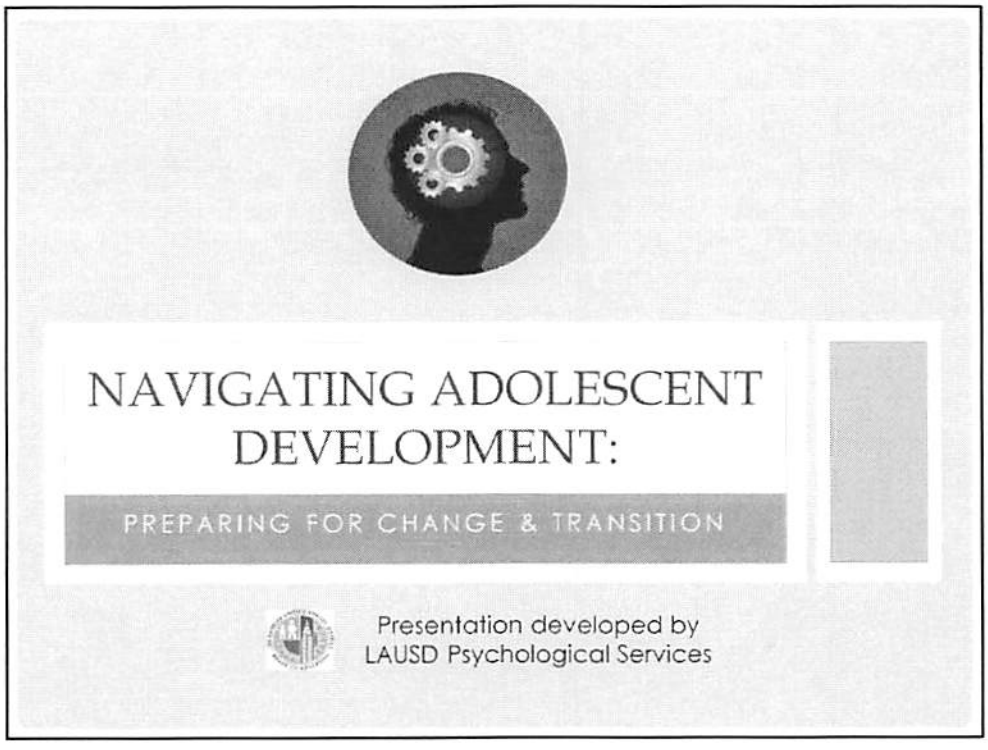



- Introductions
- Survey participants about children ages: (i.e.: How many of you have children in 6th 7th 8th , 9th, 10th 11th 12th grade?/daughters/sons... Frame question according to level of presentation.)
- The responses to the question above will help give you an indication of what might need to be emphasized in the presentation.
- Housekeeping Items: time, certificates of completion (if this is something you planned to present to parents), intro to series, breaks, question & answer format

