



Papers by Yellowbrick Leadership

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# **A Developmental Psycho-neurobiological Approach to Assessment of Emerging Adults**

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Emerging adults with psychiatric problems, and their families, have many unanswered questions and missing pieces in their understanding of what is wrong and what would truly help. Their problems and concerns at this age are extremely complex and occur across many or most areas of their lives. The developmental agenda for all emerging adults is to define themselves, and their life's greater purpose, in relation to the larger community and world. They must do this as they redefine themselves within their family as increasingly independent while still emotionally connected. There is no greater developmental challenge in all of adult life. Research shows that emergent adulthood is the single most formative time of adult life (Arnett and Tanner, 2006). The young person is making life-long decisions about everything from choice of education and career to marital partner to peer group to lifestyle and value systems.

Neurobiologists teach us that the emerging adult brain mirrors these formative changes. The brain at this time of life is the most neuro-plastic that it will ever be during adulthood. It is evolving evermore expansive and complex systems of neural networks, particularly in the higher brain centers for executive functions and behavioral and emotional self-regulatory functions (cf., Giedd, 2008). Emerging adulthood is also the time of greatest exploration and risk-taking in everything from alcohol and drugs to frequency of sexual partners to pushing the limits of their bodies and society's rules and norms. Developmental scholars understand these processes of experimentation and risk taking to occur across species and to reflect the brain's normal maturation and preparation for separation from the original family unit in order to launch the new adult and family within the community (Giedd, 2008). Considering all these developmental demands and complex changes occurring at once, it is no wonder that emerging adulthood is such a time of upheaval and turmoil for the emerging adult and the entire family. This is precisely why we emphasize a developmental focus, not a symptom-focus, the way most other treatment facilities do.

Not surprisingly, emerging adulthood is also the age period when prevalence of psychiatric disorders is highest, onset of serious psychiatric disorders is most common and the risk of suicide is also greatest (see Viner, Emerging Adult Psychiatric Disorder, this issue). The co-occurrence of serious psychiatric

disorder and/or substance abuse, on top of the enormous challenges of this developmental stage, make it virtually inevitable that the emerging adult's life will come to a profound halt. When we see emerging adults and their families for their initial assessment, many are utterly overwhelmed, confused, frightened and demoralized. They do not know what is really wrong or what will help. That is precisely why, at Yellowbrick, we place such an emphasis on a thorough assessment of the developmental, psychological, psychiatric, life skill, and neurobiological functioning of the emergent adult, including both strengths and weaknesses. We devote three full days, and our three most senior staff, in order to formulate a thorough and multi-layered understanding of the interplay of the young person's functioning, dysfunction and potentials across all of these areas of their lives. We have learned that it is never simple or straightforward. We hear time and again from families how grateful they are that at last someone can explain to them how it all fits together that their brilliant son had to drop out of college and won't leave his room or their multi-talented daughter, who seemed to have everything going for her, tried to kill herself. Yellowbrick also helps to frame the questions and the path for further discovery when issues are not yet clear.

The Emerging Adult Assessment Center utilizes a developmental, psycho-neurobiological model of understanding the young adult, just as Yellowbrick utilizes this model in the approach to treatment. Psycho-neurobiology integrates the role of brain development during this critical period for formation of self-identity, self-regulation of behavior and emotion, attachment relationships, and separation and individuation from the family, as the young person emerges into the larger community and world. The assessment process incorporates different methodologies to analyze the emerging adult's functioning across all of these central domains, and their neural substrate, as well as the primary areas of personal, occupational, and self-care functioning necessary for adult life. Each domain of the assessment process will be described, in turn, to give you a more in-depth understanding of what we assess and why it is important.

## **The Yellowbrick Assessment Model**

**Neuropsychology and Neuropsychiatry.** Neuropsychological and neuropsychiatric functioning refer to the interactive effects of brain structures and functions, and the corresponding neurochemistry and electromagnetic activation, on psychological operations and behavior, including both normal and abnormal processes. Neuropsychology includes intelligence and cognitive functioning, as well as executive operations such as speed and flexibility of mental processing, cognitive organization, and problem solving ability, among others, in both verbal and nonverbal areas. We try to understand how the young person's brain operates in terms of capacity for new learning, memory, and social-emotional

processing effects on mental operations. This is very important to know because research shows that drug and alcohol abuse, eating disorders, and mood disorders such as depression and bipolar disorder, can all have devastating effects on mental functioning and should be targeted for intervention. Most of the young people we see have struggled with one or more of these disorders and usually have some resulting impairment in their neuropsychological functioning. Our assessment team includes national authorities in neuropsychological testing integrated with self-identity and personality functioning. We also see many emerging adults with long-standing difficulties with Nonverbal Learning Disability (NLD) so we supplement their assessment with expert consultation from Mr. Joe Palumbo, a nationally recognized scholar-clinician in the field of NLD and self-development.

