

The Perfect Storm: Anxiety and Depression in Adolescents in the 21 Century Implication for Treatment in Residential Settings

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Introduction

Although Anxiety Disorders and Major Depression are distinct disorders, many researchers and clinicians have found that the two problems co-exist in many patients. They are “partners in crime” and appear to be biologically predisposed to occur together (Marano, 2003; Clark & Watson, 1991; Alloy, et al. 1990). In addition, they are neuro-chemically related and share many of the same symptoms such as fatigue, low self-esteem, sleep disturbance, irritability, and poor concentration (Iny, et al. 1993). Already representing the bulk of mental disorders, professionals warn us that an unprecedented rise of anxiety and depression is in sight (Gray, 2010).

A recent study by Twenge (2010) showed that five times as many high school and college students are dealing with psychological problems than the same population did during the Great Depression. Findings from 77,576 high school and college students show that “hypomania” (anxiety and unrealistic optimism) and depression grew at an even higher rate, with six times as many students scoring high on Minnesota Multiphasic Personality Inventory (MMPI) scales as compared to the same population during the Great Depression (Twenge, 2010). The researchers of this study believe that these results may be overly conservative estimates as students on antidepressants and other medications may have skewed the results. These findings are consistent with other studies showing a dramatic increase in anxiety and depression in adolescents (Gray, 2010).

It appears that the significant increase of anxiety and depression rates in adolescents and young adults can no longer be explained by traditionally accepted theoretical models alone, such as; psychodynamic and relational theories, behavioral and learning theories, or biological models. The additional influence of “cultural” factors such as; negative effects of social networking, heightened stress through media, poor nutrition, paradoxical implication of an over-abundance of choices, motivational shift

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from intrinsic to extrinsic goals, and lack of cardiovascular exercise may individually or in combination contribute to an environment that provides the fertile ground for such a traumatic increase in the prevalence of these disorders.

The three purposes of this article are to: a) trace the etiological history of anxiety and depression, collectively referred to as traditional factors; b) consider cultural factors that may explain the unprecedented rise in anxiety and depressive disorder of the young; and c) consider treatment approaches for adolescents in residential settings that take into consideration both traditional and cultural etiological factors of the disease(s).

Anxiety Disorders

The diagnosis and classification of anxiety disorders has evolved over the past four decades. The first Statistical Manual of Mental Disorders published by the American Psychiatric Association (APA, DSM-II, 1968) recognized the existence of only two disorders; withdrawing reactions and overanxious reactions. The DSM-IV (2000) however, describes these two diagnoses as generalized anxiety disorder and social phobia and has expanded the spectrum of defined anxiety disorders to include panic disorder, agoraphobia, specific phobia, obsessive-compulsive disorder, generalized anxiety disorder, post-traumatic stress disorder and separation anxiety.

Clinical Factors of Anxiety Disorders

Psychodynamic and relational theories.

Psychodynamic and relational theories argue for a causality model based on mother-infant interactions (Ainsworth, et al. 1978). This model argues that the bond developed between infant and mother will heighten the infant's comfort and sense of security. Conversely, poor attachment from infant to mother may give rise to fearful, inhibiting behavior - the "birthplace" of anxiety disorders in children and adolescents (Warren, et al. 1997).

Studies exploring the effects of parenting styles on child behavior have shown that children benefit from sensitive care giving while negative parenting styles such as excessive restriction and negative parental feedback are associated with adverse consequences. Children exposed to parenting styles marked by high control have shown low personal control and increased evidence of anxiety disorder in late childhood and adolescence (Krohne & Hock, 1991; Chorpita and Barlow, 1998). Likewise, maternal intrusiveness and overprotection are associated with symptoms of anxiety disorders in children and adolescents (Bowen, et.al. 1995).

Treatment implications for residential settings.

These findings suggest that children and adolescents with moderate to severe symptoms of anxiety disorders can benefit from a warm, supportive therapeutic environment. Settings that are overly

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structured and restrictive are contraindicated. Schools and programs that are highly confrontational and employ behavior management models that rely on negative feedback to shape behavior and offer limited physical contact with parents may provide short term symptom relief. However, these gains do not necessarily provide an understanding of healing to the effected “internal” pain of the depression and/or anxiety.

While enmeshed and overprotective parents may contribute to the etiology and maintenance of anxiety in the child, prolonged suspension of the parent-child interaction will not effectively reduce anxiety states in the child over the long term (Minuchin, 1974). Adolescents returning home post-discharge are better served through an intensified family therapy approach with a focus on resolving enmeshment issues (Laitila, et al. 1996). Such therapy may focus initially on the marital dyad, but family therapy eventually must include the child.

One of the outcomes of the child being in extended care treatment is the interruption of negative cycles occurring within the home, which allows for causal variables to be more isolated and examined. In addition to providing children the opportunity to focus on their own healing, time apart can also be an important window for the parents to begin their own emotional work; learning to recognize and differentiate their own personal struggles and emotional states from that of their child is essential to the healing process. If the parent(s) deal with issues related to anxiety and/or mood, how is it expressed within the home? Do others in the family sense this anxiety? How does it affect them, and in turn each other? These types of questions provide insight toward the presenting problem from a family system perspective. Learning to recognize and later disrupt these dysfunctional patterns becomes part of the focus of family therapy.

Behavioral and cognitive learning theories.

Behavioral models describing the development of anxiety have long been in existence and were first introduced by B.F. Skinner in the first half of the twentieth century. More recently, scientists have found evidence that anxiety can be learned. Parents, teachers and others may produce a steady state of anxiety in the child through prolonged modeling of fear, rewarding/reinforcing avoidant behaviors, teaching styles that emphasize frightening and dangerous aspects of life, inducing fear, or the actual infliction of harm (Fincham, et al. 1989).

The interactions between anxiety and certain cognitive processes have been described. Hadwin, et al. (1997) found that anxious children interpret ambiguous information as threatening more often than non-anxious children. Moreover, anxious children pay an inordinate amount of attention to what they perceive as a threat. Their interpretation of such “threats” is typically based on a distorted thought process. Factors contributing to such cognitive distortions may be based in socialization

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experiences that sensitize children to dangerous, anxiety-provoking conditions (Zahn-Waxler, 2000).

Treatment implications for residential settings.

Milieu therapy approaches that rely heavily on identifying maladaptive behavior without equal or greater emphasis on teaching replacement behaviors may protract the recovery process. Children and adolescents may interpret such approaches as fear inducing.

When children and adolescents are placed in residential settings for protracted symptoms of anxiety, a careful assessment of the client's behavioral-cognitive processes related to symptomology is essential. Once these processes are identified, therapeutic attempts at anxiety reduction utilizing "exposure approaches" such as successive approximation and/or other therapeutic approaches should be used cautiously if at all. The etiology of anxiety in the client should be well understood before placing the child in an environment that may expose them to "intolerable" levels of anxiety often produced through "exposure" techniques.

