

**A Two-Article Examination of the Integration of Trauma-informed Care with Adult
Medical Care**

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ABSTRACT

A TWO-ARTICLE EXAMINATION OF THE INTEGRATION OF TRAUMA-INFORMED CARE WITH ADULT MEDICAL CARE

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The intersection of attachment theory and trauma theory provides information on how a person understands and communicates health symptoms and explains interactions in a relationship such as with a medical care provider. Extensive research exists regarding health effects and health behaviors related to the experience of trauma and attachment styles for adults, people 21-years-old and older and demonstrates the intersection of trauma, attachment styles, and health outcomes for adults. Additionally, numerous studies portray the spiraling costs of healthcare and identify the super-utilizers of health care.

Super-utilizers are adults who have preventable and frequent visits to emergency rooms and or hospitalizations. Super utilizing patients have complex medical issues often exacerbated by mental illness and or substance use. The Adverse Childhood Experience (ACE) study demonstrates that people who had adverse childhood experiences have multiple medical problems as adults as well as mental health disorders and addictions, factors for super-utilizers.

Weaving the cords of attachment and trauma theories with health outcomes suggest a trauma-informed approach to adult health care improve health care outcomes. Trauma-informed care acknowledges the impact of trauma and provides care with an awareness of those effects. Understanding the impact that trauma has on patients may assist care providers in offering a more efficient effective approach to service delivery. Recent research suggests integrating effective trauma-informed care programs, into mental health and addiction treatment is best

practice. However, little research is available regarding trauma-informed adult physical health care.

This two-article theoretical-conceptual dissertation seeks to address the gap in the literature by further investigating the benefits of providing adult, trauma-informed medical care. The first paper, in this dissertation, explores the intersection of attachment and trauma theories with health outcomes. The second article builds on the need for trauma-informed care and defines the tenets of a trauma-informed care framework with examples of a trauma-informed approach through composite case vignettes.

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Introduction

Evidence supports trauma-informed care as an effective approach to the provision of health care services for adults, people 21 years old and older. Trauma-informed care is the recognition, understanding, and response to the impact traumatic experiences may cause for the individual who experienced trauma (Fallot & Harris, 2009; Ko et al., 2008; Machtinger, Cuca, Khanna, Rose & Kimberg, 2015; Raja, Hasain, Hoerch, Grove-yin, Rajagopalan, 2015; SAMSHA, 2014). A trauma-informed care approach to providing health care for adults is also beneficial for the healthcare staff and the organization (Bloom, 2013; Bloom & Farragher, 2011, 2013). However, trauma-informed care is slow to integrate into adult physical health care (Hooper, Tomek, & Newman, 2012).

This dissertation explores the following questions: How does a trauma-informed approach guide and inform adult medical care? How does a trauma-informed approach to adult medical care affect practice? Other questions which may require further research are: Does a trauma-informed care approach to adult medical care improve health, healthcare, and healthcare management? Does a trauma-informed care approach to adult medical care improve access to care? How does a trauma-informed approach impact usage of the emergency room as a source of primary care? Does a primary care framework influence choice for the care of children of the adults who experienced trauma? Are employees less frustrated with patients who over utilize care? Lastly, does a trauma-informed foundation improve employee satisfaction and retention?

The framework for this two-article, conceptual-theoretical dissertation consists of a historical perspective on trauma theory, attachment theory, and resultant adult health effects.

Weaving the cords of attachment and trauma theories provides information on how a person understands and communicates health symptoms and interacts in a relationship such as with a medical provider. Attachment style describes ways of bonding with an adult. During childhood, the bond is with the caregiver and in adulthood with other adults (Ainsworth & Bell, 1970; Ainsworth, Blehar, Waters & Wall, 1978; Bowlby, 1969, 1973, 1980, 1982, 1988; Mikulincer & Shaver, 2007).

Prior researchers have addressed the impact that trauma has on relationships affecting attachment, health, and health-related behaviors. For instance, Felitti et al. (1998), Levine (2010) and Waldinger, Schulz, Barsky, & Ahern (2006) agree that adults with histories of adverse childhood experiences suffer from health issues more than adults without adverse childhood experiences. Numerous researchers report that adults who have histories of adverse childhood experiences have difficulty accessing medical care (Hunter & Maunder, 2001; Purnell, 2010; Thompson & Ciechanowski, 2003; Waldinger et al., 2006). “Trauma violates our belief that the world is a safe place and that people can be trusted” (Brown, Harris & Falloot, 2016, p. 387).

Consequently, individuals who have experienced trauma do not trust their care providers or believe the provider will have the patient's best interest at the forefront. The mistrust translates into behaviors such as the patient under reports symptoms, seeks care only at an emergent point, misses appointments and is unhappy with the care provided (Bodenheimer, 2013; Machtinger et al., 2015). Furthermore, researchers discovered when adults, with histories of adverse childhood experiences, access the medical care they have compliance issues, meaning they do not follow instructions related to their care. Examples of compliance issues are: taking

medication correctly, dietary changes, quitting smoking or keeping follow-up appointments. (Brenk-Franz et al., 2015; Ciechanowski, Katon, Russo, & Walker, 2001; Hooper, Tomek, & Newman, 2012; Maunder et al., 2006; Meredith, Onsworth, & Strong, 2008; Meredith, Strong, & Feeney, 2006; Pietromonaco, Uchino, & Schetter, 2013). Thus, adults who have experienced trauma are prone to getting sicker, take longer to access care and require intensive interventions which drive up the costs of medical care (Thorpe, 2013). Or adults who have experienced trauma somatize, express physical complaints that may or may not have a medical diagnosis. The symptoms are excessive and disproportionate when there is a medical diagnosis. (American Psychiatric Association, 2013). Individuals who somatize request frequent medical visits, also driving up the cost of care and care management.

Early theorists, such as physician and psychoanalyst Pierre Janet (1859-1947), proposed that somatization is primarily the product of and exacerbated by what is now known as trauma (Young, 2008). A student of Janet's, Wilhelm Reich, also a physician and psychoanalyst, ascribed to Janet's beliefs regarding the correlation between somatization and trauma. Reich developed a somatic theory around the concept that the body stores memories which manifest as illness if not addressed (Reich, 1949; Young, 2008). Others who have pursued the mind-body connection include Bollas (1989), Dychtwald (1950), Levine (2010), and van der Kolk (2014).

Scores of research studies have corroborated that adverse experiences influence adult physical and psychological health. The healthcare systems have been slow to accept and integrate this knowledge and create trauma-informed symptoms of care. The health-care systems have made numerous changes during the past century including the transition from an acute care model to a chronic disease model. A chronic disease model begs for a more effective

efficient way to offer care. A trauma-informed care framework is an opportunity to provide more efficient effective care for adults.

Evolution of health care

The evolution of physical and behavioral health care during the last century has resulted in changes to the way care is provided. Some of those changes include; philosophies in administering care, scientific advances in the knowledge and treatment of disease and moving from an acute care model to a chronic care model. The chronic care model requires more interaction with medical care systems and more interaction with patients.

During the 20th century, health care reforms mirrored shifts in disease patterns. For example, most diseases in the early 1900's, when the leading causes of death were pneumonia, influenza, and tuberculosis, persisted for relatively short durations. The patient either died or got better (Kung, Hoyert, Xu, & Murphy, 2008). However, by the end of the century, behavior and lifestyle became the underlying causes of most diseases. By 2005, heart disease, cancer, and strokes caused 60% of U.S. deaths (Brandon & Feist, 2010). Additionally, there was a rise in life expectancy accompanied by a higher prevalence of chronic diseases found in the elderly, such as Alzheimer's and Parkinson's. The aging population along with the increased prevalence of chronic diseases forced physicians and other healthcare providers to transition from their former acute care model to a chronic disease model. Chronic care includes the long-term management of a chronic illness such as diabetes or heart disease. Along with this shift to a chronic care model came dramatic increases in the costs of healthcare (Brandon & Feist, 2010).

Access to care and affordable care has always been problematic. However, recent changes to the spiraling costs of healthcare have exacerbated the problem, which affects health

behaviors and creates gaps in care. Gaps in the provision of care influences quality of life, access to adequate and efficient medical care, the overall health of individuals, healthcare outcomes, and costs associated with healthcare. Brandon and Feist (2010) reported that “health care costs escalated over 600%” (p. 256) between 1975 and 2005.

In addition to the changes in life expectancy, disease patterns, and increases in costs, the enactment of the Affordable Care Act (ACA) in 2010 changed reimbursement criteria and readmission criteria. These new measures resulted in lower payments to hospitals and healthcare providers (Piekes, Chen, Schore, & Brown, 2009). Thorpe (2013) suggests that this overall reduction in reimbursement continues to cost hospitals and health care systems millions of dollars each year, especially with the over 65 age group.

Health care systems are developing and implementing a variety of strategies to counter this loss of revenue (Piekes et al., 2009). Those strategies include the use of medical home models, health coaches and the implementation of reminder calls for appointments (Bodenheimer, 2013; Kim, Michalopoulos, Kwong, Warren, & Manno, 2013; Peikes et al., 2009). Programs are emerging that provide more intensive care to super-utilizers.

Super-utilizers are patients who suffer from preventable conditions and account for an inordinate number of hospital admissions and emergency room visits. They have multiple chronic conditions such as diabetes, emphysema, and heart failure. Additionally, many have behavioral health co-morbidities (Hunter & Maunder, 2001; Maunder & Hunter, 2008; Nolte, Guiney, Fonagy, Mayes, & Luyten, 2011). Super-utilizers of healthcare exhibit the behaviors of people who have experienced trauma as outlined in the Adverse Childhood Experience (ACE) Study.

The ACE Study, a seminal research project, demonstrates the correlation between adverse childhood experiences and ill health as adults. Further research is needed to verify the probability that victims of trauma may be super-utilizers of medical care. Implementing a trauma-informed approach may bring benefits for the super-utilizers, but they are not the only adults who could benefit from a trauma-informed approach.

Other health behaviors of adults who had adverse childhood experiences are minimizing or ignoring self-care. Self-care includes exercise, diet, medication management, good hygiene, dental care, and proper sleep (Courtois & Ford, 2013). Poor self-care leads to health-related issues.

The thread that seems to weave chronic medical conditions and behavioral health co-morbidities together is earlier adverse experiences, extreme stress and trauma. The effects of trauma on behavior contribute to difficulties in the provision of adequate medical care. People affected by trauma are often in survival mode even when there is no risks present (Osterman & Chemtob, 1999) and act defensively and appear to not cooperate with care providers. Individuals with complex trauma histories bring with them challenging behaviors that health care providers may find difficult to manage in the healthcare environment (Bodenheimer, 2013; Courtois & Ford, 2013; Raja et al., 2015). An understanding of trauma and the effects of trauma could alleviate some of the difficulties care providers experience.

Defining trauma

The definitions and understandings of trauma have evolved over the centuries. Initially, traumatic experiences were related to the ravages of war and Post Traumatic Stress Disorder term became the accepted term during the Vietnam War (Levine, 2010). Mental health providers

noticed symptoms of PTSD in people who were not in war and terms like rape trauma syndrome (Burgess & Holmstrom, 1974) or battered women's syndrome (Walker, 2009) were used to describe the symptoms. Eventually, other forms of traumatic experiences became identified and accepted as trauma.

Traumatic experiences range from a single event such as a car accident to ongoing, pervasive traumatic experiences such as molestation, physical abuse, constant psychological abuse, or natural disasters. The impact of experiencing traumatic events also varies, and the response is on a continuum from mild anxiety to a diagnosis of Post-Traumatic Stress Disorder (Kessler; Sonnega; Bromet; Hughes; Nelson, 1995). Van der Kolk and colleagues designed a model to identify the varying types and response to traumatic effects with the term, developmental trauma disorder (van der Kolk, Roth, Pelcovitz, & Sunday, 2005; Rahim, 2014). However, developmental trauma disorder is not in the DSM-5.

The greater number of events experienced the more significant impact on adult health. The ACE study is a seminal research project that demonstrates the effects of adverse childhood experiences on adult health. Furthermore, the ACE study demonstrates the range of traumatic experiences and the resultant impact on health and health behaviors.

Adverse Childhood Experience Study

While experiencing traumatic events to the level of warranting a PTSD diagnosis is extreme, having an adverse experience is prevalent for a majority in the U.S., as identified by the Adverse Childhood Experience Study ACE's). The ACE study demonstrated the long-term health effects for adults who experienced adverse events as children and found that 64% of the over 17,000 adults in the study had one adverse experience in childhood. Of that 64%, eighty-

seven percent had two or more adverse experiences. The more ACE's one experienced, the greater risk of developing a chronic disease (Felitti et al., 1998).

The adverse childhood experience (ACE) study (Felitti et al., 1998) was an original study that identified the impact of early childhood experiences of trauma on health. The longitudinal ACE study involved a collaboration between Kaiser Permanente's Department of Preventive Medicine in San Diego, CA and the Centers for Disease Control in Atlanta, GA (Anda & Felitti, 2003). Over 17,000 Kaiser Permanente members participated in a study to determine how stressful or traumatic childhood experiences affect health. (Survey questions, Appendix C

Categories of childhood abuse were identified from earlier research and included, physical, sexual, and emotional abuse, physical and emotional neglect, a mother who was treated violently, household substance abuse and mental illness, separation or divorce, or a family member in jail. The results of the study were conclusive that stressful or traumatic childhood experiences correlated positively with a risk of health problems (Felitti et al., 1998). (Chart Appendix A).

Felitti et al. (1998) admitted the results of this seminal work were unexpected. Other researchers also did not expect the prevalence and degree of adverse health effects related to trauma to be so pronounced (Felitti et al., 1998). ACE correlated with significant increases in negative social, behavioral health, and physical health outcomes. Findings include "alcohol and substance use disorders, depression, suicidality, risky sexual behavior, sexual victimization in adulthood, domestic violence, self-harm behaviors, physical inactivity, obesity, heart disease, cancer, liver disease, sexually transmitted diseases, teen pregnancy, homelessness,

unemployment, and being both a perpetrator and/or a victim of interpersonal violence” (SAMSHA, 2014, sec. 1, p. 15).

The ACE study continues as many states are collecting information about adverse childhood experiences through the Behavioral Risk Factor Surveillance System (BRFSS). The BRFSS, adopted from the original CDC-Kaiser Permanente study, is an annual, state-based random telephone survey that collects data regarding health conditions and risk factors. Since 2009, thirty-two states plus the District of Columbia have included ACE questions for at least one year in the survey. (Chart Appendix B).

The relationship between traumatic experiences and attachment style

The effects of trauma-related experiences, particularly in childhood, undermine attachments and contribute to the continuation of further trauma. A secure attachment, as defined in attachment theory, is needed to offset the effects of a traumatic experience (Waldinger et al., 2006). Those who have adopted insecure attachment styles are at a higher risk of developing emotional difficulties following traumatic events (Hong, Adams, & Lilly, 2012). Exposure to trauma may result in adverse outcomes that manifest in adulthood (Felitti et al., 1998; Waldinger et al., 2006; Purnell, 2010). It is well documented that some people who experienced trauma have an “interruption of attachment” (Smith, 2013, p. 24)

According to several researchers such as Courtois (2014), Levine, (2010), Mikuliner, (1995), Radley, Kabbaj, Heydendael, Yehuda & Herman (2011), and van der Kolk, (2014), individuals who experienced trauma may adopt unhealthy coping strategies when faced with perceived stressors. Wilkinson and Marmot (2000) state, “Social and psychological circumstances can cause long-term stress. Continuing anxiety, social isolation and lack of

control over work and home life have a powerful effect on health” (p. 12). This “powerful effect on health” (p. 6) may manifest as somatization, which is the production of recurrent and multiple medical symptoms with no known cause (Courtois, 2014; Waldinger et al., 2006).

