Commonality of Emotional Trauma in Performing Arts: Implications for Training Programs

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Abstract

This article examines Adverse Childhood Experiences (ACE) scores among university performing arts students, the role of trauma as a muse and creative outlet, and attraction to the performing arts as a result of experienced trauma. Descriptive and Chi Square analysis reveal significant concentrations of ACE scores were discovered in 3 of the 10 ACE categories for performing arts majors, specifically psychological abuse, emotional neglect, and having a family member with mental illness. Additionally, performing arts students ($n = 95$) had a higher total average ACE score compared to other majors ($n = 322$). Research indicates a strong correlation between number of ACE scores and negative physical and psychological outcomes in adults (Felitti et al., 1998). Numerous methods centered on difficult emotions are employed to assist performing artists in honing their craft, physically, cognitively, and psychologically; thereby creating a complex relationship between creative inspiration from past traumatic events and destructive force to the whole person. These dynamics result in implications for performing arts preparatory programs, such as how to address these issues in their curriculum for holistic education and development of one's artistic range and abilities.

Keywords: Adverse Childhood Experiences (ACE), emotional neglect, parental mental health, performing arts, psychological abuse.

To be an interesting actor – hell, to be an interesting human being – you must be authentic and for you to be authentic you must embrace who you really are, warts and all. Sanford Meisner (Simon, 2018, p. 1)

1. Introduction:

With the increased attention to the influence of trauma on life domains and outcomes, more socializing institutions are taking on the responsibility of proactively addressing unresolved traumatic issues to increase positive outcomes (Boatwright & Midcalf, 2019; Francis, DePriest, Wilson, & Gross, 2018; Moses & Villodas, 2017; Reinbergs & Fefer, 2017). Primary and secondary education are being called upon to respond to these challenges as part of their educational goals and mission. Specifically, schools are charged with providing more social services than in generations before as a means of ensuring student success (Branson, 2019). Universities and training programs are also becoming more aware and responsive to negative manifestations of trauma that might cause students to be unsuccessful in their programs (Hallett & Crutchfield, 2017).

Besides a source of creative personal expression, performing arts can be used as a means of sublimation—a positive channel for negative energy (Zastrow et al., 2018). Research also indicates that performing arts can be used as a medium for processing and resolving past traumatic events toward healing (Kelly, 2018; Sees & Unrath, 2015; Smigelsky & Neimeyer, 2018). Performing arts provides artists with a source of power through language, movement, and activity to take the focus off the pathology, and shift to insight and self-restoration (Sharma, 2014). Additionally, the disciplined use of breath control that artists learn assists with the physical and emotional domains, which naturally encourages unresolved issues to surface for exploration (Matchett & Mokwena, 2013). Therefore, if students with a history of trauma are enrolling in performing arts in institutions of higher learning or other preparatory programs, what kinds of implications does this create for administrators and instructors?

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This article will discuss findings of research concerning Adverse Childhood Experiences (ACE) scores conducted at a Midwestern university in the United States that has a campus devoted to performing arts. The campus provides undergraduate instruction to students in art, dance, music, and theater, as well as a venue for student and world-class touring performances. Significant concentrations of ACE scores were discovered in 3 of the 10 ACE categories for performing arts majors, specifically psychological abuse, emotional neglect, and having a family member with mental illness. The article will discuss implications for preparatory programs, such as whether students are attracted to performing arts as a direct result of their traumatic experiences, and if university/preparatory programs have a responsibility to address these issues in their curriculum for holistic education and development of one's artistic range and abilities. Additional discussion will focus on the relationship between trauma and interest in creative outlets, and how this can be harnessed to assist students with their growth and development as artists.

2. Adverse Childhood Experience (ACE) and Childhood Toxic Stress

Individuals may experience trauma after suffering a physically or emotionally harmful event (Substance Abuse and Mental Health Services Administration, 2014). Toxic stress results from sustained exposure to adverse events and the prolonged biological response that occurs, creating a physically corrosive environment (Segal et al., 2019). The groundbreaking research of Felitti et al., (1998) provided considerable insight into the relationship between exposure to traumatic events and toxic stress, and negative physical and emotional health in adulthood. Because of the significance of the findings, ACE scores have been used to study the repercussions of trauma in other populations to determine additional noteworthy relationships (Blosnich & Anderson, 2015; Corbin et al., 2013; Nurius et al., 2016; Reid et al., 2017). ACE scores are comprised of 10dichotomous items to determine the presence of trauma in the following categories: a) psychological abuse, b) physical abuse, c) sexual abuse, d) physical neglect, e) emotional neglect, f) divorce/separation of parents, g) witness to abuse of mother figure, h) family member with substance use disorder, i) family member with mental health issues, and j) incarceration of a family member (Felitti et al., 1998).

The presence of trauma can create a substantial influence on a child's life (Helitzer et al., 2015; Longman-Mills & Mitchell, 2017; Nurius et al., 2016; Taillieu & Brownridge, 2013), as can toxic stress (Corr & Barton, 2018; Knowles et al., 2016). Because trauma and toxic stress often occur together, it is difficult to differentiate the influence of these phenomenon; therefore, these two terms are often lumped together. It is believed that the ongoing and accumulative damage from toxic stress is likely responsible for the negative physical and mental outcomes adults may suffer. The constant negative stimuli can lead to habitual high-risk behaviors, negative coping skills, and other activities with negative physical and emotional consequences in adulthood (Anda et al., 1999; Helitzer et al., 2015; Longman-Mills & Mitchell, 2017; Najib et al., 2019; Nurius et al., 2016;Shern et al., 2016).

Those taking the ACE survey are asked if they have experienced any of the 10 identified events before the age of 18. Categories marked with a "yes" endorsement are added together to determine a person's overall ACE score. The higher one's ACE score, the more likely negative outcomes will occur in one's adulthood (Redford, 2015). Fortunately, ACE scores are not fatalistic, and purposeful intervention and development of positive coping skills can decrease the occurrence of negative life events (Helitzer et al., 2015; Karatoreos & McEwen, 2013). Although there has been a great deal of attention on the negative outcomes of trauma and toxic stress, there can also be positive outcomes, post traumatic growth, and increase in resiliency (Beutel et al., 2017; Karatoreos & McEwen, 2013). There are many factors involved with why some people are devastated and defined by their trauma, and others become stronger from the experiences. One of many is being intentional with developing resiliency skills and consciously using negative experiences for interpersonal growth (Ben-Porat, 2015; Tassie, 2015). It may be in this vein that the use of performance arts as a means of purposeful growth may occur (Harden et al., 2015; Leather & Kewley, 2019; Palidofsky & Stolbach, 2012; Smigelsky & Neimeyer, 2018).

