Educational Grit and Psychological Trauma

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ABSTRACT

This paper examines the connection between educational grit, as espoused by Dr. Angela Duckworth, and psychological trauma. The authors explore the relationships between education, mental health, and societal needs. Since there is limited research available, the authors begin by addressing the basics. Part One answers the question, what is grit, and explains the components of grit. Part Two provides a definition and overview for trauma, with special emphasis on psychological trauma. From that discussion of terms, the authors provide further analyses in Parts Three and Four. Part Three addresses the question: How does trauma affect learning, and what is the impact on educational outcomes? The authors draw conclusions as to what educators can reasonably expect from injured individuals and what resources may be available for disenfranchised populations. Part Four closes with the question: How does education affect trauma? Specifically, can education alleviate the impact of trauma, and is healing (lifelong learning and/or improvement in symptoms) possible? Without being too clinical, the authors explain one piece of the symbiotic relationship between education and psychology, with the focus being on trauma. Recognizing that education is not a cure for all contemporary social problems, nonetheless practitioners use education as a method to relieve some aspects of human suffering.

INTRODUCTION

More than two millennia ago, the Roman poet Juvenal crafted the phrase *mens sana in corpore sano*, or a sound mind in a sound body. While the world is a much different place from the days of the Roman Empire, some things have remained the same, one of which is when people erroneously take their health for granted. Yet, what happens when the physical body breaks down or cognitive abilities begin to disintegrate? Most individuals shrink away from the mere thought of losing their ability to think, freedom to move, and to some degree, control over their lives. Sadly, society does a poor job in addressing these needs, and lacks even further in its capacity to provide the resources required to help injured individuals. For example, one estimate is "20 to 25% of the homeless population in the United States suffers from some form of severe mental illness" (National Coalition for the Homeless [NCH], 2009, para. 1). When individuals lack the ability to take care of and provide for themselves, it should be no surprise that they end up on the streets.

What is more, society tends to turn away from the people who are hurting the worst. The turning away is an amalgam of feeling inadequate to provide assistance in what may be described as a helpless and hopeless situation, and feeling disdain and disgust for the individuals who hang onto their meager existences. In some cases, society exudes a level of retribution and blames the mentally handicapped for continuing to live in circumstance beyond their control. Retribution may take many forms, but the most common are choosing to ignore the people and their deplorable plight or placing them in an institution out of sight and away from 'normal folks' in the local communities. The British band Pink Floyd provides an excellent description in the lyrics to their song, *On the Turning Away*.

"On the turning away
From the pale and downtrodden
And the words they say
Which we won't understand

Don't accept that what's happening
Is just a case of others' suffering
Or you'll find that you're joining in
The turning away"
(Gilmour and Moore, 1987, para. 1 and 2)

Lamenting "Oh, those poor souls" will do little to fix the pervasive problems faced in local communities today. Society cannot wish a problem away with empathetic yet lofty ideals, nor can citizens avoid the bodies sleeping on the streets at night. Therein lies the grit. Practitioners of education and medicine must take a pragmatic stance, an approach that acknowledges the ugly look of despair and pain but is willing to analyze the problem. In probing for new solutions, practitioners can apply principles of education and psychology, and they can provide an honest assessment for both learning and treatment.

Part One: What is Educational Grit?

Since 2007, grit has become the buzz-word for education, with implications for both pedagogy and andragogy. As with all trends, it is helpful to begin with a clear definition. Dr. Angela Duckworth describes grit as the persistence to overcome challenges and the passion to achieve meaningful goals (Goodwin and Miller, 2013; Shechtman, DeBarger, Dornsife, Rosier, and Yarnall, 2013). In a vernacular sense, grit means that a person is willing to get his hands dirty and nose bloody if that is what it takes to persevere. Thus, grit requires a certain level of hardiness and resilience. One definition of resilience provided by the military is: "the psychological and physical capacity to bounce back from life's stressors repeatedly to thrive in an era of high operational tempo" (ADRP 6-22, 2012, pg. 4-1). The resilient individual "quickly recovers from

setbacks… maintains organizational focus … [and] learns from adverse situations" (FM 6-22, 2015, pg. 6-4). To no surprise, the gritty individual displays action and thought, performance and learning.