Somatization

Somatization, physical complaints cannot be explained medically, is placed under the umbrella of somatic symptom disorders in the DSM-5 (American Psychiatric Association, 2013). Research in health care settings demonstrates that approximately 30% to 50% of patient complaints cannot be medically diagnosed (Kroenke, 2003). The newer diagnostic criteria in the DSM-5 considers that somatic complaints may or may not have with an accurate medical diagnosis. However, the symptoms are excessive and disproportionate to the medical diagnosis. (American Psychiatric Association, 2013). Furthermore, patients with somatic complaints are often problematic to treat (Fink & Rosendal, 2008.)

From the early works of Janet, Freud, and Reich to later works by Bollas, Levine and van der Kolk the belief was and is that emotions may present through physical symptoms. Attachment theory established that early relationships with caregivers create internal working models and mental representations of self and others which influence how a person understands and communicates their mental, physical, and emotional symptoms (Fink & Rosendal, 2008). Coping skills or how a person responds to perceived or actual threat determines when symptoms become problematic.

Attachment theory has been studied to assess if people with certain attachments styles are more prone to somatization. Ciechanowski, Walker, Katon & Russo (2002) found a correlation between anxious attachment style and somatization. Stuart and Noyes (1999) suggest that

insecure attachment styles are related to the adult behavior of somatization due to experiencing psychological stress.

The research regarding avoidant attachment style has mixed conclusions regarding somatization, however, does demonstrate adult behaviors that would inhibit proper utilization of health care as well as self-care. These behaviors include not seeking help, under-reporting of symptoms when they do seek care; being less likely to reach out for social support and noncompliance with medical care instructions (Tacon, Caldera, & Bell, 2001; Ciechanowski et al., 2002; Mikulincer & Shaver, 2007). Feeney and Ryan (1994) also found that anxious-ambivalent attachment style persons had more psychical complaints than individuals with secure attachment style. Attachment styles defined by attachment theory bring understanding to the behaviors mentioned above.

Attachment theory

Attachment, according to attachment theory determines the way a person connects with others, and the internal working model, a component of attachment theory, affect relationships with others including relationships with medical care providers (Corbin, 2007). John Bowlby (1969, 1973, 1980, 1982, 1988) developed Attachment theory which posits that infant's relationship, thus attachment, to the caregiver created a foundation that determined how safe the environment was and the infants developed internal working models through this attachment to the caregiver. Internal working models are representations consisting of feelings, beliefs, and expectations of self and others that determine future relationships and connection or attachment to others.

Based on Bowlby's model Mary Ainsworth and colleagues experimented with young children's attachment to their caregiver. In the experiment, the caregivers were mothers. Three attachment styles, secure, and two insecure styles, anxious-ambivalent, and avoidant were conceptualized (Ainsworth & Bell, 1970). In 1986, a fourth style, disorganized attachment in children and fearful avoidant in adults, was added (Main & Solomon, 1986). In the late 1980's, articles began to emerge regarding adult attachment (Hazan & Middleton, 1987).

Securely attached infants can utilize their caregiver as a secure base from which to depart and or return as needed for safety, soothing and nurturing. A securely attached child has internal working models of themselves as valued, competent and trusts that others will be emotionally available to them (Bretherton & Munholland, 1999). A securely attached adult can seek and accept support when faced with adversity.

Infants with avoidant attachment styles are anxious about the caregiver's responsiveness which is often rejecting, aloof or emotionally unavailable. The internal working models developed in a child with an avoidant style of attachment are ones of being devalued, not able to trust their caregiver and seeing others as rejecting and unsupportive (Bretherton & Munholland, 1999). Adults with avoidant attachment style are aloof, disengaged, mistrusting of others and have difficulty asking for support.

The parents of infants with anxious-ambivalent attachment style are not sensitive to the needs of the child, are inconsistent and when they are available are more interfering (Ainsworth et al. 1978). The internal working models possessed by the ambivalent style infant see themselves as incompetent, and others are inconsistent and unreliable (Ainsworth et al., 1978). Adults with this style may be approval seekers, get too attached to others, or they may isolate.

The fourth style, identified by Main and Solomon (1986), is disorganized /disoriented. Infants with this style cannot maintain one attachment style and show behavior that is disoriented or conflicted. The caregiver often has experienced trauma in their history and demonstrate a frightened or disoriented style of caregiving (Main, Kaplan & Cassidy, 1985). Adults with this style of attachment have difficulty with relationships.

Researchers began investigating adult attachment styles in the 1980's. Much research has emerged regarding adult attachment style, with emphasis on romantic relationships. The theory being that the initial internal representation of the emotional bond between infant and caregiver replicates in adult romantic relationships (Levine & Heller, 2011, Mikulincer & Shaver, 2007). "The attachment system is the mechanism in our brain responsible for tracking and monitoring the safety and availability of our attachment figures, (Levine & Heller, 2011, p .77). Adult attachment theory suggests the attachment style influences the ability for intimacy, trust, ability to communicate feelings and thoughts with others and the adult's perception of self-efficacy and self-worth (Levin & Heller, 2011; Mikulincer & Shaver, 2007).

Attachment theory and adult attachment theory continues to evolve and be studied. However, attachment theory is not without its critiques. From its inception psychoanalytic theory opposed attachment theory and there is still a split between the two entities (Fonagy, 2001). There also is a body of research that shows cultural has an impact on attachment theory. The indication is that attachment theory has Western values and understanding (Rothbaum, Weisz, Pott, Miyako & Moreilli, 2000). Fundamental principles of attachment theory focus on the child's ability to explore, individuate, and become autonomous which are qualities rooted in

western values that are not accepted by all cultures. Additionally, Slater (2007) discusses difficulty between attachment theory and educational psychology.

Attachment theory is expanding and evolving, but the importance of relationship is a constant foundation. Developing positive, trusting, supportive relationships are healing elements in treatment for insecure attachments (Bowlby, 1977; Shorey & Snyder, 2006; Slade, 2000,). The development of positive, trusting, supportive relationships is a component of trauma-informed care thus trauma-informed care for adults could benefit a patient with an insecure attachment style (Pietromanco et al. 2013).

Trauma-informed care

“Trauma-informed care is a strengths-based framework grounded in an understanding of and responsiveness to the impact of trauma. Trauma-informed care emphasizes physical, psychological, and emotional safety for both providers and survivors, and that creates opportunities for survivors to rebuild a sense of control and empowerment” (Hopper, Bassuk, & Olivett, 2010, p. 82). The framework of trauma-informed care requires an organizational change in policies and practices that emphasize the following: patient-centered communication, screening for trauma, safe clinical environments such as quiet waiting rooms, collaboration across disciplines, a streamlining of referrals, and a staff that is aware of their trauma histories and stress levels (Raja, et al., 2015).

Trauma-informed health care focuses on the impact of trauma and not on the treatment of trauma (Green et al., 2015), although effective trauma treatments are available. Trauma treatment is an effort to bring resolution to the trauma. Recent research shows that changes in

brain chemistry, caused by trauma, are reversible through several types of therapies (Solomon & Siegel, 2003; van der Kolk, 2014). Psychiatrists, psychologists, social workers, and other behavioral health experts provide trauma-specific treatment. Trauma-informed care is recognition and awareness of the effects of trauma, but the focus is on a health condition rather than the trauma and implemented system-wide.

When comparing adults who have not experienced trauma with adults who have experienced trauma, Courtois (2014) reported a higher incidence of mood disorders, anxiety disorders, physical health problems and addiction among the latter. Many of the symptoms of traumatic experience manifest as mental illnesses or addictions, and people may seek treatment in behavioral health settings. The mental health profession continues to evolve regarding integrating trauma-informed care into an overall approach to care (Brown et al., 2016; Muskett, 2012; SAMHSA, 2014). Additionally, some addiction treatment providers are integrating trauma-informed care into their standard practices (SAMHSA, 2014; Torchalla, Nosen, Rostam, & Allen, 2012; Brown et al., 2016).

The evidence is clear that identifying and acknowledging the patient experience of trauma is beneficial for improved outcomes (Brown et al., 2010, Brown et al., 2016; Muskett, 2012; SAMHSA, 2014; Torchalla et al., 2012). While there is a discussion about providing trauma-informed care in healthcare settings the minimal focus appears to be on children and or the super-utilizers of care. It is a compartmentalized program and not integrated as standard practice in the adult system of care (Mauder et al., 2006). Few healthcare organizations are discussing a trauma-informed approach for all adults. (Bodenheimer, 2013; Piekas et al., 2009; Thorpe, 2013).

Understanding the impact that trauma has on patients and staff assists care providers in offering a more efficient approach to care. Engagement between provider and patient creates opportunities for a collaborative relationship. Fuertes et al. (2007) suggested that treatment outcomes improve when there is a positive relationship between the patient and the care provider. However, medical care for adults has not made the transition to the inclusion of trauma-informed care (Machtinger et al., 2015; Wilson, Pence & Conradi, 2013).

Research clearly demonstrates the need for an adult, trauma-informed approach to medical care (Anda & Felitti, 2003; Brenk-Franz et al., 2015; Levine, 2010; Maunder & Hunter, 2009; Maunder et al., 2006; Puig, Englund, Simpson, & Collins, 2013; Purnell, 2010; van der Kolk, 2014). The gap in the literature shows a need for further investigation of the benefits of trauma-informed care for adults.

This two-article conceptual- theoretical dissertation draws from the theory that adult, trauma-informed health care is a best practice for all adult patients. The first article is an overview of attachment and trauma theories, the intersection of the two and health outcomes related to adverse experiences. The second article builds on the need for trauma-informed care and defines the tenets of a trauma-informed care framework. The second paper also gives examples of a trauma-informed approach through composite case vignettes.

Article One: The Intersection of Trauma Theory, Attachment Theory, and Adult Health Behaviors

Abstract

In this paper, I weave the cords of attachment and trauma theories with health outcomes. The intersection of attachment theory and trauma theory provides information on how a person understands and communicates health symptoms, and interacts in a relationship, and their mentalizing capacity. The intersection of trauma, attachment styles, and health outcomes for adults are shown to be significantly related. A trauma-informed care milieu acknowledges the impact of trauma and offers care with this understanding which may improve outcomes.

The findings of the Adverse Childhood Experience (ACE) Study are explained and contain information on the number of people affected by traumatic experiences. The study demonstrates the effects of traumatic experiences on physical and psychological health, which influence health behavior. The findings of the ACE Study demonstrate a need for adult trauma-informed medical care.

To further an understanding of the need for trauma-informed care I review trauma and attachment theories followed by information on the intersection of the two theories. Attachment styles form through early relationships and create relationship styles that continue through adulthood. Trauma impacts these relationship styles and correlates with health behaviors, access to care and healthcare management. Thus a trauma-informed approach to adult health care may help to repair ruptured attachments and foster resilience.

Following the first article is a second article focusing on trauma-informed health care with case vignettes to demonstrate a trauma-informed approach.

Overview of Trauma Theory

The American Psychiatric Association (2013) Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5) identifies trauma when a person is exposed to “actual threat or threatened death, serious injury, or sexual violence (American Psychiatric Association, 2013, p.271). Courtois (2014) defines trauma as “any event or experience (including witnessing a traumatic event) that is physically and or psychologically overwhelming to the exposed individual” (p. 5). She described various types of trauma such as impersonal trauma (e.g., an act of God), an interpersonal trauma which is deliberately caused by another, attachment trauma, betrayal trauma, secondary trauma, institutional trauma, identity trauma, community trauma, trauma from medical procedures, and cumulative lifelong continuous complex trauma.

The definitions and understandings of trauma have evolved over the centuries. Initially, traumatic experiences were related to the ravages of war. Levine (2010) identified terms related to trauma such as “soldier’s heart” and “nostalgia” from the Civil War era that “most likely describe the unending weeping and inability to stay present and go on with life” (p.33). The term “fright neurosis” was used, briefly, before World War I (Levine, 2010, p. 32). The term “shell shock” (Levine, 2010, p. 33) was the accepted term for trauma during World War I. The World War II era described the symptoms of trauma as “battle fatigue” and “war neurosis” (Levine, 2010, p. 33). By the Vietnam, War PTSD was the accepted terminology used to describe the impact of the stressors of war. Levine (2010) notes that “The Vietnam War brought the ravages of war to our living room with a new level of awareness of how trauma affects the human being” (p. 33).

All types of trauma can range from mild to horrific (Courtois, 2014; van der Kolk, 2014; Rahim, 2014). The impact of trauma varies and depends on several factors including: The age of

the individual at the time of the precipitating event, early adverse life experiences of abuse, neglect, family violence, and the number of protective devices, such as support and social networks, that are available (Bowlby, 1969; Johnson, 2006; van der Kolk et al.,2005).

According to Rahim (2014), “the association between trauma-inducing experiences and psychological distress, including post-traumatic stress disorder has been well established” (p. 548). Researchers have also shown that most trauma survivors recover from their adversity without being diagnosed with post-traumatic stress syndrome (PTSD) (Johnson, 2006).

There are various levels of impact from the trauma that van der Kolk and others suggested labeling developmental trauma disorder. Developmental trauma disorder identifies the impact of trauma on a spectrum from little too severe. Rahim (2014) states that “the model proposed by van der Kolk et al. (2005) acknowledges that exposure to trauma may result in adverse outcomes, but those outcomes will be affected by the quality of the child’s attachment to the caregivers” (p. 549). Significant debate ensued over including developmental trauma disorder in the DSM-5 but is yet to be resolved (Rahim, 2014).

Van der Kolk et al., (2005) suggested a case formulation as an alternative to a DSM diagnosis. A continuum of symptoms that range from moderate to extreme is an important part of the discussion. On one end of the continuum is complex trauma which involves severe symptoms. According to Courtois (2014), “Complex trauma encompasses multiple and repeated experiences of interpersonal trauma (usually starting in childhood), often becoming chronic. It routinely involves layers of traumatic experiences ‘on top of’ or because of attachment/relational trauma” (p. 19).

Over time, professionals began to discover PTSD symptoms in people who had not been on the battlefield. For example, individuals suffering from enduring chronic stress would manifest with similar symptoms (Freidman, Resick, & Keane, 2007). The symptoms of PTSD were not a diagnosis but rather a concept. Mental health providers began to understand that traumatic experiences effects are on a continuum from minimal impact to severe and complex symptoms.

Stress

Stress is a common denominator in all traumatic experiences. The stress reaction affects physical and mental health and triggers a physiological response. Van der Kolk (2014) explains that when the brain perceives a threat, the adrenal glands flood the body with adrenaline and cortisol, which creates the flight, fight, or freeze response. During a physical threat, an individual in a state of hyperarousal would have the energy to flee or fight the danger. Adverse childhood experiences create stress which engages the stress response and, as noted above, this state of hyperarousal remains and carries on into adulthood. Children have fewer resources and depend on adults to help them learn such skills. The internal working models developed in childhood are the framework adults use for dealing with adversity consequently the adult may need assistance in developing new internal working models to deal with adverse events.

Adults who have learned sufficient positive coping skills such as yoga, meditation, prayer, seeking social support through friends, family, spiritual center, etc. can intervene with the stress response. Adults who have not learned positive coping skills tend to seek other methods, negative coping skills. Negative coping skills include behaviors found in the ACE's study such as overeating, drinking alcohol, doing drugs and smoking cigarettes (Felitti et al., 1998).