Biological models.

A number of researchers have conducted studies that lend support to the theory that genetic influence may play a role in the manifestation of anxiety. Their findings show that children with parents suffering from anxiety disorder have higher incidence rates of anxiety than children whose parent do not struggle with the affliction (Kendler, et al. 1992; Last, et al. 1991; Boer, 2000).

Others report that children who demonstrate inhibiting and withdrawn-like behaviors when meeting strangers may be predisposed to developing anxiety disorders later in life (Kagen, et al. 1987, Kalin, 2010). A related study points out a relationship between generalized anxiety disorder in adolescent females and behavioral inhibition in early childhood (Schwarz, et al. 1999).

Ratey (2008) suggests that over the last decade, a significant body of research has emerged that advocates for the involvement of physiological and neurobiological processes of the brain in the etiology of anxiety disorders. The research indicates that chronic stress has a significantly aversive effect on the hippocampus (a part of the limbic system of the brain), shrinking dendrites, killing neurons, and preventing neurogenesis. At the same time, the amygdala, referred to as the alarm system in the brain, is in "overdrive" and becomes increasingly stronger and dominates the hippocampus. The net effects are symptoms including weight gain, insulin resistance, panic attacks, anxiety, depression, increased risk of heart disease, and an erosion of cognitive skills (Ratey, 2008).

A particular focus of these studies is centered on the hypothalamic-pituitary-adrenal axis (HPS) system, which is centrally involved in a person's response to stress and the regulation of arousal

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(Tsigos & Chrousos, 2000). Abnormalities in the production of neurochemicals such as noradrenalin and cortisol have been implicated in anxiety disorders. Youth with clinically significant levels of these chemicals show higher levels of anxiety than the control groups (Granger, et al. 1994). Moreover, phobias, generalized anxiety, and panic disorder have been linked to abnormalities in limbic and stem-hypothalamic circuits of the brain (Davis, 1997).

Treatment implications for residential settings.

Treatment of anxiety disorders should occur in concert with “rule-in” or “rule-out” of abnormalities in neurobiological regulatory processes. Basic neurological exams are critical and should be followed, if indicated by more in-depth diagnostic processes including sleep deprived EEG, endocrineological exams, etc.

A large emerging body of literature is demonstrating that brain plasticity makes it possible to reverse clinically significant imbalances in brain chemistry (Adamec, 1997; Lawlis, 2008). This is a revolutionary departure of the previously held notion that the brain is “hard wired” at a relatively early age. Historically, many forms of anxiety disorders were treated with psychotropic medications (i.e. SSRI's and Benzodiazepines) and/or cognitive behavior therapy. Over the past decade, however, neurologists have shown that increased levels of certain proteins including brain-derived-neurotropic-factor (BDNF) responsible for the regulatory processes of neurotransmitters, can reduce or eliminate certain states of anxiety (Ratey, 2008). (For further details; see Cultural Factors: Cardiovascular Exercise).

Depressive Disorders

The majority of depressive disorders are made up of major depressive disorder and dysthymic disorder (Kashani & Sherman, 1988). Bipolar disorder, once considered rare in children and adolescents, has received increased interest from clinicians and researchers, alike (Carlson, et al. 2000).

Clinical Factors of Depression

Psychodynamic and relational theories.

Both researchers and clinicians have postulated that depression in children and adolescents may be the result of the loss of a love object, either real or imagined (Beck & Alford, 2009; Gabbard, 2005). Other contributing factors may include the caregiver's failure to meet the psychological needs of the child, repeated disappointments of the child, unresolved unconscious circumstances, unresolved grief, extreme guilt, unrealistic high standards, or internalization of blame (Gabbard, 2005).

Family therapy and sociology literature have historically pointed to the fact that depression in children and adolescents can often be based

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in family dysfunction (Heru & Ryan, 2002; Martin, et al. 1995). Ubiquitous studies have found that low levels of parental support and warmth in combination with parental rejection, hostility, and family conflict are highly correlated with depression in children and adolescents (Ge, et al. 1996; Sumner, 2009; Young, et al. 2005). For decades, those working with family systems have recognized that the collective blame for family dysfunction is often laid at the feet of a child, and thus, a single family member becomes the “identified patient.” Because of their “acting-out” symptoms (e.g. irritability, hostility and other maladaptive behavior), such youth are often misdiagnosed with oppositional defiant disorder (ODD) because the underlying pathology is often not recognized by the casual observer; the “acting-out” problems are masquerading for the “acting-in” symptoms (Millon 2011; Minuchin, et al. 1975)

Treatment implications for residential settings.

When “acting-out” symptoms of the child become unmanageable in an outpatient setting, residential treatment is often the best option. Depending on symptom acuity and history, the out-of-home interventions may vary from a short psychiatric hospitalization to longer term enrollment in a therapeutic boarding school. Regardless of the setting, family therapy must be considered a pivotal component of the treatment regime. Unfortunately, in the face of overwhelming evidence, some operators of residential programs are abandoning or minimizing family therapy with the false hope that a moratorium of greatly reduced interaction between the child and family will accelerate the healing process of the child (Asen, 2002; Cottrell & Boston, 2002; Shirk, et al. 2003). Only in exceptional cases when family dysfunction reaches irreversible levels, should family therapy be abandoned in an effort to emancipate the child from the family.

Behavioral and cognitive learning theories.

Behavioral theories suggest that anxiety and depression can be learned through a conditioning process (Mineka & Kihlstrom, 1978). There is support for the theory that organisms can reach a state of “learned helplessness” when exposed to repeated levels of stress. Such an individual will “surrender” to an aversive, stressful, and challenging situation and demonstrate anxiety and/or depressive symptoms (Maier & Seligman, 1985)

Additionally, individuals may demonstrate cognitive distortions when exposed to prolonged, aversive environmental experiences (e.g. distorted thinking patterns, biased beliefs about self and/or others, negative self-concept or deficient social skills). Such cognitive distortions have been demonstrated to lead to depression in adults, children and adolescents (Seligman, et al. 1984).

Treatment implications for residential settings.

The reversal of a conditioned response is associated with an “extinction curve” process. Even though the subjects may no longer be exposed to the aversive stimuli, some patients are prone to replicate the aversive

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stimuli, perpetuating the associated behavioral manifestations of anxiety and depression. Paradoxically, these subjects re-create or “invent” equally aversive stimuli to perpetuate the maladaptive stimulus-response cycle. Harsh programmatic consequences to such replicating aversive stimuli may further prolong the extinction process. Unless the learned, maladaptive behavior is a threat to safety of the personal and/or the therapeutic environment, strategic therapy may hold greater promise reducing maladaptive behavior as opposed to forms of verbal confrontation (Coatsworth, et al., 2001; Szapocznik, J. & Willimans, R.A. 2000; Watzalwick 1975).