According to authors Goodwin and Miller (2013), grit consists of four components; the first component is goal-directedness. A person must begin with a goal in mind, be intent on accomplishing that goal, and must dedicate time and talent to attain the objective or end state. The goal may require long hours of tedious work, may take priority over other activities, and may necessitate the denial of pleasure (Shoda, Mischel, and Peake, 1990). Given the amount of focus and labor involved, the person must decide if the goal is worth pursuing. In other words, a person cannot wander aimlessly through life, lackadaisically derive a plan, and yet expect a lifelong dream to come to fruition. Grit requires commitment and performance; a desire to succeed without work is just desire. Furthermore, some research has shown there is an inverse association between grit and an orientation toward pleasure (Suzuki, Tamesue, Asahi, and Ishikawa, 2015). While no one expects total deprivation, gritty individuals are willing to forego pleasure or gratification to continue working towards their goals. This mindset of goal-over-pleasure is a significant part of what puts gritty people into a league of their own.

The second component is motivation. This means that the person has the desire or passion to achieve the goal, and the goal is meaningful to that person's life. According to the American Psychological Association (APA), there are two types of motivation (Fenton, 2015); the key difference is whether the motivation arises from the outside (extrinsic) or from the inside (intrinsic). Most often extrinsic motivation occurs when an individual wants to earn a reward such as money, receive an honor and praise, or avoid punishment and harsh discipline (Cherry, 2016). A simple view of extrinsic motivation is that it has two subsets: (1) the person receives recognition or (2) he eludes adversity. In both situations, the individual behavior is rewarded. With intrinsic motivation, the individual performs a task because she finds the activity personally rewarding (Cherry, 2016). In this circumstance, the person does not pursue a reward from others. Intrinsic motivation also has two subsets: (1) the individual enjoys the task on a personal level or (2) despite dislike or disinterest, the individual wants to solve the problem or overcome the challenge (Fenton, 2015). In either case, the desire is innate.

Arguably, the accomplishment of any goal is a combination of both intrinsic and extrinsic motivation. However, in dealing with grit, extrinsic motivation is not enough; the goal is personal and the achievement of that goal requires intrinsic motivation. Fenton (2015) states: **"Students tend to enjoy learning and to do better when they are more intrinsically rather than extrinsically motivated to achieve" (para. 9). Additionally, some research studies suggest that excessive extrinsic motivation is detrimental to student learning because students adapt to their learning environment and expect rewards even for petty, mundane, and extremely simplistic tasks (Cherry, 2016). In an ideal classroom, educators witness students applying themselves and learning because the students recognize the intrinsic value of mastering a certain subject or topic.**

The third component is self-control. Although self-control conveys images of people refusing to give into impulse or maintaining emotional composure, self-control has a slightly different meaning for grit. Self-control requires an individual to avoid distractions and remain focused on the task (Goodwin and Miller, 2013). Avoiding distractions is not always easy; arguably, part of human nature includes going on a whim or taking a rest, both mental and physical. Hence, impulse is not detrimental in and of itself; one theory from evolutionary psychology is impulse is part of survival (Nicholson, 1998). Another consideration is people cannot work indefinitely; people must take time for sleep, food, and other life-sustaining activities. Those basic life-sustaining functions comprise the base level of Maslow's hierarchy and form the collective physiological needs (Burton, 2012); see Table 1.