Additionally, adults with insecure attachment may not be aware of or able to use social support and coping mechanisms to deal with states of hyperarousal.

For people with trauma histories, this state of hyperarousal remains long after the threat has expired and over-stresses the brain (van der Kolk, 2014). Therefore, the continuous production of cortisol and adrenaline, a response meant to protect, now harms the body (Bloom, 2013; Courtois & Ford, 2013; van der Kolk, 2014). Furthermore, the stress-related increase in cortisol production links to visceral obesity, hypertension, hyperlipidemia, insulin resistance, and periodontal disease activity (Klages, Weber, & Wehrbein, 2005).

ACE Study

Adverse childhood experiences as described in the ACE study (Felitti et al., 1998) and other studies demonstrate the effects of traumatic childhood experiences that manifest in adulthood. In the 1980's, Dr. Vincent Felitti and colleagues from Kaiser Permanente's (San Diego, CA), interviewed two hundred eighty-six people who had dropped out of Kaiser Permanente's obesity program. Felitti and colleagues found that most respondents had experienced sexual abuse as a child. Felitti surmised that weight gain could be a coping mechanism for depression, anxiety, and fear. Felitti presented his finds at a conference in Atlanta, Georgia and as a result met Dr. Robert Anda, a medical epidemiologist at the Centers for Disease Control. (Anda & Felitti, 2003, Felitti et al., 1998).

From that meeting, Anda and Felitti embarked on designing a study to determine if early adverse childhood experiences affected adult health beyond obesity. Anda researched childhood trauma for a year. Anda and Felitti added and changed questions for the survey until they came up with ten questions. The questions asked were about abuse, neglect, and household

dysfunction (See Appendix C for the ten questions). Over the course of two years, 1995 – 1997, 17, 337 study participants took the survey questions.

Adults who experienced trauma as children may have a variety of physical complaints such as: headaches, stomach aches, muscle aches, constipation, and may suffer from many chronic conditions such as heart disease, diabetes, liver disease, autoimmune diseases, high blood pressure, irritable bowel syndrome, fibromyalgia, chronic fatigue, and other pain syndromes (Courtois, 2014; Courtois & Ford, 2013; Levine, 2010; Rasul, Stansfeld, Hart, & Davey, 2005; Tosevski & Milovancevic, 2006; van der Kolk, 2014). Adults who have experienced trauma are at a higher risk for diseases attributed to secondary health risk factors such as smoking, the number one cause of preventable death and disease (Whetten, Reif, Whetten, & Murphy-McMillan, 2008). Additionally, research findings show that people with a history of trauma present with greater addiction rates than do people without traumatic histories. Addiction itself is a breeding ground for a host of diseases related to alcohol and drug use such as hepatitis and HIV/AIDS (Whetten et al., 2008; Dean & Fenton, 2010).

Traumatic experiences and the ensuing traumatic effects occur as a result of abuse, neglect, war, loss, disasters and other harmful emotional experiences. The impact of trauma is a costly public health issue and can manifest physically and psychologically. As previously stated, the effects of traumatic experiences are on a continuum ranging from mild to severe (van der Kolk et al., 2005; Rahim, 2014) and can include a post-traumatic stress response.

Bloom & Farringer (2011), Bloom (2013), Courtois & Gold (2009), Levine (2010), Maunder & Hunter (2008, 2009), Siegel (2001) and van der Kolk (2014), indicate that individuals who have experienced trauma are prone to triggers referred to as a post-traumatic stress response. A post-traumatic stress response is a response to the current environment that

elicits the original memory and response to a traumatic experience. For example, people with histories of trauma have reported feeling extreme stress in medical situations and during medical procedures (Courtois & Ford, 2013). The medical care may trigger a post-traumatic stress response; thus, people tend to avoid seeking the health care they need until the health issue reaches a crisis level (Courtois & Ford, 2013).

Trauma-informed health care could be an intervention mechanism for patients through the provision of care that is relational, empathetic and offers social support. While effective trauma treatment is available (Siegel, 2001), treatment is not synonymous with trauma-informed care. Creating positive relationships, as is a goal of a trauma-informed approach has a foundation in attachment theory.

Overview of Attachment Theory

John Bowlby (1907-1990) developed attachment theory Bowlby (1969, 1973, 1980, 1982). Bowlby trained in psychoanalytic theory, the accepted psychological theory of the time, under Melanie Kline, a co-founder of Object Relations Theory (ORT). ORT diverges from the Freudian concept of drive theory to a theory of relationship (Goldstein, 2001; Schauer, 1986). Bowlby (1988) described attachment as a connection between people that has a lasting psychological impact. These connections, beginning with the infant and caregiver, are the earliest bonds formed in relationship with the caregiver. Bowlby postulated that the early relationship is responsible for shaping future relationships, the ability to self-regulate, and the capacity to rebound from adversity. Bowlby (1982) described attachment as an emotional relationship that involves comfort, care, and pleasure and persists “from the cradle to the grave” (p. 208).

Bowlby, along with American developmental psychologist Mary Ainsworth, combined contemporary object relations and other theories, which “laid the foundation for one of the most researched conceptual frameworks in modern psychology” (Mikulincer & Shaver, 2007, p. 7). As a part of this foundational theory, known as attachment theory, Ainsworth conducted a seminal experiment called “the strange situation” (Zimberoff & Hartman, 2002, p. 7). In the experiment, researchers observed the interaction of children 12–24 months old with a caregiver and a stranger during a 20-minute period. During those 20 minutes, the researchers observed the child’s behavior as the caregiver and stranger entered and left the room. Compiling data from the experiment, Ainsworth and Bowlby conceptualized three attachment styles, secure, offers a buffer against the effects of stress and uncertainty (Mikulincer, Florian, & Weller, 1993), anxious-ambivalent, the child is anxious and clingy because of deep-rooted insecurity (Bowlby, 1988) and avoidant, the child learns not to trust self or others and becomes withdrawn (Ainsworth & Bell, 1970; Ciechanowski et al., 2002; Mikulincer & Shaver, 2007).

In 1986, a fourth style, disorganized attachment in children and fearful avoidant in adults was added (Main & Solomon, 1986). Disorganized attachment, characterized by chaotic and traumatic attachments are simultaneously the source of and the solution to fear (Alexander, 1993; Johnson, 2002). In the late 1980’s, articles began to emerge regarding adult attachment (Hazan & Middelton, 1987).

Empirical studies supported Bowlby's emphasis on emotional accessibility and responsiveness in all relationships plus the need for soothing interactions (Gottman, 1994). In recent years, attachment research has become “one of the broadest, most profound, and most creative lines of research in 20th-century psychology” (Cassidy & Shaver, 1999, p. 89).

Zimberoff and Hartman (2002) noted the primary tenets of attachment theory are as follows:

- the opposing principles of attachment and separation/loss
 - the individual's need for secure attachment to reach out and to explore inner and outer environments
 - the persistence of attachments throughout life
 - the negative consequences of the early disruption of the attachment bond
 - the attachment bond to caregivers that are vital to the child's mental health
- (Zimberoff & Hartman, 2002).

When relationships form that provide individuals with security, people can seek out and accept support from others to deal with conflict and stress positively. Their relationships tend to be happier, more stable, and more fulfilling (Schore, 1994). Bowlby (1973) stated, “the psychology and psychopathology of emotion are in large part the psychology and psychopathology of effectual bonds” (p. 130). Emotional accessibility and responsiveness are the cornerstones of secure bonds. Thus, emotion is also an integral principle of attachment theory and provides an understanding of the extreme emotions experienced in distressed relationships (Bowlby, 1973).

The foundation of attachment theory is the infant/child's relationship with the mother or the primary caregiver. Attachment styles develop from repeated interactions between mother or another caregiver and child. Those interactions create what attachment theory labels as “internal working models” or “schemas.” Internal working models are an essential component of the formulation of relationships in attachment theory.

Internal working models

Internal working models are a set of conscious or unconscious beliefs about self and others. These internal working models create perceptions about the relationship between self and others, the availability of support from others, and the ability to regulate emotion (Cassidy, 1994; Collins & Feeney, 2004; Marmarosh & Tasca, 2013; Thompson, 1994). These internal working models, which begin developing in infancy along with affect regulation, significantly affect and determine future relationships (Cassidy, 1994; Collins & Feeney, 2004; Fonagy, Stelle & Steel, 2002; Marmarosh & Tasca., 2013, Mikulincer & Shaver, 2007; Thompson, 1994).

The internal working models come from the experience of our first relationship and provide the foundation from which the individual perceives and copes with the external world. With the aid of internal working models, children predict the attachment figure's likely behavior which determines their responses. The type of internal model children constructs is of great consequence in their understanding of the lessons learned in early relationships and how they affect subsequent relationships. Internal working models provide insights regarding children's self-worth and whether or not others are available to protect, help, or support them (Bowlby, 1988; Collins & Feeney, 2004; Marmarosh & Tasca., 2013).

The models are termed working models because they are subject to change and develop according to changing experiences in relationships. Bowlby observed that these internal working models, established in the early stages of childhood, retain some flexibility but increasingly become resistant to change (Bowlby, 1982). Children's behavior is affected by their expectations of themselves and others. As adults, these expectations impact relationships and are relatively consistent throughout a person's lifespan (Dykas & Cassidy, 2011). Without interventions attachment styles, usually, do not change but that does not mean they cannot change. If a person

with an insecure attachment style establishes a relationship with an understanding partner who can communicate effectively, the person may move in the direction of secure attachment.

Or a person with an insecure attachment style may seek therapy. The therapeutic relationship could serve as a trusting relationship. The therapeutic process could also help the client to learn self-regulation and how to seek and accept social support. We can learn from past experiences and become a more secure person. The ability to become a more secure person depends on the severity of the attachment style combined with the person's innate personality. Insecure attachment styles may develop into more secure style with support, be it professional, casual or a committed relationship (Levine, A. & Heller, R., 2011; Roisman, Padron, Sroufe & England. 2002). Secure attachment style is the most adaptive and desirable.

Attachment styles

As previously noted there were three attachment styles, secure, avoidant, anxious-ambivalent and a fourth style, disorganized attachment in children and fearful avoidant in adults came later. Each, in turn, is described below along with the potential impact that a style has on adults receiving medical care.

Secure attachment style. In the strange experiment children with, what became labeled, secure attachment style engaged with the stranger when the caregiver was present. They became visibly upset when the caregiver left but happy to see the caregiver upon her return. Secure attachments create a haven that offers a buffer against the effects of stress and uncertainty (Mikulincer et al., 1993). This secure base allows individuals to reach out and encourages exploration and openness to new information (Mikulincer, 1995), which promotes the confidence necessary to take risks, learn, reflect, and integrate new information about self, others, and the world (Fonagy & Target, 1997). The child feels confident that the caregiver is available and

responsive to their needs and communications. Securely attached children can explore knowing they have a base to return to in times of need. The caregiver's response to the child creates a sense of security which improves future coping strategies. Therefore, secure attachment is considered the most adaptive attachment style for learning and for making use of resources in a non-threatening environment (Mikulincer & Shaver, 2007).

Secure attachment builds on the confidence that the attachment object, will be responsive when needed. Secure attachments shape future relationships, lead to a willingness to explore the world, fosters a resilience to stress, and facilitates the ability and desire to seek and maintain contact with significant others. Connection with others is an intrinsic, primary motivating factor.

According to attachment theory, one never achieves complete independence regardless of how effective or ineffective is the dependency (Bretherton & Munholland, 1999). Secure dependency compliments autonomy and helps to create self-confidence throughout the lifespan. As Mikulincer (1995) explained, having secure connections allow children a degree of autonomy and independence. Interdependency is the healthy outcome of a secure connection and will help one to regulate emotions and create meaningful relationships (Mikulincer & Shaver, 2007).

The caregiver responds to the child's needs appropriately, consistently, and promptly creating a sense of safety, trust, and support. Adults, with a secure attachment style, will likely have positive self-worth, trust others, and be able to seek and accept social support and establish intimate relationships. Securely attached individuals have a positive view of self and others and are able and willing to share their feelings with others affording them resiliency factors when faced with adversity. When needing medical attention, securely attached adults are likely to seek such care and follow treatment recommendations (Waller, Sheidt, & Hartman, 2004).

Avoidant attachment style. This mode of attachment occurs when the child decides it is fruitless to rely on others and attempts to meet certain needs without assistance from anyone else. When the caregiver is unavailable or unresponsive to the child's needs or requests, the child learns to avoid emotional connection and retreats to an inner world. There will be little emotional sharing during play, and the child seems indifferent to whether the caregiver is present or not. The caregiver does not respond to the needs of the child, discourages crying, and encourages independence. Thus, the child learns not to trust, becomes withdrawn, and adopts an internal working model that supports mistrust of self and others (Mikulincer & Shaver, 2007; Ciechanowski et al., 2002).

Bowlby (1988) described a similar behavior pattern among adults. For example, someone with the avoidant attachment style may seem self-centered and unresponsive to others' needs and may appear physically and emotionally distant in relationships. Adults with avoidant attachment styles are often loners, lack social support, and have low levels of self-worth (Mikulincer & Shaver, 2007). Additionally, they are less likely to seek medical care and when they do will tend to overreport or underreport their symptoms. Furthermore, they may avoid being completely honest about their lifestyle and medical history and usually do not follow prescribed aftercare (Ciechanowski et al., 2004; Hooper et al., 2012).

Providing medical treatment for adults characterized by avoidant attachment style is challenging for healthcare providers. Additionally, their health conditions may be exacerbated by a high incidence of mood disorders and addiction (Mauder & Hunter, 2008; Mauder et al., 2006). The frustration of medical providers with this population creates difficulties in the patient-provider relationship (Mauder et al., 2006). The patient-provider relationship is

important, especially for a person with a chronic medical condition that requires continuing care, such as diabetes (Ciechanowski et al., 2001).

Anxious-ambivalent attachment style. This attachment style involves erratic clinging accompanied by frustration and resentment. When the caregiver is inconsistent and or intrusive, the child becomes anxious and fearful, never knowing what to expect. The person characterized by this attachment style tends to over-attach because of deep-rooted insecurity (Bowlby, 1988). The caregiver is inconsistent in responding to the needs of the child and vacillates between appropriate and neglectful care. The child is unable to trust the response of the caregiver leading to a state of anxiety.

When the same child becomes an adult, this pattern is played out in relationships by being available at times and isolated at others. The person wants comfort and safety from relationships, but they are unable to receive that support. The individual characterized by the anxious-ambivalent attachment style seeks approval, may have difficulty in regulating emotions and has a low tolerance for frustration. Long wait times in waiting rooms or emergency care centers could trigger an emotional response, and the person may leave before acquiring appropriate medical care (Hunter & Maunder, 2001; Maunder & Hunter, 2008; Nolte et al., 2011; Hooper et al., 2012).

Disorganized attachment/fearful-avoidant attachment style. This attachment style was added for classification purposes to include cases that do not meet the criteria of the other three styles (Shorey & Snyder, 2006). Disorganized attachment is identified differently for children than for adults; the term “disorganized” identifies this style in children and “fearful-avoidant” in adults (Bartholomew & Horowitz, 1991). This attachment style develops from chaotic and traumatic attachments which are simultaneously the source of and the solution to fear

(Johnson, 2002; Alexander, 1993). Children with a disorganized style of attachment do not know what to expect from the primary caregiver so do not learn a consistent way to have their needs met. For some children, this behavior manifests itself as bossy and controlling, and for others, the child appears parentified, meaning they assume an adult role. It is the most unstable attachment style and is a risk factor for a host of psychopathologies (Main & Hesse, 1990; Main & Solomon, 1986).