Interesting concentrations of high ACT scores have been found in several vulnerable populations, such as those living in poverty (Francis et al., 2018); individuals who were the victims of human trafficking (Reid et al., 2017), women of color (Corbin et al., 2013), Persons of First Nations (Nurius et al., 2016), individuals who identify as members of the LGBTQ+ community (Blosnich & Anderson, 2015), those struggling with substance use disorders (Fuller-Thomson et al., 2016), and female sex offenders (Willis & Levenson, 2016). Thomas and Jaque (2018) investigated childhood adversity in professional performing artists, and found that increased reports of childhood abuse and neglect by actors. Additionally, in studies of actors and athletes, Thomas and Jaque (2019a and 2019b) found increased reports of childhood maltreatment. However, a review of literature did not find additional investigations concerning ACE scores in performing artists. This is a worthwhile area of research to understand the attraction of some students to performing arts. Additionally, data-driven implications can assist

performing arts programs in developing effective training and academic education needed for performance artistry, while also ensuring holistic wellbeing of students.

3. ACE Scores, Toxic Stress, and Performing Arts

The consequences of toxic stress are well documented. Research indicates that toxic stress can create negative physical, emotional, cognitive, social, and spiritual consequences (Beutel et al., 2017; Brew et al., 2018; Miller-Cribbs et al., 2016). Additionally, the use of negative coping skills to deal with the ongoing physical and emotional discomfort is correlated with engagement in high-risk behaviors, including tobacco use, substance use disorders, unsafe sexual practices, disordered eating, self-mutilation, suicidal ideation, and more (Karatoreos & McEwen, 2013; Longman-Mills & Mitchell, 2017; Umberson et al., 2014). Involvement in negative coping skills has the potential to spill over into other life areas, such as education, employment, and significant relationships (Boatwright & Midcalf, 2019; Khrapatina & Berman, 2017; LaMotte et al., 2019; Reinbergs & Fefer, 2018).

Additionally, for performing artists, maladaptive coping skills can negatively affect their craft. This is a complex relationship, as artists may be asked to use past traumatic or aversive events to create emotion needed for a character's perspective, the mood of a piece, or to connect with the author/choreographer's vision (Aronson, 2003; Bilgrave & Deluty, 2004; Scheeder, 1999; Strasberg, 1987). These dynamics can place preparatory programs in a dilemma. If those drawn to performing arts are more likely to have higher ACE scores due to childhood trauma and toxic stress, they are likely to have an untapped reservoir of potential emotions and experiences to draw from as they train and hone their craft. Performing artists rely on numerous techniques to focus the artistic expressions they exhibit. Specific methods common to most performance artists are the Stanislavski Method and Strasberg's Method. Both methods encourage artists to use real and personal emotions to create a realistic performance from internal and external sources (Scheeder, 1999; Strasberg, 1987). Stanislavski encouraged students to develop emotional memories to draw from as needed for different situations, moods, and moments (Aronson, 2003; Bilgrave & Deluty, 2004). Stanislavski (1936/1989) stated,

> It [emotional memory] has risen, naturally, from the depths of your soul to light the creative spark in you. Who can say which manifestation of true inspiration is better? They are all splendid, each in its own way, if only because they are *inspired.* (p. 189)

Strasberg, however, implored his students to temporarily become the character or situation being displayed, immersing one's self in the realness of the part to have a visceral understanding of the life one was working to recreate artistically (Hirsch & Bell, 2014). Strasberg (1987) noted:

> Only imaginary reality can be both created and, therefore, controlled by the actor…The task is for the actor to keep his attention centered on what he is doing, and to create the reality and truthfulness of each Imaginary object or experience. (p. 70)

A final common method is the Meisner Technique, which involved repetition and rehearsal of different emotions to the point that the emotion can be called upon like second nature when it is needed for a performance (Simon, 2018). Meisner concluded that:

> …That's repetition which leads to impulses…my approach is based on bringing the actor back to his emotional impulse and to acting that is firmly rooted in the instinctive. It is based on the fact that all good acting comes from the heart, as it were, and that there's no mentality in it. (Meisner & Longwell, 1987, p. 36-37)

Therefore, performing artists are encouraged to rely on autobiographical information to inform the characters and moments they are creating, while engaging in repetition to make these responses spontaneous (Matchett & Mokwena, 2013).

A more contemporary vocal coach and performing arts instructor, Linklater (2006), developed several exercises that allows one to enhance their ability to project verbal expression. Linklater's techniques, commonly called "the Linklater Voice," are used by actors and vocal performers as a means of increased range and resonance. Performers are encouraged to be aware of their mouth positions, jaw and tongue tension, and vibrato, while also focusing on freeing their breathing to allow a natural awakening of expression. Performers are encouraged to open their mind, body, and breathing to expand their power and generate a controlled release. Through Linklater Voice training, performers find a decrease of inhibitions that hold them back from a full range of emotional expression. Linklater (2006) explains that, "The result of the work will be to produce a voice that is in direct contact with the emotional impulses, shaped by the intellect but not inhibited by it" (p.81). As a result, a

common occurrence for students using Linklater Voice training is to have a sudden and unexpected explosion of emotion, bring with it "memories and the monsters" (Linklater, 1997, p. 4).

Students with unresolved trauma may present emotions, cognitions, and physical symptoms as a result of their performance training that are unpleasant and challenging for the student and instructor. These techniques provide a platform for processing unresolved issues (Kelly, 2018); however, instructors of performing arts may be ill-equipped to deal with the manifestations. Lack of mental health training, time constraints, production demands, and the importance of keeping the group milieu intact limits instructors from giving emotional eruptions and problematic behaviors the individual time needed (Moore, 2016). However, due to the use of personal emotion in the development of artistry, there is no way to escape the rawness of students' unresolved issues in training programs.