Neuropsychiatrically, it is critical to understand precisely the nature of the psychiatric disorder(s) the young person struggles with in order to optimize the psychopharmacologic and overall treatment. The emerging adults we see are seldom simple diagnostically so it is essential that we review all previous findings and medication history, speak with previous psychiatrists, and integrate all that data with the findings from our thorough psychoneurobiological assessment, to arrive at a final diagnostic picture. Parents invariably enter the assessment with serious questions about the appropriateness of the current medications. We are often able to provide real answers to tough questions. Neuropsychological and neuropsychiatric functioning is assessed at Yellowbrick with a series of well-established tests, questionnaires, activities and interviews. The findings are summarized in total, and interpreted as a coherent whole.

**Self-Identity and Personality Organization.** Self- and personality-organization are the developmentally evolving processes that determine who we are, how we see ourselves, both alone and with other people, how we experience and regulate our emotions and behavior, and how we view other people and their motivations and actions. Psychoneurobiologists have found that the primary, organizing purpose across development is to create a coherent and complex view of our self (Siegel, 1999). Fundamentally, all psychological difficulties involve elements of self- and personality-organization. Many of our emerging adults come to us with diagnoses of personality disorders, some of which are associated with great shame and hopelessness, such as Borderline Personality Disorder. We assist emerging adults with such diagnoses to sort through, and to understand, the true nature of their self-identity and personality, and how they can address the issues to move forward in treatment and their lives. In contrast to shame and hopelessness, emerging adults who go through the assessment process often feel a comfort and sense of hope that Yellowbrick has been able to “see” into them in a way they have never experienced before that helps them to know who they are, and what they need to do, to “get better”. The quality and level of self-identity and personality-organization are assessed here utilizing a range of well-established methods, including both objective and projective testing as well as

in-depth interviews with our senior staff, including Dr. Viner who is nationally recognized as an expert in understanding self-development and personality organization.

**Self-Regulation of Tension, Emotion and Behavior.** The capacity to regulate tension states, emotion, and behavior is based in specific neural systems that are formed early in development, evolve further during a second growth spurt in late adolescence and emerging adulthood, then remain relatively constant throughout life. Understanding the self-regulatory processing of the emerging adult is essential to a complete assessment of their emotional, social and behavioral functioning. Many of the young people we assess have severe difficulties with self-regulation, including, for example, disturbed patterns of sleeping and waking, anxiety or dysphoric mood dysregulation, and/or behavioral dysegregation such as an eating disorder or addiction. We assess self-regulation through a range of real-time technical recordings, behavioral sampling, and self-report methods.

**Strengths and Coping Capacities.** Strengths and coping capacities are extremely important in assessing a young person's abilities to engage in the world, fulfill latent potentials, relate to other people and respond to treatment. They can make all the difference in someone's participation in life and feelings of competence and hope for the future. We find that most of the emerging adults we see have quite significant strengths and abilities but have often lost sight of them in the midst of all their struggles. It helps them to be validated in their authentic capabilities as they come to terms with their limitations and try to move forward in their lives. We assess their strengths and coping through their life experience, interviews with our senior clinicians and the life-skills and education/career specialists, as well as well-established self-report inventories.

**Temperament.** Temperament is one of the most enduring characteristics known. It is evident shortly after birth and continues, relatively unchanged throughout the lifespan. It affects everything we are and everything we do, from the way we approach new situations and people, to our daily rhythmic patterning, to the level of stimulation we are comfortable with and our baseline mood fluctuations. In the Yellowbrick assessment we use the most well established and widely used measure of adult temperament, the Adult Temperament Questionnaire, to assess temperament in emerging adults. Parents find the information on their child's temperament particularly helpful in understanding some of the long-term worrisome behavior patterns and vulnerabilities they have observed and not known quite how to integrate.

**Attachment Style.** Attachment patterns, like characteristics of temperament, reflect neural systems within the brain and are relatively enduring from early childhood throughout life. Our attachment styles and relationship patterns determine much of who we are and how we interact in the world. Unlike temperament, however, attachment styles, and their corresponding neural systems, can change

but only through repeated, intensive and new real-life, real-time experiences. We assess attachment patterns through the clinical interviews and a series of self-report questionnaires and 1 clinical rating scale.

**Family Relationships.** Family relationships are a central aspect of the emerging adult's life. They form the prototype for all subsequent relationships including with peers, romantic partners, classmates and work associates. When a young person is troubled and struggling to launch an independent, self-sufficient life, the family is always deeply affected. There are usually conflicts and wounds that need healing on both sides. We devote considerable time during the assessment to understanding the family's history and experience together, as well as their communication and relationship patterns at this critical time in the emerging adult's life. We utilize self-ratings, interviews, and direct observation methods to assess family relationships.

**Separation and Individuation.** One of the major developmental challenges of emerging adulthood is to become independent and self-sufficient while maintaining a healthy degree of closeness and connectedness. It requires moving beyond the family and the neighborhood of childhood and going further out into the world with competence and confidence, while staying in touch with family and friends from home. There is a corresponding surge of brain development associated with preparing the young person to live, love, work and act self-sufficiently, within a community. When a young person is struggling to do this, it usually derails the process of separation. This is assessed at Yellowbrick through clinical interviews, self-reports, and direct observation of the family and the emerging adult together.