Biological models.

It has been demonstrated that genetic factors may increase risk for depression (Sullivan, et al. 2000). Birnmaier, et al. (1996) suggested that children of parents who suffer from depression have a 50% higher chance of being afflicted with similar symptoms. Dawson et al. (1999) found a relationship between a reduction in left frontal EEG activity and depression in children and adolescents of depressed mothers. Aside from genetic factors, the likelihood for depression increases with the presence of aversive environmental factors both within and outside the family. Rende, et al. (1993) hypothesized that the comorbidity of genetic and environmental factors produces more severe symptoms of depression.

Post, et al. (1996) posit that mood disorders may be related to an evolving developmental neurobiological framework, suggesting that environmental experiences may to somewhat interact to mediate the effects on gene expression. Such environmental experiences include psychosocial stressors, along with the neurobiology of recurrence to stressors. In this view, social support may be capable of generating an inhibitory effect on illness progression by decreasing the perception and neurobiological impact of stressors, even at the level of gene expression (Post, et al. 1996; Robinson, et al. 2008). Such findings are in support with the “new brain science” providing further validation that the brain is not “porcelain” but “changeable” in what has been termed “brain plasticity” (Ratey, 2008; Jasny, et al. 2008).

Treatment implications for residential settings.

Neurobiologists have shown that one’s genetic code is physically manifested through the process of gene expression and that this process can be influenced by environmental factors (University of Illinois, 2006). For example, environmental stressors may function to “turn on” expression of a gene related to symptoms of depression or anxiety. Conversely, social support and other strategic interventions may be capable to changing brain chemistry to inhibit depressive symptoms by “turning off” expression of the same genes. A study by Ducek, et al. (2008) provided the first compelling evidence that gene expression changes in individuals that practice short and long term relaxation response (RR). Ducek, et al. (2008)

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has shown that RR is characterized by decreased oxygen consumption, increased exhaled nitric oxide, and reduced psychological distress, all contributing to changes in gene expression. Such findings may give credence to approaches such as yoga and other systematized relaxation techniques to treat anxiety and depressive disorders.

Patients with clinical levels of individual or comorbid anxiety and depression may greatly benefit from social support that is “relatively” free of stress. Coping and stress management skills, however, are not acquired in a “quarantined” environment, free of stressors. The presence of appropriate stressors is critical to the treatment of adolescents so affected, and should be included in individualized treatment plans. Making use of the “new brain science” requires more than the provision of a stable environment along with traditional “talk therapy.” Adolescents suffering from comorbid features of anxiety and depression may be able to benefit from virtual reality exposure therapy (Parsons & Rizzo, 2008), biofeedback therapy, eye movement desensitization response therapy (EMDR), and other non-traditional approaches.

Anxiety and Depression; A Developmental Perspective

Developmental psychopathology has been defined as “*the study of the origins and course of individual patterns of behavioral maladaptation*” (Sroufe & Rutter, 1984). Since pathology does not magically appear, developmental theories of anxiety and depression are based on models whereby the interaction between the individual and the environment “produce” the symptoms – the integration of nature–nurture. Hence, the role of resiliency, adaptive functioning, emotion, co-morbidity, gender and culture are all integral to the phenomenology and etiology of mood disorders.

Emotions and Internalizing Problems

Emotions have regulatory functions within the framework of internal dynamic processes. Likewise, they assist in the organizational and adaptive processes within interpersonal interactions (Campos, et al. 1983). Emotions have a “neutral” value, in as much as there is no emotion that is more or less valid. While emotions are not seen as dysfunctional by themselves, prolonged exposure to and/or high intensity of negative or situational inappropriate emotions may indeed have maladaptive qualities (Watson & Clark, 1992). A disconnect between what a person feels and how such feelings are expressed, in part, is an indication of emotional dysfunction. Such dysfunction may be a manifestation of the individual’s inability to regulate emotions within social and/or intra-psychic processes (Cole et al. 1994).

One of the markers of healthy development for children and adolescents is the ability to regulate emotions and behavior (Silk, et al. 2003). Appropriate development, in part, is measured by the youth’s ability to cope with everyday life and the stressors associated with it. “Emotional”

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maturation is also influenced through the socialization processes (Bobroff, 1960). Learning to regulate what to keep private and what to share, along with learning appropriate forms of expression, is crucial in the pro-social development of the child (Flavell, 1968).

Treatment implications for residential settings.

Emotional dysregulation is typically treated with cognitive-behavioral therapy (CBT) (Whitfield, 2003) or dialectical behavior therapy (DBT) (Linehan, 1997). Nevertheless, CBT and DBT are associated with a wide variety of manualized protocols that may be too numerous and complex, restricting effective training and dissemination of knowledge (Barlow, et al. 2004). For this reason, therapists advocate for a “unified” approach that includes: a) altering antecedent cognitive reappraisals; b) preventing emotional avoidance; and c) facilitating action tendencies not associated with the emotion that is dysregulated (Barlow, et al. 2004).

Such a “unified” approach requires interventions that cross the boundaries of a strict CBT or DBT approach. If emotional dysregulation is born of a protracted history of moderate to severe anxiety, exposure therapies or systematic desensitization may be indicated.

Emotions and the development of psychopathology

An individual's affect refers to their personal experience of feeling or emotion. Such experiences are based on personal interpretation and can be biased. The formation of an individual's affect is thought to be the result of repetitive, everyday social interaction along with the emotional content (Izard, 1977). Over time, these personal, affective experiences or biases become the central building blocks for personality. Specific forms of psychopathology can develop when, through repetition, these biases are consolidated into rigid forms. Hence, we recognize anger in antisocial personality, sadness in all forms of depressive disorder, and fear in an overwhelming number of anxiety disorders.

The affective dimensions of psychopathology are not limited to a single emotion. For example, worry, anxiety, guilt, shame, lack of pleasure, suppression of anger and hostility, or empathic over-arousal where the self becomes submerged in the problems of others, are all emotions associated with depression (Izard, 1977).

Treatment implications for residential settings.

The predictability, structure, and constancy of a therapeutic milieu are central to aligning emotion with a particular event or experience (Campling, 2001). Such a milieu becomes the practice field where replacement feelings are explored, and after prolonged and consistent practice, may translate into more enduring behavior patterns.

Such a “practice field” can turn into an “obstacle course” for the child when all components of the school or program (i.e. therapy, milieu, education, recreation, psychiatry, etc.) lack inter-departmental consistency.

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The alignment of the professional staff with the everyday caregiver is critical in the teaching of replacement emotions and behavior (Balmer, 2006).

Comorbid Anxiety and Depression

There is a high incidence of comorbidity of anxiety and depression with some researchers indicating rates as high as 70% (Brady & Kendall, 1992). Moreover, the comorbidity of anxiety and depression in adolescents is more common than either anxiety or depression alone (Angold, et al. 1999).