4. Performing Arts and Traumatic Healing

The idea that performing arts can be an avenue for healing has recently become more popular in trauma treatment settings (Barnett, 2018; Sees & Unrath, 2015; Sharma, 2014; Thomson & Jaque, 2011; Zerrudo, 2016). Innovative methods for treating complex trauma have shown that performing arts can provide a safe and supportive arena for trauma to be explored, replayed, retold, and understood from a different and more accurate perspective (Smigelsky& Neimeyer, 2018). Linklater (1997) stated, "…the voice is a powerful scrubber, with words an excellent cleaning agent. The right words are alchemical touchstones that can turn the deadly, poisonous lead of an abused and wounded childhood into the life-restoring gold of art" (p.4). Performing arts can allow the re-telling of a story from a detached viewpoint. This therapeutic space outside the pathology reduces anxiety and facilitates insight (Kelly, 2018). One can re-map the events of the trauma and find moments to intervene with new cognitions (Matchett & Mokwena, 2013). The moments where thinking errors entered and created negative perceptions can be re-processed and dissolved. Additionally, the event can be honored as part of one's developmental life, while decreasing the power of the event over present-day behavior and perceptions (Palidofsky & Stolbach, 2012). This level of insight results from the involvement of a person on a physical, emotional, and cognitive level, and has the potential to be restorative and increase resiliency (Harden, et al., 2015; Sharma, 2014). Furthermore, the use of performing arts in traumatic healing can be vicarious—both for those providing the artistry and those witnessing it (Kerig, 2012; Scorgie et al., 2017; Sees & Unrath, 2015; Zerrudo, 2016). Therefore, if performing arts training programs and instructors could harness the benefits of artistry training to both expand depth in performance while also assisting students with unresolved trauma, potential negative consequences from dysfunctional coping skills could be decreased. This could potentially transform a student's personal perspective and worldview in a positive manner that could increase positive health behaviors and emotional well-being, providing lifelong benefits. Especially for students who plan to make a career in performing arts, healthy resolution of trauma and toxic stress could increase efficacy in lifelong employment, performance efforts, and sustained positive coping skills.

5. Current Study and Method

During a 2018 research study involving the ACE scores of social work students at a Midwestern university, prevalence of trauma was noted in performing arts students. Because the initial sample of performing art students was quite small, additional data were collected that specifically targeted performing arts students. A separate International Review Board (IRB) application was created and approved by IRB Committee of the same Midwestern university in 2019.The institution is a 4-year university with a campus devoted specifically to performing arts, providing numerous undergraduate degrees in the areas of art and design, music, dance, and theater. As of 2018, the university provided educational services to 11,041 undergraduate students and 1,030 graduate students. The performing arts campus provided educational and performance services to 241students in fall 2018.

In spring 2019, instructors from the performing arts campus were invited to participate in the ACE study. Junior and senior level courses were surveyed to help ensure that only dedicated majors participated in the survey. Students were shown a 5-minute video titled *ACES Primer* (Redford, 2015). The video provided students with an overview of what ACE scores are, the correlations between ACE scores and future health risks, and benefits of understanding one's ACE score for proactive action. Psychometric properties of the ACE survey indicate it is a reliable and valid survey for retrospective events of child maltreatment (Bethell et al., 2017), and has an internal consistency score of 0.83 (Meinck et al., 2017). Participants circled a "yes" or "no" endorsement concerning the occurrence of each the 10 ACE items before the age of 18.Additionally, participants were asked to answer six demographic questions concerning gender, ethnicity, sexual orientation, primary major, socio-economic background, and developmental setting before transitioning to college (rural, moderate size, urban). Participants were not offered an incentive and participation was voluntary.

Anonymity of participants was protected, and participants were debriefed following the survey. All students were provided with a fact sheet concerning ACE scores, where to find additional information concerning ACE scores, and contact information for the on-campus counselling center. Additionally, students were provided with the contact information for the lead researcher, a licensed clinical social worker in the state where the data were collected. The data from both studies (2018 and 2019) were merged and a total of 421 students participated in the study, 95 participants were performing arts students. Of the 421 surveys, 417 were used. A total of four surveys were purged due to incomplete data.

6. Variables and Measures

6.1. Dependent Variable, Student's Major

Student's major was the dependent variable used in analysis, which was coded to reflect (1) = students majoring in performing arts compared to (0) = all other majors. In the original survey, students were asked, "What is your primary major?"Of the 350 respondents, 16% (N=56) reported majoring in criminal justice, 23% (N=81) were social work majors, 5% (N=18) were computer science majors, 7% (N=24) of respondents indicated they were majoring in performing arts, 3% (N=12) reported majoring in accounting, 12% (N=42) reported that their major was in a STEM field, 7% (N=25) were nursing majors, 23% (N=82) of respondents identified as business, finance, or human resources majors, and 3% (N=10) of students reported majoring in sports management. Following the original survey, preliminary findings suggested a positive relationship between adverse childhood experiences and majoring in performing arts. Therefore, the following semester, an oversample of students majoring in performing arts was asked to participate in the survey. An additional 79 performing arts majors completed the survey (N=429).

6.2. Independent Variables, Adverse Childhood Experiences

Adverse childhood experiences were measured with the following ten indicators: (1) psychological abuse, (2) physical abuse, (3) sexual abuse, (4) emotional neglect, (5) physical neglect, (6) divorce, (7) mother or stepmother treated violently, (8) substance abuse, (9) mental illness, (10) household member incarcerated. Each adverse experience was coded individually as (1) = yes, experienced this form of abuse, neglect, or disruption or (0) = did not experience this form of abuse, neglect, or disruption. The analyses also included two additional measures of adverse childhood experiences. The first indicated whether students reported *any* of these categories, coded as: (1) = one or more adverse childhood experiences and (0) = no adverse childhood experiences .The second measured students' total ACE scores, which ranged from zero to ten, with zero indicating that the student had not experienced any category of adversity and ten reflecting that the student had experienced each category of adversity.

6. 3. Control Variables

Respondents in both the original study and the oversample were asked their gender and race/ethnicity, both of which were included in the analysis as dichotomous variables with males and white/non-Hispanic students as the omitted categories.

7. Analytic Strategy

Logistic regression was used to predict the binary outcome variable, likelihood of majoring performing arts from each of the individual ACE categories and the control variables, gender and race/ethnicity. Logistic regression is a statistical test that estimates the probability of an event occurring, which in this analysis, the event is whether or not a student will major in performing arts. Model 1 tests whether experiencing each individual ACE category predicts students' likelihood of majoring in performing arts, and Model 2 adds the control variables to Model 1.

8. Results

Figure 1 shows the percentage of number of adverse childhood experiences among all majors compared to performing arts majors by categories. The categories include (1) no adverse childhood experiences, (2) one to two categories of adverse childhood experiences, (3) three to four categories of adverse childhood experiences, (4) five to six categories of adverse childhood experiences, and (5) seven or more categories of adverse childhood experiences. Among the sample of students not majoring in performing arts, approximately 37% reported no adverse childhood experiences compared to 16.5% of students majoring in performing arts. Nearly 34% of non-performing arts majors reported that they had experienced one to two categories of adverse childhood experiences compared to approximately 36% of the performing arts majors.