The fourth and final component is a positive mind-set. A positive mind-set consists of embracing challenges and accepting failure as part of learning (Goodwin and Miller, 2013), as challenges and failure are very much a part of life. While obstacles are ubiquitous, it is a person's response to problems and failure that separates her from the fold. Stress-response is as individual as a person's immune system; analogously, some people will succumb to infection whereas others will remain healthy. Likewise, some people will face challenges with bravado; others will shy away. Again, avoidance is not necessarily a bad thing; avoidance is a part of evolution in which humans recognize they need to avoid conflict, ambiguity, or hardship because the circumstances threaten their survival (Nicholson, 1998). Clearly, some situations merit avoidance, but gritty people are more willing to accept challenges and take appropriate risk to achieve their goals.

Despite a long-held assumption that intelligence (IQ) is the best predictor of academic success, grit does not show positive correlations with IQ (Suzuki et al., 2015). Just because a person is smart does not mean he is gritty; it is possible for a person to be lazy and intelligent. However, a counterargument is the smart person knows when to commit to a certain task, and when to cease working because the task is no longer appealing, is too onerous, or does not fulfill the overall goal. This is not to say that gritty people continue marching blindly forward regardless of circumstance or outcome. A profound revelation is grit encapsulates both perseverance and intelligence; the level of

TABLE 1
MASLOW'S HIERARCHY OF NEEDS

Self-actualization	Level 5	Morality, creativity, problem-solving, lack of prejudice
Esteem	Level 4	Self-esteem, confidence, achievement, respect
Love and belonging	Level 3	Friendship, family, sexual intimacy, relationships
Safety	Level 2	Security, employment, resources, property, health
Physiological	Level 1	Food, water, sleep, sex, homeostasis

Table 1. The table provides one example of Maslow's hierarchy of needs.
Adapted from: Burton, N. (2012). *Our Hierarchy of Needs*.

intelligence varies, but the level of persistence remains high (Suzuki et al., 2015). In closing, Diamond and Lee (2011) describe the learning environment that fosters grit; see Table 2.

Part Two: What is Psychological Trauma?

Unfortunately, trauma is not easy to define; there is much confusion about what trauma is and what it is not. To a layperson, trauma may conjure images of horrific accidents, hospitals, and emergency rooms, but trauma has more than just a physical element. According to the Substance Abuse and Mental Health Services Administration (SAMHSA), there is the following accepted definition.

> "Trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional, or spiritual well-being" (pg. 7, 2014).

Alternatively, every accident or malady that happens is not necessarily traumatic. Without sounding poetic, pain occurs to all people and does not discriminate in

TABLE 2
THE GRITTY LEARNING ENVIRONMENT

Sense of belonging	Students need to feel comfortable, i.e. being open and honest and sharing constructive feedback. Classroom rules emphasize respect for all individuals.
Self-discipline and persistence	Students monitor their own progress and continue working even when the teacher is not watching.
Acceptance of challenges	Overcoming challenges builds hardiness and a skillset to deal with future problems. The purpose is to build cognitive and emotional strength.
Learning through failure	Failure is not the end but a transient state or transition to the next learning activity. Although failure may be embarrassing or painful, it is essential for self-growth.
Improvement through experience	As students accumulate varied learning experiences, they develop an improved skillset of how to overcome challenges. Experience takes time; learning requires patience and dedication.

Table 2. The table summarizes the classroom environment for grit.
Source: Diamond and Lee (2011). *Interventions Shown to Aid Executive Function Development in Children 4–12 Years Old.*

TABLE 3
RESEARCH FINDINGS FOR TRAUMA

Human-caused	Deliberate, cruel human acts are harder to understand or rationalize. People often use scientific reasons to explain accidents or natural disasters, e.g. floods and fires.
Repeated or lengthy	The longer someone is exposed to (or must endure) trauma, the greater the risk is for that person to develop psychological harm.
Unpredictable	Not that anyone expects trauma to be planned, but spontaneous acts of violence catch people unaware. Simply put, people do not have time to prepare themselves for what is about to happen.
Multifaceted	The perpetrator may use a combination of abuse (physical, verbal, sexual, and emotional) and coercive control (entrapment and/or isolation).
Sadistic	Acts of cruelty resulting in pain infliction, mutilation, and/or disfigurement are extremely disturbing.
Occurred during childhood	Trauma may take the form of abuse, violence, or neglect.
Caused by a caregiver	Because the victim is dependent on the caregiver, the victim may feel betrayed, helpless, and confused.