Studies have demonstrated that anxiety in children will often evolve into depressive disorder during adolescence or later in life (Kovacs, et al. 1989; Breslau, et al. 1995; Warner, et al. 1999). These findings are consistent with attachment models where the anxiety, induced by feelings of object loss, becomes intolerable and therefore results in depression (Lubbe, 2011). Similarly, in the learned helplessness model discussed above, the first reaction to “uncontrollable” situations is anxiety, followed by depression (Abramson & Seligman, 1978). Rumination is an alternative model, whereby a person worries, perseverates or obsesses about one’s symptoms of depression such that symptom severity is magnified to clinical significance (Nolen-Hoeksema & Girgus, 1994).

The progression from anxiety to depression is dependent on the deregulation of the nervous systems. Under sustained arousal, the individual eventually begins to shut down and withdraw from environmental stimulation, with a net effect of depression (Arnetz & Ekman, 2006).

Anxiety and depression have also been associated with certain cognitive processes. In the case of anxiety, the individual scans the environment in anticipation of potential threats. A consistent state of hypervigilance toward an internal magnification of such threats leads to anxiety, while depression involves the repetitive mental rehearsal of experiences associates with failure and loss (Mineka, et al. 1998).

Avoidance Behavior as the Result and Contributor of Anxiety and Depression

Avoidance behaviors are universal to virtually all individuals with anxiety disorders (Suinn, 1990). For those struggling with anxiety and depression, avoiding and running away from fear and anxiety can also constrict one’s life and transform anxiety from being a normal human experience into a life shattering problem (Forsyth and Eifert, 2007). Thus, avoidance serves as *the* predominate means of coping with symptomatology, stressors, tasks, and responsibilities. While everyone experiences some levels of avoidance in their life, individuals with significant anxiety and mood disorders rely upon this “strategy” to such an extent that the individual’s attempted “solution” contributes, enforces, and solidifies the problem (Watzlawick, 1975). Thus, a young man with a social phobia may refuse to go to school with the net result of school failure,

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manifested in failing grades and lack of credits, despite IQ test scores in the superior range. His “coping behavior” of not going to school further alienates him from his social support system and adds to his already high level of anxiety. This ongoing pattern of avoidance contributes to an inability to complete tasks, responsibilities, and goals.

Avoidance behavior has infinite applications and forms. For a young person dealing with anxiety and depression, avoidance may be manifested as an “electric addiction” by immersing themselves in video games and/or social media. For the individual struggling with post-traumatic stress disorder (PTSD), places, people, or events associated with the trauma are avoided. Obsessive compulsive rituals are performed as a means of avoiding intensely unpleasant internal states. Some individuals avoid initiating tasks, responsibilities, or the mere possibility of being exposed to stressful stimuli. For others, avoidance appears in the form of an inability to complete the task they have initiated. Hence, they become “bored,” need multiple “fresh starts” in a new environment, or tasks becomes “too hard” despite displaying ability and skill to the contrary (Heimberg, 2004).

Over time, the accumulated history of failure to complete tasks related to anxiety results in distorted fears and beliefs regarding personal abilities and anticipated outcomes (Heimberg, 2004). The emotional payoff for avoidance is that the world (family, school, peers, etc.) has often adapted to the child’s needs, wants, demands, and lowered expectation, leaving the child unchallenged to acquire functional coping skills. Consequently, the child grows increasingly brittle, lacking in resilience and effective coping skills. The cumulative effect of this process leaves the individual with a distorted self-concept, self-esteem and identity formation (Skaalvik, 1997).

Self-Concept, Self-esteem, and Identity Formation – the Flip-Side of Avoidance

Twenge (2006), evaluating data from 1.3 million subjects, postulates that today’s adolescents are more miserable than ever before, lacking self-esteem and self-identity despite projecting an image of confidence and assertiveness.

Self-esteem can be defined as a favorable or unfavorable attitude toward the self (Rosenberg, 1985). Self-esteem is the product of two internal assessments or judgments. First, it is the person’s overall sense or global judgment of the self or “self-worth” and second, a person’s sense of his/her competency in a specific domain or area. Key to self-esteem is the level of discrepancy between what a person desires and what that person believes he/she has achieved, and the overall sense of support that person feels from people around him (Rosenberg, 1965).

Related concepts such as self-confidence or body-esteem imply a narrower sense of the self-esteem. In sum, self-esteem is influenced by many factors; parents, teachers, friends, and the environment are

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constantly influencing self-esteem (Osborne, 2007). Therefore, self-esteem is influenced by all of these factors and it is possible that anxiety and depression, in part, are brought about by low self-esteem.

Identity formation and self-esteem are positively related (Stets & Burke 2003). Adolescence is a time in a person's life when identity formation takes center stage and emotional turmoil and heightened sensitivity during adolescence can make this major developmental task difficult (Meeus, et al. 1998). Erikson (1994) suggested that every adolescent experiences an identity crisis during which he or she has to find answers to the basic questions of "Who am I and where am I going?" This identity confusion is not associated with a descriptive diagnosis, but is a dynamic condition that makes an adolescent vulnerable to different psychiatric disorders (Meilman, 1979). Anxiety and depression are the most common of such disorders, followed by school and behavior problems (ADAA 1999). A recent study demonstrated that adolescents with low scores on the Sense of Identity Assessment Form (SIAF) show higher rates of depression than the control group, suggesting that there is a significant, positive relationship between poor sense of identity, depression, and anxiety scores (Damir, et al. 2010). A related study showed that low levels of self-esteem and sense of self, are associated with depression and decreases academic achievement (Fathi-Ashtiani, et al. 2007).

The constructs of self-esteem and self-identity share several common patterns of thoughts and thinking styles. Common to those affected by low levels of self-esteem and self-identity are feelings of defeat, defective, deserted, and deprived with a sense of worthlessness and depression lurking in the shadows (Beck, 2009; Burns, 1980). Worthlessness is the perception that one is of less value than other people in the perceived environment (Burns, 1980). In an effort to regain a measure of self-esteem, some adolescents seek association with "friends" that demonstrate similar behaviors or thought patterns of worthlessness in an effort to normalize their own thoughts, feelings, and behaviors (Burns, 1980).

Self-esteem invariably effects personality. People with low self-esteem tend to be more neurotic, more introverted, more disagreeable, less open, and less conscientious than people with high self-esteem (Burns, 1993). Individuals with these cognitive and behavioral characteristics tend to experience more negative emotions than positive. Studies show a clear link between self-esteem, self-identity, depression, anxiety, and personality (Burns, 1993).

Treatment implications for residential settings.

