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Resource Paper for Dancers, Teachers and Health Practitioners

Hidden Effects of Early Life Trauma on Dancers

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ABSTRACT

The power of dance as an art form is extraordinary. Dancers and audiences value this form of human expression. Often dance expresses a powerful range of human experiences, including loss and trauma. For every individual, the likelihood of experiencing traumatic events is high; approximately 70% of the world population experiences at least one traumatic event in their lifetime and 75% of these individuals report more than one traumatic event. Traumatic experiences are embedded into the body and psyche, either for a short window of time or throughout the lifespan. This resource paper focuses on the hidden effects of early-life trauma and how it may impact and / or influence a dancer's beliefs, behavior, and health long after the adverse circumstances end. The authors are aware that the dance culture can be toxic and even traumatic at times, however it is the traumatic exposures that occur across all contexts and settings that are the primary topic of this paper. This resource paper includes the following topics: definition of trauma, signs and symptoms of trauma, the influence of trauma on child and adolescent development, mourning processes for loss and abuse, resilience and adversity, long-term consequences of trauma, trauma-related eating disorders, perfectionism and shame, pitfalls that may undermine resilience, and ways to foster healing through dance. Trauma-related responses are always complex. This complexity raises challenges for dancers, educators, clinicians, and company personnel. With more trauma awareness, the debilitating effects of early trauma can be reduced and as a community we may better protect and support dancers who have experienced trauma. Gifted traumatized dancers are too precious to lose. We can collectively create a trauma-aware dance environment that fosters dancers as well as fostering the art of dance.

GENERAL INTRODUCTION

The power of dance as an art form is extraordinary. Dancers and audiences value this form of human expression. Often dance expresses a powerful range of human experiences, including loss and trauma. For every individual, the likelihood of experiencing traumatic events is high; approximately 70% of the world population experiences at least one traumatic event in their lifetime and 75% of these individuals report more than one traumatic event. Sadly, children are even more vulnerable to traumatic exposure, whether that is within their family and / or in their community. Traumatic experiences are embedded into the body and psyche, either for a short window of time or throughout the lifespan. Unfortunately, when children and adolescents experience chronic adversity, a permanent biological trauma signature often remains. This resource paper focuses on the hidden effects of early-life trauma and how it may impact and / or influence a dancer's beliefs, behavior, and health long after the adverse circumstances end.

The authors are aware that the dance culture can be toxic and even traumatic at times, however it is the traumatic exposures that occur across all contexts and settings that are the primary topic of this paper. The global effects of war; catastrophic climate events; the need to seek refuge in another community, city, or country; and domestic and community violence are influencing many of today's dancers and they will continue to influence the next generation of dancers. These events can leave people physically and / or emotionally disabled and homeless. Children and adolescents can be orphaned and / or suffer an overall reduction in resources needed to support healthy development such as nutritional

diet, education, community areas to play safely, and family and neighbors to care for them. Exposure to significant early trauma may increase a focus on threatening signals and intensify angry responses throughout life. Ongoing early trauma may also increase the likelihood of being re-victimized in adulthood. Traumatized adults without childhood trauma experiences suffer similarly, although they generally have more autonomy and maturity, including more mature biological stress systems that can support them when managing catastrophic life events.

DEFINITION

The word trauma means a wound to the body or psyche inflicted from an external source. Types of traumatic events have different effects on individuals. Intentional relational trauma such as childhood physical and sexual abuse, rape, domestic and community violence, gender-based violence, war, torture, and systemic racism increase the risk of developing posttraumatic stress disorder (PTSD). Extreme climate or natural disasters are also devastating, but these events are often easier to recover from trauma-related symptoms. Developing long-term PTSD is less frequent under these conditions even though PTSD symptoms may still exist for months or years after natural disasters. Whilst anger and blame may be directed towards government officials who might have minimized the destruction from natural disasters, anger and blame are intensified when the trauma is intentional and relational. This form of trauma is experienced as a personal attack on the self.

In all incidents, a traumatic event involves being rendered helpless when experiencing or learning about a violent life-threatening event. The body's stress system is hyper-activated, which causes a fight, flight, or freeze response. During childhood, if this stress system is repeatedly activated, then this system is modified so that individuals can survive ongoing trauma. As a result, the stress system in the body will constantly scan for threat; this system can simmer on a low boil in the background to be ready to rapidly respond when a threat is present. Unfortunately, this constant activation of the stress system will strain other body systems which can lead to poorer health later in life, such as heart disease, diabetes, breathing difficulties, digestive problems, muscle and bone weaknesses, cognitive and motor movement problems, and / or autoimmune diseases.

SIGNS AND SYMPTOMS OF TRAUMA

Symptoms of traumatic-stress and PTSD may appear unevenly, with some symptoms lasting a long time and others experienced at a high intensity. The most common trauma-related symptoms include:

- recurrent uninvited intrusive memories and / or dreams of the trauma(s)
- dissociative flashbacks that make you feel that it is happening now
- intense fear and body freezing or shaking in response to a memory or to a signal that is heard, smelled, felt, or viewed that makes you remember the trauma
- constant scanning the environment for danger
- exaggerated startle responses
- efforts to avoid situations or locations and / or memories or thoughts that resemble the traumatic event(s)

- problems concentrating on work or school or dancing
- sleep disturbances
- reckless self-destructive behavior such as cutting, drinking, random sexual encounters, etc.
- increased feelings of irritability and angry outbursts
- dissociative feelings that can include perceptions that you are standing outside yourself, the world seems dreamlike, or memory-loss gaps
- negative thoughts or moods that increase beliefs that you are bad, ruined, others are untrustworthy, and intense blaming of yourself or others.

Over time, memory encoding and retrieval difficulties may persist which can lead to inconsistent performance levels in dancers. Dissociation, a trauma response, can also decrease the sensation of pain which can lead to increased risk of injury and burn out. It can also diminish the possibility of entering flow states when performing. Childhood abuse experiences can lead to chronic dissociative depression which is a form of depression that emerges earlier than major depression. Dancers with dissociative depression may have lower self-worth, increased suicidal ideation and behavior, increased feelings of guilt, loss of appetite, weight fluctuations, and reduced concentration.

Over time, other symptoms may emerge. These symptoms might be a secondary response to early trauma exposure. These may include an increase in:

- anxiety
- depression
- perfectionism
- substance abuse / addictions
- self-harming behavior such as cutting or over-exercising
- sexual changes such as engaging in risky sexual encounters or being terrified and avoiding sex completely
- mental fog/confusion
- sleep problems
- eating disorders or disordered eating
- body shame
- obsessive-compulsive related disorders
- general feelings of being unwell and nauseous

These trauma-related symptoms can interfere with forming and maintaining relationships and can interfere with daily functioning. If left untreated, these symptoms can increase the risk for injury, thoughts of suicide, failed relationships, unable to sense and identify emotional and physical pain, and may lead to unnecessary burnout which might make you want to stop dancing completely.

CHILD AND ADOLESCENT DEVELOPMENT AND TRAUMA

Children and adolescents suffer trauma-related symptoms however the expression of their symptoms is somewhat different than adults. The cognitive maturation influences how youths will psychologically understand trauma. Their maturing stress systems are also modified to accommodate their stress-responses, and these changes can become permanent. In some traumatized youths they may appear unphased during daytime activities, but sleep disruptions are often intensified. For some, more explosive anger or

hyperactive behavior may be present. They may regress and behave as if they were much younger. Their attention is also directed toward threat which can compromise their ability to learn. Academic achievement may diminish because of their trauma-responses. Youths may have vastly different recall abilities, with some having vivid trauma memories that they recount repeatedly whereas others may have no memory of the traumatic events. Some youths may present with changes in eating, sleep, play, muscle tension, attention, and concentration. Regardless of memory recall and behavior, their stress systems are negatively affected.

Armed conflict powerfully effects children: today children are increasingly exposed to armed conflict that is targeted by governmental and non-governmental combatants. Many children are forcibly displaced from family, homes, communities, and / or countries. Essential health care such as vaccinations and wellness-checks as well as education schedules are disrupted or halted. Chronic malnutrition is common in the life of a child within armed conflict regions. Increased risk of injury, death, sexual exploitation, rape, and sexually transmitted infections are prevalent. Armed conflict exposure also results in increased psychiatric disorders, emotional and behavioral difficulties, and diminished self-worth. The consequences of such profound physical and psychological damage to children can persist throughout their lifespan and can be transmitted to the next generation (intergenerational trauma) because the stress systems are changed. This may lead to traumatized people reacting with more violence and an increased desire to retaliate. Intergenerational transmission to the next generation of children may also include heightened anxiety, depression, suicidality, and mental health distress. Sadly, the long shadow of unresolved trauma can permeate into generations of new children who are raised by traumatized parents. These devastating effects may be reduced by programs that are designed to support children who grow up in these violent conditions.

