



Papers by Yellowbrick Leadership

---

**WHAT'S EMERGING ABOUT EMERGING ADULTS?**  
**New Research and Clinical Applications**

**By Jesse Viner, MD**  
**Founder and Executive Medical Director**

Emerging adulthood is a developmental period of both great risk and potential. Developmental psychologist and researcher Jeffrey Arnett was the first to identify and name the period between ages 16 and 29 as a distinct developmental phase termed Emerging Adulthood; the age of possibilities. Arnett's decade of research is published and co-authored with Yellowbrick Board of Advisors member and NIMH research scholar Dr. Judith Tanner, in *The Emerging Adult; Coming of Age in the 21<sup>st</sup> Century*. Arnett and Tanner identify 5 primary features in the normal phase of emerging adulthood:

- the age of identity exploration;
- the age of instability in all areas of life;
- the age of feeling in-between adolescence and adulthood;
- the most self-focused age;
- the age of possibilities and opportunities to create the future.

As a normal part of this developmental period, the emerging adult is experimenting with everything...from drugs and alcohol, to sexual partners, to lifestyle patterns, to career opportunities, to social and political identities...literally every aspect of their lives is in transition, becoming... Think for a moment about your own path in young adult life... what were you doing? Were any of you with me at Woodstock?! If you say you remember Woodstock, I know you weren't *really* there!

Daniel Siegel, M.D. in his comprehensive work *The Developing Mind* (1999) synthesizes the findings from developmental neuro-scientific research. This growing body of research shows that the ultimate, organizing purpose of the brain's formation and growth throughout the lifespan is to evolve an ever more complex, integrated and higher-order representation of the self. In other words, identity formation is a crucial, nuclear process for survival and adaptation. Emerging adulthood is an active and essential window of time in the maturational unfolding of identity.

The emerging adult phase has unique emotional challenges:

- consolidation of identity and self regulation
- role transitions within family,
- peer and intimate relationships,
- establish oneself as a capable and valued person within society.

During emerging adulthood, a second wave of psychological separation-individuation occurs with a corresponding profusion of brain cell pruning, re-networking and the establishment of neural patterns that correspond to enduring patterns of experience and behavior. Whereas in the first phase of separation-individuation in the 2<sup>nd</sup> through 4<sup>th</sup> years of life, where much of identity formation is ironically along the lines of becoming ourselves by becoming like our primary caretakers, identity formation in emerging adulthood takes place along the lines of

identifying with peers, extra-parental adults and heroes. The representation of self also derives ever more specifically from the experience of the interface with the world outside the family home. It is important to understand that brain development in the late teens and twenties is still such that action and subsequent experience is the feedback system most relied upon for information as to identity. Freed from the constraints of living within the family home and being subject to its various rules and restrictions, in addition to broader exposure to alternative choices, emerging adults engage with the world in new ways as it offers novel opportunities for self experience and expression. Behavioral exploration and even risk taking are normative, even required actions in the service of learning so as to shape the self; risk taking allows the emerging adult to experience the outer margins of their “comfort zone”, thus defining the self’s boundaries.

Behavioral exploration and the search for myriad experience strengthen the self’s competence and facilitates a coherent motivational reward system; you learn to know both what you are good at and what feels good. For example, the career literature indicates that those emerging adults who try more and different work situations prior to forging a career commitment experience increased career success and satisfaction.

Siegel’s review of the research also demonstrates that the self does not develop optimally in isolation but within a context of relationships. Advances in the neurobiology of interpersonal experience (cf., Daniel Siegel, 1999) show that the brain forms its neural connections within human connections. In Siegel’s words, “Human connections shape neural networks”. The development of synaptic networks is how the brain expands and sustains the architecture for new learning. The brain, not just the heart and soul, needs emotional relationships to grow. According to Allan Schore (2003) a Yellowbrick Board of Advisor who is an internationally recognized scholar on attachment and affect regulation, it has been demonstrated that built into our DNA is the fact that intimate relationships throughout life act as psychobiological regulators of hormones that directly affect gene transcription. This has powerful implications for the healing role of intensive psychotherapy.