Self-esteem is highly correlated with all the physical (Antonucci & Jackson, 1983), emotional (Judge & Bono, 2001), and behavioral (Leary, et al. 1995) variables associated with depression. Individuals with high self-esteem or self-identity are healthier both mentally and physically

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(Achenback, et al. 1987). People with high self-esteem are better students, better ball players, and better friends. They are more stable emotionally, less subject to criticism, more resilient, and happier. Increasing self-esteem may help adolescents to mediate against the contributive factors of anxiety and depression discussed above.

While virtually all residential programs and schools provide an environment that fosters the development of self-esteem and identify formation, they often do so by default and not through a mindful, strategic approach. Being around “good people”, demanding accountability, and providing a stable and predictable environment have all the makings of a platform contributing to a “growth environment.” Such a platform, however, can be greatly enhanced by specific, scientifically based programming that takes more of a direct aim in addressing the above described factors.

Anxiety and Depression; Cultural Perspectives

Lane (2000) has suggested that the mental health and happiness of young people have declined since the 1950's. A dramatic rise in anxiety and depression among the young is also well documented (Gray, 2010). The etiological factors discussed above are insufficient to explain this trend.

Stress is a threat to the body's equilibrium. A person chronically exposed to moderate and high levels of stress will suffer from emotional and often physical strain. The “ripple effects of the body's stress response can lead to full-blown mental disorders such as anxiety and depression. Chronic stress can even tear at the architecture of the brain” (Ratey, 2008). In an attempt to explain this dramatic rise of stress among the young, an increasingly prominent view is to look toward the etiology of both psychosocial and psychocultural issues (Gray, 2010).

Heightened Stress through Media

News has always been about reporting that which is deviant from the norm. A fan streaking naked across the football field is far more newsworthy than a mother having a picnic with her children in the city park. Over the past decade, deviancy has been “put on steroids” as images of the grotesque, bizarre, shocking, and horrible stream into the homes of the American family at a rate never before experienced (Beresin, 2010).

An ever widening array of digital displays ranging from TV to smart phones allows today's youth to experience tragedy and strangeness while sitting comfortably on the couch. Today, the dissemination of the deviant, shocking, and tragic is no longer reserved for the news media. Exposure through “YouTube”, blogs and other virtual experiences suggests that the constant “*torrent of tragedy and demands lashing at us, keeps the amygdala flying*” (Ratey, 2008, p. 1). Under stress, the amygdala – referred to as the panic button of the brain – triggers changes in blood chemistry that result in physiological changes including increased heart rate, blood pressure, and

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respiratory rate (Ratey, 2008).

The typical American child will view more than 200,000 acts of violence, including more than 16,000 murders before age 18 (Beresin, 2010). Such violence keeps the brain in an unhealthy state of arousal. Such stress on the hypothalamus, pituitary, and adrenal (HPA) gland axis keeps the brain on constant alert status so that the “thinking” part of the brain is robbed of energy. As a result, chronic exposure to toxic levels of stress leads to anxiety and mood disorders (Ratey, 2008).

Treatment implications for residential settings.

Restricting a student from accessing disturbing and exciting images alone represents no cure. Digital media is so pervasive that students retuning to the “real” environment after a stay in a controlled residential setting will inevitably encounter problematic stimuli in their everyday lives. Traditionally, residential schools and programs have relied on isolation from the world at large and talk therapy as the primary therapeutic approaches for working towards stress reduction with clients. However, recent advances in neuropsychology have opened the way to new and very promising approaches to working with stress including physiologically modulated cardiovascular exercises, learning of complex physical tasks, virtual exposure therapies, yoga, and other non-traditional approaches. These novel intervention strategies, when applied in parallel with traditional milieu and talk therapy practices, may help struggling adolescents develop the tools needed to cope with aversive stimuli through digital media in the real world.

Electronic/Virtual Socialization

Following a steady decline in suicide rates over the previous two decades, researchers report an 18% increase in suicides for youth 20 years of age and younger (AMA Journal, 2008). While the cause of this phenomenon requires further studies, mental health professionals point toward a dramatic rise in virtual/electronic networking among the young (Bridges, et al. 2008). Texting, email, and increasing interaction through social networking services leave children and adolescents far too dependent upon their peer group with a corresponding decline in independent decision making skills (Rosen, 2011). Dependence on electronic forms of communication may further disadvantage youth by inhibiting the development of non-verbal communication and social skills, potentially leading to social isolation (e.g. body language, vocal tones, etc.).

While more research is needed, there is some evidence that suggests young people who are initially free from mental health problems, but who use the internet obsessively are at risk for depression (Harrison, 2010). Another study shows that students using virtual/electronic networking obsessively were 2.3 times as likely to experience depression as those who do not (Lam, 2010). A recent study by Hampton, et al. (2009), shows a direct relationship between the amount of time spent in virtual

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or electronic networking and social isolation. It appears that the more a person attempts to communicate via electronic means, the more lonely they are likely to feel.

Researchers showed that adolescents spend hours in the virtual world with people they do not know in real life (Adams, 2009; Lapachet, 1992). Hence, virtual “friends” are in fact not friends in the traditional sense at all. Virtual networking may create a feeling of getting to know someone, who in reality, one does not know at all. The net effect is that physical contact with friends fades away and the individual slowly becomes disconnected with reality (Stella, 2011). There is a tendency for those who feel disconnected and socially isolated to increase their time in the virtual world in an attempt to relieve their symptoms (e.g. isolation, loneliness, social anxiety, depression) only to find an increase of such symptoms. Ironically, the “cure” becomes the cause (Jordan, et al. 2011).

It is possible that the comorbidity of social isolation and the decline of social skills in negotiating the real world may lead to anxiety and depression with internalizing (e.g. withdrawal, sleep disturbance, depressed mood, etc.) or externalizing (e.g. irritable mood, anger, etc.) symptoms.

Treatment implications for residential settings.

The unavailability of phones and computers in a controlled residential setting has little long-term effect for the child, as those social-networking tools are readily available when the child returns home. In the short term, breaking the addiction by removing such tools is an important first step to eliminate the pathological use of electronic social networking. However, perhaps the greatest contribution a residential setting can make to a youth struggling with an electronic/virtual communication addiction is to boost communication and social skills, in an effort to foster the development of higher self-esteem. Research has shown that extroverted individuals are less likely to fall prey to toxic levels of virtual social networking. Conversely, the introverted individual has a greater propensity for utilizing pathological electronic socialization methods to “stay in tune” with the peer group (Kuss & Griffith, 2011).

Shift from Intrinsic to Extrinsic Goals

The proliferation of anxiety and depression in the young are, in part, related to the shift from intrinsic to extrinsic goals (Twenge, et al. 2010). Intrinsic goals are those that focus inward such as the development of competencies and a healthy self-identity. Extrinsic goals are outwardly focused, such as the acquisition of money or admiration from peers. This shift in value orientation is underscored by a study of college freshmen who indicated that being “well off financially” is more important than “developing a meaningful philosophy of life,” a complete reversal of the findings in the 1960s and 70s (Twenge, et al. 2004). Such a shift may be fueled by a clear message from the media, which is increasingly focused on materialism. That message is that “You will not be happy unless you have

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good looks, are popular and have plenty of material goods” (Burroughs, et al. 2002).