Approximately 15.6% of non-performing arts majors and 26.21% of performing arts majors indicated that they had experienced three to four categories of adverse childhood experiences. Almost 10% of non-performing arts majors and 17.5% of performing arts majors reported that they had experienced five to six categories of adverse childhood experiences. The category of seven or more adverse childhood experiences was similar among both non-performing arts majors (3.68%) and performing arts majors (3.88%).

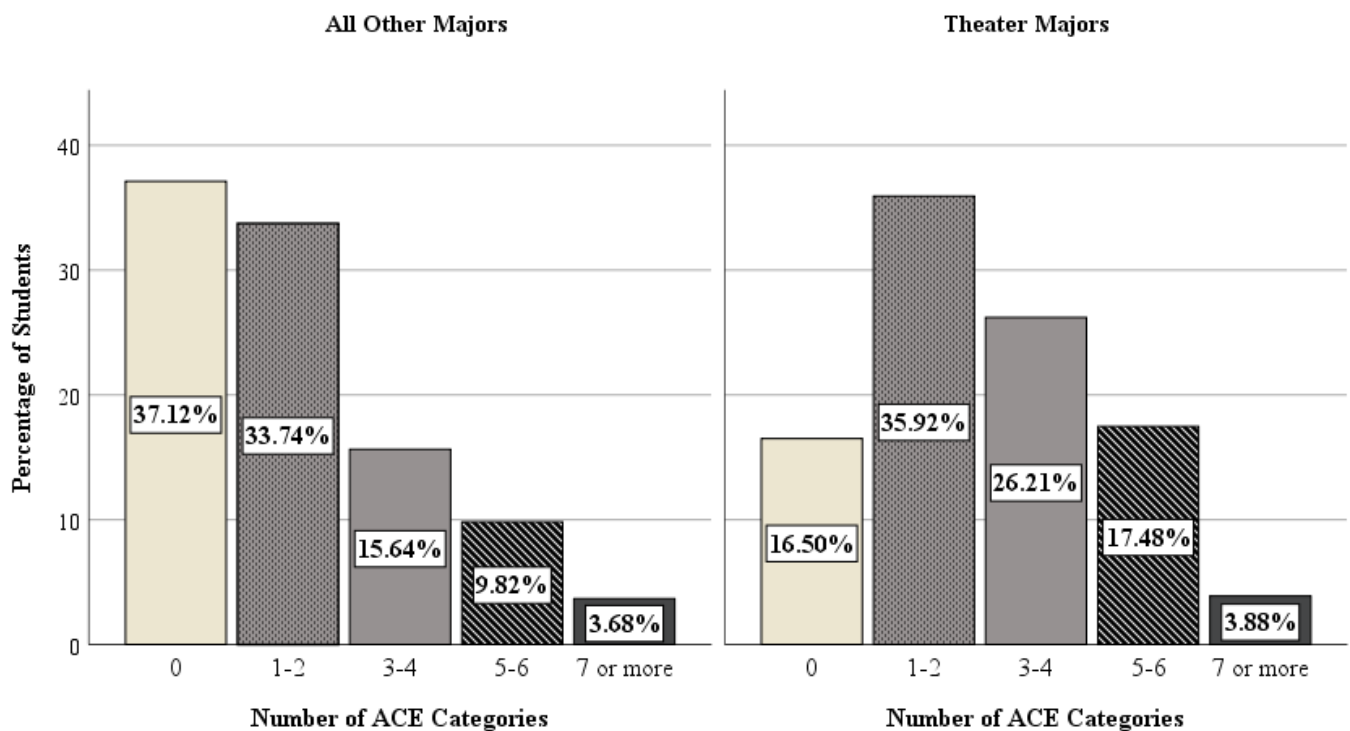**Figure 1. Percentage of Number of Adverse Childhood Experiences among All Majors Compared to Theater Majors**

Table 1 shows the average score for each ACE item (and the control variables) for the full sample (*N*=417), performing arts majors only (*N*=95), and all other majors (*N*=322). Pearson's chi-square test was used to examine whether there was a statistically significant difference between each mean ACE score for performing arts majors compared to all other majors. This test evaluates the likelihood that any observed differences between each mean score occurred by chance. Among performing arts majors, nearly 49% percent of students reported experiencing psychological abuse compared to 27% of all other majors. The results indicate a p-value of .001, suggesting a high confidence-level (more than 99%) that the difference between the two means was not due to random chance. Approximately 16% of both performing arts majors and all other majors reported experiencing physical abuse. Almost 20% of performing arts majors reported being the victim of sexual abuse compared to nearly 12% of all other majors. However, this difference was not statistically significant at the p ≤ .05 threshold.

Additionally, Table 1 shows that 40% of performing arts majors reported being the victim of emotional neglect compared to 18% of all other majors, (p ≤ .001). In terms of having a household member with a substance abuse issue, nearly 34% of performing arts majors reported that they lived with someone who was a problem drinker, alcoholic, or who used street drugs compared to almost 24% of all other majors (p ≤ .05). A little over 46% of performing arts majors indicated that a household member had been depressed, mentally ill, or attempted suicide during their childhood, while only 26% of all other majors indicated that they had this experience during childhood. This difference was statistically significant (p ≤ .001). There was not a statistically significant difference between students majoring in performing arts (9%) and all other majors (10%) in terms of having a household member go to prison.

Among performing arts majors, nearly 84% reported at least one adverse childhood experience compared to approximately 63% of all other majors (p ≤ .001). Students majoring in performing arts had an average total ACE score of 2.61 compared to 1.83 among all other majors, a difference that was statistically significant (p ≤ .01).

In terms of the control variables, among the full sample of respondents, 60% identified as female and 23.5% of students identified as a race/ethnicity other than white/non-Hispanic. Among performing arts majors, there was a higher percentage of female students (66%) and a lower percentage of non-white students (19.6%).

