.), *Current perspectives and applications in neurobiology: Working with young people who are victims and perpetrators of sexual abuse* (pp. 229–258). Neari Press.

Perry, B. D. (2009). Examining child maltreatment through a neurodevelopmental lens: Clinical applications of the neurosequential model of therapeutics. *Journal of Loss and Trauma*, 14(4), 240-255. <u>https://doi.org/10.1080/15325020903004350</u>

Perry, B. D. (2014). The neurosequential model of therapeutics: Application of a developmentally sensitive and neurobiology-informed approach to clinical problem solving in maltreated children. In K. Brandt, B. D. Perry, S. Seligman, & E. Tronick (Eds.), *Infant and early childhood mental health: Core concepts and clinical practice* (pp. 21–53). American Psychiatric Association Publishing.

- Perry, B. D. (2019). The neurosequential model. In J. Mitchell, J. Tucci, & E. Tronick (Eds.), The handbook of therapeutic care for children: Evidence-informed approaches to working with traumatized children and adolescents in foster, kinship and adoptive care (pp. 137–155). Jessica Kingsley.
- Perry, B. D., & Dobson, C. L. (2013). The neurosequential model of therapeutics. In J. D. Ford & C. A. Courtois (Eds.), *Treating complex traumatic stress disorders in children and adolescents: Scientific foundations and therapeutic models* (pp. 249–260). The Guilford Press.

- Porges, S. W. (2007). The polyvagal perspective. *Biological Psychology*, 74(2), 116–143. https://doi.org/10.1016/j.biopsycho.2006.06. 009
- Porges, S. W. (2022). Polyvagal theory: A science of safety. *Frontiers in Integrative Neuroscience, 16*, Article 871227. <u>https://doi.org/10.3389/fnint.2022.871227</u>
- Porges, S. W. (2023). The vagal paradox: A polyvagal solution. *Comprehensive Psychoneuroendocrinology*, 16, Article 100200. <u>https://doi.org/10.1016/j.cpnec.2023.100200</u>
- Potgieter, T. (2021). Using color hands approach to bilateral stimulation. In A. Beckley-Forest & A. Monaco (Eds.), *EMDR with children in the play therapy room: An integrated approach* (pp. 393–399). Springer Publishing.

Price, E. W., & Swan, A. M. (2020). Connecting, coping, and creating: An expressive arts group for first year college students. *Journal of Creativity in Mental Health*, *15*(3), 378–392. <u>https://doi.org/10.1080/15401383.2019.1685</u> <u>924</u>

- Sahar, T., Shalev, A. Y., & Porges, S. W. (2001). Vagal modulation of responses to mental challenge in posttraumatic stress disorder. *Biological Psychiatry*, 49(7), 637– 643. <u>https://doi.org/10.1016/S0006-3223(00)01045-3</u>
- Schaefer, C. E., & Drewes, A. A. (2011). The therapeutic powers of play and play therapy. In C. E. Schaefer (Ed.), *Foundations of play therapy* (2nd ed., pp. 15–25). Wiley.

Schwarz, R. & Braff, E. (2012). We're no fun anymore: Helping couples cultivate joyful marriages through the power of play. Routledge. https://doi.org/10.4324/9780203807897

Scotland-Coogan, D., & Davis, E. (2016). Relaxation techniques for trauma. Journal of Evidence-informed Social Work, 13(5), 434– 441. <u>http://dx.doi.org/10.1080/23761407.2016.116</u> 6845

- Seymour, J. W. (2016). An introduction to the field of play therapy. In K. J. O'Connor, C. E. Schaefer, & L. D. Braverman (Eds.), *Handbook of play therapy* (2nd ed., pp. 3–15). Wiley.
- Shapiro, F. (2012). *Getting past your past: Take control of your life with self-help techniques from EMDR therapy.* Rodale.
- Shapiro, F. (2018). Eye movement desensitization and reprocessing (EMDR) therapy: Basic principles, protocols, and procedures (3rd ed.). Guilford Press.

Shin, L. M., Rauch, S. L., & Pitman, R. K. (2006). Amygdala, medial prefrontal cortex, and hippocampal function in PTSD. *Annals* of the New York Academy of Sciences, 1071(1), 67–79. https://doi.org/10.1196/annals.1364.007

Smyth, J. M., Hockemeyer, J. R., Heron, K. E., Wonderlich, S. A., & Pennebaker, J. W. (2008). Prevalence, type, disclosure, and severity of adverse life events in college students. *Journal of American College Health*, 57(1), 69–76. <u>https://doi.org/10.3200/JACH.57.1.69-76</u> Sommer, J. L., Mota, N., Reynolds, K., & El-Gabalawy, R. (2021). COVID-19 as a traumatic stressor is an indicator of mental health symptomatology. *Psychiatry Research, 300,* 113936. <u>https://doi.org/10.1016/j.psychres.2021.1139</u> <u>36</u>

Van Der Kolk, B. A. (2000). Posttraumatic stress disorder and the nature of trauma. *Dialogues in Clinical Neuroscience, 2*(1), 7– 22. <u>https://doi.org/10.31887/DCNS.2000.2.1/bvd</u> <u>kolk</u>

- Van Der Kolk, B. A. (2003). The neurobiology of childhood trauma and abuse. *Child and Adolescent Psychiatric Clinics*, 12(2), 293– 317. <u>https://doi.org/10.1016/S1056-4993(03)00003-8</u>
- Van Der Kolk, B. A. (2006). Clinical implications of neuroscience research in PTSD. Annals of the New York Academy of Sciences, 1071(1), 277–293. <u>https://doi.org/10.1196/annals.1364.022</u>
- Van Der Kolk, B. A. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. Penguin Random House Company.
- Van Der Kolk, B. A., & Saporta, J. (1991). The biological response to psychic trauma: Mechanisms and treatment of intrusion and numbing. *Anxiety Research*, 4(3), 199–212. <u>https://doi.org/10.1080/08917779108248774</u>
- Verbitsky, A., Dopfel, D., & Zhang, N. (2020). Rodent models of post-traumatic stress disorder: behavioral assessment. *Translational Psychiatry*, 10(1), Article 132. <u>https://doi.org/10.1038/s41398-020-0806-x</u>

Adult Play Activities

Wagner, D. (2016). Polyvagal theory in practice. *Counseling Today, 59*(1), 50-53.

Wang, X., Zhang, N., Pu, C., Li, Y., Chen, H., & Li, M. (2022). Anxiety, depression, and PTSD among college students in the post-COVID-19 era: a cross-sectional study. *Brain Sciences*, 12(11), 1553. <u>https://doi.org/10.3390/brainsci12111553</u>

Wattick, R. A., Hagedorn, R. L., & Olfert, M. D. (2021). Impact of resilience on college student mental health during COVID-19. *Journal of American College Health*, 71(7), 2184–2191. https://doi.org/10.1080/07448481.2021.1965

World Health Organization. (2016). International statistical classification of diseases and related health problems (10th ed.). <u>https://icd.who.int/browse10/2016/en</u>

World Health Organization. (2022). World mental health report: Transforming mental health for all. <u>https://www.who.int/publications/i/item/9789</u> 240049338

Wu, W., Ma, M., Ibarra, A. E., Lu, G., Bakshi, V. P., & Li, L. (2023). Global neuropeptidome profiling in response to predator stress in rat: Implications for post-traumatic stress disorder. *Journal of the American Society for Mass Spectrometry*, 34(8), 1549–1558. https://doi.org/10.1021/jasms.3c00027