Fearfully-attached adults possess some of the features of the avoidant and anxious attachment styles and attempt to maintain emotional distance to remain autonomous (Shaver & Mikulincer, 2007). One who adopts a fearful attachment style will appear as apathetic and detached from self and others. The individual may be abusive, insensitive, and somewhat withdrawn (Hunter & Maunder, 2001; Maunder & Hunter, 2008; Mikulincer & Shaver, 2007).

In the medical setting, fearfully-attached patients present challenges to health care providers. They project an attitude of not caring about their physical issues, may dismiss the importance of following treatment regimens and tend to be oppositional. One of the traits of this style is a feeling of victimization, so they may mistrust advice given to them by health care providers and are reluctant to disclose their symptoms honestly. Consequently, they underreport or overreport the severity of their symptoms making an accurate diagnosis difficult (Hunter & Maunder, 2001; Maunder & Hunter, 2009; Ciechanowski et al., 2001).

A knowledge of attachment styles is crucial to the understanding of adult behaviors in healthcare settings. Care of their illness may require reaching out, asking for help, social support, and assistance dealing with challenges, all difficult for an individual with insecure attachment styles. The health care provider's sensitivity to these issues improves patient interaction and, consequently, patient outcomes.

The creation of a backdrop for understanding people's response to traumatic experiences requires a consideration of the components of attachment theory, relationships with caregivers, internal working models, and emotions combined with affect regulation. The sense of security or insecurity that develops from the initial relationship experiences moves beyond the original dyad and is generalized and carried into other relationships (Bowlby, 1982; Dykas & Cassidy, 2011; Marmarosh & Tasca, 2013). When a person is around unfamiliar people and or surroundings, such as medical professionals and medical facilities, the internal working models are called upon to aid in interpretation of the new environment (Dykas & Cassidy, 2011). Consequently, interaction with medical professionals could be the cause of re-traumatization.

Other theories of development

All theories originated from Freud, either to expand upon his psychodynamic view or to refute it and create a different approach. Sigmund Freud surmised that personality development was the result of whether a child successfully overcame the inevitable conflict in each psychosexual stage of development. His theory did not include adult development or relationship influences (Hergenhahn, 1984). Bowlby's focus on the relationship, in attachment theory, was quite controversial and a clear break from Freud and psychoanalytic thinking.

Instead of the classic Freudian drive theory which believes that internal drives cause behavior. Erik Erikson developed a stage theory. Erikson believed people, from infancy into adulthood progressed through a series of 8 stages. Each stage built upon the other but does not need completion before moving to the other. He theorized that cultural and environmental context was part of influence in the stages and that a person could alter their personality Crain (2010). Erikson's theory begins to acknowledge the influence of the environment on

development as does Attachment theory. Attachment theory put a stronger emphasis on the environment regarding the primary caregiver as most important.

Donald Winnicott developed object relations theory regarding mental representations influenced by thoughts and feelings (Levy & Blatt 1999). The theory suggests that an adverse experience or experiences from caregivers contribute to unhealthy internal processes and interpersonal relationships. The personality can change as circumstances influence the mental representations (Greenberg & Mitchell, 1983). Object relations theory is similar to attachment theory in that both theorize that relationships and internal representations set the framework for the developing personality.

Treatment modalities

It bears repeating that a trauma-informed approach does not provide trauma therapy. A trauma-informed organization has staff that knows of the counseling resources available, in their geographic area, and aid the patient in making an appointment and give the patient directions to the treatment facility. Unless a person has specific training in providing trauma therapy, it would be detrimental to the patient to provide such treatment. For best practice knowledge of therapists certified in trauma treatment would be ideal. However not all areas have therapists with this credential, so it is important to know of therapists who have training in treating trauma. It also would not be beneficial for the patient if a trauma-informed provider suggested a modality, such as EMDR and it was not available in the patient's geographic area.

The modalities for treating adults with the various levels of and symptoms related to experiencing trauma, the most severe PTSD, is a dissertation unto itself. There is ongoing development of treatment approaches to treating trauma along the continuum from depression and anxiety to Post-Traumatic Stress Disorder. Debate exists over the most effective treatment

for trauma, but Cognitive Behavioral Therapy is the most researched and has claims of being the most effective (Bisson & Andrew, 2007; Bisson et al., 2007).

Other modalities show promise. Experiential methods are emerging to take the lead in effectiveness for the treatment of trauma (Carnabucchi, 2014; Hudgins & Toscani, 2010; Wylie, 2004). Experiential methods include many of the body psychotherapy techniques and use of the creative arts, like art, dance, movement, and drama. However, these findings are fraught with the mainstream therapy arguing the validity of such claims.

The critically important point is that a trauma-informed system of care needs to know the modalities available in their geographic area. Collaboration is an element of a trauma-informed system thus developing a relationship with the trauma treatment providers is essential.

Following is a summary of several therapies utilized to deal with the continuum and severity of symptoms from experiencing trauma.

A more recent technique, ART (Accelerated Resolution Therapy), gleans components of several effective evidence-based modalities for treating trauma such as EMDR (Eye Movement Desensitization & Reprocessing) and CBT (Cognitive Behavioral Therapy). ART is a 1-5 session method of specific interventions utilized to change the way negative images store in the brain. The limited research, to date, shows promise for ART (Kip et al. 2014; Kip et al. 2012),

Another therapy is DBT (Dialectical Behavior Therapy) created by Marsha Linehan using strategies from cognitive behavioral therapy and mindfulness. Solution focused therapy concentrates on the strengths and expectations related to the client's issues. The therapist does not need to know the origin of the problem and is usually brief in number of sessions needed for change to take place (Dolan, 2000; Pederson, 2012). EMDR, developed in the late 1980's and early 1990 engages the brain's adaptive information processing mechanisms to change response

to a traumatic event (Shapiro & Laliotis, 2010). These therapies are shorter in number of treatment sessions and available in suburban areas.

Bioenergetics, developed by Alexander Lowen and John Perrikos, is a body psychotherapy that originates from Wilhelm Reich's belief that the body stores memories. The bioenergetic therapist training includes learning techniques to release memories from the body and process the emotions (Lowen, A. 1959). John Perrikos created Core Energetics from Bioenergetics and added a spiritual component to the bioenergetic methods. Both bioenergetics and core energetics are costly and require years of therapy and primarily available in metropolitan areas (Pierrakos, J. 1986).

While this list is not exhaustive, several other methods are used to treat the effects of trauma. Those methods are EFT (Emotional Freedom Technique), Gestalt Therapy, NLP (Neuro-linguistic Programming), Somatic Imaging, Art Therapy, Dance and Movement Therapy and Psychodrama. To describe each methods in detail would be a paper unto itself and, not the focus of this article.

Intersection of Attachment and Trauma Theories

Causes of disruptions in attachment patterns are life transitions such as birth, adolescence, mid-life crises, menopause, illness, old age, infirmity, and death. Situational crises include divorce, marriage, loss of employment, or relocation (Courtois, 2014). Some disruptions in attachment patterns can be traumatic such as the death of a parent, an emotionally unavailable primary caregiver due to addiction or mental illness, physical or sexual abuse or neglect, and may exacerbate a future experience of a traumatic event. Examples of future tragic events are divorce, rape, or physical abuse from a partner. Traumatic events threaten the individual, thereby creating intense emotions and a desire for comfort and connection.

Developmentally, children raised without trauma learn separation, appropriate individuation, and autonomy. The traits of separation, individuation, and autonomy are needed for resiliency to overcome adversity. Resiliency is the ability to bounce back from negative events. Resiliency can be taught, learned, developed (Ong, Bisconti & Kimberly, 2006; Tugade, Fredrickson & Barrett, 2004). When adverse occurrences happen in the child's life, without a secure base, attachment theory explains the resultant traumatic effects from deprivation, loss, rejection, and abandonment by the caregiver.

McFarlane & van der Kolk (1996) describe attachment to others as our "primary defense against feelings of helplessness and meaninglessness" (p. 24). While a positive connection can aid in the self-regulation of emotions, the loss of connection can result in depression, only one of many potential outcomes that could complicate health care. Detachment is expressed as angry protests, clinging behavior, depression, and despair (Bowlby, 1969, 1973, 1980). If the attachment is threatened but not yet severed, the attachment system may become hyperactivated as evidenced by heightened attempts to connect, such as clinging or aggression. If continuously repeated, these behaviors become habitual styles of engagement, which result in the disorganized child and the fearful-avoidant adult (Bartholomew & Horowitz, 1991).

Attachment theory provides a theoretical basis for understanding and clarifying the manifestations of individual differences in adults' ability to perceive social support, even when available. (Muller, Gragtmans, & Baker, 2008). Social support is having a friend, family member or other that the person trusts cares about them. With ruptured attachments, there may be no social support available. Cohen and Lemay (2007) discuss the importance of social integration into a variety of social relationships. Social support is an important element in chronic disease management and is a component of chronic medical care (Brandon & Feist,

2010). Furthermore, Hunter and Maunder (2001) state that “the attachment theory provides a unique, simple and, a pragmatically useful model for understanding the ways that individuals can feel and react when stressed by illness, and how the professional may help manage that distress” (p. 177).

A secure attachment style helps one cope with adverse events. A person with a secure attachment style will reach out and ask for social support and can accept support. This individual, as an adult, is trustful of others and comfortable sharing feelings. Adults with one of the other attachment styles tend to isolate themselves and not seek social support, to some extent, depending on the attachment style. They are unwilling or unable to share feelings with others due to a lack of trust and beliefs about their unworthiness. Traumatic experiences can disturb the development of healthy attachments and may create a cycle of trauma (Muller et al., 2008; Muller & Rosenkranz, 2009; Muller, Sicoli, & Lemieux 2000).

Curative factors that help develop secure attachments are trust and safety, core values of a trauma-informed approach. Secure attachments have resiliency skills needed to minimize the effects of trauma and intervene with the potentially adverse health issues. The primary critical element for medical care providers is awareness of trauma and the effects of trauma on health and health behaviors. Science can now demonstrate the effects of chronic stress and trauma on the brain and body and informs practice to heal the effects of trauma.

Science and trauma

Science has identified the effects on the body systems from adverse experiences and the stress response. With the advent of modern scientific measures some changes, in the brain and body chemistry, can be measured and accurately identified. PET (Positron Emission

Tomography), an imaging test that helps determine how one's tissues and organs are functioning) scans can verify the changes in brain chemistry that occur due to trauma.

Neuroscientists have shown that the effects of trauma can be passed on to offspring (van der Kolk, 2014). Changes in brain chemistry, caused by a traumatic event or repeated traumatic stress modify the chemical composition of the body, which is then passed on to offspring. These offspring often exhibit symptoms of trauma without ever experiencing a traumatic event (van der Kolk et al., 2005).

Neuroplasticity is an area of research that may help adults who have experienced traumatic events in childhood. The rapidly growing field of neuroplasticity is lending support to Bowlby's idea that attachment styles may adapt with proper interventions, allowing individuals to transform from avoidant or ambivalent attachment styles to a more secure attachment style (Kita, 2009). Preen (2011) suggests new relational experiences can change neural pathways, thus altering the internal working model. Radley et al. (2011) state, "Adaption in the face of stress is an important priority for all biological systems" (p. 481). Perceived threats in an individual cause an activation of the sympathetic nervous system that is like that of a real threat. The arousal of the sympathetic nervous system signals our body chemistry in ways which may be beneficial. However, chronic stress reactions can be potentially harmful to our bodies (Appleton, McCormick, Loucks, Buka, Koenen & Kubzansky, 2012; Bloom, 2013; Courtois, 2013; Levine, 2010; van der Kolk, 2014).

Health behaviors and health effects through the lens of trauma and attachment theories.

As identified by the ACE study, 64% of the over 17,000 adults in the study had one adverse experience in childhood. Of that 64%, eighty-seven percent had two or more adverse experiences. The more ACE's one experienced, the greater risk of developing a chronic disease

(Felitti et al., 1998). Those chronic diseases include high blood pressure, heart disease, and diabetes, addictions and mental illness (Anda & Felitti 2003; Appleton et al., 2012; Ciechanowski et al., 2001; Ciechanowski et al., 2004; McWilliams & Bailey, 2010; Maunder & Hunter, 2008; Meredith et al., 2006; Pietromonaco et al., 2013; Puig et al., 2013). Raja et al. (2015) state that many traumatic events involve a violation of a person's body, which may have adverse effects on physical and mental health as well as attitudes towards medical care. Medical care from assessment to treatment can be traumatic or may re-traumatize the patient.

Medical exams and treatment often involve examination and touching of the patient's body such as pelvic exams, breast exams, dental care or cervical cancer screening (Raja et al., 2015). Getting close to and touching the body could remind the patient of being raped, hit, held down against their will, being scared while watching something awful happening to a parent, sibling or friend. It is hard to predict what, exactly, could be the trigger. It is vital to know that a patient has a history of trauma, a medical exam and or treatment is fertile ground for retraumatization. The additional stress of medical procedures combined with a history of adverse experiences may overwhelm the person's ability to cope and cause a traumatic response.

Sometimes trauma survivors can be high utilizers of office visits and emergency care or they often avoid preventive measures including dental care. Healthcare visits can be anxiety-provoking. Patients who do not trust the system are reluctant to disclose relevant medical history or a history of trauma. Partial disclosure of health information could prevent accurate diagnosis and treatment. An example is a patient does not inform the provider about their alcoholism. The provider prescribes Wellbutrin for his symptoms of depression. However, Wellbutrin is contraindicated for people with a history of alcoholism due to potential seizures. In

this example, the man had seizures, lost his driver's license due to seizures. When I asked if he told the Dr. he had a history of alcoholism he said: “No, why should I, that’s my business.” I explained why, he went back to the provider, gave the Dr. the information who immediately changed his meds, no more seizures, but it took him a long time to get his driver’s license back.

The intersection of attachment and trauma theories provides information on how a person understands and communicates health symptoms and how they interact in a relationship.

Maunder & Hunter (2009) stated that a person’s attachment style could affect physical health by impacting the intensity of their symptoms, behavior, stress response, care provider-patient relationships, healthcare utilization (Meredith et al., 2006; Urry et al. 2006; Verhaak, Heijmans, Peters & Rijken, 2005; Waller, Scheidt & Hartman, 2004;), and disability levels (McWilliams & Bailey, 2010). According to van der Kolk et al., (2005), “Victims of prolonged interpersonal trauma, particularly trauma early in the life cycle, had a high incidence of problems with (a) regulation of affect and impulses, (b) memory and attention, (c) self-perception, (d) interpersonal relations, (e) somatization, and (f) systems of meaning” (p. 389).

McWilliams & Bailey (2010), delineated three mechanisms that could lead those who have adopted a non-secure attachment style to experience elevated levels of disease: (a) an increase in susceptibility to stress, (b) a greater tendency to use external methods of self-regulation, such as substance abuse and food consumption, and (c) the underuse of social support. The ACE study and others support that stress significantly contributes to disorders of the mind and body. The severity and frequency of the stress and coping mechanisms, depending on the attachment style, impact outcomes related to health and health behaviors.

It is important for healthcare providers to have knowledge regarding the impact of trauma on attachment style so they can provide an understanding approach, trauma-informed care, to

their scope of practice. Recognizing the intersection of attachment and trauma theories establishes a framework for understanding adult health behaviors and barriers to accessing healthcare and healthcare management. Healthcare management requires a degree of self-care which may be lacking in people who have experienced trauma (Courtois & Ford, 2013).