Table 1. Descriptive statistics and comparison of theater majors and all other majors' prevalence of childhood exposure to abuse, neglect, and household dysfunction

	Percentages Full Sample $N=417$	Theater Majors (only) $N=95$	Other Majors $N=322$	Pearson Chi-Square Test for Significance	Min-Max
Dependent Variable					
Theater Major	23.95				0-1
Independent Variables					
Psychological Abuse	32.17	48.54	26.99	.000	0-1
Physical Abuse	15.85	15.53	15.95	.920	0-1
Sexual Abuse	13.75	19.42	11.96	.056	0-1
Emotional Neglect	23.13	39.22	18.10	.000	0-1
Physical Neglect	6.06	3.88	6.75	.288	0-1
Divorce	37.76	40.78	36.81	.469	0-1
Mother Treated Violently	9.11	12.75	7.98	.144	0-1
Substance Abuse	26.00	33.66	23.62	.044	0-1
Mental Illness	30.84	46.08	26.07	.000	0-1
Incarceration	9.37	8.91	9.51	.857	0-1
Any ACE Category Reported	67.83	83.50	62.88	.000	0-1
Average Total ACE Score	2.02	2.61	1.83	.012	0-10
Control Variables					
Female	60.33	66.34	58.46		0-1
Non-White Students	23.53	19.61	24.77		0-1

Table 2 presents the results from the logical regression analysis predicting the likelihood of majoring in performing arts from each of the ACE categories. Both Models 1 and 2 yield similar results. In the full model (Model 2), the results suggest that students who experienced psychological abuse were more likely to major in performing arts compared to their peers who had not experienced psychological abuse (.894; p-value≤ .01). This suggests that the odds of majoring in performing arts are 2.445 times higher for students who reported being the victim of psychological abuse .Additionally, Model 2 shows that students who reported being the victim of physical abuse were more likely to major in performing arts compared to students who did not report physical abuse (.887; p-value ≤ .05). The ACE category, sexual abuse was not statistically significant in predicting the likelihood of majoring in performing arts. The results also predict that students who indicated that they were the victim of emotional neglect were more likely to major in performing arts compared to students who were not the victim of emotional neglect (1.029; p-value ≤ .01), which suggests that the odds of majoring in performing arts are almost 2.8 times higher for students who reported being the victim of emotional neglect compared to students who did not indicate this adverse childhood experience. In addition, students who reported experiencing physical neglect were more likely to major in performing arts compared to students who did report prior experiences with physical neglect (-1.702; p ≤ .01).

The other ACE categories, including, divorce, mother treated violently, substance abuse, mental illness, and incarceration were not statistically significant in predicting the likelihood of majoring in performing arts. The control variables, gender and race/ethnicity were not statistically significant in predicting students' likelihood of majoring in performing arts.

Table 2. Additional Characteristics of Oversample of Theater Majors (N = 79)

		Frequency	Percent
Sexual Preference			
	Straight	51	64.6
	Gay	5	6.3
	Lesbian	1	1.3
	Bisexual	13	16.5
	Uncertain	4	5.1
	Identify Using Other Term	5	6.3
Socioeconomic Status			
	Lower class	5	6.6
	Working class	19	25.0
	Middle class	32	42.1
	Upper middle class	10	13.2
	Upper class	1	1.3
	No response/missing	12	11.8
Geographic Characteristics of Hometown			
	Rural	6	7.6
	Small town	22	27.8
	Moderate city	32	40.5
	Large City	9	11.4
	No response/missing	10	12.7

9. Discussion

Due to the preliminary results of the first ACE research project focused on social work students, elevated ACE scores for performing arts majors were expected. However, when the second research study was conducted focusing just on performing arts students, the concentrations in emotional neglect, psychological abuse, and having a parent with mental illness were unexpected and noteworthy.

Emotional neglect occurs when a caregiver is unable or unwilling to provide a child's basic needs (Zastrow et al., 2018). For the purposes of this paper, emotional neglect is the result of a caregiver's inability to provide healthy emotional stimulation due to organic issues with the caregiver, such as struggling with unresolved trauma creating low maternal/paternal warmth, substance use disorder, mental health issues, developmental disability, and/or mental health issues. Poverty can also create considerable environmental issues that result in unintentional emotional neglect (Jin et al., 2018). Psychological abuse is purposeful maltreatment that is executed with the intention to harm and/or punish a child. Common categories of psychological maltreatment are rejection, isolation, terrorizing, ignoring, and corrupting a child (Zastrow et al., 2018). Both emotional neglect and psychological abuse have been correlated with negative sequela in childhood, adolescence, and adulthood over all life domains (Majumdar et al., 2017). Perhaps growing up in an environment that lacks healthy and positive emotional supports causes a child to tap into his/her internal creativity as a coping technique and mode of escape. This type of defense mechanism fills in the missing gaps for a child emotionally and becomes refined through experience to be a source of esteem, talent, personal strength, and avenue for future career aspirations. Furthermore, witnessing mental health issues in a caregiver may inspire one's imagination to create a private world where the child plays out how the script is supposed to go between the caregiver and the child, allowing meaningfulness through the pathology a child is powerless to change.

Development of coping skills, interest, and polished talents in performing arts as a healthy means of dealing with trauma demonstrates resiliency, which is one of the most effective techniques to counteract the damage of childhood adversity (Beutel et al., 2017).

Resiliency is often defined as the ability to bounce back after adversity (Koni et al., 2019). Another way of looking at this personality trait is devising new, different, or alternatively effective methods to function despite highly adverse situations (Jackson-Cherry & Erford, 2018). Therefore, children who are exposed to emotional neglect, psychological abuse, and the manifestations of a caregiver struggling with mental health issues may be drawn to cognitive creativity as a means of resilience. Additionally, this may be why the use of performing arts has been found to be helpful in processing and healing unresolved issues of trauma, as these same internal systems are stimulated to emotionally and cognitively unravel and correct long-standing issues of maltreatment. Children are powerless in situations of emotional neglect, psychological abuse, and having a parent with mental illness. Using cognitive creativity and developing resiliency is a means of regaining power over one's life, if only in one's private world. The use of performing arts allows some to correct or make sense of these issues in their internal world, which can translate into external originality, especially in the form of performing arts. If this method of resilience becomes developed and honed, either through encouragement or sheer engagement, it can become a source of lifelong interest (Faccio et al., 2013; Leather & Kewley, 2019).

If preparatory programs recognize that some of their students have experienced adverse childhood experiences, do they have an obligation to address these issues as part of students' training? Implications for programs are significant. Instructors are not necessarily trained to process unresolved traumatic issues, nor does the rigor of the program allow for such time-involved endeavors. Program-level practical and logistical responses would be to provide dedicated counsellors to performing arts students at a free or reduced charge. Furthermore, these counsellors should be provided with specialized cross training in trauma-informed care, the uniqueness of performing arts programs, and the demands of performance training to be more effective with struggling students. If having a dedicated counsellor is not realistic, perhaps a block of reserved sessions with the on-campus counselling office or with a local social service provider could be achieved. Additional ideas would be to provide group counselling services for students. Some programs may make support services available to students on a voluntary basis, while other programs might require participation as part of advanced training for performing arts majors. Education and awareness of ACEs and sequela of trauma should also be discussed with performing arts students, to increase students reaching out for assistance and being supportive performers to each other.

