What Were You Thinking?
Brain Development in Young Adults

The young adult brain is different from both child and adult brains. If providers are confused or frustrated by their choices, they may not take into consideration that young adults exist in a unique developmental period. As an adolescent undergoes puberty between ten and sixteen years of age, they undergo a reduction in reward sensitivity and become more likely to engage in thrill-seeking behaviors.[1] Day-to-day life may feel less engaging and in order to make up for that, teens are driven to new experiences in order to feel some of the pleasure and satisfaction they crave. As their pre-frontal cortex matures through their mid-twenties, their executive functioning skills (Table 1) associated with pre-frontal cortex maturation develop.[2] Then, they are better able to slow down decision making and use reason to determine the potential positive and negative impact of a choice. Until then, it is far more like that they will "act now and think later." Today, adults seek to support young adults in moderating impulsiveness.[2]

Table 1. Executive Functioning Branches & Skills

Representational Knowledge	Skills that allow a person to learn rules, conventions, and socio-cultural norms.
Operational Process Skills	Skills that allow a person to plan ahead, stay organized, use working memory, and connect a person's intentions and goals through actions.
Self-Regulation	Skills that allow a person to resist engaging in behavior that is inappropriate or unhelpful in a given situation.

Research has suggested that psychosocial maturation into adulthood is strongly dependent on executive functioning development.[3] Given that young adult executive functioning skills are not fully matured, young adults are a particularly vulnerable population to engage in risky behaviors like alcohol abuse, gambling, smoking and sexual activity.[4, 5, 6] Brain scan studies have shown that young adult and adult brains respond very differently when faced with a possible reward. Adolescents have a strong bias toward immediate gain rather than long-term gain.[7] Both typically and atypically developing young adults are biased toward making impulsive decisions because their judgement skills are still developing. For example, young adults are much more likely than mature adults to choose a $5 reward for completing a task today than a $50 reward a week into the future. This is because as the brain matures, more brain circuits are recruited to suppress impulsive behavior.[7] We also know that young people who experience trauma can have less intellectual energy to devote to these important developmental tasks. When the brain is in survival mode, it may not be able to learn new skills or build executive functioning. Understanding a young person's trauma history may help improve a provider's ability to support young adults by meeting them where they are at developmentally.

What We Know From the Field

As difficult as the transition to adulthood is, young adults with mental health conditions struggle more than typically-developing young adults. As they cope with the symptoms

and impact of mental illness, the developmental tasks being taken on by other youth are temporarily shunted. Studies have shown that adolescents and young adults with mental health conditions are delayed in all areas of psychosocial development except sexuality.[8]

Meeting Young Adults Where They Are

- **Tackle Executive Functioning Challenges Head On** - Since young adults may struggle with using executive functioning skills, it may be helpful to assist young adults in scheduling and setting up reminders about future appointments, and brainstorm with the young adult about ways to hold themselves accountable to attend their appointments.
- **Believe in Recovery and Hold Out Hope** - A group of researchers found that it is essential for mental health service providers to operate within a recovery framework to provide young adults with a sense of hope that they can improve their mental health in treatment.[9]
- **Help Young Adults Find Their Voices in Treatment** - Research has found that emotional competence, the ability to understand one's own internal and personal worlds and having the language to describe it was identified by young adults as a facilitator to engaging in mental health treatment.[9, 10]
- **Pay Attention to Relationship Development** - It is important to work to establish a connected, safe relationship with young people you wish to help. They need to experience that providers are reliable, honest, and non-judgmental. Knowing them as individuals is integral to person-centered care. In addition, stablishing relationships will offer providers insight. It is extremely important for providers to be aware of any changes in a young adult's social behavior that may hint to a pattern of social withdrawal and to screen these young adults for suicidal thoughts or behaviors.[9]
- **Provide Young Adults with Knowledge about DMH Services** and other appropriate services in the community that are available to them and what they can expect from a particular service may be helpful in engaging young adults in treatment.[9, 10]
- **Help Young Adults Manage Their Emotions** - Teaching them skills to deal with stress and anxiety and working to develop strategies for understanding their reactions to people and places they encounter can assist them developing self-care skills that all young adults, but especially those with mental illness, will find useful. Rickwood and colleagues (2005) found that "teaching adolescents to accurately identify and effectively manage emotions may not only lead to increases in the quality of their social support…it may also make them more willing to use that support in times of need."[9]

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RECOMMENDED READING

- Debra Rickwood, Frank P. Deane, Coralie J. Wilson & Joseph Ciarrochi (2005) Young people's help-seeking for mental health problems, Australian e-Journal for the Advancement of Mental Health, 4:3, 218-251, DOI: 10.5172/jamh.4.3.218
- Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: a systematic review. BMC psychiatry, 10(1), 113.

ADDITIONAL RESOURCES FOR DMH EMPLOYEES

- Northeast Massachusetts Community of Practice (Nov., 2011) TTYL: Keeping in Contact with Your Professional. Worcester, MA: University of Massachusetts Medical School, Department of Psychiatry, Systems and Psychosocial Advances Research Center, Transitions Research and Training Center. www.umassmed.edu/transitionsACR/publications
- Northeast Massachusetts Community of Practice (Nov., 2011) My Must Have Papers. Worcester, MA: University of Massachusetts Medical School, Department of Psychiatry, Systems and Psychosocial Advances Research Center, Transitions Research and Training Center. www.umassmed.edu/transitionsACR/publications

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[9] Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2005). Young people's help-seeking for mental health problems. Australian e-journal for the Advancement of Mental health, 4(3), 218-251.

[10] Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: a systematic review. BMC psychiatry, 10(1), 113.