Table 3. The table lists factors when psychological trauma is usually most severe.
Source: Giller, E. (1999). *What is Psychological Trauma?* Made available by the Sidran Institute.

its application or choice of victim. Pain, death, and disappointment are ubiquitous but trauma is not. Just because someone loses blood does not mean the individual has suffered trauma. The Sidran Institute for Traumatic Stress Education and Advocacy provides further clarification. Particularly, it is not the event that determines trauma but the individual's subjective experience to the event (Giller, 1999). Despite exposure to or experience of the same event, one person may feel unable to cope but the other person remains calm. A main point is trauma "refers to extreme stress that overwhelms a person's ability to cope" (Giller, para. 1, 1999). Since coping skills are subjective and varied across the human population, some people are able to cope with tragic occurrences and still function with other demands; Table 3 provides a synopsis of research findings.

Witnessing can also be traumatic, e.g. watching the abuse or torture of another person. The more attached a person is to the victim, the more stress the person will feel (Giller, 1999). Stress may take the form of fear, helplessness, or entrapment. Moreover, trauma is not an isolated occurrence. Trauma often occurs in conjunction with depression, suicidality, mental illness, homelessness, substance abuse, and other health problems (Bremner, 2006; SAMHSA, 2014). Because it is almost impossible to isolate the effects of trauma, researchers struggle with how best to provide treatment options.

Part Three: How Does Trauma Affect Learning?

The simple response is trauma can have a serious, detrimental impact on learning. Notably, there are strong correlations between trauma and other forms of mental illness such as depression, dissociation, schizophrenia, and personality disorders (Bremner, 2006). Exposure to severe trauma can cause long-term and possibly debilitating emotional and psychological harm. Depending upon the level of disability, the person may struggle with day-to-day responsibilities such as self-care, relationships, and overall stability (NCH, 2009); Appendix A provides a brief synopsis of some sociological factors for mental illness and trauma. To determine the impact on learning, it is helpful to begin by examining the effects on the brain. Trauma affects the brain the most in the amygdala, hippocampus, and the medial prefrontal cortex (Bremner, 2006; Sherin and Nemeroff, 2011). Table 4 summarizes the functions associated with these regions of the brain as well as the impacts of trauma upon those three areas.

The amygdala, prefrontal cortex, and the hippocampus each play a role in learning and stress response. With changes in brain structure and function, the ability to learn after a traumatic event becomes questionable and slow due to recovery. First, over-responsiveness of the amygdala can cause intense emotion, such as aggression, agitation, irritation, or fear (Wright, 2016). Prolonged stimulation of the amygdala can result in paranoia, hypervigilance, and exaggerated stress responses to include rapid heart rate and rapid breathing. However, the amygdala is not enlarged; neurologists have not observed any structural changes (Sherin and Nemeroff, 2011). Second, individuals with hippocampal damage may develop amnesia or the loss of long-term memory. Hippocampal damage also interferes with the creation of new memories forming in the short-term memory and declarative memories, or remembering simple facts, times, or locations (Mandal, 2014). Clearly, the ability to learn new information and to recall it later diminishes. Third, people suffering from trauma may not be able to detect the differences between safe and unsafe environments due to interference with fear conditioning (Sherin and Nemeroff, 2011). This lack of discrimination may create situations in which the person is overreacting or preparing for danger when there is no apparent threat. With the onset of fight-or-flight, the person may not be able to stop the stress response. Finally, depending upon the severity of traumatic exposure, the person may experience some deficit in overall intelligence and language expression.