Gray (2010) suggests that an increased societal focus on schooling, with little emphasis on meaningful play and recreational activities are to blame for the shift to the externality. School in this view is simply a means to external prosperity and not necessarily supportive in developing a meaningful philosophy of one’s life. Healthcare professionals across the nation draw attention to the fact that sedentary play, such as electronic games are taking the place of cardiovascular or socially interactive play all contributing to both increased levels of anxiety and depression and reduced levels of physical health (Wholley, et.al. 2008).

Treatment implications for residential settings.

The very nature of a controlled and structured setting with limited choices and exposure to media invariably has a positive effect on reversing the trend toward materialism and narcissism in adolescents. Daily accountability for one’s behavior to staff and fellow peers is very important to aid in the shift away from narcissism. In addition, a strategic, systematized approach through formal workshops, classes, seminars on ethics and value, moral education, and volunteer work may further enhance this shift. Processing and solving moral dilemmas, through a variety of media (i.e. movies, video clips, reading, group discussions, group assignments, etc.) have proven to be effective in assisting adolescents to refocus toward intrinsic values (Chu, et al. 1996).

Paradox of Choice

Freedom, autonomy and the ability to choose are critical to the well-being of individuals. In addition, personal control over managing choices effectively and in a predicable fashion is essential to achieving happiness (Schwartz, 2005). Americans of all ages have more choices than ever before. For example, a trip through the grocery store will present the shopper with an apparent endless choice selection of potato chips.

If choice is critical to one’s happiness, logic would suggest a direct correlation between the number of possible choices and happiness. However, Harris (1987) showed that in 1966, 9% of consumers were “unhappy” with the choices they had at their disposal and in 1986 that number had increased to 37 percent, even though the number consumer choices have radically increased over that time period.

Explaining this apparent paradox, Schwartz (2005) points toward two closely related issues. First, as the experience of choice and control expands (e.g. the ability to have choices and manage them effectively), expectations expand simultaneously. That is to say that the more choices we have, the more choices we want. Thus, the aspirations and expectations are always greater than our ability to realize them, no matter how liberating the realization becomes. In essence, there is always something more and something better. Second, more choices may not always mean more

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control. There comes a point at which opportunities become so numerous that the individual feels overwhelmed. Instead of feeling in control (i.e. managing options effectively), the individual feels unable to cope (Schwartz, 2005). Prolonged exposure to these phenomena will expose the individual to experiences of being overwhelmed, anxious and eventually depressed.

Dealing with endless choices requires a corresponding amount of control and this increased level of control requires personal discipline, social and personal maturity (Schwartz, 2005). Youth in the U.S. have more choices than any like age group in the history of the world, but increasingly lack the social competence and coping skills to take advantage of choices. Conversely, rates of anxiety and depression among Amish youth, a close social group with limited choices, are less than one fifth of that of the whole US population (Schwartz, 2005).

Treatment implications for residential settings.

Based on the preceding discussion, it is plausible that adolescents whose symptom acuity has reached a level requiring residential care show higher incidents of poor impulse control, low self-esteem, lack of social maturity and impaired personal discipline than youth not involved in treatment environments. Hence, adolescents in residential treatment may benefit from limited exposure of choices with treatment support to optimally manage the available choices. To choose from an extensive list of recreational activities on a given day or from a long list of food choices for a particular meal does little in making the youth feel more comfortable. Happiness is not related to the number of choices available, but the increasing ability to manage the available choices effectively. The result is often measured in increased self-worth and sense of self, which in turn contributes to the reduction of anxiety and depression.

Cardiovascular/Exercise Activity

The Center for Disease Control and Prevention reports that childhood obesity has more than tripled in the past 30 years and the percentage of children aged 6–11 years in the United States who were obese increased from 7% in 1980 to nearly 20% in 2008. Similarly, the percentage of adolescents aged 12–19 years who were obese increased from 5% to 18% over the same period. In 2008, more than one third of children and adolescents were overweight or obese (CDC, 2009).

Lack of physical activity has proven to be the main contributor to obesity in youth (CDC, 2009). Experts site insufficient physical activity and too much time spent in sedentary behaviors may equal or even exceed diet quality as important contributors to being overweight in adolescence (Patrick 2004; Ebbeling et al. 2002). Hence, mental health experts are lamenting the fact that an increasing number of children and adolescents abandon vigorous cardiovascular activities in favor of sedentary activities like playing video games, virtual networking, watching TV, “hanging-out”, etc. (Tremblay & Willms, 2003). Such a shift leaves the developing child exposed

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to a higher risk for mood disorders in general and depression in particular (Broome & Llewelyn, 1995).

A lack of cardiovascular activity can lead to sleep disturbance, which in turn leads to depression (Fogelholm, et al. 2007). A lack of exercise fosters laziness and can make a child feel physically inadequate, even if he is not obese (Ratey, 2008). Lack of exercise may affect posture, eye contact and how individuals generally carry themselves as well as how they are ultimately received by their peers (Tremblay, et al. 2000). Lack of cardiovascular activity can stunt the development of motor skills and hand-eye coordination. All of these variables, individually or in combination, are proven to have a daunting effect on a child's confidence, self-esteem and identity formation (Tremblay, et al. 2000). The progression towards negative self-image inevitably leads to anxiety and depression (Battle, 1978). Studies suggest that people who are depressed are less likely to exercise, a finding that helps to explain the increased risk for cardiovascular health in this demographic population (Wholley, et al. 2008).

Increased physical activity has proven to have therapeutic effects for mood related problems. A 2007 placebo-controlled trial out of Duke University -- the first of its kind -- found that exercise may be just as effective in relieving depression as the antidepressant Zoloft (Blumenthal, 1999). Ratey (2008) indicates that studies have shown that exercise lifts mood by increasing either endorphin or serotonin levels in the brain. Endorphins are thought to work as natural painkillers while serotonin is believed to affect mood (Ratey, 2008).

Treatment implications for residential settings.

A comprehensive review of meta-analyses has demonstrated an increased positive effect of exercise on the reduction of anxiety and depression when the exercise is aerobic (Landers, 1994). Therefore, activities like running, swimming, or cycling more effectively reduce symptoms of depression and anxiety than non-aerobic activities like walking, flexibility training, weight lifting, etc. Furthermore, cardiovascular exercise programs showed the greatest impact on symptoms of anxiety and depression when the program was longer than 4 months in duration and clients presented with low levels of fitness and high levels of anxiety (Kugler, et al. 1994; Meyer, et al. 1997). Another meta-analysis demonstrated that cardiovascular exercise may produce an anxiety reduction similar in magnitude to other commonly employed anxiety treatments, including relaxation exercises, and offer additional physical benefits (Craft, 1997). Across five meta-analytic reviews, the results consistently show that both acute and chronic exercise is related to a significant reduction in depression (North, et al. 1991).