MOURNING LOSS AND ABUSE

Everyone will lose someone special in their lifetime, and they will grieve. The grieving process is ultimately deeply individual. Mourning is influenced by (a) the relationship with the deceased person (partner, family, child, friend), (b) the nature of their death (natural causes, violence, suicide, overdose, stillbirth, etc.), (c) the emotional support available, and (d) the cultural beliefs of the bereaved individual. Losses can also result due to traumatic event(s). Loss may include loss of personal belongings, home, community, faith, partners (divorce/separation), friendships, pets, careers, financial stability, health, body parts, cognitive capacity, and/or a sense of self-identity (i.e., am I still a dancer when I stop dancing). The mourning process associated with the death of others or traumatic events often takes several years to process, especially because multiple anniversary dates throughout the year become reminders of loss or abuse.

Attention should be focused on how dancers resolve the loss. During the first year or two after a major loss or traumatic event, normal functioning can become disorganized. Feeling disoriented and lost may persist for protracted periods of time or may emerge when internal or external signals remind you of the loss. Markers of lack of resolution can be extremely subtle or substantially overt and exaggerated. It is also important to note that gaining resolution does not mean that major losses and / or abuses are forgotten or

dismissed. They do change how we move forward in life, but they should not cause psychological and physiologic disorganization and disorientation.

RESILIENCE AND ADVERSITY

To determine if someone is resilient, exposure to something traumatic must first occur. If you respond to a traumatic event without developing symptoms of stress such as sleep disruption, concentration difficulties, or diminished daily functioning then you are deemed resilient. Resilience is a term most often viewed as a positive characteristic. In theory, resilient capacities may vary through a lifetime, especially if cumulative life challenges erode your physical and psychological resources. Resilience can be supported by learning and applying psychological skills to regulate intense feelings as well as receiving support from others when suffering traumatic experiences.

Resilience can be enhanced in children and adolescents who grow up in armed combat. Promoting resilience includes:

- protecting them from harm
- providing opportunities to play
- building community and family support
- strengthening relationships with caregivers/parents
- offering therapy treatments that involve learning self-regulation skills

Research has demonstrated that engaging in creative activities also enhances resilience. Even if creative people falter during stress, returning to creative activities can strengthen a return to well-being. Most dancers who view dance as a creative form of expression may have also learned effective problem-solving skills to ensure adequate performances; these skills promote optimal responses to stress.

Not surprising, there are positive effects that can be obtained from stressful experiences. For example, exposure to childhood traumatic events may increase *empathy*. Dancers tend to be sensitive to the needs and feelings of others. For those dancers who experienced early trauma they may be better able to understand others who suffered trauma, although it may also overwhelm them and cause more distress. Artistically, dancers may need to portray suffering, fear, loss, and uncertainty. For dancers with a trauma history this may provide opportunities to express these feelings in a safe performance setting. An enhanced empathic capacity may also facilitate a deeper understanding and engagement with fellow dancers, friends, and family. Coupled with a capacity for empathy, dancers with trauma histories may thrive in environments that foster feelings of belonging. This may be further supported if dancers can develop a strong sense of their own racial / ethnic identity and racial / ethnic belonging.

Dancers tend to be passionate about dance and their artistry. The capacity to experience passion about an activity is often understood as an inner sense of identity within the individual. In general, dancers who embrace *harmonious passion*, a form of feeling like they have autonomy and that they can speak up for their needs, are viewed as resilient individuals. Embracing harmonious passion allows them to respond to stressful situations with an ability to be adaptive and flexible. In contrast, dancers who identify as obsessive in their passion rigidly believe that they must dance at any cost. When obsessively passionate

dancers are challenged with injuries, illness, or other career obstacles, their distress is increased and their ability to respond to stress is often rigid and maladaptive. Unfortunately, there is a loss of resilience in obsessively passionate dancers when they encounter traumatic events. Dance educators can help promote resilience in dancers with a trauma history by encouraging harmonious passion behaviors, such as offering choices in the studio environment. Psychoeducation about the two forms of passion can greatly support adaptive resilience.

TRAUMA-INFORMED AWARENESS

COMPLEX LONG-TERM DIFFICULTIES

Long-term difficulties in adulthood are often associated with troubling feelings that continue because of childhood abuse and neglect. These difficulties may harm cognitive development, including diminishing attention- and concentration-related skills, decreasing educational achievement, and may even lead to difficulties sustaining employment. Serious mental health problems may persist such as PTSD, anxiety, depression, suicidal thoughts, as well as being trapped in domestic partner violence situations. Substance abuse and addictive behavior are often present, and for dancers, this may also be associated with an obsessive passion and a maladaptive need to be perfect. Unfortunately, long-term difficulties managing trauma-related symptoms may make dancers fixate on their imperfections in physical appearance and judge their dance performances as catastrophic failures. Sexual health problems may also be increased, including excessive high-risk sexual activities or phobic fears of sex. Physical health may also be a problem. Many people with complex trauma histories can suffer health disorders related to autoimmune, cardio-vascular, skin, gastro-intestinal, and genitourinary disorders.

EATING DISORDERS

The effects of early trauma on the stress system (hypothalamic-pituitary-adrenal (HPA) axis) increases physical and psychological dysregulation. Consequently, there is increased risk to develop eating disorders in early adolescence, which can persist into late adulthood. Eating disorders in general are difficult to treat; however, for patients who suffered abuse in childhood, their symptoms are typically more complex. Their therapy treatment tends to be less effective and drop-out rates are higher. Childhood trauma symptoms must be treated at the same time as an eating disorder to enhance eating disorder treatment. Dancers with a history of early abuse and an eating disorder require treatment that includes psychoeducation related to the effects of trauma, skills to enhance their self-esteem, and tools to help them recognize inner body states and emotions. Dissociation is often associated with childhood trauma which can persist into adulthood. Dissociation can dampen physical and emotional awareness and is often associated with eating disorders. Treatment approaches that address dissociative processing as well as childhood trauma may reduce eating disorder symptoms.

PERFECTIONISM AND SHAME

Perfectionism within dancers is common. It is regarded as a complex trait that can present in several ways. Dancers can be self-oriented perfectionists which means they direct their

need to be perfect towards themselves. They can be other-oriented perfectionists which mean they expect and demand perfection from others. They can also adopt a socially-prescribed perfectionism that is focused on how others expect them to be perfect. Dancers can also adopt a perfectionistic presentation that involves a compulsive desire to present a perfect public image, hide imperfections, and not disclose imperfections to others. The need to present a perfect self may be expressed by extreme forms of avoidance or high anxiety. Research findings indicate that substantial childhood adversity is associated with elevated socially-prescribed perfectionism including efforts to present the self as perfect. Socially-prescribed perfectionism is also associated with increased PTSD symptoms. When this occurs, perfectionism can increase beliefs that dancers have low or no control over many stressful situations.

Feelings of *shame*, literally the belief that the self is unworthy, is strongly associated with childhood adversity. Studies investigating dancers have demonstrated that efforts to escape shame states may increase perfectionistic behaviors. During development, the magical thinking-style of young children reinforces beliefs that being perfect will protect them from rejection and abandonment; they believe that being perfect (good) will secure love and acceptance. Shame, in general, as well as body-image shame, may lead to eating disorders. When early trauma provokes shame, the combination of trauma and shame strongly predicts eating disorders. As well, perfectionism further increases maladaptive behaviors such as eating disorders or self-harming behaviors. These maladaptive behaviors may be used by dancers to achieve an idealized dancer body; sadly, these behaviors also distort realistic evaluations of their bodies. For adults with early trauma, these deep shame and perfectionist beliefs, and corresponding maladaptive behaviors, can be reduced with therapy but they can also re-emerge under sufficient and specific stressors, especially when dancers feel alone, abandoned, and unwanted. The perfectionistic traits coupled with toxic shame can elevate suicidal thoughts and may even cause vulnerable dancers to attempt suicide. Offsetting maladaptive perfectionism and toxic shame can be achieved through developing strong social support connections along with being able to regulate intense emotional states. Enhancing a feeling that dancers have some control in stressful situations can add further support. Unfortunately, when dancers use emotion-oriented coping strategies, literally thinking about how badly you feel all the time, then shame, anxiety, and perfectionism may intensify. Focusing on tasks and problem-solving strategies can strengthen wellbeing and shift the focus away from negative emotions and self-hatred. The ability to focus on practical movement sequences, musicality, technical execution are well-understood problem-solving skills; this task-oriented focus may allow dancers to re-direct attention away from their negative feelings about themselves and others.