The most enduring task for educators is to be aware of the signs of trauma, and not to attempt resolving problems alone (Figley, 1995). Societal problems seldom occur in a vacuum or in a linear fashion, but rather play out in a web of complexity. Hence, instructors should never assume that they can fix all the problems their students encounter. A simple but understated rule is if faculty suspect something unethical or illegal, then they should report the case to the professional or agency who

TABLE 4
REGIONS OF THE BRAIN MOST AFFECTED BY TRAUMA

Region	Associated Functions	Effects from Trauma
Amygdala	Emotional processing Emotional learning Acquisition of fear responses Mediation of stress responses	Increased activity
Medial Prefrontal Cortex	Intelligence Language Memory Inhibition of stress responses	Decreased volume and activity
Hippocampus	Memory Spatial navigation Control of stress responses Fear conditioning	Decreased volume and activity

Table 4. The table describes the traumatic impact on three regions of the brain.
Source: Sherin and Nemeroff (2011). *Post-traumatic Stress Disorder: The Neurobiological Impact of Psychological Trauma.*

has the authority or jurisdiction to deal with the problem. Besides reporting, agencies such as the National Child Traumatic Stress Network (NCTSN) provide resources and support to schools. Analogous to treating cancer, early recognition is paramount; Table 5 provides an expanded list of indicators.

Part Four: Can Education Alleviate the Impact of Trauma?

The answer to this probing question is an overwhelming yes. While practitioners never promise that education is a cure to any problem, behavioral therapists use various educational tools and techniques to lessen the burden of trauma. To explain all of therapeutic methods available to treat trauma would be an enormous effort and not the intent of this paper. Table 6 provides the SAMHSA recommendations for treating trauma (pg. 19-32). The guidelines are in agreeance with the components and research summary of grit mentioned earlier (Goodwin & Miller, 2013; Diamond & Lee, 2011). Furthermore, Appendix B provides three examples of psychoeducational therapies and how the treatment options for trauma align with the principles of grit.

The SAMHSA guidelines pertain to therapy settings, but what guidelines are available to help instructors with possible mental health or behavioral health issues in the classroom? The NCTSN provides recommendations to teachers at all levels of education, from preschool to high school; see Table 7. A false expectation is for instructors to perform the responsibilities of a

TABLE 5
INDICATORS OF TRAUMA

School Performance	Overall lower grade point average (GPA) Higher rates of absences, especially unexcused absences or absences lasting longer than one day Less likely to finish school and enter college More adverse behavior such as suspensions and expulsions Decrease in communication skills to include reading, writing, and speaking Isolation or social withdrawal
Learning Impairment	Decrease in attention span and the ability to remember learning activities or classroom events Reduction in focus, organizational skills, and information processing Inability to perform effective problem solving and planning Feelings of being overwhelmed with school work, frustration, anxiety, or fatigue Sleep problems, nightmares, or intrusive dreams
Physical and Emotional Distress	Various physical ailments to include headaches, stomachaches, and possible suppressed immune system – *'the person is always sick'* Impulsive behavior, emotional outbursts, or lack of control Over or under-reacting to physical touch, sounds and movements (e.g., bells, sirens, crowds, etc.) Resistance to change and/or authority

Table 5. The table provides some key indicators for trauma.
Source: Child Trauma Toolkit for Educators (NCTSN, 2008).

TABLE 6
GUIDELINES FOR TREATING TRAUMA

1. Create a safe environment.	The participant should feel safe at all times during treatment.
2. Identify recovery as a primary goal.	Self-motivation is paramount. The person must want to get better.
3. Support control, choice, and autonomy.	The patient should share in the control during therapy. The person has the option to stop the treatment at any time.
4. Create collaborative relationships and participation opportunities.	The healthcare system provides support in many ways. Early diagnosis, intervention and treatment is critical; professionals such as social workers and psychiatrists provide oversight and treatment options.
5. Use a strengths-focused perspective and promote resilience.	As part of the recovery process, the person develops better personal skills to deal with stress.
6. Provide hope – recovery is possible.	Though complete healing may not be possible, the participant may be able to contribute to society in meaningful ways and live a somewhat normal life.