It is well established that exercise and nutrition have beneficial effects on mind and body. However, recent advances in science have provided some powerful insight into the neurophysiology of how exercise

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affects mood, anxiety, and learning. This research tells us that through systematic, strategic exercise, one can keep the brain at peak performance (Ratey, 2008). Moreover, research has shown that fitness has a direct effect on scholastic performance (Ratey, 2008). Over the past five years, the California Department of Education (CDE, 2004) has consistently shown that students with higher fitness scores also have higher test scores. As discussed above, toxic levels of stress erode the brain's cognitive functions (Ratey, 2008). Recent research in neurophysiology has found that "exercise unleashes a cascade of petrochemicals and growth factors (insulin-like growth factor GF-1) and vascular endothelial growth factor (VEGF) that can reverse this process (i.e. cognitive impairment due to stress), by physically bolstering the brain's infrastructure" (Ratey, 2008). In sum, when it comes to youth who suffer from anxiety and depressive disorders, fitness is more important than sport (Ratey, 2008).

Diversions and recreational activities such as walking, riding horses, playing baseball, river rafting, etc. are important aspects in the comprehensive programming for youth in residential settings (O'Marrow, 1971). They break-up monotony and improve quality of life. However, to achieve clinically significant positive effects through exercise, available research indicates a systematized, prolonged aerobic exercise program is favorable. Exercise should include skill acquisition (complex tasks such as skiing, kayaking, etc.) and aerobic exercise. The best sports are those that simultaneously tax the cardiovascular system and the brain, such as rock climbing, balance drills, etc. (Ratey, 2008).

Nutrition

Nutritional deficiencies have proven to be a risk factor for depression (Alpert, 1997). Such risk factors include; excessive consumption of sucrose (sugar) (Johnson, et al. 2007), excessive amounts of magnesium or vanadium, amino acids imbalance, excessive consumption of caffeine, deficiencies of folic acid, vitamin B, vitamin C, calcium, copper, iron, magnesium, potassium or biotin (Morrow, 2010).

Diet and nutrition can play a key role in the onset, severity, and duration of depression, including daily mood swings (Holford, 2001). Many of the same food patterns that precede depression coincide with food patterns occurring during depression. These patterns may include skipping meals, poor appetite, and a desire for sweets.

Adolescents, notorious for their poor eating habits and the highest consumer group of junk food, are particularly at risk. Recent research conducted by British and French epidemiologists showed that over-eating of junk food is associated with increased levels of depression. Data collected from study participants (N=3,486) shows that people who ate a junk food diet – one that was high in processed meat, chocolates, sweet desserts, fried food, refined cereals and high fat dairy products – were more likely to report symptoms of depression (Akbaraly, et al. 2009) than

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people who ate a diet rich in fruits, vegetable and fish were less likely to report being depressed (Zeratsky, 2010).

Treatment implications for residential settings.

Since adolescents typically are not involved in the preparation of the food they eat, they are ill informed about what they eat. The combination of providing nutritious meals with limited or no access to junk food is beneficial. However, in order to increase the level on understanding and insight of how nutrition can affect both mental and physical health, a hands-on approach may prove more effective. Participating in menu planning, shopping for the ingredients, and meal preparation can provide an optimal platform for adolescents to become familiar with the mind-body-food connection. In addition, the youth is in an optimal position to acquire budgeting, cooking, and organizational skills, which likely will have a positive effect on self-worth.

Alcohol and Drug Abuse

The damaging effects of illicit drugs on the developing brain are well documented in the professional literature (Ramage, et al. 2005). A new study, published in *Neurobiology of Disease*, suggests that daily consumption of cannabis in teens can cause depression and anxiety and has an irreversible long term effect on the brain (Gobbi, 2009). The study findings suggest that cannabis may act on two important compounds in the brain – serotonin and norepinephrine – which are involved in the regulation of neurological functions such as mood control and anxiety.

Depression can cause substance abuse (Dorus & Senay, 1980), substance abuse can cause depression, and the comorbidity has well been established (Regier, et al. 1990). While drug abuse in adolescents is often viewed as a way to rebel or fit in with peers, some youth hope to find symptom relief through self-medication (US, NDCP, 2008). Some teens turn to substance abuse because of an underlying mood disorder, such as anxiety or depression, which has been discussed throughout this paper. A study involving 424 youths between the ages of 16 and 19 years, shows that the onset of depression is correlated with substance abuse, suggesting that self-medication leads to the development of alcohol or substance abuse (Deykin, et al. 1987).

Adolescents are notorious for having difficulties accepting and/or recognizing that they are depressed and can be treated with medication and psychotherapy (Sodaro & Ball, 1999). A recent study by the US Department of Health and Human Services estimates that as many as 3 million adolescents suffer from clinical depression, but an estimated 2 million are undiagnosed and not receiving proper treatment (SAMHSA, 2009). Youth who do not receive effective treatment show increased levels of self-medication through substance use/abuse, often only serving to exacerbate the problem.

Both alcohol and marijuana have a sedative effect on the brain

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resulting in diminished cognitive abilities, and such “numbing” effects may provide possible symptom relief (IAHC, 2012). Stimulants, such as cocaine, tend to elevate mood. However, attempts at self-medication often lead to increased symptomology including elevated forms of anxiety and depression as well as maladaptive social behavior like, lying, stealing, deception, and family conflict.

Treatment implications for residential settings.

Duncan, et al. (2009), after reviewing dozens of meta-analyses, suggest that there is no statistical difference among dozens of therapeutic models in treating mental illnesses with the exception of anxiety disorders. Similar findings are emerging in the treatment of alcohol and drug abuse literature. Kelly & Myers (2009) report that there are no scientific studies that support one specific therapeutic approach as the best format for support groups for adolescent poly-substance abusers. The same researchers have found that adolescents participating in 12-step meetings with members closer to their own age attend more meetings, are involved in more active step work, and have better long-term recovery outcomes (Kelly, Myers & Brown, 2005). In addition, they have found that adolescents respond more to the general group support dimension of group dynamics than to the spiritual aspects of the program or active step work (Kelly, Myers & Rodolico, 2008).

These findings lend credence to the notion that the “change factor” in a recovery group does not lie with a particular treatment approach (i.e. 12-step, N.A., rational recovery, etc.), but with the efficacy of the therapeutic properties of the peer group itself. In sum, peer support and encouragement trump a particular treatment approach. The “art” in creating a supportive peer approach within the context of a treatment group is first and foremost a matter of the skill level of the therapist. Maintaining a supportive relationship with the student, while at the same time demanding accountability, is what matters most.