Today’s culture, especially on college campuses, while also decried, offers opportunities for exploration that did not exist even a decade ago. Jarrett Seaman, who will be at Yellowbrick on December 4<sup>th</sup> discussing his book *Binge: Campus Life in the Age of Disconnection and Excess* which was written following 2 years of research living on a dozen college campuses across America, describes how traditional dating has become the minority pattern replaced by the phenomena of spontaneous “hooking up”. This is where groups of men and women congregate for an evening together, most often involving alcohol and sometimes drugs, and everyone implicitly agrees to “see what happens”. This provides a fluid interpersonal context for experiencing oneself in relation to others, and coming to know individual needs, struggles and preferences. The current culture allows for both men and women to initiate though this path remains more treacherous for women. Studies show sexually aggressive or experienced women (Seaman’s research and surveys indicate over 80% of women have sex during college) are tarnished in reputation and lose status over time compared to equivalent men who rise in status. The culture of “hooking up” exists despite the fact that Glenn and Marquadt’s survey of 1000 women on 11 campuses demonstrates that 63% of career oriented college women state they intend to find their husband while in college.

When we consider some of the implications of these patterns and statistics we come to understand some of the socio-cultural factors that contribute to emerging adulthood being a time of instability.

Family culture and relationships, community norms, and institutional expectations of secondary schools no longer function as implicit regulators of the self. The emerging adult is challenged to autonomously define, establish and further develop these self regulating values, principles and capacities. According to Jennifer Tanner Ph.D., developmental research shows that during emerging adulthood there is a shift away from family and neighborhood toward greater individual identity, personal responsibility, personal power, self-regulation, and self-agency in the larger community and society as a whole.

Contexts such as college campuses are destabilizing as there is little guiding presence of authority beyond those provided by the law, multiple opportunities for exposure and provocation to engage in risk taking behaviors. Contradictory social and personal expectations for maintaining one's membership while striving to achieve individual goals are often compounded by an ambivalence within the emerging adult regarding living out the values and expectations from their family of origin.

These challenges occur within a developmental context of as yet incomplete brain networking, loss and transition from the traditional infrastructure of community support available to minors, and increasing confrontation of their limited capacity to function in an ever increasing complex world beyond home. Jennifer Tanner Ph.D. conceptualizes negotiating these challenges in emerging adult development as a process called "Recentering". This represents a transformation of the locus of power and responsibility into a hopefully integrated and coherent emerging adult identity. All too often this process fails.

Research and clinical experience demonstrate that about 75% of those who are to become psychiatrically ill will do so in late adolescence and young adulthood. The U.S. Department of Health and Human Services estimates that 18% (6.4 million) of those 16-25 meet the criteria for a major psychiatric diagnosis. Freidman, et al conservatively assess that 7% (2.6 million) are functionally impaired as they transition into adulthood. These emerging adults often have a complex combination of psychiatric illnesses such as depression or anxiety, learning or processing difficulties interfering with skill development, and emotional struggles that distort personal growth.

Attempts at coping by troubled emerging adults often introduce complications from behavior patterns such as substance abuse or eating disorders which further compromise brain integrative and learning capacity, reinforce social disconnection, and arrest the development of emotional and executive competence. Problem behaviors such as binge-eating and vomiting affect brain function through the severe and enduring disruption of serotonin, dopamine, and opioid systems. This leads to further affective disorganization, then dissociative somnolence. Vomiting in bulimia, for example, is associated with decreased serotonin binding in the hypothalamus, disrupting regulation of appetite, satiety, and mood (Kaye, 2001).

Nutritional restriction in anorexia actually diminishes brain volume with corresponding cognitive impairment, obsessiveness and emotional dysregulation. It has been demonstrated that substance abuse affects the process of myelination which remains incomplete into the mid-twenties. Myelin lining of neurons is consolidating during the emerging adult years, as is the development of the orbito-frontal cortex which is the brain base of impulse control and judgment. By affecting myelin in these critical brain areas, the networks can't carry the same degree of stimulation, have limited resilience and are at risk for becoming overloaded much in the same way as narrow bandwidth carries limited signal and the system is at risk for crashing if there is signal overload.