Table 6. The table provides guidance for psychoeducational therapies.
Source: Trauma-Informed Care in Behavioral Health Services (SAMHSA, 2014).

licensed psychiatrist in addition to the daily duties of managing a classroom and teaching students. Teachers are not therapists, and faculty must coordinate with professionals in criminal justice, social work, and behavioral health to provide the best care for their students.

CONCLUSION

The future of grit looks promising; the application of grit to other disciplines besides education will facilitate changing old paradigms and solving problems with new methodologies. Goodwin and Miller (2013) offer the recommendation to start teaching grit during elementary school and to reinforce those skills in higher grades and college. In cultivating grit alongside other life skills, individuals should start early and continue to improve their hardiness over their lifetime. Shechtman et al. (2013) encourage educators to teach students how to achieve goals, solve problems, and overcome obstacles as part of curricula. Setbacks are a normal part of everyday life; therefore, teaching students how to deal with difficulty is a basic survival skill.

Continuing research in the fields of neuroscience and neuropsychology hope to shed additional light on exactly how trauma affects the brain, both short-term and throughout the lifespan. Concerning the treatment of trauma, pharmaceuticals, specifically selective serotonin reuptake inhibitors (SSRIs), can promote neurogenesis and reverse hippocampal atrophy and memory deficits (Bremner, 2006; Sherin and Nemeroff, 2011). Notably, changes in the environment, such as social enrichment and learning, can modulate neurogenesis (Bremner, 2006). Similarly, changes in environment can slow the normal age-related decline, especially for Alzheimer's disease and certain forms of dementia. However, there are some shortcomings to current research. The full effects of sex hormones on the brain, specifically the decrease of hormones during menopause, is still unclear (Bremner, 2006). Previous studies have determined that the structures of the brain change as part of the normal aging process. More medical studies are imperative to determine which neurological changes are age-related and which changes are a result of trauma or mental illness. Additionally, the human brain can adapt to environmental stressors, and the brain can reverse some damage (Sherin and Nemeroff, 2011). The ability to reverse all damage is probably a naïve assumption, but neurological adaptations give hope that further healing is possible.

While psychoeducational therapies have been effective in treating trauma, there are some limitations. Psychoeducational therapy requires practitioners to have specialized training, casework, and field time (SAMHSA, 2014). From a human resources (HR) perspective, clinics must hire professionals with advanced degrees, to include medical degrees. Besides healthcare, the financial impact on public systems includes criminal justice and housing/homelessness services (Insel, 2014). Second, therapy may require multiple sessions extending over months of treatment; practitioners never assume that one session will fix the trauma. Practitioners must be willing to start again, try a different method, or use a combination of therapies if the person is not improving or has a relapse. In almost all cases, success is not immediate; treatment requires multiple steps or a process of options most favorable to the particular case.

The authors recommend that recovery programs for trauma provide role models who have suffered trauma and yet have overcome adversity to live a normal life and be successful. A powerful assertion is trauma victims can progress through Maslow's hierarchy to self-actualization. Sadly, most intervention program focus only on the lower levels, health and safety. With encouragement and resourcing, individuals can go beyond the basic needs of hunger and shelter. Healthcare and housing form the baseline for stability; the goal should be for continued outreach and improvement. With education and employment opportunities, injured individuals can participate in community partnerships and learn new skills. With more integration, people can develop self-sufficiency and renewed self-worth; thus, people can choose to live a life that is productive rather than destructive.