PITFALLS UNDERMINING RESILIENCE

Recovery from trauma is uneven. Dancers with early-trauma histories can establish a stable lifestyle and present as high functioning in adolescents and adulthood. However, outside factors can destabilize them such as suffering new re-victimizing experiences (domestic violence, physical or sexual assault, natural disasters, accidents). In the dance world, the loss of a dance career due to injury or company dismissal can also destabilize wellbeing. These events can significantly destabilize a sense of identity in dancers with a history of trauma. For some dancers they may once again exhibit florid symptoms of PTSD. The hard-earned identity of being a dancer can be challenged in an instant. For dancers with a

complicated history of early trauma and loss, this may thrust them into isolation and despair. Dancers are well-practiced at presenting themselves as fully functioning artists; however, their private (secret) inner collapse in wellbeing may co-occur and be in stark contrast to their public high-functioning presentation. Recovering from early trauma requires developing adaptive strategies, which can be trained; however, for some individuals, the aftermath of yet another severe traumatic event can collapse previously learned optimal coping strategies. The need to maintain behaviors that support adaptive resilience must continue throughout the lifespan, and for dancers with a history of childhood maltreatment, the necessity to continually support and re-kindle adaptive strategies is vital.

FOSTERING HEALING THROUGH DANCE

Healing from complex trauma exposure and trauma-related symptoms is best managed with a mixture of medication and psychotherapy treatments. Psychoeducation helps explain and normalize the nature of trauma and trauma-related stress responses. Gaining self-regulation skills includes effective coping strategies, specifically increasing task-oriented problem-solving skills and reducing emotion-oriented and avoidant-oriented coping strategies. If traumatic events are still ongoing, especially if a social support system is absent, then trauma recovery is severely limited. Fundamentally, providing protection from harm, enhancing family functioning, and strengthening relationships in conjunction with psychoeducation and therapeutic treatment will help heal traumatized youths and adults. Unfortunately, this multi-pronged approach to heal complex trauma exposure is not offered in most communities and countries.

The ability for children to heal relies on the developmental stage when trauma exposure is experienced, as well as the environment in which children develop. Dance programs can reduce some of the ongoing exposure to trauma by providing social support as well as opportunities to dance, even when violence and threat in the outside community may persist. For dancers of all ages, dance can relieve tension and restore a sense of body ownership. Offering pathways to shape a future that provides meaning and purpose can re-direct suicidal thoughts or impulses. Engaging in creativity promotes resilience. Encouraging dancers to invest in their creativity can promote well-being, especially if it operates within a supportive communal environment. Within a supportive dance environment, one that demonstrates care and respect for dancers, a sense of optimism can be nurtured; this is vital because optimism is regarded as an essential ingredient in healing and resilience.

Trauma-informed care, education, and company policies can help reduce the effects of complex trauma exposure. The key ingredients include a willingness to ***approach and realize*** that unresolved trauma and loss may hide behind the presentation of eating disorders, self-injurious behavior, perfectionism, or other negative behaviors that may be present in the dancer. Offering statements such as “What happened to you” rather than “What is wrong with you” may diminish negative self-judgement and open a more supportive relationship. ***Recognizing*** that these symptoms may be associated with past, and possibly ongoing trauma, will hopefully increase understanding and compassion. The symptoms outlined in earlier sections of this paper may indicate that dancers may be struggling to manage stressful situations. ***Responding*** to dancers who may suffer complex trauma

should include offering a safe place to explore dance artistry and to feel valued and respected. Providing outside resources that can offer effective trauma-related treatment and be willing to discuss mental health may provide further support to the dancer. Rejection, dismissal, devaluing, and derogation can destabilize vulnerable dancers with complex trauma histories. Every effort should be deployed to ***resist re-traumatizing*** these vulnerable dancers. Sometimes, company and school policies require the dismissal of a dancer from the company or school. This is often due to financial or administrative changes and not because the dancer was at fault. In these situations, it is essential to provide resources for the dancer to continue dancing, including suggesting new communities for social and emotional support. In addition, normal daily challenges can re-traumatize vulnerable dancers; it is vital to provide resources that include effective psychoeducation that is rooted in healing complex trauma.

Trauma-related responses are always complex. This complexity raises challenges for dancers, educators, clinicians, and company personnel. With more trauma awareness the debilitating effects of early trauma can be reduced. Gifted traumatized dancers are too precious to lose. We can collectively create a trauma-aware dance environment that fosters dancers as well as fostering the art of dance.

REFERENCES

1. Ager, Alastair, Emily Pasha, Gary Yu, Tim Duke, Catherine Eriksson, and Barbara Lopes Cardozo. "Stress, Mental Health, and Burnout in National Humanitarian Aid Workers in Gulu, Northern Uganda." *Journal of Traumatic Stress* 25 (2012): 713–720. https://doi.org/10.1002/jts.21764.
2. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition, Text Revision. Washington, DC: American Psychiatric Publishing, 2022.
3. Amore, Mario, and Giovanni Serafini. "Early Stress and Dissociation: Psychopathological Pathways." *Journal of Psychopathology* 26 (2020): 54–69. https://doi.org/10.36148/2284-0249-362.
4. Asmussen, Kirsten, Fiona Fischer, Ellie Drayton, and Tom McBride. *Adverse Childhood Experiences: What We Know, What We Don't Know and What We Should Do Next*. Early Intervention Foundation, 2020. https://www.eif.org.uk/report/adverse-childhood-experiences-what-we-know-what-we-dont-know-and-what-should-happen-next.
5. Barboza-Solis, Cristina, Romain Fantin, Melissa Kelly-Irving, and Clémentine Delpierre. "Physiological Wear-and-Tear and Later Subjective Health in Mid-Life: Findings from the 1958 British Cohort." *Psychoneuroendocrinology* 74 (2016): 24–33. http://dx.doi.org/10.1016/j.psyneuen.2016.08.018.
6. Bartoli, Filippo, Chiara Crocamo, and Giuseppe Carrà. "Metabolic Dysfunctions in People with Post-Traumatic Stress Disorder." *Journal of Psychopathology* 26 (2020): 85–91. https://doi.org/10.36148/2284-0249-372.
7. Bonanno, George A., and Charles L. Burton. "Regulatory Flexibility: An Individual Differences Perspective on Coping and Emotion Regulation." *Perspectives on Psychological Science* 8, no. 6 (2013): 591–612. https://doi.org/10.1177/1745691613504116.
8. Bosqui, Tania J., and Basel Marshoud. "Mechanisms of Change for Interventions Aimed at Improving the Wellbeing, Mental Health and Resilience of Children and Adolescents Affected by War and Armed Conflict: A Systematic Review of Reviews." *Conflict and Health* 12 (2018): 15. https://doi.org/10.1186/s13031-018-0153-1.
9. Bryant, Richard A. "Post-Traumatic Stress Disorder: A State-of-the-Art Review of Evidence and Challenges." *World Psychiatry* 18, no. 3 (2019): 259–269. https://doi.org/10.1002/wps.20656.
10. Burgin, Daniel, Dimitris Anagnostopoulos, Board and Policy Division of ESCAP, Benedetto Vitiello, Tanja Sukale, Marc Schmid, and Jörg M. Fegert. "Impact of War and Forced Displacement on Children's Mental Health – Multilevel, Needs-Oriented, and Trauma-Informed Approaches." *European Child and Adolescent Psychiatry* 31 (2022): 845–853. https://doi.org/10.1007/s00787-022-01974-z.