The super-utilizers are a group of patients who cannot provide self-care, have frequent and preventable hospital admissions or emergency room visits, and present with multiple chronic conditions including one or more mental health or substance use diagnoses. Some are homeless, experience social isolation, live in sub-standard housing in blighted neighborhoods, and lack the finances to pay for medications, co-pays if they are insured, or treatment if they are not. Super-utilizers also impose a financial burden on healthcare systems. The super-utilizers are an identified population that needs intervention. Trauma-informed medical care for adults is a viable intervention for this group.

However not every patient who would benefit from a trauma-informed approach is a super-utilizer. Nor has a correlation been proven between super-utilizers and patients who somatize, experience physical symptoms of illness without identifiable medical cause. Trauma-informed medical care for adults could improve the lives of all patients and enhance primary care treatment practices. (Pfundner, Wier & Steiner, 2010). Trauma-informed care is a suggested strategy to improve the quality of care and health outcomes for those who have a history of trauma (Ko et al., 2008; Raja et al., 2015; SAMSHA, 2014) and is the subject of the next article.

Conclusion

This article weaves together attachment theory, trauma theory, adult health, and health behaviors. The seminal work of the ACE Study solidified the importance of acknowledging traumatic experiences. The ACE study demonstrated the long-term health effects for adults who

experienced adverse events as children and found that 64% of the over 17,000 adults in the study had one adverse experience in childhood. Of that 64%, eighty-seven percent had two or more adverse experiences. The more ACE's one experienced, the greater risk of developing a chronic disease (Felitti et al., 1998). Those chronic diseases include high blood pressure, heart disease, and diabetes, addictions and mental illness (Anda & Felitti 2003; Appleton et al., 2012; Ciechanowski et al., 2001; Ciechanowski et al., 2004; McWilliams & Bailey, 2010; Maunder & Hunter, 2008; Meredith et al., 2006; Pietromonaco et al., 2013; Puig et al., 2013).

The toll on survivors physically, emotionally, psychologically, and spiritually can be devastating. As pointed out in this article, a traumatic experience can be a one-time event or repetitive adverse events. The impact on the victim can be minimal to meeting criteria for Post-Traumatic Stress Disorder. Evidenced-based trauma treatments are available, and trauma treatment is different from trauma-informed care. Fostering healthy relationships aids in reparing rutured attachments.

Attachment is the emotional bond or connection between a caregiver and child that, ideally, creates a sense of safety and security. The ideal relationship creates a secure attachment style. A traumatic experience or experiences disrupt the attachment bond and create internal working models that adversely impact health behaviors, access to medical care, and the ability to follow prescribed treatment recommendations. The child does not develop into adulthood with the safety and security needed to explore and trust the world. The lack of feeling safe and trusting leads to an insecure style of attachment. The insecure style of attachment affects adult relationships including a relationship with self and with medical care providers.

Research shows that traumatic experiences correlate with the insecure attachment styles of avoidant, anxious-ambivalent and disorganized. Insecure attachment styles negatively

influence health and health behavior. Trauma-informed care, the recognition, and acknowledgment of trauma and the impact of that traumatic experience on an individual, can help to repair insecure attachment styles.

Trauma-informed care models are available. The mental health and addiction treatment milieus are moving in the direction of integrating trauma-informed care as a standard of practice, and isolated trauma-informed programs are available in healthcare systems for children and super-utilizers. There is little evidence to demonstrate that health systems are integrating a trauma-informed approach with all adults.

While current evidence suggests that weaving attachment theory, trauma theory and adult health and adult health behaviors together would warrant a trauma-informed intervention, further research is needed to address the gap in the literature. The benefits needing ongoing investigation are: does a trauma-informed health care system for adults increase access to health care, increase seeking care earlier in the disease process, increase patient compliance and does a trauma-informed system of care reduce emergency room visits, reduce hospital stays and lengths of stay. Research also needs to investigate the benefits to the organization, financially and the well-being of staff.

In the following article, I give a synopsis of trauma and attachment theories, the connection between trauma and attachment theories and suggest trauma-informed care for adults is needed. Case vignettes demonstrate the opportunity to utilize trauma-informed care principles in an adult health care setting.

Article Two: Trauma-Informed Care with Case Vignettes

Abstract

Trauma-informed care increases awareness regarding the prevalence of adverse childhood experiences, trauma, and the impact traumatic experiences can have on adult health. There is a significant correlation between experiencing traumatic events and increased risk of chronic illness, mental health issues, substance abuse and early death. Because of the findings of the ACE (Adverse Childhood Experience) study, the pervasiveness of trauma and the effects on health became known. Service systems were compelled to respond to the new substantiated information about trauma and health. Part of this response, beginning in the 1990's, is trauma-informed care.

Trauma-informed care is an organizational structure utilized to deliver health care that is responsive to the needs of patients related to the effects of adverse experiences. The underpinnings of a trauma-informed approach are safety, trustworthiness, collaboration, choice, and empowerment. Providing healthcare staff with information regarding the impact of trauma, combined with teaching the core values of a trauma-informed approach, facilitates support and effective interactions with patients, consequently better outcomes.

Trauma-informed care integration within the mental health and substance abuse profession is growing. Communities and schools are moving toward a trauma-informed model to providing services and improving communities. However, the general adult medical care system is reluctant to adopt a trauma-informed model as best practice.

Emphasizing the specific aim of the article, the need for trauma-informed adult medical care, I describe the guiding principles of trauma-informed care with three composite case

histories. as examples. Trauma and attachment theory are woven together to demonstrate the effects of disrupted attachments, due to traumatic experiences, on adult health.

Trauma

Trauma-informed care discussion includes the need for an understanding of trauma.

Courtois (2014) defines trauma as “any event or experience (including witnessing a traumatic event) that is physically and or psychologically overwhelming to the exposed individual” (p. 5).

She described various types of trauma such as impersonal trauma (e.g., an act of God), an interpersonal trauma which is deliberately caused by another, attachment trauma, betrayal trauma, secondary trauma, institutional trauma, identity trauma, community trauma, trauma from medical procedures, and cumulative lifelong continuous complex trauma (Courtois, 2014). All types of trauma range from mild to horrific (Courtois, 2014; van der Kolk, 2014; Rahim, 2014). The Adverse Childhood Experiences Study (ACE) correlated the number of adverse experiences with adult health issues and concluded. The more experiences, the greater negative impact on health (Felitti et al., 1998). Adverse childhood experiences as described in the ACE study (Felitti et al., 1998) demonstrate the effects of traumatic childhood experiences that manifest in adulthood.

ACE Study

In the 1980's Kaiser Permanente's (San Diego, CA), Department of Internal Medicine, head, Dr. Vincent Felitti joined with Dr. Robert Anda, a medical epidemiologist. Together, they launched an extensive exploration of the relationship between trauma, called “adverse childhood experiences and health outcomes in adulthood” (Anda & Felitti, 2003). Between 1995 and 1997

17, 337 study participants took the survey questions (Appendix C). The questions asked were about abuse, neglect, and household dysfunction.

The ACE study demonstrated the long-term health effects for adults who experienced adverse events as children and found that 64% of the over 17,000 adults in the study had one adverse experience in childhood. Of that 64%, eighty-seven percent had two or more adverse experiences. The more ACE's experienced, the greater risk of developing a chronic disease (Felitti et al., 1998).

Adults who experienced trauma as children have a variety of physical complaints such as: headaches, stomach aches, muscle aches, constipation, and may suffer from many chronic conditions such as heart disease, diabetes, liver disease, autoimmune diseases, high blood pressure, irritable bowel syndrome, fibromyalgia, chronic fatigue, and other pain syndromes (Courtois, 2014; Courtois & Ford, 2013; Levine, 2010; Rasul, Stansfeld, Hart, & Davey, 2005; Tosevski & Milovancevic, 2006; van der Kolk, 2014). Adults who have experienced trauma are at a higher risk for other diseases attributed to secondary health risk factors such as smoking, the number one cause of preventable death and disease (Whetten, Reif, Whetten, & Murphy-McMillan, 2008). Research findings show that people with a history of trauma also present with greater addiction rates than do people without traumatic histories. Addiction itself is a breeding ground for a host of diseases related to alcohol and drug use such as hepatitis and HIV/AIDS (Dean & Fenton, 2010; Whetten et al., 2008).

Traumatic experiences and the ensuing traumatic effects occur as a result of abuse, neglect, war, loss, disasters and other harmful emotional experiences. The impact of trauma is a costly public health issue and can manifest physically and psychologically. These effects of

traumatic experiences are on a continuum ranging from mild to severe (van der Kolk, Roth, Pelcovitz, & Sunday, 2005; Rahim, 2014) and can include a post-traumatic stress response.

Bloom & Farragher (2011), Bloom (2013), Courtois & Gold (2009), Levine (2010), Maunder & Hunter (2008, 2009), Siegel (2001) and van der Kolk (2014), indicate that individuals who have experienced trauma are prone to triggers referred to as a post-traumatic stress response which is a response to the current environment that elicits the original memory and response to a traumatic experience. For example, people with histories of trauma have reported feeling extreme stress in medical situations and during medical procedures (Courtois & Ford, 2013). The medical care may trigger a post-traumatic stress response; thus, people tend to avoid seeking the health care they need until the health issue reaches a crisis level (Courtois & Ford, 2013).

The impact of trauma varies (Bowlby, 1969; Johnson, 2006; van der Kolk et al., 2005). According to Rahim (2014), “the association between trauma-inducing experiences and psychological distress, including post-traumatic stress disorder has been well established” (p. 548). Researchers have also shown that most trauma survivors recover from their adversity without being diagnosed with post-traumatic stress syndrome (PTSD) (Johnson, 2006). The various levels of impact from trauma were proposed and identified, by van der Kolk and others, as developmental trauma disorder. Developmental trauma disorder identifies the impact of trauma on a spectrum from little too severe.

On one end of the continuum are minimal symptoms to minor anxiety, minor depression, little interference from symptoms with daily living to debilitating post-traumatic stress syndrome. PTSD is also on a continuum of the severity of symptoms. The DSM-5 did not include developmental trauma disorder. Rahim (2014) states that “the model proposed by van

der Kolk et al. (2005) acknowledges that exposure to trauma may result in adverse outcomes, but those outcomes will be affected by the quality of the child's attachment to the caregivers" (p. 549).

Attachment Theory

John Bowlby (1907-1990), developed attachment theory Bowlby (1969, 1973, 1980,1982). Bowlby (1988) described attachment as a connection, between people, that has a lasting psychological impact. These connections, beginning with the infant and caregiver, are the earliest bonds formed in relationship with the caregiver. Bowlby postulated that the early relationship is responsible for shaping future relationships, the ability to self-regulate, and the capacity to rebound from adversity. Bowlby (1982) described attachment as an emotional relationship that involves comfort, care, and pleasure and persists "from the cradle to the grave" (p. 208). Bowlby, along with American developmental psychologist Mary Ainsworth, combined object relations and other theories, which "laid the foundation for one of the most researched conceptual frameworks in modern psychology" (Mikuliner & Shaver, 2007, p. 7).

Ainsworth conducted a seminal experiment called "the strange situation" (Zimberoff & Hartman, 2002, p. 7). In the experiment, Ainsworth and colleagues observed the interaction of children 12–24 months old with a caregiver and a stranger during a 20-minute period. During those 20 minutes, the researchers observed the child's behavior as the caregiver and stranger entered and left the room. Compiling data from the experiment, Ainsworth and Bowlby conceptualized three attachment styles, secure, offers a buffer against the effects of stress and uncertainty (Mikulincer, Florian, & Weller, 1993), anxious-ambivalent, the child is anxious and over-attaches because of deep-rooted insecurity (Bowlby, 1988) and avoidant, the child learns

not to trust self or others and becomes withdrawn (Mikulincer & Shaver, 2007; Ciechanowski, Walker, Katon & Russo, 2002; Ainsworth & Bell, 1970).

In 1986, a fourth style, disorganized attachment in children and fearful avoidant in adults was added (Main & Solomon, 1986). Disorganized attachment characterized by chaotic and traumatic attachments which are simultaneously the source of and the solution to fear (Johnson, 2002; Alexander, 1993). In the late 1980's, articles began to emerge regarding adult attachment (Hazan & Middelton, 1987). The later research studied attachment styles relating to adult health and health behaviors (Alexander, 1993; Brenk-Franz et al., 2015; Bretherton & Munholland, 1999).

Attachment styles develop from repeated interactions between mother or another caregiver and child. Those interactions create what attachment theory labels as internal working models. Internal working models are an essential component of the formulation of relationships in attachment theory. Internal working models are a set of conscious or unconscious beliefs about self and others. These internal working models create perceptions about the relationship between self and others, the availability of support from others, and the ability to regulate emotion (Cassidy, 1994; Collins & Feeney, 2004; Marmarosh & Tasca, 2013; Thompson, 1994). Internal working models, which begin developing in infancy, along with affect regulation, significantly affect and determine future relationships (Cassidy, 1994; Collins & Feeney, 2004; Marmarosh & Tasca, 2013; Mikulincer & Shaver, 2007; Thompson, 1994).

Intersection of trauma and attachment theories

The intersection of attachment and trauma theories provides information on how a person understands and communicates health symptoms and how they interact in a relationship.

Attachment is the emotional bond or connection between a caregiver and child that, ideally, will create a sense of safety and security. A traumatic experience or experiences disrupt the attachment bond when the ideal is not actualized. Consequently, the child does not develop into adulthood with the safety and security needed to explore and trust the world. The lack of feeling safe and trusting leads to an insecure style of attachment. The insecure style of attachment affects adult relationships including relationships with medical care providers.

The traumatic experience can be a one-time event or an ongoing series of events. A few examples of ongoing stress are; economic deprivation, living in a violent neighborhood or having a primary caregiver who suffers from alcoholism or mental illness (Courtois & Ford, 2013; Collins & Feeney, 2004; Hong, Adams & Lily, 2012). The possibilities for living with chronic stress is not an exhaustive list but merely to mention a few examples of circumstances that cause chronic stress. Chronic stress is traumatic and disrupts the attachment bond with the caregiver creating an environment for insecure attachment styles to develop.

Research shows that traumatic experiences correlate with the attachment styles of avoidant, anxious-ambivalent and disorganized influence health and health behavior. Traumatic experiences have the potential to disrupt attachment and create internal working models that adversely impact health behaviors, access to medical care, and the ability to follow prescribed treatment recommendations. Prior researchers have addressed the impact that trauma has on relationships affecting attachment, health, and health-related behaviors. For instance, Felitti et al. (1998), Levine (2010) and Waldinger et al., (2006) agree that adults with histories of adverse childhood experiences suffer from health issues more than adults without adverse childhood experiences.

Numerous researchers report that adults who have histories of adverse childhood experiences have difficulty accessing medical care (Hunter & Maunder, 2001; Purnell, 2010; Thompson & Ciechanowski, 2003; Waldinger et al., 2006). “Trauma violates our belief that the world is a safe place and that people can be trusted” (Brown, Harris & Falot, 2016, p. 387). Recognizing that trust and safety are primary issues for people who have experienced trauma the values of safety and trustworthiness in a trauma-informed approach could mitigate the internal working models that support believing the world is not safe and no one can be trusted. The development of positive, trusting, supportive relationships is a component of trauma-informed care thus trauma-informed care for adults has a restorative potential for patients with an insecure attachment style (Pietromanco, Uchino, & Schetter, 2013).