**Life Skills.** Well-developed life skills such as personal self-care, money management, and household responsibilities are necessary for every emerging adult. Yet, these are frequently undermined by psychological difficulties. At times of emotional distress, these everyday activities can be extremely overwhelming and difficult to accomplish. In order to assess life skills functioning, each emerging adult in treatment at Yellowbrick undergoes, with our occupational therapist, an interactive, behavior-sampling assessment that is very well established in the field.

**Education and Career Functioning.** At the age of emerging adulthood, a central developmental goal is to begin to envision one's career choice, post-high school educational goals, and to begin to take some steps toward those goals. For someone with psychological difficulties, however, it is usually almost impossible to move forward in education and career aspirations until he or she begins to address the difficulties that were part of the derailed developmental process in the first place. In order to assess educational and career functioning, we utilize a range of self-report and interview methods, including the very well respected Strong Vocational Interest Inventory.

**Risk Factors.** The risk of suicide is very real in the emerging adult population. This is especially true in severe depression, particularly in combination with substance abuse and certain impulse control problems. In order to assess suicide risk, we rely on clinical interviews with highly senior staff, review of history, and self-report inventories that have well-established predictive validity for suicide attempts. Emerging adults are also at risk for other forms of self-destructive and self-sabotaging behavior such as self-injury, drug abuse or victimization. We assess the young person's risk for all forms of self-harm.

**Authentic Motivation and Therapeutic Alliance.** True motivation for change, and persistence toward personal life goals, are essential in determining someone's current capacity for treatment and making changes in their life. Therapeutic alliance is the single best predictor of psychotherapeutic treatment outcome. We consider these two sources of motivation for change and treatment to be critical determinants of whether a troubled, treatment-wary or treatment-resistant young adult will make use of the help available. There are two self-report questionnaires of motivation for treatment as well as a series of interviews with senior clinicians that assess these core elements of emergent motivation.

### **Translating the Assessment: The Products**

**Collaboration Conference.** The assessment's Collaboration Conference is the meeting of the emerging adult and his or her family with the professional team involved in the assessment process. The purpose of the meeting is to join together the experience of the emerging adult and the family with the collective wisdom of Drs. Viner, Monroe-Cook and Humphrey's 90+ years of clinical experience working with troubled emerging adults. In collaboration together, we focus our collective wisdom to understand the full nature of the developmental and psycho-neurobiological difficulties that have brought the young person's life to a halt, the matrix of factors that have contributed to those difficulties, the available strengths and resources the young person already has, and what it will take for him or her to get traction in treatment and be able to truly launch a fulfilling and meaningful life.

**The Assessment Report.** The results of the completed assessment are summarized in an integrative and comprehensive report, which is available to the emerging adult and their parents within two weeks of the Collaborative Conference at the conclusion of the assessment. The report incorporates all of the findings from each of the psycho-neurobiological, and life-functioning, domains summarized above, as well as the history and previous treatment records, all integrated into a cohesive whole. The report is organized into different sections corresponding to each psycho-neurobiological domain assessed and integrated into an Executive Summary at the beginning of the report. The Executive Summary reviews the results of all the tests, inventories, procedures, interviews and history, and integrates

them into a coherent formulation of the patient’s psycho-neurobiological functioning, levels of self-organization and self-regulation, attachment and relationship patterns, psychosocial development, strengths and capabilities, life functioning and self-care skills, career and educational accomplishments and aspirations, degree of risk, future potential, and initiative and motivation for action. This summary naturally flows into the final section of the Executive Summary in which we present the recommendations for optimal treatment, whether at Yellowbrick or elsewhere, and life functioning in general, based on our comprehensive psycho-neurobiological assessment of the emerging adult.

## **Conclusion**

The initial assessment process at Yellow-brick generates a very specific treatment plan for each emerging adult who enters either The Residence or the intensive outpatient Life Strategies Program. The assessment team presents the findings and treatment plan to the entire professional staff so that the treatment team can “hit the ground running” when the emerging adult begins the program. In addition, Dr. Humphrey meets with each emerging adult to provide specific, in-depth feedback about the results of the assessment and how these will be integrated into the treatment plan and ongoing progress evaluations. The meetings with Dr. Humphrey are very powerful and meaningful to the young person as he or she begins to mobilize their own self-understanding and motivation to change.

The Yellowbrick Assessment also provides the pre-treatment data points for tracking the progress and outcome effectiveness of Yellowbrick’s psycho-neurobiological model of care. We are in the process of beginning an extensive and intensive research study of the Yellowbrick psycho-neurobiological model of treatment in our emerging adult population. We have recruited consultation from internationally recognized clinician-scholars and are nearly ready to begin the formal research studies. We will be examining a range of critical questions including, among others, the nature and course of core autonomic self-dysregulation in response to psycho-neurobiological treatment, which has never been studied for any type of psycho-therapeutic treatment, as well as which factors at initial assessment best predict a positive outcome to Yellowbrick’s intensive treatment. Yellowbrick is committed to the highest quality of care possible and that requires that we evaluate our outcomes using well-established scientific methods in psychotherapy research.

## **References**

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