11. Butler-Barnes, Sheretta T., Shelby Leath, Ashley Williams, Christina Byrd, Riana Elyse Anderson Carter, and Tabbye M. Chavous. "Promoting Resilience among African American Girls: Racial Identity as a Protective Factor." *Child Development* (2017). https://doi.org/10.1111/cdev.12995.
12. Chen, Chen, Paul L. Hewitt, and Gordon L. Flett. "Adverse Childhood Experiences and Multidimensional Perfectionism in Young Adults." *Personality and Individual Differences* 146 (2019): 53–57. https://doi.org/10.1016/j.paid.2019.03.042.
13. Clements-Nolle, Kristen, and Rachel Waddington. "Adverse Childhood Experiences and Psychological Distress in Juvenile Offenders: The Protective Influence of Resilience and Youth Assets." *Journal of Adolescent Health* 64 (2019): 49–55. https://doi.org/10.1016/j.jadohealth.2018.09.025.
14. Corley, Charissa. 2010. "Creative Expression and Resilience among Holocaust Survivors." *Journal of Human Behavior in the Social Environment* 20 (4): 542–552. https://doi.org/10.1080/10911350903275325.
15. Cosway, Rachel, Norman S. Endler, A. John Sadler, and Ian J. Deary. 2000. "The Coping Inventory for Stressful Situations: Factorial Structure and Associations with Personality Traits and Psychological Health." *Journal of Applied Biobehavioral Research* 5 (2): 121–143. https://doi.org/10.1111/j.1751-9861.2000.tb00069.x.
16. Dalgaard, Nina T., Beth K. Todd, Susan I. F. Daniel, and Edith Montgomery. 2016. "The Transmission of Trauma in Refugee Families: Associations between Intra-Family Trauma Communication Style, Children's Attachment Security and Psychosocial Adjustment." *Attachment and Human Development* 18 (1): 69–89. https://doi.org/10.1080/14616734.2015.1113305.
17. Dobos, Beatrix, Bettina F. Piko, and David Mellor. 2021. "What Makes University Students Perfectionists? The Role of Childhood Trauma, Emotional Dysregulation, Academic Anxiety and Social Support." *Scandinavian Journal of Psychology* 62: 443–447. https://doi.org/10.1111/sjop.12718.
18. Eusanio, Jacqueline, Paula Thomson, and S. Victoria Jaque. 2014. "Perfectionism, Shame, and Self-Concept in Dancers: A Mediation Analysis." *Journal of Dance Medicine and Science* 13 (3): 106–114. https://doi.org/10.12678/1089-313X.18.3.106.
19. Everall, Robin D., K. J. Altrows, and Brenda L. Paulson. 2006. "Creating a Future: A Study of Resilience in Suicidal Female Adolescents." *Journal of Counseling and Development* 84: 461–470. https://doi.org/10.1002/j.1556-6678.2006.tb00430.x.
20. Felitti, Vincent J., and Robert F. Anda. 2010. "The Relationship of Adverse Childhood Experiences to Adult Medical Disease, Psychiatric Disorders and Sexual Behavior: Implications for Healthcare." In *The Impact of Early Life Trauma on Health and Disease: The Hidden Epidemic*, edited by Ruth A. Lanius, Eric Vermetten, and Clare Pain, 77–87. Cambridge: Cambridge University Press.
21. Flett, Gordon L., and Paul L. Hewitt. 2024. "The Need to Focus on Perfectionism in Suicide Assessment, Treatment and Prevention." *World Psychiatry* 23 (1): 152–154. https://doi.org/10.1002/wps.21157.
22. Forrest, Walter, Ben Edwards, and Galina Daraganova. 2018. "The Intergenerational Consequences of War: Anxiety, Depression, Suicidality, and Mental Health among the Children of War Veterans." *International Journal of Epidemiology* 47 (4): 1060–1067. https://doi.org/10.1093/ije/dyy040.
23. Franklin, Tamara B., Hans Russig, Iris C. Weiss, Johannes Graff, Nadine Linder, Adrien Michalon, Szilard Vizi, and Isabelle M. Mansuy. 2010. "Epigenetic Transmission of the Impact of Early Stress across Generations." *Biological Psychiatry* 68: 408–415. https://doi.org/10.1016/j.biopsych.2010.05.036.
24. Garcia, Fernando E., Andrea Duque, and Felipe Cova. 2017. "The Four Faces of Rumination to Stressful Events: A Psychometric Analysis." *Psychological Trauma: Theory, Research, Practice, and Policy* 9 (6): 758–765. https://doi.org/10.1037/tra0000289.
25. Gil, Shaya, and Michael Weinberg. 2015. "Coping Strategies and Internal Resources of Dispositional Optimism and Mastery as Predictors of Traumatic Exposure and of PTSD Symptoms: A Prospective Study." *Psychological Trauma: Theory, Research, Practice, and Policy* 7 (4): 405–411. https://doi.org/10.1037/tra0000032.
26. Goddard, Ashley. 2020. "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.
27. Gregory, Jessica C., and Claudia G. Interiano-Shiverdecker. 2021. "Behind the Curtain: Ballet Dancers' Mental Health." *The Professional Counselor* 11 (4): 423–439. https://doi.org/10.15241/jcg.11.4.423.

28. Greenberg, David M., Simon Baron-Cohen, Naomi Rosenberg, Peter Fonagy, and Jason P. Rentfrow. 2018. "Elevated Empathy in Adults Following Childhood Trauma." *PLoS ONE* 13 (10): e0203886. https://doi.org/10.1371/journal.pone.0203886.
29. Guillaume, S., I. Jaussent, L. Maimoun, A. Ryst, M. Seneque, L. Villain, D. Hamroun, P. Lefebvre, E. Renard, and P. H. Courtet. 2016. "Associations between Adverse Childhood Experiences and Clinical Characteristics of Eating Disorders." *Scientific Reports* 6: 35761. https://doi.org/10.1038/srep35761.
30. Hamidinejad, Niloofar, Behrouz Dolatshahi, and Fatemeh Bagheri. 2023. "Predicting Disordered Eating Behaviors Based on Perfectionism and Childhood Trauma: Presenting an Explanatory Model with Mediated Role of Internalized Shame." *Journal of Applied Psychological Research* 14 (3): 239–256. https://doi.org/10.22059/japr.2023.332315.644044.
31. Hodgdon, Hilary B., Rachel Liebman, Lauren Martin, Marci Suvak, Karen Beserra, Wendy Rosenblum, and Joseph Spinazzola. 2018. "The Effects of Trauma Type and Executive Dysfunction on Symptom Expression of Polyvictimized Youth in Residential Care." *Journal of Traumatic Stress* 31: 255–264. https://doi.org/10.1002/jts.22267.
32. Kaczkurkin, Antonia N., Anu Asnaani, Jingwen Zhong, and Edna B. Foa. 2016. "The Moderating Effect of State Anger on Treatment Outcome in Female Adolescents with PTSD." *Journal of Traumatic Stress* 29: 325–331. https://doi.org/10.1002/jts.22116.
33. Kadir, Ayesha, Seema Shenoda, Jeffrey Goldhagen, Sarah Pitterman, Parminder S. Suchdev, Kim J. Chan, Cynthia R. Howard, Patrick McGann, Nicole St. Clair, Kenneth Yun, and Laura D. Arnold. 2018. "Effects of Armed Conflict on Children." *Pediatrics* 142 (6): e20182586. https://doi.org/10.1542/peds.2018-2586.
34. Karam, Elie G., Matthew J. Friedman, Eric D. Hill, Ronald C. Kessler, Katie A. McLaughlin, Maria Petukhova, Laura Sampson, Vandita Shahly, Matthias C. Angermeyer, Evelyn J. Bromet, Giovanni de Girolamo, Ron de Graaf, Koen Demyttenaere, Fiona Ferry, Silvia E. Florescu, Josep M. Haro, Yanping He, Aimee N. Karam, Norito Kawakami, Viviane Kovess-Masfety, Maria E. Medina-Mora, Matthew O. Browne, Jose A. Posada-Villa, Arieh Y. Shalev, Dan J. Stein, Maria C. Viana, Zarko Zarkov, and Karestan C. Koenen. 2014. "Cumulative Traumas and Risk Thresholds: 12-Month PTSD in the World Mental Health (WMH) Surveys." *Depression and Anxiety* 31: 130–142. https://doi.org/10.1002/da.22169.
35. Kerbage, Hicham, Omar Bazzi, Wissam El Hage, Eric Corruble, and Diane Purper-Ouakil. 2022. "Early Interventions to Prevent Post-Traumatic Stress Disorder in Youth after Exposure to a Potentially Traumatic Event: A Scoping Review." *Healthcare* 10: 818. https://doi.org/10.3390/healthcare10050818.
36. Kessler, Ronald C., Sergio Aguilar-Gaxiola, Jordi Alonso, Carlos Benjet, Evelyn J. Bromet, Gustavo Cardoso, Louisa Degenhardt, Giovanni de Girolamo, Ralitza V. Dinolova, Fiona Ferry, Silvia Florescu, Oye Gureje, Josep M. Haro, Yueqin Huang, Elie G. Karam, Norito Kawakami, Sing Lee, Jean-Pierre Lepine, David Lebinson, Fernando Navarro-Mateu, Beth-Ellen Pennell, Maria Piassa, Jose Posada-Villa, Kate M. Scott, Dan J. Stein, Marijtje ten Have, Yolanda Torres, Maria C. Viana, Maria V. Peukhova, Nicholas A. Sampson, Alan M. Zaslavsky, and Karestan C. Koenen. 2017. "Trauma and PTSD in the WHO World Mental Health Surveys." *European Journal of Psychotraumatology* 8 (5): 1353383. https://doi.org/10.1080/20008198.2017.1353383.
37. Khan, Aysha, Hana C. McCormack, Elizabeth A. Bolger, Christine E. McGreenery, Gina Vitaliano, Ann Polcari, and Martin H. Teicher. 2015. "Childhood Maltreatment, Depression, and Suicide Ideation: Critical Importance of Parental and Peer Emotional Abuse during Developmental Sensitive Periods in Males and Females." *Frontiers in Psychiatry* 6: 42. https://doi.org/10.3389/fpsyt.2015.00042.
38. Klest, Bridget. 2012. "Childhood Trauma, Poverty, and Adult Victimization." *Psychological Trauma: Theory, Research, Practice, and Policy* 4 (3): 245–251. https://doi.org/10.1037/a0024468.
39. Lapum, Jennifer L., Jacqui Martin, Kristen Kennedy, Chelsea Turcotte, and Heather Gregory. 2019. "Sole Expression: A Trauma-Informed Dance Intervention." *Journal of Aggression, Maltreatment and Trauma* 28 (5): 566–580. https://doi.org/10.1080/10926771.2018.1544182.
40. Lassri, Dana, Patrick Luyten, Golan Cohen, and Golan Shahar. 2016. "The Effect of Childhood Emotional Maltreatment on Romantic Relationships in Young Adulthood: A Double Mediation Model Involving Self-Criticism and Attachment." *Psychological Trauma: Theory, Research, Practice, and Policy* 8 (4): 504–511. https://doi.org/10.1037/tra0000134.