Trauma-Informed Care

“Trauma-informed care is a strengths-based framework grounded in an understanding of and responsiveness to the impact of trauma. A trauma-informed approach emphasizes physical, psychological, and emotional safety for both providers and survivors, and creates opportunities for survivors of trauma to rebuild a sense of control and empowerment (Hooper, Tomek & Newman, 2012, p. 82). Trauma-informed care acknowledges the impact of trauma and provides care with an awareness of those effects and teaches staff a basic understanding of how traumatic events shape behaviors throughout the lifespan (Bloom & Farrigher, 2013; Courtois & Gold, 2009). Trauma-informed organizations provide services based on an understanding of the “vulnerabilities or triggers of trauma survivors that traditional service delivery approaches may exacerbate so services and programs can be more supportive and avoid re-traumatization”

(Wilson, Pence & Conradi, 2013, p. 6). Facilitation of resiliency and recovery are foundational principles of a trauma-informed approach.

Approximately 70% of patients that enter health care facilities suffer from psychosocial issues (Robinson & Reiter, 2007). Health care providers may not have the time or expertise needed to cope with patients who present with difficult behavior. Challenging behaviors include resistance to care such as using their cell phone during the intake process, interrupting when the care provider is talking, complaining about the care, oppositional as in refusing to answer appropriate medical questions, refusing to follow instructions for the exam, like open your mouth or say “ah”, or exhibit symptoms related to mental health disorders such as excessive anxiety. A growing body of evidence supports trauma-informed care as a possible solution to handling difficult behaviors (Bloom, 2013; Bloom & Farragher, 2011; Bloom & Farragher, 2013; Cocozza et al., 2005; Courtois & Gold, 2009; Domino, Morrissey, Cheung, Huntington, Larson & Russell., 2005; Fallot & Harris, 2009; Fuertes et al., 2007; Green et al., 2015; Knight, 2015; Machtinger, et al., 2015; Morrissey et al., 2005; Raja, Hasain, Hoersch, Grove-yin, & Rajaopalan., 2015; SAMSHA, 2014; Wilson et al., 2013).

The National Center for Trauma-Informed Care, established in 2005 by the Substance Abuse and Mental Health Services Administration (SAMHSA), “suggested that every part of an organization seeking to be trauma-informed—its organizational structure, its management systems, and its service delivery—be assessed and potentially modified to include a basic understanding of how trauma affects the life of an individual seeking services” (Wilson et al., 2013, p. 6). Trauma-informed care is a suggested strategy to improve the quality of care and health outcomes for those who have a history of trauma (Ko et al., 2008; Raja et al., 2015; SAMSHA, 2014). Trauma-informed care is not the treatment of trauma.

Trauma-informed care may seem basic and similar to relational concepts, theories about how and why people do or don't relate to others, particularly for those trained in social work. However, there are fundamental differences. One difference is trauma-informed care is more than the training of certain staff in the core values of a trauma-informed foundation. The entire organization becomes aware of the need to recognize trauma and the impact of trauma. A second difference is that in a trauma-informed model there is significant emphasis on awareness of employees that are trauma survivors and how that impacts the relationship with other employees as well as patients. (Bloom, 2013; Bloom & Farragher, 2011; Bloom & Farragher, 2013; Wilson et al., 2013). It is also important to note that a trauma-informed approach is a principle of care rather than a program. A trauma-informed ideology is beneficial for all and particularly helpful for those with adverse childhood experiences. A couple of examples, forthcoming, show the principles of trauma-informed care in action albeit not knowing if the patient has a trauma history.

As suggested by Fallot and Harris (2009), trauma-informed care builds upon five core values, safety, trustworthiness, choice, collaboration, and empowerment. Following is a synopsis of each core value. The value of safety refers to no harm for all concerned, physically, and psychologically (Fallot & Harris, 2009; SAMHSA, 2014, Wilson et al., 2013). All concerned in the matter includes the person receiving care, family member or support individual of the person receiving care and the care provider. Survivors of trauma experienced harm instead of safety so creating a safe space and providing respectful treatment is restorative.

Safety covers things like well lit parking lots, doors either locked or unlocked depending on the circumstances. An example of the value of safety regarding locked doors is a hospital ending visitation at 8:00 P.M. and after that entrance doors are locked, and admittance to the

hospital is through the emergency room where security, as well, as medical staff is available. Safety includes unobstructed hallways, noise control, precise directions as to where to go for what service, and easy access to bathrooms.

A short example of safety for all concerned is an emergency room nurse practitioner (NP) had a patient demanding narcotics for a toothache. After examination, the patient was given directions to take a combination of Tylenol and ibuprofen, explained that the combination, in that dose, could be as effective as a narcotic. The NP also prescribed an antibiotic for possible dental infection with a referral to a dentist. The patient expressed his unhappiness with the care, loudly, calling the NP obscenities and demanding to be given narcotics or see a different Dr. who would give him what he wanted. The NP explained while she would be happy to get another provider he would have to wait until one was available. At that point, he jumped off the bed and got quite close to the nurse, making louder demands for narcotics. Security arrived and, after, attempts to calm the patient down failed, security escorted him off the hospital property. The safety of the patient was a concern as well as the safety of the NP and the safety of the other patients in the emergency room. This NP and a few others in the emergency room department were trained in a trauma-informed approach even though the organization is not trauma-informed.

Interventions employed from a trauma-informed model, in the example above, were speaking in a calm voice, speaking clearly and consistently giving the same message, validation that the patient is in pain, explaining the rationale for not giving narcotics with assurance that the medications prescribed alleviate pain and antibiotics treat the underlying cause of the pain, a dental infection. The NP gave a referral to a dentist. A none trauma-informed response could have escalated into the patient being physically restrained, possibly charged with disorderly conduct and or threatening a person.

The value of trustworthiness concerns the understanding of expectations, providing clarity about procedures and costs of care, basically who will be doing what, when, and how much will it cost. An example is a person, who has Medicare insurance is in the emergency room, not well enough to go home, but did not have criteria to substantiate an inpatient admission. The attending physician told the patient an admitting diagnosis has to wait until test results are back. If admitted before meeting Medicare criteria for admission Medicare does not pay for the hospitalization. Honesty facilitates trust, even when the honesty may be a stressful message. Building trust is an element of a trauma-informed approach. When the patient trusts the care provider, it increases the likelihood of compliance with treatment recommendations (Brenk-Franz et al., 2015; Brown et al., 2016; Ciechanowski et al., 2004; Ciechanowski et al., 2002; Green et al., 2015).

Establishing and maintaining boundaries relates to confidentiality and ethical issues and are part of trustworthiness. A couple of ethical issues as examples are seeing a patient at the local grocery store and not saying hello unless they speak first or not giving the patient access to a care provider's social media page. Boundaries also pertain to appropriate touch. People who have histories of trauma had trust violated and often have difficulty trusting others. Establishing trustworthiness creates an opportunity for healing and for honest dialog between the patient, care provider and patient's family, when available.

Choice is another core value of a trauma-informed system of care. A trauma survivor had choice taken away from them so showing respect by offering choice is reparative. Choice includes modifying services, when possible, to enhance the patient experience of choice. Some examples of offering choice would be appointment times, the location of service, maybe home care as an option, aligning with the patient's goals for improved health and methods to reach that

goal. Giving the patient clear information regarding their rights and responsibilities enhances choice (Fallot & Harris, 2009; Wilson et al., 2013, SAMHSA, 2014).

An example of patient choice is regarding cultural beliefs in addition to patients right to choose. In one hospital system in a rural area, a clinic was established to cater to the plain population, mostly Amish and Mennonite but also Brethren. The clinic has appointment times in the AM but the afternoon is an open clinic to accommodate farmers schedule, transportation issues or other difficulties to a specific appointment time.

The clinic offers lab and x-ray services so minor emergencies can be taken care of at the clinic saving a long buggy ride to a hospital or lab. The physician and nurse practitioners in the clinic, while English (the Amish name for non- Amish folks) are trained in alternative medicine, integrative medicine and or homeopathy to align with the beliefs of the plain community. A woman went to the clinic and was prescribed medication for shingles plus a pain medication. She refused the treatment and asked for an alternative. The Dr. prescribed two homeopathic remedies prescribed which the patient later reported as being helpful, within 24 hours the fever subsided, and the pain subsided in 3 days. While the rash took some time to go away, the patient reported it was “not bothersome.” Honoring the patient’s choice improved compliance with care and choice is a core value of a trauma-informed approach. The clinic is not trauma-informed but trauma aware. Training, in some of the alternatives to allopathic medicine, teach about trauma-informed methods.

The difference between training in trauma-informed awareness and becoming an informed trauma system is systemic. Trauma-informed awareness means exactly that, an awareness that a trauma-informed approach is available. A trauma-informed system provides

training for all staff in trauma-informed care. Additionally, policies and procedures reflect the foundation of a trauma-informed approach.

The core value of collaboration involves showing respect for the patient's life experience and looking for strengths to be honored and utilized. A trauma-informed framework is strengths-based, and the collaboration between provider and patient hones that component. The relationship between provider and patient is akin to a partnership. Each person brings strengths of the relationship. The strength of the patient is acknowledged, validated, and built upon to learn new skills, when necessary. Collaboration also extends to relationships among staff and colleagues (Wilson et al., 2013).

The last core value suggested by Falloot & Harris (2009) is empowerment. Empowerment encourages the patient to believe in themselves, increases a sense of self-worth and enhances self-esteem. The patient feels valued, understood, and hopeful. Resiliency skills are identified and utilized. When the patient feels empowered, there is an increased likelihood of compliance with medical care protocol (Wilson et al., 2013). The example of the Amish patient asking for alternative treatments is an example of empowerment and choice.

SAMHSA has similar values to a trauma-informed approach to care and is more detailed than the Falloot & Harris Model but embrace the same foundation. According to SAMHSA (2014, p. 11), the following are characteristics of "A program, organization, or system that is trauma-informed:

1. *"Realizes the widespread impact of trauma and understands potential paths for recovery"* (SAMHSA, 2014, p 11). A trauma-informed approach teaches the pervasiveness of trauma and the effects traumatic experiences have on health. The ACE study is a seminal work that demonstrates the pervasiveness of trauma and simultaneously shows the effects on adult

health (Felitti et al., 1998; Anda & Felitti, 2003; Falloot & Harris, 2009). The Ace study provides evidence of the need for a trauma-informed approach to adult medical care. The ongoing Ace investigation continues to substantiate the original findings (Brown et al., 2010; Chartier, Walker & Naimark, 2010; Dube, Cook, Edwards, 2010; Norman et al., 2006).

2. “*Recognizes* the signs and symptoms of trauma in clients, families, staff, and others involved with the system” (SAMHSA, 2014, p. 11). To recognize signs and symptoms means having knowledge of what the signs and symptoms are and can identify the behaviors related to the signs and symptoms. Identifiable symptoms of prior traumatic experiences include anxiety, depression, somatization, frequent hospitalizations, noncompliance with treatment recommendations, defensive behavioral, evasive answers to medical exam questions, chronic illness, alcohol use, substance use disorder, inability to manage pain, frequent headaches, stomach disorders
3. “*Responds* by fully integrating knowledge about trauma into policies, procedures, and practices” (SAMHSA, 2014, p. 11). A trauma-informed organization covers the entirety of the organization rather than one or two departments. Policies regarding the core values are developed and implemented, for example, policies regarding safety, physically and psychologically. An example would be having security escort a patient, when asked to do so, to the parking garage.
4. “*Seeks to actively resist re-traumatization*” (SAMHSA, 2014, p. 11). Sensitivity to the triggers of traumatic experiences may prevent some re-traumatization. Pelvic exams, mammograms, cervical cancer screening, dental work, and blood work are examples of

medical procedures that may trigger a response to earlier trauma (Bloom & Farragher, 2011; Courtois & Ford, 2013; Raja et al., 2015; van der Kolk, 2014).

According to SAMHSA (2014), “it is critical to promote the linkage to recovery and resilience for those individuals and families impacted by trauma” (p. 11). Consistent with SAMHSA’s definition of recovery, trauma-informed services and supports are developed based on the best evidence available, engage both consumers and families, and facilitate engagement, empowerment, and collaboration.

Trauma-informed care recognizes the survivor's need for respect, information, connection, and hope regarding their recovery. The relationship between trauma and symptoms of trauma such as substance abuse, eating disorders, depression, and anxiety is an important consideration and part of an effective trauma-informed care framework. It is also important to work collaboratively with survivors, families, and friends of the survivors, and other service agencies in a way that empower survivors and consumers. Fallot & Harris core values include all these principles.

However, SAMSHA outlined them more definitively by expanding upon the values identified by Fallot & Harris (2009). The SAMHSA core values are: “safety, trustworthiness and transparency, peer support, collaboration and mutuality, empowerment, voice and choice and cultural; historical and gender issues” (SAMSHA News, 2014, p. 1). Cultural, historical, the familial pattern of trauma and gender issues help a trauma-informed organization move past stereotypes and biases based on age, geography, race, gender, sexual orientation, etc.

An example which falls into the category of cultural and biases based on age is a ninety-two-year-old woman hospitalized for five days with issues related to a chronic illness. She was hard of hearing, and the protocol for the hospital was all patients identified as hard of hearing,

were to have an ear on the door and an ear on their whiteboard. The ear symbol indicates the patient needs certain measures implemented, like direct eye contact, being close to the bed, talking slowly and clearly. Adherence to the symbol protocol did not happen with this patient. Utilizing the core values of a trauma-informed approach may have prevented this incident from occurring, the patient would have had a more informed respectful patient experience.

Another example of cultural sensitivity is providing mandatory sensitivity training when adding a bariatric program to a hospital. Costly changes need to be made to comply with regulations regarding bariatric patients. Changes such as operating tables tested to a 1000-pound weight limit, waiting room chairs tested to 500 pounds, larger wheelchairs, larger blood pressure cuffs, storage for the larger equipment and storing, out of sight, shared snack/candy containers. Trauma-informed is sensitive to the obvious as well as the non-obvious forms of discrimination.

Evidence demonstrates the benefits of trauma-informed care, including a reduction in the use of restraints and seclusion in mental health settings (Azeem, Aujula, Rammerth, Binsfeld, & Jones, 2011; Borckardt et al., 2011), improved mental and health reduced substance abuse (Cocozza, 2005; Dolan, 1998; Domino et al., 2005; Morrissey et al., 2005; Muskett, 2014), and enhancement of physical health (Weissbecker, I., Clark, C., 2007). Trauma-informed care reduces costs and has the potential to improve patient engagement and compliance with prescribed treatment (Domino et al., 2005; Fink & Rosenthal, 2008; Fuertes et al., 2005; Raja et al., 2015). Organizations that screen for trauma need to have the resources available to address it considering trauma either on-site or by referral (Raja et al., 2015).

Common themes characterize the definitions and perspectives of a trauma-informed system of care. One common theme is a need for physical and psychological safety, paramount to a trauma-informed approach. It is important to rebuild a trauma survivor's sense of control

(Fallot & Harris, 2009). Providing a safe environment, such as ample lighting, a calm setting, protecting patient's privacy by closing the door or curtain during the exam, talking in a clear but low voice are possible ways to enhance safety for patients.

Another theme is a collaboration with clients and their families. Collaboration may be to identify trauma-related needs such as referral to a therapist specializing in trauma treatment. Or another example of collaboration is when scheduling a follow-up appointment ask the person providing transportation when is a good time. Coordinating appointment time with the driver, patient and service provider enhances respect for all concerned and may enhance the ability for the patient to get to the follow-up appointment.