Many young lives often never fully emerge into successful adulthood. The Children in Community Study (2000) compared young people with emotional and behavioral difficulties with others matched for gender and social class and found for those with psychiatric difficulties:

- The risk for failure to complete school is 14 times greater
- The rate of not being in school or employed at ages 18-21 was 4 times greater
- The risk of engaging in illegal activity was 3 times greater
- The risk of either gender being involved in a pregnancy was 6 times greater.

The authors conclude the evidence is compelling that millions vulnerable of young people with emotional and behavioral difficulties become delayed and derailed in the process of emerging into adulthood.

Seaman's research demonstrates that even those emerging adults continuing to function academically have significant emotional difficulties. The number of undergraduates on psychiatric medication has tripled, including one quarter of Harvard's students. Visits to university counseling centers has similarly increased. The National Institute of Alcohol Abuse and Alcoholism 2002 report indicated 1400 annual alcohol related deaths. A National Institute of Justice report in 2002 found that 250,000 college women had been victims of rape with only 5% officially reported. Suicide remains the 2<sup>nd</sup> leading cause of death in emerging adulthood, outpaced by accidents which most often include alcohol. For every successful suicide, there are 40 failed attempts. Nine times again as many college students at some point seriously consider killing themselves.

#### **Treatment Systems: What we have; What works.**

Treatment systems are not sufficiently organized or funded for the seriously troubled emerging adult population who, with effective treatment, are capable of becoming independent successful adults. College health services are not able to offer intensive or extended services. Community hospitals are already hard pressed to operate acute care psychiatric units with short term symptom stabilization aftercare day programs. The emerging adult's needs are approached from an episode of illness perspective and a syndrome specific focus rather than a longitudinal developmental model combining traditional treatments, extended strength based initiatives and knowledge from research in the field of neurobiology. Recurrent and persistent emotional or behavioral difficulties often extend into partial disability or explode in crisis resulting in referral to residential treatment centers.

National specialty residential treatment centers often provide excellent intervention for the acute episode of illness and build psychological and interpersonal skills necessary for successful young adult functioning. However, this population is the most vulnerable to separations and transitions in their support system and many cannot sustain their progress upon return to their community. Problems in self-regulation are stabilized, supported and healed within emotionally resonant intimate attachments which take time to develop and are not readily transferable to new therapeutic relationships. Residential treatment centers continue to function on an outdated asylum model of treatment; Go away to get better. The asylum model of treatment does not offer the concurrent experience and opportunity to build internal strengths and an anchored life in the community while receiving necessary professional support and skilled services. The emerging adult is then at risk for stalled development, misunderstanding continued suffering as demoralizing personal failure and experiencing shameful estrangement from needed family and friends.

Vander Stoep notes that families with psychiatrically ill children also tend to withdraw from their community despite increased needs for support. Continued living at home by troubled emerging adults distorts individual developmental needs and strains family bonds already weary from the turmoil and pain of psychiatric illness. Families are additionally burdened with having to cope not only with their child's illness but with functioning as case managers for a fragmented delivery system which collaborates poorly among professionals and families, and lacks accountability for outcome and economic value.

The Annenberg Foundation Trust Report on Mental Health in Adolescence (2005) has reviewed the literature on program evaluation for this population and has concluded that programs are apt to be successful-increasing positive outcomes and reducing negative outcomes if they have the following features:

- a guiding philosophy of young adult difficulties and how to effect change;
- more intensive over more time;
- broad based affecting multiple interacting systems within the individual and their milieu;
- utilize a "person in context" approach assisting "in real time" with hands on active engagement;
- provide multiple opportunities for modeling and mentoring relationships with adults and peers;
- Program self-reflective questioning and monitoring of process and outcome.

### **Yellowbrick: Opportunity, Strategy and Model**

Yellowbrick has developed its unique clinical model in concert with nationally prestigious affiliates Northwestern University Feinberg School of Medicine, Evanston Northwestern Healthcare, The Family Institute at Northwestern University, and The Chicago Institute for Psychoanalysis, as well as our nationally prominent Board of Advisors.