41. Lilly, Michelle M., Marisa J. London, and David J. Bridgett. 2014. "Using SEM to Examine Emotion Regulation and Revictimization in Predicting PTSD Symptoms among Childhood Abuse Survivors." *Psychological Trauma: Theory, Research, Practice, and Policy* 6 (6): 644–651. https://doi.org/10.1037/a0036460.
42. Mageau, Geneviève A., Robert J. Vallerand, Julie Charest, Sarah-Jane Salvy, Nathalie Lacaille, Tiffanie Boufford, and Richard Koestner. 2009. "On the Development of Harmonious and Obsessive Passion: The Role of Autonomy Support, Activity Specialization, and Identification with the Activity." *Journal of Personality* 77 (3): 601–646. https://doi.org/10.1111/j.1467-6494.2009.00559.x.
43. Marciello, Federica, Anna M. Monteleone, Giulia Cascino, Giuseppina Patriciello, Federica Pellegrino, Gennaro Fiorenza, and Paolo Monteleone. 2020. "Early Traumatic Experiences and Eating Disorders: A Focus on the Endogenous Stress Response System." *Journal of Psychopathology* 26: 77–84. https://doi.org/10.36148/2284-0249-364.
44. McEwen, Bruce S., and Ioannis N. Karatsoreos. 2020. "What Is Stress?" In *Stress Challenges and Immunity in Space*, edited by Alexander Choukèr. Cham: Springer. https://doi.org/10.1007/978-3-030-16996-1_4.
45. Metzl, Einat S., and Michelle A. Morrell. 2008. "The Role of Creativity in Models of Resilience: Theoretical Explorations and Practical Applications." *Journal of Creativity in Mental Health* 3 (3): 303–318. https://doi.org/10.1080/15401380802385228.
46. Michalek, Janna, Matthew Lisi, Niko Binetti, Sibel Ozkaya, Kristen Hadfield, Rana Dajani, and Ilaria Mareschai. 2022. "War-Related Trauma Linked to Increased Sustained Attention to Threat in Children." *Child Development* 93: 900–909. https://doi.org/10.1111/cdev.13739.
47. Molnar, Danielle S., Gordon L. Flett, and Paul L. Hewitt. 2021. "Perfectionism and Perceived Control in Posttraumatic Stress Disorder Symptoms." *International Journal of Mental Health and Addiction* 19: 2204–2218. https://doi.org/10.1007/s11469-020-00315-y.
48. Moola, Fiona, and Ashley Krahn. 2018. "A Dance with Many Secrets: The Experience of Emotional Harm from the Perspective of Past Professional Female Ballet Dancers in Canada." *Journal of Aggression, Maltreatment and Trauma* 27 (3): 256–274. https://doi.org/10.1080/10926771.2017.1410747.
49. Moos, Rudolf H., and Charles J. Holohan. 2003. "Dispositional and Contextual Perspectives on Coping: Toward an Integrative Framework." *Journal of Clinical Psychology* 59 (12): 1387–1402. https://doi.org/10.1002/jclp.10229.
50. Merriam-Webster. n.d. "Trauma." Accessed June 10, 2025. https://www.merriam-webster.com/dictionary/trauma.
51. National Institute of Mental Health. 2023. "Post-Traumatic Stress Disorder (PTSD)." Accessed August 16, 2023. https://www.nimh.nih.gov/health/topics/post-traumatic-stress-disorder-ptsd.
52. Oliver, Karen G., Philippa Collin, Jane Burns, and Jennifer Nicholas. 2006. "Building Resilience in Young People through Meaningful Participation." *Australian e-Journal for the Advancement of Mental Health* 5 (1): 1–7. https://www.auseinet.com/journal/vol5iss1/oliver.pdf.
53. Palmisano, Giuseppe L., Marco Innamorati, Giulia Susca, Domenico Traetta, Diego Sarracino, and Joël Van der Linden. 2018. "Childhood Traumatic Experiences and Dissociative Phenomena in Eating Disorders: Level and Association with the Severity of Binge-Eating Symptoms." *Journal of Trauma and Dissociation* 19 (1): 88–107. https://doi.org/10.1080/15299732.2017.1304490.
54. Pradham, Mitali, and Imogen Aujla. 2014. "The Relationship between Passion and the Psychological Well-Being of Professional Dancers." *Journal of Dance Medicine and Science* 18 (1): 37–44. https://doi.org/10.12678/1089-313X.18.1.37.
55. Plouffe, Kaitlin A. 2015. "The Relationship of Dissociation Proneness to Secondary Trauma, Burnout, and Compassion Satisfaction in Mobile Crisis Workers." *International Journal of Social Science Studies* 3 (3): 235–242. https://doi.org/10.11114/ijsss.v3i3.801.
56. Rip, Benoît, Sylvie Fortin, and Robert J. Vallerand. 2006. "The Relationship between Passion and Injury in Dance Students." *Journal of Dance Medicine and Science* 10 (1 & 2): 14–20. https://doi.org/10.1177/1089313X06010001-205.
57. Santiago, Phoebe N., Robert J. Ursano, Carol L. Gray, Robert S. Pynoos, David Spiegel, Roberto Lewis-Fernandez, Matthew J. Friedman, and Carol S. Fullerton. 2013. "A Systematic Review of PTSD Prevalence and Trajectories in DSM-5 Defined Trauma Exposed Populations: Intentional and Non-Intentional Traumatic Events." *PLoS ONE* 8 (4): e59236, 1–5. https://doi.org/10.1371/journal.pone.0059236.