TABLE 7
SUGGESTIONS FOR EDUCATORS

Maintain a routine and normalcy.	Some trauma victims may be resistant to change. Maintaining a daily schedule provides clarity and security; students know what to expect.
Give students choices in their learning environments as appropriate.	Trauma cases often involved denying the victim control, so the person feels like he is in a constant state of chaos. By giving students a choice or a voice in the classroom, they may feel more engaged in the learning activities.
Provide a quiet place for students to talk about problems.	Faculty can designate a safe place and time for students to talk. Privacy is utmost as students probably will not want to discuss personal matters in front of their peers.
Be honest, empathetic, and realistic.	As students divulge information, faculty can clarify misconceptions. Listening and providing feedback are part of the healing process. In cases of abuse or neglect, instructors can make referrals to the appropriate authorities or agencies.
Modify assignments as needed.	Teachers may need to shorten assignments or allow additional time for completion. Also, instructors can excuse students from class if a student needs to meet with a counselor or nurse.

Table 7. The table lists suggestions for educators when dealing with trauma victims.
Source: Child Trauma Toolkit for Educators (NCTSN, 2008)).

APPENDIX A
A DEEPER LOOK AT TRAUMA AND MENTAL ILLNESS

In this appendix, the authors provide considerations for self-care, relationships, and overall stability. One observation is these elements align with Maslow's hierarchy of needs discussed earlier. As the effects of trauma tend to aggregate (Giller, 1999), practitioners struggle with how to integrate the individual into society effectively.

Self-care

Self-care consists of activities relating to health and safety, and it is analogous to levels one and two respectfully in Maslow's hierarchy of needs (Burton, 2012). A crucial tenet of self-care is hygiene. To the average person, hygiene seems simplistic, but hygiene can be a challenge for the mentally ill. Examples include forgetting to brush one's teeth, lacking access to clean clothes or refusing to change clothes, failing to bathe or clean, and struggling with bodily elimination (urination and defecation). A second consideration is mental illness impacts the person's ability to make decisions and take precautions against disease. When combined with homelessness and inadequate hygiene, there is an increased risk for physical problems; ailments include but are not limited to various skin diseases, respiratory infections such as tuberculosis, and exposure to blood-borne diseases such as hepatitis and HIV (NCH, 2009). With these compounding factors, intervention and education look grim.

Stability

In addressing trauma and mental illness, stability encapsulates certain sociological factors. In addition to access to support and treatment, an important consideration is housing. In the United States, maintaining a residence is a mark of success; the proverbial white picket fence is part of Americana and remains a status symbol in current society. Despite the stigma associated with mental illness and homelessness, the need for subsidized housing is critical. "When this basic need isn't met, people cycle in and out of homelessness, jails, shelters and hospitals (National Alliance on Mental Illness [NAMI], 2016, para. 1). Funding made available via the US Department of Housing and Urban Development (HUD) is crucial in assisting disenfranchised, at-risk populations maintain a residence. Another concern is employment. The mentally ill need access to education and employment opportunities so that integration becomes a reality (NCH, 2009). Research has shown that collaboration with local universities and employers from the public, private, and nonprofit sectors is effective. One example is Goodwill Industries International; Goodwill is a nonprofit organization that offers job training programs and employment placement services for people with disabilities (Walling, 2016). With employment, people can enhance their quality of life and develop self-esteem.

Relationships

Mental illness may prevent people from forming or maintaining stable relationships (NCH, 2009). The person may suffer with a form of depression and may not desire to take part in social gatherings or family events. In these situations, the person avoids interactions with others and creates a type of isolation. Another possibility is the individual may act irrationally, have outbursts of anger, or commit acts of violence – all of which may push caregivers away. Irrational, agitated behavior may be a result of misunderstanding guidance from others; in extreme cases, caregivers may decide to stop helping. The inability to develop successful, sustaining relationships affects human survival (Nicholson, 1998) and has repercussions upon employability and housing (NCH, 2009), with follow-on ramifications for substance abuse (e.g. using street drugs to self-medicate) and crime (e.g. resorting to theft or prostitution to earn money). While family and friends are a significant part of the support network, loved ones cannot carry the full burden. Other support mechanisms include social workers, counsellors, and advocates for the mentally ill and homeless; these public servants ensure the client has access to food, medicine, and treatment.