Additionally, performing arts instructors should receive regular training on how to best help students struggling with unresolved traumatic material that may be surfacing as a direct result of exercises, methods training, or performance pieces. Unresolved issues resulting from childhood trauma have been correlated with increased involvement in high-risk behaviors, negative relationship with loved ones, conflict with authority figures, and educational/employment problems (Boatwright & Midcalf, 2019; Felitti et al., 1998; LaMotte et al., 2019; Longman-Mills & Mitchelle, 2017; Reinbergs & Fefer, 2018). Excessive conflicts in any of these life domains has the potential to derail any performing arts student, regardless of talent. Preparatory programs are tasked with training students to be the best at their craft, while also being able to make a living with their artistry in the real world.

Therefore, if performing arts programs and instructors desire long-term sustainability in the job market for their students, addressing unresolved trauma could be a long-term strategy to ensure overall success and wellbeing.

One lingering question to consider is, if unresolved trauma is a well to dip from for artistic emotion, will reconciliation decrease the artists ability to relate to characters, themes, and visions of artistic mediums? Fortunately, the Stanislavski, Strasberg, Meisner, and Linklater methods provide insight into the relationship between emotions and performing arts. All these methods encourage the deepening of one's emotional repertoire and using personal experiences to create characters and aura in presentations. Additionally, the exploration, processing, and reflection of the emotional work provides the artist with increased control and command. It would be difficult for performing arts programs to increase students' artistic skills without a focus on emotional work. Consequently, it is unlikely instructors can prepare performing arts students without unearthing unresolved issues of childhood adversity and trauma. Therefore, the most pragmatic approach would be to equip students with an understanding of the relationship between unresolved trauma and negative outcomes. Students should also be aware of the benefits of post-traumatic growth, resiliency, and being intentional with the adoption of productive coping skills for positive physical and emotional health trajectories. Additionally, programs should develop supports for students and instructors to assist with harnessing trauma and its destructiveness, while salvaging its potential creativity.

10. Limitations

Although these findings reveal important implications for performing arts programs, there are also limitations that should be considered. First, the study of trauma and future outcomes indicates consistent results, but also endless possible outcomes (Brew et al., 2018). Due to personal experiences, perceptions of traumatic events, personality factors, temperaments, and several other nuances, no two people experience trauma in the same manner. It is also difficult to separate the effects of trauma and poverty on future outcomes (Francis et al., 2018).Therefore, it is difficult to separate the effects of trauma, personal factors, lower socioeconomic status, and resulting outcomes. Additionally, the overall sample is small ($n = 95$), making the results of this study primary. Future research should draw from a larger sample with increased diversity of socioeconomic background to delineate correlational relationships.

Second, because of the emotional work that performing arts majors engage in as part of their training, ACE scores for this population might be artificially inflated. Performing arts students are regularly encouraged to engage in reflection of emotions, using past adversities to understand character development and/or the emotional aura of a piece, thereby increasing their empathic skills, overall reach, and depth as a performer. Therefore, this makes the sample vulnerable to increased sensitivity to identification of past childhood traumatic events and inflated results.

Finally, the data for this research venture was based in the United States, and all participants identified as Americans. This creates potential limitations to the generalizability of the results. Training courses and students in other countries may experience different preparation methods, cultural underpinnings, and instructor influences that would generate different outcomes and implications for their individual preparatory programs. Research with larger and more diverse performing arts programs globally would yield stronger results, implications for preparatory programs, and methods to increase program efficacy.

11. Conclusion and Future Research

The awareness of ACEs and how unresolved adversities can potentially affect all life domains has caused more and more social institutions to appreciate the presence of trauma in people's lives. Preparatory programs for performing arts have long recognized a connection between emotion and quality of performance. Additionally, the idea that those attracted to performing arts might have unresolved trauma in their lives and are attracted to performing arts to exercise their emotional demons is not new to instructors. However, instructors may lack the skills, training, and time to effectively deal with emotional distress of students. Programs often struggle to deal with resulting harmful effects from attempts to engage students in emotional aptitude that evokes negative, toxic, and/or out of control emotional baggage and behaviors. Preparatory programs should recognize their responsibility to students with unresolved trauma and the inexorable surfacing of difficult emotions involved in the training of performing arts students.

Future research studies should further investigate the connection between ACEs, concentrations of trauma, and interest in performing arts. Additional research concerning coping skills that are most effective with performing arts students and ways preparatory programs can best support students are also needed. Preparatory programs should take advantage of this developmental period to use training methods and performance exercises to provide students with opportunities for intentional post-traumatic growth and the adoption of positive coping skills. Appropriate supports and specific interventions can provide students with the education and skills needed for their performing art, while also increasing their longevity in the field, success as a professional performer, and personal well-being.

References

Anda, R. F., Croft, J. B., Felitti, V. J., Norenberg, D., Giles, W. H., Williamson, D. R., & Giovino, G. A. (1999). Adverse childhood events and smoking during adolescence and adulthood. *American Medical Association, 282*(17), 1652-1658.

Aronson, O. (2003). The actor's body. *Third Text, 17*(4), 313–321. doi:10.1080/0952882032000166143

Barnett, J. (2018). Setting the stage for bridging disability and trauma studies: Reclaiming narrative in Amy and the orphans. *Word & Text: A Journal of Literary Studies & Linguistics, 8*, 129–148.

Ben-Porat, A. (2015). Vicarious post-traumatic growth: Domestic violence therapists versus social service department therapists in Israel. *Journal of Family Violence, 30*(7), 923-933. doi:10.1007/s10896-015-9714-x

Bethell, C.D., Carle, A., Hudziak, J., Gombojav, N., Powers, K., Wade, R., & Braveman, P. (2017). Methods to assess adverse childhood experiences of children and families: Toward approaches to promote child well-being in policy and practice. *Academic Pediatrics, 17*(7s), s51-s69).

Beutel, M. E., Tibubos, A. N., Klein, E. M., Schmutzer, G., Reiner, I., Kocalevent, R.D., & Brähler, E. (2017). Childhood adversities and distress: The role of resilience in a representative sample. *PLoS ONE, 12*(3), 1–14. doi:10.1371/journal.pone.0173826

Bilgrave, D. P., & Deluty, R. H. (2004). Stanislavski's acting method and control theory: Commonalities across time, place, and field. *Social Behavior & Personality: An International Journal, 32*(4), 329–340. doi:10.2224/sbp.2004.32.4.329

Blosnich, J. R. & Anderson, J. P. (2015). Thursday's child: The role of adverse childhood experiences in explaining mental health disparities among lesbian, gay, and bisexual U.S. adults. *Social Psychiatry and Psychiatric Epidemiology, 50*, 335-338. doi:10.1007/s00127-014-0955-7

Boatwright, P., & Midcalf, L. (2019). The effects of poverty on lifelong learning: Important lessons for educators. *Delta Kappa Gamma Bulletin, 85*(3), 52–57.