58. Sar, Vedat, Gokce Akyuz, Erdal Ozturk, and Fatma Alioglu. 2013. "Dissociative Depression among Women in the Community." *Journal of Trauma and Dissociation* 14: 423–438. https://doi.org/10.1080/15299732.2012.753654.
59. Schwartz, Mark F., and Lenore D. Galperin. 2002. "Hyposexuality and Hypersexuality Secondary to Childhood Trauma and Dissociation." *Journal of Trauma & Dissociation* 3: 107–120. https://doi.org/10.1300/J229v03n04_06.
60. Shakespeare-Finch, Jane, and Elizabeth Daley. 2017. "Workplace Belongingness, Distress, and Resilience in Emergency Service Workers." *Psychological Trauma: Theory, Research, Practice, and Policy* 9 (1): 32–35. https://doi.org/10.1037/tra0000108.
61. Slone, Michelle, and Anat Shoshani. 2022. "Effects of War and Armed Conflict on Adolescents' Psychopathology and Well-Being: Measuring Political Life Event." *Terrorism and Political Violence* 34 (8): 1797–1809. https://doi.org/10.1080/09546553.2020.1839427.
62. Socci, Valentina, Roberto Rossi, Daniele Talevi, Chiara Crescini, Daniela Tempesta, and Fabrizio Pacitti. 2020. "Sleep, Stress and Trauma." *Journal of Psychopathology* 26: 92–98. https://doi.org/10.36148/2284-0249-375.
63. Strathearn, Lane, Michele Giannotti, Roslyn Mills, Steve Kisely, Jake Najman, and Amanuel Abajobir. 2020. "Long-Term Cognitive, Psychological, and Health Outcomes Associated with Child Abuse and Neglect." *Pediatrics* 146 (4): e20200438. https://doi.org/10.1542/peds.2020-0438.
64. Swart, Ingrid, Caroline van Niekerk, and Wilna Hartman. 2010. "Trauma-Related Dissociation as a Factor Affecting Musicians' Memory for Music: Some Possible Solutions." *Australian Journal of Music Education* 2: 117–134.
65. Thomson, Paula. 2010. "Loss and Disorganization from an Attachment Perspective." *Death Studies* 34: 893–914. https://doi.org/10.1080/07481181003765410.
66. Thomson, Paula, and S. Victoria Jaque. 2012. "Dancing with the Muses: Dissociation and Flow." *Journal of Trauma and Dissociation* 13 (4): 478–489. https://doi.org/10.1080/15299732.2011.652345.
67. Thomson, Paula, and S. Victoria Jaque. 2014. "Unresolved Mourning, Supernatural Beliefs and Dissociation: A Mediation Analysis." *Attachment and Human Development* 16 (5): 499–514. https://doi.org/10.1080/14616734.2014.926945.
68. Thomson, Paula, and S. Victoria Jaque. 2018. "Childhood Adversity and the Creative Experience in Adult Professional Performing Artists." *Frontiers in Psychology* 9: 111. https://doi.org/10.3389/fpsyg.2018.00111.
69. Thomson, Paula, and S. Victoria Jaque. 2019. "Attachment and Childhood Adversity in Athletes, Actors, Dancers, and Healthy Controls." *International Journal of Sport and Exercise Psychology* 17 (4): 334–349. https://doi.org/10.1080/1612197X.2017.1349824.
70. Thomson, Paula, and S. Victoria Jaque. 2020. "Cumulative Psychological Trauma, Emotional Regulation, and Orthopedic Injury in a Sample of Pre-Professional and Professional Dancers and College Athletes." *Medical Problems of Performing Artists* 35 (2): 89–95. https://doi.org/10.21091/mppa.2020.2014.
71. Thomson, Paula, and S. Victoria Jaque. 2024. "Risk and Protective Factors in Dancers Exposed to Trauma." *Journal of Dance Medicine and Science*, forthcoming: 1–8. https://doi.org/101177/1089313X241273880.
72. Vallerand, Robert J., and Valérie Paquette. 2024. "The Role of Passion in the Resilience Process." *Self and Identity* 23 (3–4): 288–305. https://doi.org/10.1080/15298868.2024.236905.
73. van Dijke, Annemiek, Judith A. B. Hopman, and Julian D. Ford. 2018. "Affect Dysregulation, Psychoform Dissociation, and Adult Relational Fears Mediate the Relationship between Childhood Trauma and Complex Posttraumatic Stress Disorder Independent of the Symptoms of Borderline Personality Disorder." *European Journal of Psychotraumatology* 9: 1400878. https://doi.org/10.1080/20008198.2017.1400878.
74. Watson, Patrick. 2019. "PTSD as a Public Mental Health Priority." *Current Psychiatry Reports* 21: 61. https://doi.org/10.1007/s11920-019-1032-1.
75. Woller, Sarah J., John W. Boffa, Andres G. Viana, Brian J. Albanese, and Anka A. Vujanovic. 2025. "PTSD Symptoms, Suicidal Ideation, and Suicidal Risk among University Students: The Role of

Shame." *Psychological Trauma: Theory, Research, Practice, and Policy* 17 (1): 145–153. https://doi.org/10.1037/tra0001829.

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WHAT IS PERFECTIONISM?

As with many psychological terms and variables, researchers do not fully agree on how best to define perfectionism. Therefore, a two-part definition will first be introduced in order to familiarize the reader with the research context. Following this a practical, but theoretically grounded description, will be presented to guide the rest of the paper.

One commonly used definition of perfectionism is that it comprises "the setting of excessively high standards of performance in conjunction with a tendency to make overly critical self-evaluations."[1] As is evident from this statement, perfectionism is *multidimensional*: that is, it is not one single characteristic, but a combination of several. As a first category of these characteristics, any or all of the following tend to be included in the perfectionism construct:

- setting particularly high standards or goals, including the goal of perfection
- being highly driven and determined
- for some, a desire for structure, planning, and organization

The definition also makes it clear that there is a “darker side” to perfectionism – a second category of characteristics. This tends to be reflected in the experience of one or more of the following:

- a sense that what one does is never good enough
- worry about making, or having made, mistakes
- rumination, guilt, and doubts
- high levels of criticism from self and/or important others

While this may sound relatively straightforward, there is a complication. Put simply, it centers on whether displaying the characteristics listed in the first category above is sufficient to be called a perfectionist. Some argue that it is, and thus believe that a positive form of perfectionism is both possible and desirable for high performance.[2-4] Others argue that doing so is a little like acknowledging *one symptom* of an illness while ignoring the full-blown syndrome. For example: noting only a cough while failing to acknowledge that a patient has the flu. Researchers making this argument would reject the notion that there is a “positive” and a “negative” form of perfectionism. Instead, they argue that to be a perfectionist, one has to experience both the positive and the negative sides.[5] Those who feel they match the first category of characteristics above would thus not be perfectionists, but rather persons who strives toward excellence. For example, in one study of Olympic champions,[2] it was found that they reported precisely this combination of responses. These successful performers were highly dedicated and worked extremely hard toward very challenging goals, but did not react particularly negatively to mistakes, nor were they prone to feelings of inadequacy.

Whichever position one takes, one major point is worth making clear: it is rare to experience the positive attributes of perfectionism without the negative. Numerous studies in a range of domains indicate that if one does strive for perfection, self-criticism, doubts, and a sense of inadequacy are often the unhappy by-products of that striving.[1,5] In the interests of conceptual clarity and practical utility, the following terms and conceptualizations are proposed for moving forward:

- Striving for excellence is the pursuit of challenging yet attainable goals. Because goals are *difficult* to reach, high levels of dedication and hard work are necessary. However, because they are *possible* to reach, a positive sense of challenge can nurture one's motivation and the satisfaction of a job well done can be experienced.
- Perfectionism is the pursuit of perfection and, as such, is typically unrealistic and not attainable. Perfectionism also encompasses a highly critical view of the actions and mistakes made either by oneself or others. Since perfectionists never, or almost never, reach their goals, there is a constant discrepancy between where they currently see themselves as being and where they want (and typically feel like they ought) to be. This discrepancy prevents satisfaction and often results in negative thoughts and emotions.

For those interested in elite performance in particular, it becomes important to navigate the narrow path between a healthy striving for excellence and the ultimately detrimental striving for unrealistic perfection. This means how to set *suitably challenging* rather than *unrealistic* goals, and to *remain driven* without running the risk of *never being satisfied*. In more recreational contexts where elite performance is not the goal, participation should be more focused on enjoyment and self-development than performance excellence, but it is still entirely possible that dancers with perfectionist tendencies will appear in such contexts and will need at least as much careful guidance.

PERFECTIONISM AND ITS LINKS TO WELL- AND ILL-BEING

Much research has examined the links between perfectionism and various forms of well- or ill-being. When considered in its entirety, perfectionism is clearly detrimental. For instance, persons who are more perfectionistic also report lower levels of self-esteem and self-confidence, higher levels of anxiety, and higher rates of disordered eating.[5] However, the multidimensional nature of perfectionism becomes crucial here: when separating out the "positive" (*e.g.*, setting particularly high standards or goals, including the goal of perfection) from the "negative" aspects (*e.g.*, self-criticism and sense of inadequacy), a more nuanced picture appears. Simply put, the "positive aspects" are largely associated with well-being while the "negative aspects" are largely associated with ill-being. True perfectionists, therefore, typically have the potential for well-being undermined by the accompanying negative thoughts and feelings. Those who manage to strive for perfection while avoiding the negative sides generally report greater well-being. Recall, however, that these individuals are

the exception; most perfectionists experience both the positive and the negative sides of it. Therefore, striving for excellence appears more favorable than perfectionism.

It is interesting to note that if a teacher can help students move from perfectionism to a striving for excellence, they will be aligning their students' achievement goals with research findings not only for perfectionism, but also contemporary motivation[6-8] and goal setting[8,9] theories. Such theories, and their accompanying research evidence, clearly state that goals should be challenging yet realistic, specific rather than vague, and within the performers' control rather than outside it, for example in comparing one's ability with that of others. To place these findings in context, links between perfectionism and several key well- and ill-being constructs are described in the following sections. Yet even beyond the psychological and physical benefits described below, striving for excellence may be more appropriate than perfectionism for an art form like dance, simply because personal interpretation is a valuable component of artistry. To be *perfect* often suggests a pre-determined form or mold, while being *excellent* suggests greater fluidity, artistic freedom, and the possibility of going beyond existing norms.