APPENDIX B
Examples of Psychoeducational Therapies

Note: The terms patient and client are used interchangeably because the treatment of trauma may take place in an institutionalized setting (i.e., the person is a patient in a hospital) or as part of outpatient services (the client chooses to participate in voluntary counselling). In both instances, the individual retains some autonomy and decision-making about her participation in treatment. Only in the most extreme cases will a person be forced into treatment.

Narrative Therapy

Narrative therapy (NT) is more than just the art of storytelling. In particular, NT "views psychotherapy not as a scientific practice, but as a natural extension of healing practices that have been present throughout human history" (SAMSHA, 2014, pg. 145). Humans have created myths and legends, retold the great events of history long before the science of archeology, and have passed down the teachings of religion long before written language. The ability to speak is profound in its application; while often viewed negatively, lying and gossip are also part of human evolution and survival (Nicholson, 1998). In NT, speaking and listening are equally important, and the client is able to tell her story from her point of view. The individual may pause the narrative at any time and may revisit, retell, or embellish certain points or details of what happened. The primary role of the practitioner is to hear the patient; the power of listening cannot be understated. Listening provides acknowledgment (e.g., I hear you) and validation (e.g., it's OK for you to feel that way). The practitioner creates a safe environment where the client feels safe to discuss very private and often graphic subjects. The role of the physician (educator) is not to judge the patient or the event. However, the therapist may stop the session to prevent the patient from being re-traumatized if certain details trigger an extreme response. Hence, the physician and client determine the pace of therapy, similar to how the teacher and student set the pace of instruction in the classroom.

Stress Inoculation Therapy

The origins of stress inoculation therapy (SIT) began with the treatment of anxiety; therapists now use SIT to treat trauma. SIT consists of education, skills training, and skills application (SAMHSA, 2014). Similar to education, the patient (student) has the opportunity to learn new, beneficial information; additionally, the patient has the chance to apply the resiliency skills in a safe environment (therapy session or classroom) and under the purview of a therapist (instructor). Moreover, learning is not just for learning sake; the client has a personal identified goal to develop improved resiliency skills for stress management. SIT skills training contains muscle relaxation, breathing exercises, role-playing, guided self-talk, and assertiveness training (SAMHSA, 2014). An important skill is thought stopping, in which the person ends negative thoughts by thinking of something positive. Redirecting thoughts allows the individual to remain calm rather than to become anxious or feel overwhelmed by stressors. Effective coping mechanisms will allow the person to manage increasing levels of stress, and thus become inoculated as he confronts events from the past or prepares for future, realistic circumstances.

Exposure Therapy

According to SAMHSA (2014), "exposure therapy is recommended as a first-line treatment option when the prominent trauma symptoms are intrusive thoughts, flashbacks, or trauma-related fears, panic, and avoidance" (pg. 144). The purpose of exposure therapy (ET) is to desensitize clients through repeated encounters with traumatic material. Clients work through the details of the traumatic event to include memories, objects, emotions, and places. Akin to SIT, the patient will become more resilient as he works through the exposure-based interventions. As re-traumatization is a concern, the therapist carefully monitors each session to allow the client sufficient time to process memories and emotions like sadness and fear. The skilled practitioner seeks balance between exposure to triggers to build resilience and exacerbation of symptoms indicating re-traumatization. As too much exposure can be detrimental to the client, the collaboration between the practitioner and the client helps to create a healthy relationship and a safe environment to address the trauma. Notably, counselors should be cautious with clients who display signs of mental illness or substance abuse (SAMHSA, 2014). Since the person is already in a comprised state, ET may not be the best option for treatment.

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