Branson, D. C. (2019). Student trauma, the hidden curriculum, and cultural humility: This trio needs a team approach. In S. Taukeni, (Ed.), *Addressing multicultural needs in school guidance and counseling*. IGI Global.

Brew, B., Doris, M., Shannon, C., & Mulholland, C. (2018). What impact does trauma have on the at-risk mental state? A systematic literature review. *Early Intervention in Psychiatry, 12*(2), 115–124. doi:10.1111/eip.12453

Corbin, T. J., Purtle, J., Rich, L. J., Rich, J.A., Adams, E.J., Yee, G., & Bloom, S.L. (2013). The prevalence of trauma and childhood adversity in an urban, hospital-based violence intervention program. *Journal of Health Care for the Poor and Underserved, 24*, 1021-1030.

Corr, C., & Barton, E. E. (2018). Research to practice in maltreatment, trauma, and toxic stress. *Topics in Early Childhood Special Education, 38*(3), 132–133. doi:10.1177/0271121418795669

Faccio, E., Olocco, M., & Iudici, A. (2013). New ideas and clinical practices to improve corporeal self-esteem. *European Journal of Counselling Psychology, 2*(2), 145–152. doi:10.5964/ejcop.v2i2.38

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 Experience (ACE) study. *American Journal of Preventive Medicine, 14*(4), 245-258.

Francis, L., DePriest, K., Wilson, M., & Gross, D. (2018). Child poverty, toxic stress, and social determinants of health: Screening and care coordination. *Online Journal of Issues in Nursing, 23*(3), doi:10.3912/OJIN.Vol23No03Man02

Fuller-Thomson, E., Roane, J. L., & Brennenstuhl, S. (2016). Three types of adverse childhood experiences, and alcohol and drug dependence among adults: An investigation using population-based data. *Substance Use & Misuse, 51*(11), 1451–1461. doi:10.1080/10826084.2016.1181089

Hallett, R. E., & Crutchfield, R. (2017). Homelessness and housing insecurity in higher education: A trauma-informed approach to research, policy, and practice. *ASHE Higher Education Report, 43*(6), 7–118. doi:10.1002/aehe.20122

Harden, T., Kenemore, T., Mann, K., Edwards, M., List, C., & Martinson, K. (2015). The Truth N' Trauma project: Addressing community violence through a youth-led, trauma-informed and restorative framework. *Child & Adolescent Social Work Journal, 32*(1), 65–79. doi:10.1007/s10560-014-0366-0

Helitzer, D., Graeber, D., LaNoue, M., & Newbill, S. (2015). Don't step on the tiger's tail: A mixed methods study of the relationship between adult impact of childhood adversity and use of coping strategies. *Community Mental Health Journal, 51*, pp. 768–774. doi:10.1007/s10597-014-9815-7

Hirsch, F., & Bell, J. (2014). Birth of the method. *Sight & Sound, 24*(11), 44–51.

Jackson-Cherry, L. R. & Erford, B. T. (2018). *Crisis assessment, intervention, and prevention* (3rd ed.). Person Education, Inc.

Jin, M. J., Jung, W., Hyun, M. H., & Lee, S.H. (2018). Effect of behavioral inhibition system and childhood emotional neglect on serotonergic activity, negative affect, and rejection sensitivity in non-clinical adults. *PLoS ONE, 13*(11), 1–13. doi:10.1371/journal.pone.0207746

Kail, R. V., & Cavanaugh, J. C. (2018). *Human development: A life-span view* (8th ed.). Wadsworth, Cengage Learning.

Karatoreos, I. N. & McEwen, B. S. (2013). Annual research review: The neurobiology and physiology of resilience and adaption across the life course. *Journal of Child Psychology and Psychiatry, 54*(4), 337-347. doi:10.111/jcpp.12054

Kelly, D. (2018). Enacting embodied memory theater in an intuitive inquiry study of therapeutic space for the dying. *The Humanistic Psychologist, 47*(2), 158-180. doi:10.1037/hum0000116

Kerig, P. K. (2012). Introduction to part II: Trauma and juvenile delinquency: New directions in interventions. *Journal of Child & Adolescent Trauma, 5*(3), 187–190. doi:10.1080/19361521.2012.697023

Khrapatina, I., & Berman, P. (2017). The impact of adverse childhood experiences on health in college students. *Journal of Child & Adolescent Trauma, 10*(3), 275–287. doi:10.1007/s40653-016-0093-0

Knowles, M., Rabinowich, J., Ettinger de Cuba, S., Cutts, D., & Chilton, M. (2016). Do you wanna breathe or eat: Parent perspectives on child health consequences of food insecurity, trade-offs, and toxic stress. *Maternal & Child Health Journal, 20*(1), 25–32. doi:10.1007/s10995-015-1797-8

Koni, E., Moradi, S., Arahanga-Doyle, H., Neha, T., Hayhurst, J. G., Boyes, M., Cruwys, T., Hunter, J. A., & Scarf, D. (2019). Promoting resilience in adolescents: A new social identity benefits those who need it most. *PLoS ONE, 14*(01), 1–11. doi:10.1371/journal.pone.0210521

LaMotte, A. D., Gower, T., Miles-McLean, H., Farzan-Kashani, J., & Murphy, C. M. (2019). Trauma's influence on relationships: Clients' perspectives at an intimate partner violence intervention program. *Journal of Family Violence, 34*(7), 655–662. doi:10.1007/s10896-018-0004-23

Leather, J. & Kewley, S. (2019). Assessing drama therapy as an intervention for recovering substance users: A systematic review. *Journal of Drug Issues, 49*(3), 545-558. doi:10.1177/0022042619845845

Linklater, K. (2006). *Freeing the natural voice: Imagery and art in the practice of voice and language.* Nick Hern Books.

Linklater, K. (1997). Thoughts on theater, therapy, and the art of voice. In M. Hampton & B. Acker (Eds.), *The vocal vision: Views on voice by 24 leading teachers, coaches, and directors* (pp. 3-12). Applause Theater & Cinema Books.

Longman-Mills, S. & Mitchell, C. (2017). Alcohol misuse in adulthood following experiences of psychological maltreatment during childhood. *International Public Health Journal, 9*(1), 43-49.

Majumdar, I. G., Singh, T., Arya, Y. K., Mandal, S. P., & Kumari, S. (2017). Childhood parental emotional maltreatment: A study of its consequences in adulthood. *Indian Journal of Health & Wellbeing, 8*(1), 29–34.

Matchett, S. & Mokwena, M. (2013). Washa Mollo. *Matatu: Journal for African Culture & Society, 44*(1), 107–125.