RELATIONSHIPS BETWEEN PERFECTIONISM AND FEELINGS ABOUT THE SELF

Research clearly demonstrates relationships between perfectionism and low self-confidence (belief in one's abilities) and/or self-esteem (perceptions of one's worth as a person).[5,10] Such findings stand to reason because holding oneself to aspirations of perfection will nearly always mean falling short of one's goals. Always feeling inferior to where one wants to be (or, worse, where one feels one *should* or *must* be), logically diminishes self-confidence. If a dancer's identity is tied up in dancing as the single most important activity in life and there is a belief one must do well as a dancer in order to be a good person, then the more fundamental construct of self-esteem is at serious risk. This is particularly important during times of stress. For a dancer with low self-esteem and high stress levels, chances are high that goals of perfect performance become overly demanding and upcoming shows feel like impending doom rather than exciting challenges.

RELATIONSHIPS BETWEEN PERFECTIONISM AND DISORDERED EATING

One of the most thoroughly researched relationships is that between perfectionism and disordered eating.[5,11-14] A wealth of studies has confirmed that not only is perfectionism an inherent part of established eating disorders, but it is a risk factor for eating disorder development. This means that one would struggle to find an anorexia sufferer who is not also a perfectionist. Moreover, in dance styles where bodily appearance is under constant scrutiny, being perfectionistic about one's *performance* may also develop into the belief that one's *body* has to be perfect. Severe self-restraint, compulsive exercise, and excessive attention to body weight and shape thus become more likely. Importantly, research has demonstrated that the link between having

perfectionistic tendencies and actually acting on one's desire for thinness becomes stronger during times of stress.[14]

RELATIONSHIPS BETWEEN PERFECTIONISM AND ANXIETY

Performers with perfectionistic tendencies are more likely to experience various forms of anxiety.[5,10,12,15] First, the sense that what one does is never good enough tends to be accompanied by an uneasy, anxious feeling. Sense of control is also an important consideration: anxiety tends to arise when perceiving a lack of control over one's actions and over the likelihood of success - and achieving perfection is, of course, not fully within one's control. It is also important to note that one does not have to be very perfectionistic to experience anxiety. Instead, the relationship is gradual: the more perfectionistic the dancer, the more anxiety and the lower the self-confidence he or she is likely to experience.[10]

RELATIONSHIPS BETWEEN PERFECTIONISM AND BURNOUT

Studies indicate that perfectionists are at greater risk of experiencing burnout as a result of their commitment to an activity like dance.[5,16-18] This typically involves experiencing physical and emotional exhaustion, decreasing levels of performance, and a "falling out of love" with their activity. Motivation is a key consideration here: is the dancer training for an interesting, intrinsically rewarding and well-defined goal, or slogging away in order to "just not fall behind" or to avoid feelings of guilt?[19] Does training and achievement result in satisfaction and pride, or explanations that "it's still not good enough" and just temporary relief at best? If a dancer is driven by a sense of dissatisfaction with progress toward unreachable goals, he or she may overtrain in an attempt to reach those goals, which in turn is a precursor for burnout.

RELATIONSHIPS BETWEEN PERFECTIONISM AND INJURY

Finally, it is interesting to note that perfectionism also links to an aspect of ill-being which is typically considered to be mostly physical in nature, namely, injury.[20-21] Specifically, there are indications that those who both pursue unrealistic goals and worry about never being good enough also injure themselves to a greater extent. This stands to reason, because perfectionists typically work very hard – sometimes too hard – and frequently pushing beyond the point of fatigue is an obvious injury risk factor. Perfectionistic dancers may also be more likely to re-injure themselves, because they often return from an injury before it is fully healed. The reason for this may well lie in dissatisfaction with performance. If a dancer constantly feels inferior and inadequate, then only by constantly working very, very hard can that person ever feel close to reaching his or her goals.

PERFECTIONISM AND THE TEACHER

While much perfectionism research has focused on how perfectionistic a person is in relation to his or her own goals and actions, some researchers have taken an alternative approach. Based in a tripartite model, they argue that aside from being perfectionistic toward ourselves (*self-oriented perfectionism*) we can also

feel that others expect perfection from us (*socially prescribed perfectionism*), or we ourselves can demand perfection from others (*other-oriented perfectionism*).[22] While as yet not examined systematically in dance, research from other domains suggests that these latter two forms would be valuable to consider in relation to dance teachers. For example, if as a teacher you expect unwavering commitment at all times, 110% dedication to the art form above all other life domains, and technical as well as artistic perfection from your dancers, then you might be an *other-oriented perfectionist*. From there the leap to your dancers developing tendencies of *socially prescribed perfectionism* is not far. One qualitative research study illuminates this scenario:

One particular dancer went on to describe the effects of the level of perfection expected in the dance world, which upon reflection of a performance allows harsh self-judgments with regard to post-performance self-satisfaction or dissatisfaction… this dancer stated: 'From the school days you're made well aware that failure is not acceptable … sometimes you're made to feel like you failed when really you just weren't perfect.'[23]

Given that socially prescribed perfectionism is associated with the ill-being indicators outlined above (*e.g.*, anxiety and burnout), it appears particularly unwise to nurture it, for instance by expecting perfection and demonstrating dissatisfaction with anything less. The same applies to teacher or parental pressure more generally. The dancer quoted above mentions harsh self-judgments as one of its effects. Anxiety in relation to how one's body appears to others and social anxiety more generally are other undesirable outcomes of socially prescribed perfectionism.[5,12,16] Indeed, it stands to reason that dancers are likely to become nervous in settings where they feel others expect them to be perfect, because how can they ever live up to it? Perhaps other-oriented perfectionism can even cause injury to others: legend has it that Fred Astaire, a noted perfectionist, had Ginger Rogers do so many re-takes of a scene in *Swing Time* (1936) that her feet started to bleed through her shoes.

RECOMMENDATIONS FOR PRACTICE

First: How do I know if my dancers are perfectionistic?
While teachers should not be expected to know every dancer's mind, a few simple guidelines may help to separate more prominent demonstrations of perfectionism from healthy strivings for excellence. Of course, this does not constitute an in-depth psychological assessment and should not be used to create rigid labels for dancers.

With this caveat stated, two things appear important:
1. Talk with your dancers. Try to understand what motivates them to dance, drives them to undergo strenuous training, and how they feel after more and less successful dance classes and performances. For instance,
a. When talking about their goals:
- Are they realistic and specific or unrealistic and vague?

- Do they seem to have high or low self-confidence and self-esteem?

b. When talking about the future:
- Do they seem to feel hope for success or fear of failure?
- Do they focus on what they want to reach or what they want to avoid?

c. When talking about life in general:
- Is dance seemingly in harmony with other activities (*e.g.,* school, family) or is dance their be-all and end-all?
- Do they seem to experience high or low levels of support from friends and family?

The person most likely to be perfectionistic and thus in need of your support will probably speak of unrealistic goals accompanied by low self-confidence and/or self-esteem, fear of failure, avoidance motivation, and an identity tightly bound to dance. This is especially of concern if they also lack support in other areas of their lives.

2. Observing dancer behavior. While perfectionism is partly in the mind of an individual, it also impacts on behavior.

a) Do the dancers eagerly approach challenge or shy away from situations in which they may not appear perfect?
b) Are they willing to work on their weaknesses in front of others?
c) Are they brave enough to take creative choices which may not "work" and risks them looking silly?
d) After mistakes or failure, do they seem to chastise themselves excessively?

Perfectionistic self-presentation means avoiding situations where one cannot appear perfect to others. This is often related to an unwillingness to work on skills one is not good at, and especially doing so in front of others. The uncertainty of improvisational, creative exercises may be particularly tough for some. If such avoidance behaviors are combined with tendencies to be overly critical, self-punishment and never being pleased, you may well have a perfectionist in your studio.

Finally, interactions between dancers and their parents may be instructive. Do the parents seem to convey rigid expectations for their child, such as them having to perform perfectly at all times or be the best? Do they make approval and love contingent on performance? If this is the case, perfectionism will be more likely to develop in the child.

<u>Second</u>: What do I do about it?

Teachers typically teach groups and there is a limit to how far training can be individualized. Chances are that some dancers in your group have perfectionistic tendencies, some strive for excellence, and some do neither. Is this an impossible scenario? Fortunately not. Instead of worrying overly about the unobservable goings-on in dancers' minds, concentrate your efforts on creating a healthy environment for everyone. In this final section, a small set of very important recommendations are summarized.