Family Role and Dynamics

Those in the helping professions who work with families are concerned with significant shifts in parenting styles. They describe the phenomena as *parental induced psychological fragility* (Hara Estroff Maano, 2004). This phenomenon is driven by a berserk-gone approach to prepare the child for an increasingly competitive world. In this misguided fashion, parents are going to extraordinary lengths to take the lumps and bumps out of life for their children. However well-intentioned, parental hyper-concern and micro scrutiny have the net effect of making children more fragile. Hara Estroff Marano (2004) suggests that this may be the primary reason why the young are breaking down in record numbers. The same researcher suggests that many of the strategies parents employ to prepare their young for real life paradoxically leave them crippled, and in need of “training wheels” well into their twenties and thirties.

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The net effect of such “hyper-protective” parenting is a young adult with diminished coping skills. Parents who are overly controlling in an attempt to mitigate difficulty, pain, hardship and/or exposure for their young leave the child with inadequate tools to cope with stress. Such a parent will mortgage the child’s future for comfort in the present. They want to eliminate the growing pains without realizing they leave the child unprepared to succeed in a stressful environment.

The Perfect Storm

Traditional Contributors

Traditionally, etiology and epidemiology of anxiety, depression and their co-morbid features have been explained in through: a) Psychodynamic and Relational Theories, b) Behavioral and Cognitive Learning Theories, c) Biological Models, and d) the Development Models. While these theories and models remain valid and can be viewed as “traditional factors”, the surging levels of anxiety and depression among adolescents and young adults can no longer be explained by these theories and models alone.

Cultural Contributors

An increasing number of mental health professionals are suggesting that the answer to the unprecedented expansion of anxiety and depression among youths is due to a dramatic rise in environmental stress. More so than ever before, teenagers are bombarded with life stressors on a daily basis. Contributing to this heightened stress level is the fact that the psychosocial maturation processes in contemporary youths are delayed compared to previous generations, resulting in diminished coping skills leaving youth less able to cope with stressors.

Thus, the cultural factors of a) heightened stress through media, b) electronic and virtual networking, c) shift from intrinsic to extrinsic goals, d) paradoxical consequences of choice, e) lack of cardiovascular activities, f) lack of optimal nutrition, g) alcohol and drug abuse, and h) shift in family role and dynamics, also need to be considered when identifying factors responsible for the rapid proliferation of anxiety and depression in the young.

Comorbidity between Traditional and Cultural Factors

The traditional factors based in psychodynamic and relational theories, behavioral and cognitive learning theories, biological models, and developmental models of anxiety and depression, constitute one of the “weather fronts.” The co-morbidity of anxiety and depression build a second “weather front,” and the cultural factors provide a third “weather front.” When all of these fronts converge, they present the “perfect storm”, a meta-co-morbidity of sorts.

Youth who require residential based treatment are often caught in

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such a storm. The symptoms that bring them to this point may have single or multiple origins. Moreover, the origin of anxiety and/or depression may be found in traditional or cultural factors, however, when the child reaches the acuity of requiring residential care, both traditional and cultural factors are inevitably present. The origin of the problem is often obscured because of multiple presenting symptoms. Diagnosis and treatment are further complicated as symptoms of both anxiety and depression mirror each other.

Adolescents caught in this “perfect storm” often exhibit symptoms that a casual observer may interpret as oppositional or purely conduct related. Consequently, such a child may find him or herself in a behavior modification program that does not strategically and mindfully address the underlying stressors. It is not unusual then that such a youth perceives treatment as a punishment for being “bad.” Hence, an intense, deliberate approach in addressing all the contributing factors through strategic programming that aims at symptom relief is likely to be far more advantageous.

Implications for Residential Treatment

Historical Perspective

During the 1960s, 70s, and early 80s, adolescents requiring residential care were essentially treated in one of three different settings. First, youth with “mental disorders” were treated in specialty psychiatric hospitals at a cost of \$500 to \$1,000 per day (Mechanic, 1985). Youth requiring residential care that fell under the jurisdiction of the juvenile justice system, the Department of Child Services, or other state-run agencies were placed by these respective agencies in long term institutions. Youth, who required residential care, but fell outside of the parameters of the above mentioned groups, were placed in “private” specialty schools and program.

These specialty schools and programs grew out of a combination of character education, drug rehabilitation models and/or milieu therapy. Adolescents who were referred to these settings presented with oppositional behaviors, maladjustment, underachieving, and/or substance abuse. Little or no formal therapy was provided. The term “therapy” was purposely avoided in order to create distance from “mental disorders”. Loosely, these provides were labeled as “emotional growth” schools and facilities.

However, with the proliferation of managed care and the subsequent disappearance of most adolescent psychiatric hospitals, parents and professionals were looking to specialty schools and programs to treat the child with needs beyond character education and a “structured environment.” Unequipped to provide formal therapy, emotional growth schools and programs were ill prepared to provide optimal services to clinically challenged youth. Subsequently, new providers entered the field

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that made use of both milieu therapies, while simultaneously providing clinical sophistication to effectively treat youth with diagnosable mental disorders and disturbances. Eventually, after the turn of the century, the majority of “emotional growth” programs followed these early pioneers and added psychotherapists to their staff.

Contemporary Practices

Over the past few decades, differential diagnoses have expanded. Correspondingly, treatments have become more specialized. However, up until the first five years of the new century, residential treatment centers and specialty schools and programs have often attempted to treat an ever widening range of issues and problems. Thus, it is not uncommon for programs to treat all forms of mood disorders, anxiety disorders, pervasive developmental disorders, drug and alcohol problems, personality disorders and disorders that first appear during childhood such as attachment disorder. Following the medical model, some specialty schools and programs have become “general practitioners” with the differentiation between providers often characterized by minutia.

Looking for the next Step

Within the past 2-5 years, a small number of providers have abandoned the “general practitioner” approach in favor of specialization. These specializations, which will likely become increasingly differentiated in coming years, are driven by two factors. First, with the anticipation of the new publication of the fifth edition of the Diagnostic Statistical Manual (DSM V), there will be an ever widening differentiation of diagnoses. Along with such differentiation comes the need for a greater spectrum of best practice models relative to identified problems. Second, cutting edge treatment and intervention models must take into account the cultural factors described above. While in the past some of these contributory factors have been addressed (i.e. substance abuse, change in family roles), others received little or no attention.

Therefore, advances in modern neuropsychology, continued forays into nutritional science, new models of addiction treatment, incredible breakthroughs in exercise physiology, and new emerging studies on moral and value education must be mindfully and strategically incorporated into the treatment of anxiety and depression. Since the contemporary culture is not likely to roll back to a more pastoral time, residential treatment must consider a mindful, strategic approach to incorporating interventions and methods that attend to both traditional and cultural factors in order to provide a holistic method that is optimized for the treatment of anxiety and depression.

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