Meinck, F., Cosma, A. P., Mikton, C., & Baban, A. (2017). Psychometric properties of the Adverse Childhood Experience Short Form (ACE-ASF) among Romanian high school students. *Child Abuse and Neglect, 72*, 326-337. doi: 10.1016/j.chiabu.2017.08.016

Meisner, S. & Longwell, D. (1987). *Sanford Meisner on acting.* Random House, Inc.

Miller-Cribbs, J. E., Wen, F., Coon, K. A., Jelley, M. J., Foulks-Rodriguez, K., & Stearns, J. (2016). Adverse childhood experiences and inequalities in adult health care access. *International Public Health Journal, 8*(2), 257-270.

Moore, T, (2016, April 8). Why theater majors are vital in the digital age. *Chronicle of Higher Education,* p. A48. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=114275580&site=ehost-live

Moses, J., & Villodas, M. (2017). The potential protective role of peer relationships on school engagement in at-risk adolescents. *Journal of Youth & Adolescence, 46*(11), 2255–2272. doi:10.1007/s10964-017-0644-1

Najib, A., Khan, A. A., & Afzal, S. (2019). Toxic stress and adverse childhood experiences. *Annals of King Edward Medical University, 25*(1), 1–2.

Nurius, P. S., Green, S., Logan-Greene, P., Longhi, D., & Song, C. (2016). Stress pathways to health inequalities: Embedding ACEs within social and behavioral contexts. *International Public Health Journal, 8*(2), 241-256.

Palidofsky, M., & Stolbach, B. C. (2012). Dramatic healing: The evolution of a trauma-informed musical theater program for incarcerated girls. *Journal of Child & Adolescent Trauma, 5*(3), 239–256. doi:10.1080/19361521.2012.697102

Redford, J. (Producer). (2015, September 21). *ACES primer* [Video file]. Retrieved from https://vimeo.com/139998006

Reid, J. A., Baglivio, M. T., Piquero, A. R., Greenwald, M. A., & Epps, N. (2017). Human trafficking of minors and childhood adversity in Florida. *American Journal of Public Health, 107*(2), 306-311.

Reinbergs, E. J., & Fefer, S. A. (2018). Addressing trauma in schools: Multitiered service delivery options for practitioners. *Psychology in the Schools, 55*(3), 250–263. doi:10.1002/pits.22105

Scheeder, L. (1999, July 2). Why classical theater deserves the spotlight in acting classes. *Chronicle of Higher Education*, p. B12.

Scorgie, F., Baron, D., Stadler, J., Venables, E., Brahmbhatt, H., Mmari, K., & Delany-Moretlwe, S. (2017). From fear to resilience: adolescents' experiences of violence in inner-city Johannesburg, South Africa. *BMC Public Health, 17*, 441. doi:10.1186/s12889-017-4349-x

Sees, D., & Unrath, K. (2015). The Yellow Boat project: How art heals, connects, and transforms. *Canadian Review of Art Education: Research & Issues, 42*(1), 44–56.

Segal, E. A., Gerdes, K. E., & Steiner, S. (2019). *An introduction to the profession of social work* (6th ed.). Cengage Learning.

Sharma, P. (2014). Making song, making sanity: Recovery from bipolar disorder. *Canadian Journal of Music Therapy, 20*(1), 65–84.

Shern, D. L., Blanch, A. K., & Steverman, S. M. (2016). Toxic stress, behavioral health, and the next major era in public health. *American Journal of Orthopsychiatry, 86*(2), 109–123. doi:10.1037/ort0000120

Simon, A. (2018, January 3). Acting styles: Sanford Meisner's techniques. *On-location Education*. Retrieved fromhttp://www.onlocationeducation.com/blog/2018/1/3/acting-styles-meisner

Smigelsky, M. A., &Neimeyer, R. A. (2018). Performance retelling: Healing community stories of loss through Playback Theater. *Death Studies, 42*(1), 26-34, doi:10.1080/07481187.2017.1374014

Stanislavski, C. (1989). *An actor prepares*. (E. R. Hapgood, Trans. International ed.). Routledge. (Original work published 1936).

Strasberg, L. (1987). A *dream of passion: The development of the method*. Penguin Group.

Substance Abuse and Mental Health Services Administration. (2014). *Trauma-Informed Care in Behavioral Health Services*. Treatment Improvement Protocol (TIP) Series 57. HHS Publication No. (SMA) 13-4801. Rockville, MD: Author.

Taillieu, T. L., & Brownridge, D. A. (2013). Aggressive parental discipline experienced in childhood and internalizing problems in early childhood. *Journal of Family Violence, 28*, 445-458. doi:10.1007/s10896-013-9513-1

Tassie, A. K. (2015). Vicarious resilience from attachment trauma: Reflections of long-term therapy with marginalized young people. *Journal of Social Work Practice, 29*(2), 191-204. doi:10.1080/02650533.2014.933406

Thomson, P., & Jaque, S. V. (2011). Testimonial theater-making: Establishing or dissociating the self. *Psychology of Aesthetics, Creativity & the Arts, 5*(3), 229–236. doi:10.1037/a0021707

Thomson, P., & Jaque, S. V. (2018). Childhood adversity and the creative experience in adult professional performing artists. *Frontiers in Psychology*, *9*, 111.

Thomson, P., & Jaque, S. V. (2019a). Attachment and childhood adversity in athletes, actors, dancers, and healthy controls. *International Journal of Sport and Exercise Psychology, 17*(4), 334-349. doi:10.1080/1612197x.2017.1349824

Thomson, P., & Jaque, S. V. (2019b). History of childhood adversity and coping strategies: Positive flow and creative experiences. *Child Abuse and Neglect, 9*, 185-192.doi: 10.1016/j.chiabu.2018.12.019

Umberson, D., Williams, K., Thomas, P. A., Liu, H., & Thomeer, M. B. (2014). Race, gender, and chains of disadvantage: Childhood adversity, social relationships, and health. *Journal of Health and Social Behavior, 55*(1), 20-38.

Willis, G. M., & Levenson, J. S. (2016). The relationship between childhood adversity and adult psychosocial outcomes in females who have sexually offended: implications for treatment. *Journal of Sexual Aggression, 22*(3), 355–367. doi:10.1080/13552600.2015.1131341

Zastrow, C. H., Kirst-Ashman, K. K., & Hessenauer, S. L. (2018). *Understanding human behavior and the social environment* (11th ed.). Cengage Learning.

Zerrudo, M. R. (2016). Theater of disaster, folk stories as vehicles for healing and survival. *Teaching Artist Journal, 14*(3), 161–170. doi:10.1080/15411796.2016.1209073