Be demanding yet realistic of the dancer.
Encourage dancers to set and work toward their own goals within the constraints of class, and take an interest in their individual progress. Make it explicit that you are interested in excellence, not perfection and that the way to get there is via realistic, challenging goals and flexible, not rigid, demands. Then make this true by using constructive and challenging, but not negative feedback. Verbally state that the classroom is a place to feel safe to take risks, work on skills that are outside one's comfort zone, and to have fun. Teachers can also encourage dancers to feel pleased with their progress by showing that they, too, become pleased when dancers learn or even just put in effort. Feeling confident, courageous, and creative comes from careful nurture and appropriate challenge, not from demands of perfection.

If you have dancers with seemingly perfectionistic goals yet *high* levels of confidence, you can commend them for their courage and commitment, while still making them aware that goals should be realistic and that perfection rarely fits that bill. Help them see that they do not necessarily need to lower their standards; just clarify them and work out sensible steps toward their goals. This makes the goals possible to reach, and thereby possible to celebrate when reached! The myth that being constantly dissatisfied is a useful driving force should have no place in 21st century dance practice, because motivation is healthier when it is about striving *toward* something interesting and valuable (such as new creative heights), rather than *away from* something undesirable (such as dissatisfaction with the self or other people's disapproval).[6]

Be supportive of the person.
Value your dancers as people first, performers second. Rounded identities with life experience will be more resilient to stress, bounce back faster after mistakes, and also have more interesting things to say artistically. Encourage them to have friends outside of dance and perhaps to engage in a range of other activities such as art, sports, or music. To be supportive, make feedback non-judgmental and focused on how challenges can be approached positively. Steer attention away from largely uncontrollable factors like body dimensions and toward controllable (and arguably more interesting) ones like artistry and communication.

Be especially supportive of some, yet stay realistic.
Some dancers need more support than others. Perfectionistic dancers with low self-esteem and few activities or support outside dance may be at particular risk of experiencing the negative sides of perfectionism and its associated ills (*e.g.*, low body esteem, disordered eating attitudes). This is especially important during times of stress, so give dancers with perfectionistic tendencies some extra support during performances, exams, auditions, and similarly demanding times. However, remain realistic about your responsibilities; teachers should not diagnose or feel responsible for dancers' personalities or mental health. When things fall outside your expertise, help yourself to help them by having a good

network of contacts and a referral system in place. Evidence suggests that cognitive behavioral therapy can be an effective way of dealing with perfectionism.[24]

Keep things in perspective.

Dance can be wonderful, inspiring, and motivating, but it should not become the be-all and end-all of one's existence. If a dancer appears to be over-training, it is important to monitor workload and discuss the distinction between working hard and working smart. Introducing more mental training can help alleviate some physical fatigue and scientific principles around rest, repair, and periodization deserve serious discussion.[25]

If a dancer is blowing the importance of an event out of proportion, try to explain that, while you appreciate his or her dedication to dance, it is important to remember that there are other important facets of life such as one's health and relationships. If you keep things in perspective, they are more likely to do the same. Perfectionists also need to practice making mistakes so that they can learn for themselves that it is not life threatening. Sharing your own mistakes with your dancers – and generally being open and human – will also help keep things in perspective. More generally, gently guide them toward realistic goals and try to get them absorbed in the artistically or musically interesting parts of the performance where there is room for individual interpretation and immersion. As noted by Sylvie Guillem: *"Technical perfection is insufficient. It is an orphan without the true soul of a dancer."*

REFERENCES

1. Frost RO, Marten P, Lahart C, Rosenblate R. The dimensions of perfectionism. Cog Ther Res. 1990;14:449–468.
2. Gould D, Dieffenbach K, Moffett A. Psychological characteristics and their development in Olympic champions. J Appl Sport Psych. 2002;14:172-204.
3. Sellars PA, Evans L, Thomas O. The effects of perfectionism in elite sport: Experiences of unhealthy perfectionists. Sport Psychol. 2016;30(3):219-230.
4. Stoeber J, Otto K. Positive conceptions of perfectionism: Approaches, evidence, challenges. Pers Soc Psych Review. 2006;10:295-319.
5. Hill AP, Mallinson-Howard SH, Madigan DJ, Jowett GE. Perfectionism in sport, dance, and exercise: An extended review and reanalysis. *In:* Tenenbaum G, Eklund RC (eds): *Handbook of Sport Psychology* (4th ed). Wiley: Hoboken, NJ. 2019
6. Keegan RJ. Achievement goals in sport and physical activity. *In*: Horn TS, Smith AL (eds). *Advances in Sport and Exercise Psychology* (4th ed.), Human Kinetics: Champaign, IL. 2018.
7. Standage M, Curran T, Rouse, PC. Self-determination-based theories of sport, exercise, and physical activity motivation. *In*: Horn TS, Smith AL (eds). *Advances in Sport and Exercise Psychology* (4th ed.), Human Kinetics: Champaign, IL. 2018.
8. Nordin-Bates SM. Performance psychology in the performing arts. *In:* Murphy SM (ed): *The Oxford Handbook of Sport and Performance Psychology, Oxford Library of Psychology Series.* Oxford University Press: New York. 2012.
9. Burton D, Weiss C. The fundamental goal concept: the path to process and performance success. *In:*Horn T (ed): *Advances in sport psychology* (3rd ed.). Human Kinetics: Champaign, IL. 2008.
10. Nordin-Bates SM, Cumming J, Aways D, Sharp L. Imagining yourself dancing to perfection? Correlates of perfectionism in ballet and contemporary dance. J Clin Sport Psych. 2011;5:58–76.
11. Haase AM, Prapavessis H, Owens RG. Perfectionism and eating attitudes in competitive rowers: Moderating effects of body mass, weight classification and gender. Psych Health. 1999;14: 643-657.
12. Haase AM, Prapavessis H, Owens RG. Perfectionism, social physique anxiety and disordered eating: A comparison of elite male and female athletes. Psych Sport Ex. 2002;3(3):209-222.
13. Nordin-Bates SM, Schwarz JF, Quested E, Cumming J, Aujla IJ, Redding E. Within-and between-person predictors of disordered eating attitudes among male and female dancers: Findings from the UK Centres for Advanced Training. *Psych Sport Ex.* 2016;*27:*101-111.
14. Ruggiero GM, Levi D, Ciuna A, Sassaroli S. Stress situation reveals an association between perfectionism and drive for thinness. Int J Eat Disord. 2003;34:220–226.
15. Mor S, Day HI, Flett GL, Hewitt PL. Perfectionism, control, and components of performance anxiety in professional artists. Cog Ther Res. 1995;19:207–225.
16. Cumming J, Duda JL. Profiles of perfectionism, body–related concerns, and indicators of psychological health in vocational dance students: An investigation of the 2 x 2 model of perfectionism. Psych Sport Ex. 2012;13:729-738.
17. Lemyre P-N, Hall HK, Roberts GC. A social cognitive approach to burnout in elite athletes. Scand J Med Sci Sports. 2008;18(2):221-234.
18. Nordin-Bates SM, Raedeke TD, Madigan DJ. Perfectionism, burnout, and motivation in dance: A replication and test of the 2× 2 model of perfectionism. J Dance Med Sci. 2017;21(3):115-122.
19. Stoeber J, Stoll O, Pescheck E, Otto K. Perfectionism and achievement goals in athletes: Relations with approach and avoidance orientations in mastery and performance goals. Psych Sport Exerc. 2008;9:102-121.
20. Madigan DJ, Stoeber J, Forsdyke D, Dayson M, Passfield L. Perfectionism predicts injury in junior athletes: Preliminary evidence from a prospective study. J Sports Sci. 2018:36(5):545-550.
21. Krasnow D, Mainwaring L, Kerr G. Injury, stress, and perfectionism in young dancers and gymnasts. J Dance Med Sci. 1999;3(2):51-58.
22. Flett GL, Hewitt PL. Perfectionism: Theory, Research and Treatment. American Psychological Association: Washington, DC. 2002.
23. Critien N, Ollis S. Multiple engagement of self in the development of talent in professional dancers. Res Dance Educ. 2006;7(2):179-200.
24. Gustafsson H, Lundqvist C. Working with Perfectionism in Elite Sport. *In*: Hill AP (ed): *the Psychology of Perfectionism in Sport, Exercise and Dance*. Routledge: London. 2016.
25. Wyon M. Preparing to perform: periodization and dance. J Dance Med Sci. 2010;14(2):67-72.

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