Core research based features of the Yellowbrick model associated with positive outcomes include:

- **Developmental specialization** with the group of emerging adults and their families.
- **Treatment is intensive, extended, multifaceted and integrated into a coherent model.**
- **Yellowbrick Residence offers a developmental platform** for those emerging adults who cannot move forward living at home, on campus, or in an independent apartment. Treatment begins within a 24 hour supported setting and evolves into an individualized supported independent apartment context.
- **Treatment occurs in "real-time"**. The primary purpose of staff presence is not to prevent symptomatic behaviors. Emerging adults retain their capacity to make choices in response to their emotional experience. Treatment relationships provide a container within which they can better hold their tensions and be supported towards self-affirming responses. This is consistent with the neuroscience regarding facilitation of new learning and targets the development of core competence in life skills.
- Treatment occurs within the context of **intimate, often intense relationships embedded in the Yellowbrick community** process which reinforces norms and values consistent with effective, successful functioning. This too is consistent with neuroscience research.
- **Neuroscience research guides the pattern, rhythm and content** of Yellowbrick programming. Attention is paid to developing normative nutritional, activity and sleep patterns. Early morning interventions consist of individual support for developing effective self-organizational skills and patterns. Initial groups are designed for

- introducing gradual arousal, mind-body integration and a structured goal oriented cognitive approach to the day. As the program proceeds, groups and interventions become more interpersonally and emotionally intense. Later there are opportunities to process and metabolize the emotions themselves and their personal meaning. Evenings and weekends provide skilled support for developing the capacity to structure individual time, sustain inner vitality, socialize and play.
- Treatment is delivered directly and supervised daily by a team of **senior, full time Yellowbrick clinicians**.
  - **Families** are involved within the assessment process and throughout treatment with an emphasis on **facilitating the here and now developmental process of emerging adulthood** and learning new ways of relating and communicating rather than revisiting family traumas.
  - A culture and philosophy that emphasizes a **strength based approach leading to competence**; individuals are more than their illness, and that successful outcome means identifying, eliciting, and collaboratively actualizing authentic core strengths, talents, needs, interests, and motivation
  - **Traditional and alternative interventions** including psychiatric medicine, new findings from neurobiology, integrative medicine, multiple forms of individual as well as both small and large group psychotherapy, strength and competence based approaches, and family workshops.
  - Yellowbrick Foundation has developed an extensive, unique clinical research program designed to study emerging adult development and treatment as well as track outcome. The study is being submitted to the Northwestern Feinberg School of Medicine IRB at the end of this month.

In summary, Yellowbrick has developed a clinical model which integrates the research on emerging adult development, program treatment outcome and the frontiers of neuroscience with traditional treatment approaches.

## References

- Aquilino, W.S. (2006). Family relationships and support systems in emerging adulthood. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21<sup>st</sup> Century* (pp. 193-218). Washington, DC: American Psychological Association.
- Arnett, J.J. (2006). Emerging adulthood: Understanding the new way of coming of age. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21<sup>st</sup> Century* (pp. 3-20). Washington, DC: American Psychological Association.
- Humphrey, L.L. & Viner, J. (2007). Treatment Goals Inventory. Yellowbrick Program. Unpublished manuscript.
- Schore, A.N. (2003) *Affect regulation and the repair of self*. New York: Norton.
- Schulenberg, J.E. & Zarrett, N.R. (2006). Mental Health during emerging adulthood: Continuity and discontinuity in courses, causes, and functions. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21<sup>st</sup> Century* (pp. 135-1721). Washington, DC: American Psychological Association.
- Siegel, D.J. (1999). *The Developing Mind – Toward a Neurobiology of Interpersonal Experience*. New York: The Guilford Press.
- Tanner, J.L. (2006). Recentring during emerging adulthood: A critical turning point in lifespan human development. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21<sup>st</sup> Century* (pp. 21-56). Washington, DC: American Psychological Association.