Promoting the well-being and resilience of health care providers is an element included in trauma-informed care. Considering the large number of individuals who experienced adverse events in childhood (Anda & Felitti, 2003), it is probable that staff have trauma histories which could impact interactions with patients. For example, if a nurse raised in an abusive alcoholic home, working in the emergency room, treats a person who is drunk the nurse may react with disdain, anger, or fear, any of which could impair the relationship. Trauma-informed models emphasize the importance of teaching about personal histories of trauma (Bloom, 2013; Bloom & Farragher, 2011; Bloom & Farragher, 2013; Raja, 2015; Wilson et al., 2013) and encourage the provider to reflect on their trauma history (if applicable) and how that could affect interactions and relationships with patients (Raja et al., 2015). The framework used to develop a trauma-informed approach to adult medical care encompasses what research has shown to be effective. Useful models of trauma-informed care include healthcare organizations, staff, and patients.

Healthcare organizations as a whole and staff, individually, are as vulnerable to adversity as the people they serve. Staff may react to traumatic events with similar behaviors exhibited in patients. Stressors that organizations face are financial and political which does not promote an atmosphere of safety and trust for staff which influences patient care. Thus, a best practice of trauma-informed care will include the organization and staff (Bloom, 2013; Bloom & Farragher, 2011, 2013).

The following vignette's and case consults are a composite of real patients whose names and specific identifying information has been changed to protect their anonymity.

Vignette One

Tom is a 71-year-old male with a 65 year, two-pack-a-day smoking history. He has COPD, is on oxygen at night and PRN (as needed) during the day, and has irritable bowel syndrome. Tom is a Vietnam veteran and served in the Marine Corps for 11 years. When asked why he left after 11 years, he stated, in a matter of fact tone, "I got tired of spending so much time in the brig." I was curious so I asked why he was in the brig so much and he replied, "barroom brawls." That comment led me to ask if drinking was ever a problem and he gave a standard answer, "depends on who you ask, but I quit that." When I asked if it was due to drinking problems he responded, "Well, I guess it depends on how you look at it. It was mostly a problem for me since I wasn't winning as many fights and was getting too old to pick myself up off the floor. Besides I started having a lot of aches and pains in the AM." I asked if anyone in his family was alcoholic. He responded, "does a bear s... in the forest?" I laughed and said, "I guess so. I was never in the forest long enough to find out." We both laughed and seemed to connect. He said that he liked my style and was glad he did not scare me with his bull s.... I said it would take a lot more than that to scare me and he responded by saying he will just have

to try harder. We laughed and continued the session. He became more relaxed and responsive. The interaction described is an element of a trauma-informed approach to creating connection and developing trust.

We have a lengthy biopsychosocial questionnaire to be completed that has a lot of questions. He did not like most of them. I told him if he promised to come back we could finish it next session. Giving the patient respect and choice is a trauma-informed approach. He answered “deal” and reached out his hand out to shake mine. Our dialog continued in this manner over the next 18 months.

After a general discharge from the Marine Corps, Tom worked in the steel mill until it closed, almost 20 years. Currently, he works as a maintenance man at a local fast food restaurant. As his trust in me began to grow, he revealed a long history of childhood abuse, problems in school, failed marriages, troubled relationships, and little social support. He said he “had no love for” his mother and did not attend her funeral. He had few friends and little family; there were a sister and a niece, one son that he visited or spoke with on occasion, and another that he had not seen or spoken to in years. According to Tom, all his other relatives were deceased. This patient had suffered through adverse childhood experiences and a lifetime of traumatic events. We discussed the possibility of him having PTSD and that he may need to see a psychiatrist, which ultimately, he agreed to. At first, he was adamant about not being diagnosed as crazy. I responded by saying that “crazy” was an inaccurate characterization; rather he had been courageous and resilient to have persevered through such trying times.

He pursued the therapeutic process although his efforts to quit smoking were sporadic and showed little success. He reported that he began to smoke at age five, so I suspected the process was going to be challenging for him. He took my advice to begin a 12-step program

through Nicotine Anonymous. He was readily accepted and encouraged and, although he did not go out after the meetings for coffee with the group, he became a regular attendee.

As we continued the therapeutic process, he began revealing more of his adverse childhood experiences and complained about the care he received in the Veteran's Administration (VA) system, his declining health, and several other things that made him unhappy. Eventually, he permitted me to talk with his VA physician. Because of my meeting with the physician, he underwent a psychiatric evaluation, was diagnosed with depression, and given antidepressants. It had taken some encouragement before Tom agreed to take his medication. However, he did finally say he felt better than he had in a long time, maybe even his whole life.

As the process continued, he needed and asked for more counseling sessions. For about six months, I saw him twice a week. My role was not as a trauma therapist but rather a trauma-informed therapist. A trauma-informed approach validates the traumatic experience and effects of the trauma. A trauma-informed approach can be more psycho-educational which is teaching about the effects of trauma. Health symptoms and health behavior are related to the experience of trauma.

In this case, smoking was a symptom of trauma. People with an ACE score of 4 or more are twice as likely, as people with lower scores, to be smokers (Felitti et al. 1998, Starecheski, 2015). The incidence of smoking in trauma survivors is higher compared with people who are not trauma survivors. It is used to medicate feelings that overwhelm the individual (Fonagy, Stelle & Steel, 2009; Fuertes et al., 2007; Johnson 2006).

A trauma-informed approach refers the patient for trauma treatment. Trauma treatment brings resolution to the symptoms of trauma. The specific focus of trauma treatment is treating

the trauma. The therapist is trained in trauma treatment and could employ a variety of treatment modalities such as Cognitive Behavioral Therapy, the most researched therapy model for the treatment of trauma and has claims of being the most effective (Bisson & Andrew, 2007, Bisson, et al., 2007).

Other modalities show promise. Experiential methods are emerging to take the lead in effectiveness for the treatment of trauma. (Wylie, 2004; Hudgins & Toscani, 2013; Carnabucchi, 2014). Experiential methods include many of the body psychotherapy methods and methods using the creative arts, like art, dance, movement, and drama. However, these findings are fraught with the mainstream therapy arguing the validity of such claims.

A more recent technique, ACT (Accelerated Resolution Therapy) gleans components of several effective evidence-based modalities for treating trauma such as EMDR (Eye Movement Desensitization & Reprocessing) and CBT (cognitive behavioral therapy). ART is a 1-5 session method of specific interventions utilized to change the way negative images store in the brain. The limited research, to date, shows promise for ART (Kip et al. 2014; Kip et al. 2012),

Another therapy is DBT (dialectical behavior therapy) created by Marsha Linehan using strategies from cognitive behavioral therapy and mindfulness. Solution focused therapy concentrates on the strengths and expectations related to the client's issues. The therapist does not need to know the origin of the problem and is usually brief in number of sessions needed for change to take place (Dolan, 2000; Pederson, L., 2012). EMDR, developed in the late 1980's and early 1990 engages the brain's adaptive information processing mechanisms to change response to a traumatic event (Shapiro & Laliotis, 2010). These therapies are shorter in of number of treatment sessions and available in suburban areas.

Bioenergetics, developed by Alexander Lowen and John Perrikos, is a body psychotherapy that originates from Wilhelm Reich's belief that the body stores memories. The bioenergetic therapist training includes learning techniques to release memories from the body and process the emotions (Lowen, A. 1958). John Perrikos created Core Energetics from Bioenergetics and added a spiritual component to the bioenergetic methods. Both bioenergetics and core energetics are costly and require years of therapy and primarily available in metropolitan areas. (Pierrakos, J. 1990).

This list is not exhaustive, but several other methods used to treat the effects of trauma are EFT (Emotional Freedom Technique), Gestalt Therapy, NLP (Neuro-linguistic Programming), Somatic Imaging, Art Therapy, Dance and Movement Therapy and Psychodrama. To describe each one would be a paper unto itself and not the focus of this article. Also, there is a trauma treatment certification.

The important thing to know is that a trauma-informed system of care needs to have knowledge of the modalities available in their geographic area. Collaboration, which includes referral to other service and corroborating with that service provider to provide best practice care for the patient. Collaboration is an element of a trauma-informed system thus developing a relationship with the trauma treatment providers is essential.

Trauma treatment changes the internal working model of the individual to create internal working models conducive to safety and trust, helps the patient to establish a supportive and encouraging relationship and provide support to the individual. The values of trauma-informed care, safety, trustworthiness, collaboration, choice, and empowerment work towards developing positive relationships with the patient. The goals are improved outcomes, in the case of medical

care, it would be outcomes related to health and improved compliance with treatment recommendations.

Trauma-informed care does not deal directly with the trauma nor is it the primary focus. Typically, a trauma-informed system is providing another service as the primary reason the patient's provision of care. The service could be mental health treatment, addiction treatment, smoking cessation, diabetes, weight management, etc.

A trauma-informed approach is not just training for therapists but other staff such as nurses, physicians, phlebotomists, respiratory therapists, x-ray technicians, dentists, or security guards. A trauma-informed approach is about awareness of trauma.

Collaboration is working in partnership with the patient which includes referral to other services. Corroborating with that service provider in the best interest of the patient builds trust. Collaboration is an element of a trauma-informed system. Developing a relationship with the trauma treatment providers is essential.

In the case of Tom, we collaborated on much of his medical care. For example, we created a regime to aid in taking his medications properly and on time, obtained a portable oxygen tank so he could be more mobile, developed a strategy for reconnecting with one of his kids, and we also worked on developing a support system. The mentioned examples develop trustworthiness, a core value of a trauma-informed approach.

His attitude changed, he was more cooperative and compliant, took his medications and used his oxygen regularly. I looked for opportunities to give Tom choice, choice regarding appointment times, choice regarding his cessation aid options, such as using the nicotine replacement patch or taking Chantix. I scheduled his appointments before and after medical procedures to discuss his fears and test results. Eventually, his irritable bowel syndrome

symptoms subsided, his COPD symptoms improved, and he was less depressed than he had been before taking antidepressant medication.

Findings on the utilization of trauma-informed care show that patients exhibit improved outcomes. Outcomes include increased compliance, increased engagement in the treatment process, keeping appointments, adherence to prescribed treatment and health care protocol, like exercising, taking medications on time and appropriately and patient satisfaction (Ko et al., 2008; Koetting, 2016; Raja et al., 2015).

Tom was a gruff, burly, tattooed man who gave the appearance of being invincible. However, it was a facade to hide the intense emotional pain he felt. Traumatic experiences impacted Tom, first as a child living in a chaotic and alcoholic home and secondly as a Vietnam veteran. He trusted no one, which is an indicator of the avoidant attachment style. Adding to his history of adverse events were the current medical procedures he was enduring, all very invasive. He often complained about the care he received at the VA facility. He stated that he walked out more than once when he had to wait too long or when “the bastard” at the front desk was rude.

After 18 months of counseling with me and consistent medical care that alleviated many of his symptoms, Tom decided to retire, reconnect with some old friends in another state, and relocate. He quit smoking, the primary focus of our work together and was planning to start a Nicotine Anonymous group in his new town. Social support became important to Tom, and he was actively seeking opportunities to continue receiving support. He has called me on a few occasions to tell me he is still smoke-free, and the last time we spoke, he said he had a girlfriend. He did not go for trauma-specific treatment. However, using a trauma-informed approach, Tom received consistent medical care which improved his physical health and a psychiatric evaluation that led to his medical treatment for depression.

Vignette Two/Case Consult

The diabetes nurse presented a case to me for suggestions. The patient is a 74-year-old male with a history of diabetes, uncontrolled blood sugars ranging from 360-380, high blood pressure, high cholesterol, and high triglycerides. Additionally, he is 65 pounds overweight and smokes about ten cigarettes per day. The nurse was at a loss as to how (?) to motivate him to diet, exercise, take his medications including using insulin. His family physician referred him to the diabetes center. He refused to attend the diabetes care managed program but did agree to have the consult with the nurse. The nurse said that she wanted to refer him to me for smoking cessation but was afraid he would not come. I offered to call him and did so.

My first thought was to find a way to engage him in his care and to begin building trust, a component of trauma-informed care. During the brief conversation, I had with him I sensed despair and a feeling of hopelessness and that he guesses he is just a “tough cookie.” (his words). I told him that tough cookies were my favorite and I was up for the challenge. He chuckled and said, “we’re on.”

Over the course of the next nine months, I saw him weekly, always scheduling a time when the office was less busy so he could be checked in quickly with no wait. I also scheduled 15 minutes time before his appointment and the previous appointment as to not make him wait. According to trauma-informed principles, this helps create a sense of safety and trust.

He had a tragic history that started with the abandonment of his father at age 2. He had a good relationship with his mother and younger sister. He assumed the role of the man of the family and never asked for help. He was fine, and it was good his “deadbeat dad” left.

He grew up and lived a “typical blue-collar life,” good job, great wife, three kids, lived in a mortgaged house in the suburbs. Life was good. Drank too much for a while and quit so he

would not become his father. However, he overindulged in food, smoked up to two packs of cigarettes per day for the past 60 years, drank coffee excessively, raced cars and didn't get along with his father in law.

Five years before seeing me his wife died from Lou Gehrig's' disease. He stopped going to the race rally's because she always went with him. He remarried after two years of loneliness he could not stand and is now regretting it. Within the first year his stepson was killed in a car accident, and a year later his other stepson committed suicide. In between the two deaths, he lost his job without notice. The unexpected financial loss was devastating, and they sold their home to "downsize" into a little apartment. Recently his sister lost her battle with leukemia, and his middle son is battling lung cancer.

As can be typical for an adult with adverse childhood experiences he did not realize those experiences influenced him as an adult until we started working together. His belief that he is the man and must figure it out whatever it was, and not ask for help prevented him from seeking help for his health issues. To make that matter worse his current wife trusted no doctor and "nagged" him to try natural remedies for whatever was wrong with him. He was feeling helpless, isolated, and very much alone.

He was depressed. I initially focused on that so made a referral for depression screening, collaboration. Collaboration, a core value of trauma-informed care, is working with the patient to determine the patient's choice, and, when necessary working with staff, or colleagues to enhance care for the patient. The patient was assessed by the physician and prescribed an antidepressant. We developed a plan for the patient to access support. He chose (another principle of trauma-informed care) to seek support from his minister. They set up a monthly meeting which the patient looked forward to and enjoyed.

The patient was an avid golfer but had to give that up due to lack of money and difficulty with breathing. We discussed that the patient is making an appointment with a pulmonologist and possibly attending pulmonary rehab. He agreed, and I made the referral. Using principles of trauma-informed care, collaboration, choice, and empowerment the patient received necessary information so he could make an informed decision.

His diagnosis was chronic obstructive pulmonary disease. He was prescribed medications and oxygen. The new regime was overwhelming, so we collaborated on a medication schedule that fit his lifestyle and was more manageable. One of his strengths from his career was making graphs, checklists and organizing data. I suggested using these great skills for his medications and medication refill. He complied, and it served him well. In the months after that, he never ran out of medication because he forgot to get it refilled, or forgot to take the medication given helped him breathe much better as did the oxygen he used at night. And he had a choice as to which pulmonary rehab location was more convenient for him. We figured out how much money he was spending on cigarettes and he concluded he could afford golf if he quit. He started to carry a gold tee in his pocket as a reminder.

He agreed to attend the diabetes program, engaged in the program and with the help of the diabetes nurse made some amazing strides. Through consultation with me, we set up a plan for him. The nurse agreed to call him twice a week to get his blood sugar numbers, coach him on his food choices and offer support. He kidded with us that we were tag teaming him, but he loved every minute of it.

He quit smoking, lost weight, and his numbers all came within normal range. He could discontinue insulin and reduce some of his other medications. He reunited with some old friends and meets them for lunch weekly. He had a few lapses back to smoking when the stressful

situation presented themselves. Each time I offered validation and encouragement for how far he's come and helped him develop a plan to get back on track.

He was not interested in going to therapy and felt what we worked on was therapy enough for him. His case shows a trauma-informed approach significantly improved the patient's life and health. He was less depressed, more engaged in social support, expressed improved communication with his wife and kids, and was regularly attending church again.

Vignette 3/Case Consult

This last case study involves a member of a healthcare organization and not direct patient care. The diabetes coordinator nurse where I work asked if she could do a behavioral health consult with me. She had a relatively young patient, 45, who was a new "insulin start," the term used for when a patient begins daily doses of insulin and needs to learn how to manage their life and meals around the insulin injections. However, the diabetes coordinator nurse was frustrated with her patient's lack of compliance and consequent high blood sugars.

I first asked the nurse if the patient had had any adverse childhood experiences and she replied that she did not know. The ten questions (see Appendix C) used to assess for trauma are not part of our medical record system and, consequently, a history of traumatic experiences is not part of an initial assessment. In contrast, a trauma-informed system would have incorporated the questions into all initial assessments. The nurse did not have this information because she was unaware of the questions to ask or the importance of asking. As Bloom (2013) and Courtois and Gold (2009) suggest, all components of an organization need trauma-informed training. A nurse would develop a plan of care, not a treatment plan as in a counseling session. We included in his

plan of care the core values of a trauma-informed approach. What can be done to ensure safety, create trustworthiness, offer choice, collaboration, and empowerment?

I spent some time with the nurse giving her a brief overview of the intersectionality of trauma and attachment theories and the importance of trauma-informed care. She was quite receptive to the information and stated that she could think of several other patients who may have experienced some degree of trauma. She asked for tips on how to work with her patient. I shared some ideas with her, such as acknowledging to the patient that a diagnosis of a chronic illness can be traumatic and that some illnesses require injections (body insertion), which may be triggers for re-traumatization. I explained that she should express care and concern for her patient and give her information in small doses. Also, she could have her patient repeat back to her information to make sure she understands proper medication and insulin injection rituals. I added that she should help her patient incorporate these new health behaviors into her daily routine. Finally, she should remind her patient that our diabetes support group attended by other individuals that are struggling as she is. The nurse was willing to offer to call her patient three times a week instead of adhering to the standard twice a week call schedule used to check on diabetic patients.

In speaking with the patient at the next appointment, the nurse found out she had adverse childhood experiences and never talked to anyone about them; her patient figured it was in the past and no longer important. Thinking once an event is over it no longer affects a person is a typical response for adults who have experienced adverse childhood events (Anda & Felitti, 2003). She shared that she has a lot of anxiety about medical procedures. The idea of having to “stab” herself to check sugar levels three times a day was awful and, now, having to inject

herself with insulin on top of checking sugar levels causes her more anxiety than she could bear, so she just doesn't do it.

The nurse asked to meet with me again, and we strategized to develop a trauma-informed diabetes plan of care. Building trust, being a patient advocate and moving slowly albeit diligently was part of the plan. Following the trauma-informed core value of choice the patient decided she would like a follow-up call on Monday and Thursday in the afternoon. She and the nurse agreed to collaborate on her food plan adjusting portion size. And she agreed to check her blood sugar in the AM and the PM. The care plan is effective for one month, and then she and the nurse will reevaluate it.

The patient's goal was to achieve some semblance of health. She has three young children and wants to be able to interact with them and see them grow up and, thus, was motivated to tend to her health care. A referral was made to our behavioral health division for a psychiatric evaluation, possibly anti-anxiety medication, and trauma counseling. This case study is a great example of how effective even a modicum of trauma-informed training can impact patient care.

Conclusion

Trauma-informed care increases awareness on the part of healthcare providers of the impact traumatic experiences can have on patients. Given information regarding the impact trauma may have on patients facilitates support and effective interactions with patients. A trauma-informed care approach teaches a basic understanding of how traumatic events shape behaviors throughout the lifespan. Trauma-informed care builds upon five core values, safety, trustworthiness, choice, collaboration, and empowerment. SAMHSA added a sixth dimension, cultural, historical and gender issues.

Trauma-informed care is not trauma treatment. In trauma treatment, the specific goal is to treat the trauma. Therapists who provide trauma treatment have specific training in treating trauma, possibly a certified trauma treatment specialist and the primary focus is the trauma and symptoms from experiencing trauma. A trauma-informed approach to adult medical care's specific focus is the presenting physical illness or physical symptoms. The goal is to treat the physical symptoms. Trauma-informed care is provided by all staff, nurses, physicians, security, etc. The training involved in a trauma-informed approach is awareness rather than treatment of trauma.

Much of mental health and addiction treatments are slowly integrating a trauma-informed care approach. However, the medical profession has yet to incorporate trauma-informed care into adult medical care as a standard of practice. The framework used to develop a trauma-informed approach to adult medical care encompasses what research has shown to be effective in other settings. Useful models of trauma-informed care are available for healthcare organizations, staff, and patients.

The three case studies presented demonstrate the benefits patients can experience from a trauma-informed approach. While the department I work in is not trauma-informed, I use a trauma-informed approach consistent with and similar to social work principles. In each case, the six key SAMSHA principles, note earlier, guided treatment and consultation.

Dissertation Conclusion

This dissertation weaves together attachment theory, trauma theory, adult health, and health behaviors. The seminal work of the ACE (Adverse Childhood Experience) Study solidified the importance of acknowledging traumatic experiences. The ACE study demonstrated the long-term health effects for adults who experienced adverse events as children and found that 64% of the over 17,000 adults in the study had one adverse experience in childhood. Of that 64%, eighty-seven percent had two or more adverse experiences. The more ACE's one experienced, the greater risk of developing a chronic disease (Felitti et al., 1998). Those chronic diseases include high blood pressure, heart disease, and diabetes, addictions and mental illness (Anda & Felitti 2003; Appleton et al., 2012; Ciechanowski et al., 2001; Ciechanowski et al., 2004; McWilliams & Bailey, 2010; Maunder & Hunter, 2008; Meredith et al., 2006; Pietromonaco et al., 2013; Puig et al., 2013).

The toll on survivors physically, emotionally, psychologically, and spiritually can be devastating. A traumatic experience can be a one-time event or repetitive adverse events. The impact on the victim can be minimal to meeting criteria for Post-Traumatic Stress Disorder. Trauma disrupts attachment.

Attachment is the emotional bond or connection between a caregiver and child that, ideally, creates a sense of safety and security. The ideal relationship creates a secure attachment style. A traumatic experience or experiences disrupt the attachment bond, when the ideal is not actualized, and create internal working models that adversely impact health behaviors, access to medical care, and the ability to follow prescribed treatment recommendations. The child does not develop into adulthood with the safety and security needed to explore and trust the world. The lack of feeling safe and trusting leads to an insecure style of attachment. The insecure style

of attachment affects adult relationships including a relationship with self and with medical care providers.

Research shows that traumatic experiences correlate with the insecure attachment styles of avoidant, anxious-ambivalent and disorganized. Insecure attachment styles negatively influence health and health behavior. Evidenced-based trauma treatments are available, and trauma treatment is different from trauma-informed care.

Trauma-informed care, the recognition, and acknowledgment of trauma and the impact of that traumatic experience on an individual, can help to identify, intervene with, and refer the patient to trauma treatment. Trauma-informed care models are available. The mental health and addiction treatment milieus are moving in the direction of integrating trauma-informed care as a standard of practice, and isolated trauma-informed programs are available in healthcare systems for children and super-utilizers. There is little evidence to demonstrate that health systems are integrating a trauma-informed approach with all adults.

Trauma-informed care increases awareness on the part of healthcare providers of the impact traumatic experiences can have on patients. Given information regarding the impact trauma may have on patients facilitates support and effective interactions with patients. A trauma-informed care approach teaches a basic understanding of how traumatic events shape behaviors throughout the lifespan. Trauma-informed care builds upon five core values, safety, trustworthiness, choice, collaboration, and empowerment. SAMHSA added a sixth dimension, cultural, historical and gender issues.

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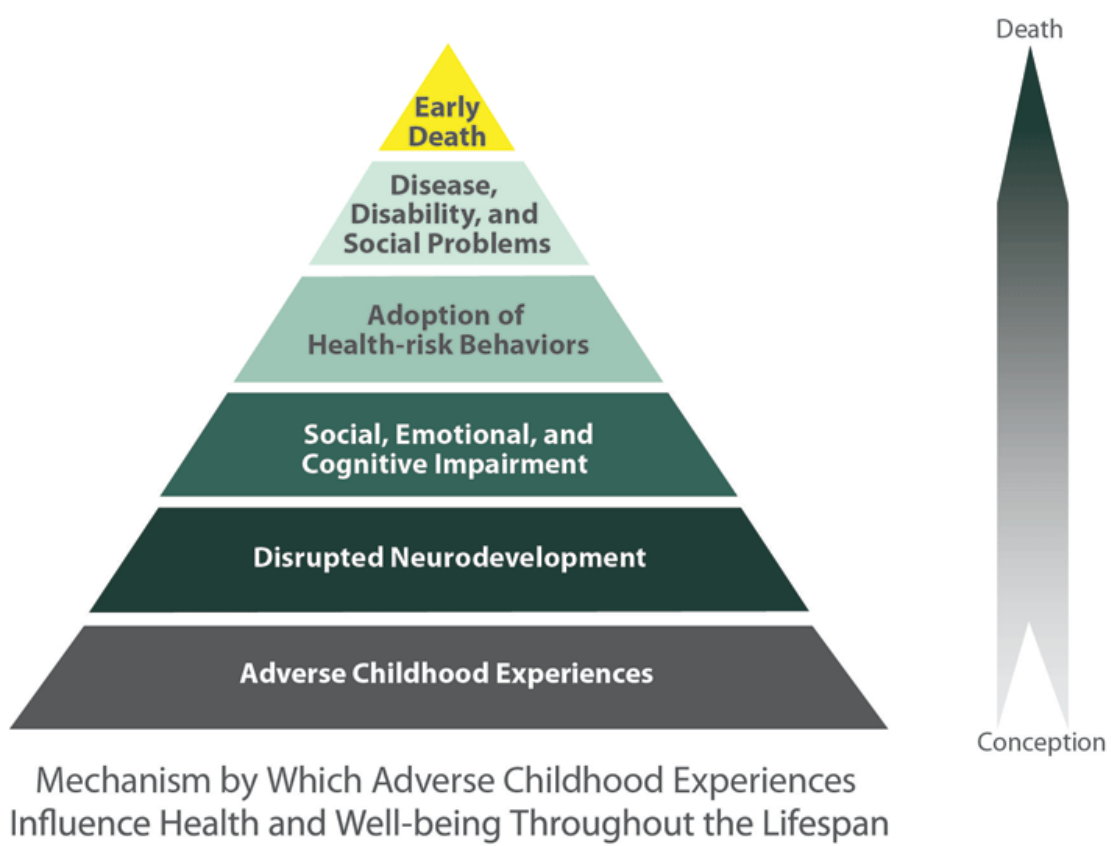
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The three case studies presented demonstrate the benefits patients can experience from a trauma-informed approach. In each case, the six key SAMSHA principles, noted earlier, guided treatment and consultation.

While current evidence suggests that weaving attachment theory, trauma theory and adult health and adult health behaviors together would warrant a trauma-informed intervention, further research is needed to address the gap in the literature. The benefits requiring investigation are: does a trauma-informed health care system for adults increase access to health care, increase seeking care earlier in the disease process, increase patient compliance and does a trauma-informed system of care reduce emergency room visits, reduce hospital stays and lengths of stay. Research also needs to investigate the benefits to the organization, financially and the well-being of staff.

A quote from William Osler, the father of modern medicine, sums up the argument for the need for trauma-informed adult medical care: “It is sometimes much more important to know what sort of a patient has a disease than what sort of disease a patient has.” William Osler. (n.d.). BrainyQuote.com.

Appendix A

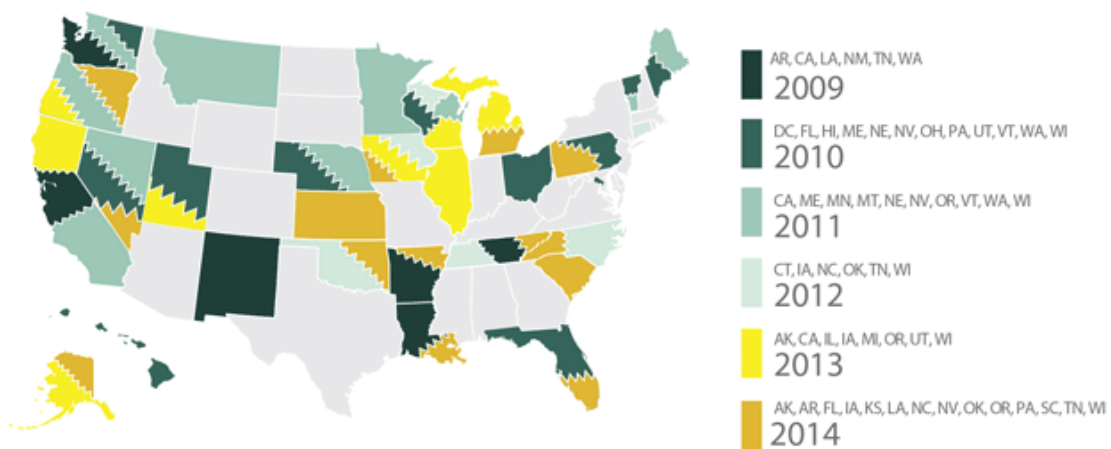


Mechanism by Which Adverse Childhood Experiences Influence Health and Well-being Throughout the Lifespan

CDC website

Appendix B

THE ACE STUDY CONTINUES



[CDC website](#)

Appendix C **What's My ACE Score?**

Prior to your 18th birthday:

1. Did a parent or other adult in the household **often or very often**...

Swear at you, insult you, put you down, or humiliate you?

or

Act in a way that made you afraid that you might be physically hurt?

Yes No If yes enter 1 _____

2. Did a parent or other adult in the household **often or very often**...

Push, grab, slap, or throw something at you?

or

Ever hit you so hard that you had marks or were injured?

Yes No If yes enter 1 _____

3. Did an adult or person at least 5 years older than you **ever**...

Touch or fondle you or have you touch their body in a sexual way?

or

Attempt or actually have oral, anal, or vaginal intercourse with you?

Yes No If yes enter 1 _____

4. Did you **often or very often** feel that ...

No one in your family loved you or thought you were important or special?

or

Your family didn't look out for each other, feel close to each other, or support each other?

Yes No If yes enter 1 _____

5. Did you **often or very often** feel that ...

You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you?

or

Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?

Yes No If yes enter 1 _____

6. Was a biological parent **ever** lost to you through divorce, abandonment, or other reason ?

Yes No If yes enter 1 _____

7. Was your mother or stepmother:

Often or very often pushed, grabbed, slapped, or had something thrown at her?

or

Sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard?

or

Ever repeatedly hit over at least a few minutes or threatened with a gun or knife?

Yes No If yes enter 1 _____

8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?

Yes No If yes enter 1 _____

9. Was a household member depressed or mentally ill or did a household member attempt suicide?

Yes No If yes enter 1 _____

10. Did a household member go to prison? Yes No If yes enter 1 _____

Now add up your "Yes" answers: _____ This is your ACE Score

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