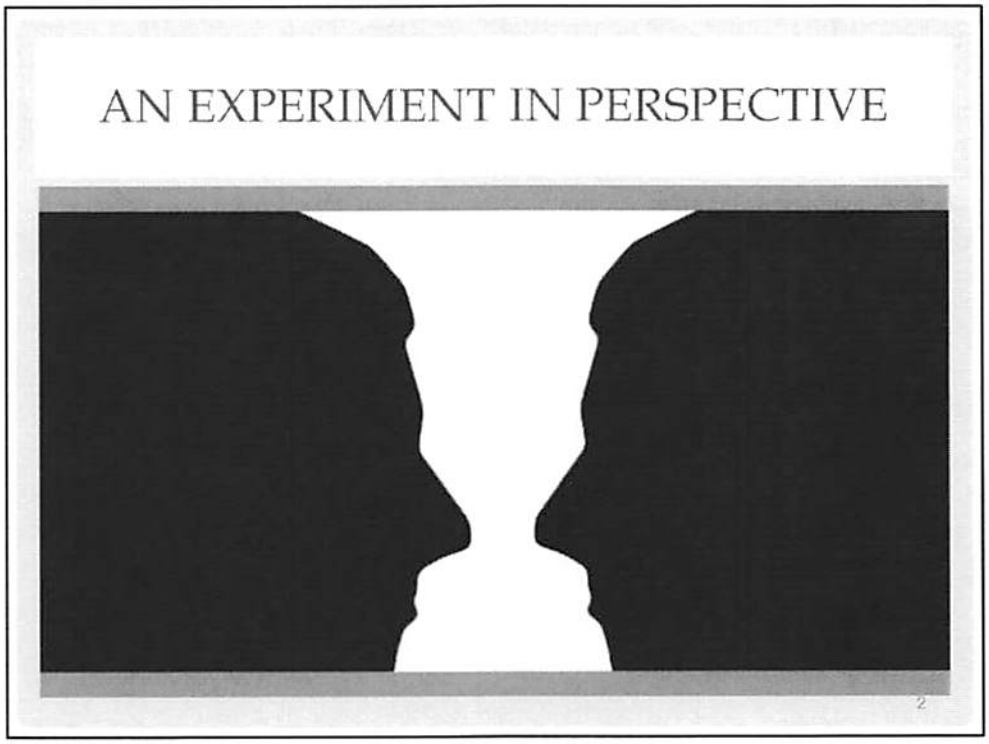
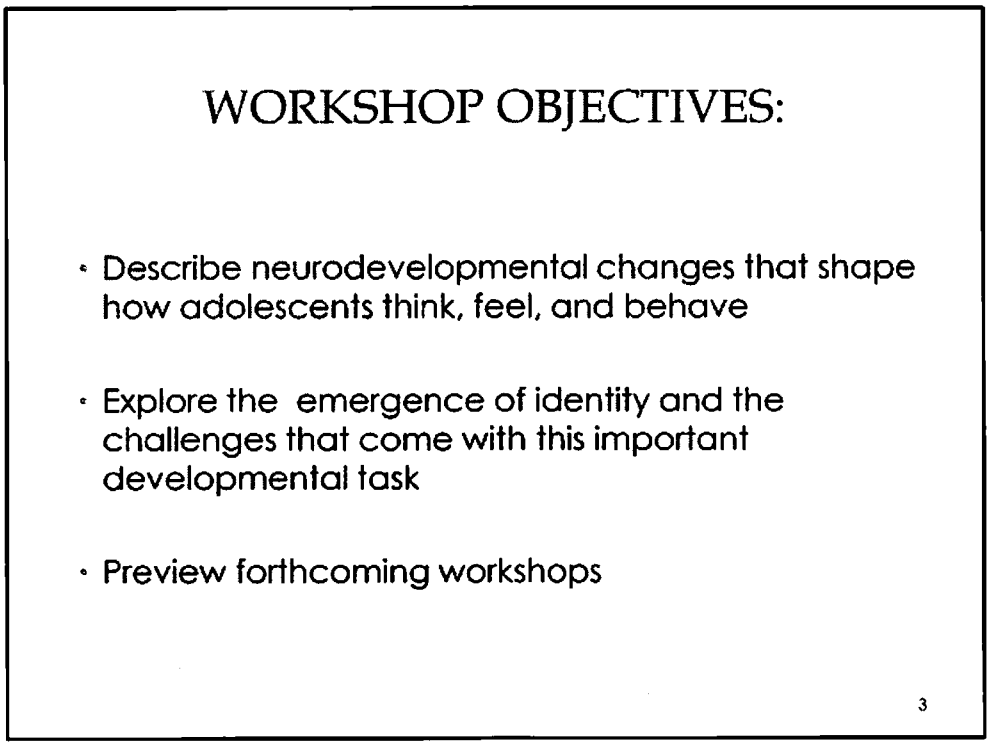



Image retrieved from: http://art.ekstrax.com/2015/01/optical-illusions-simple-yet-wonderful.html

Activity:

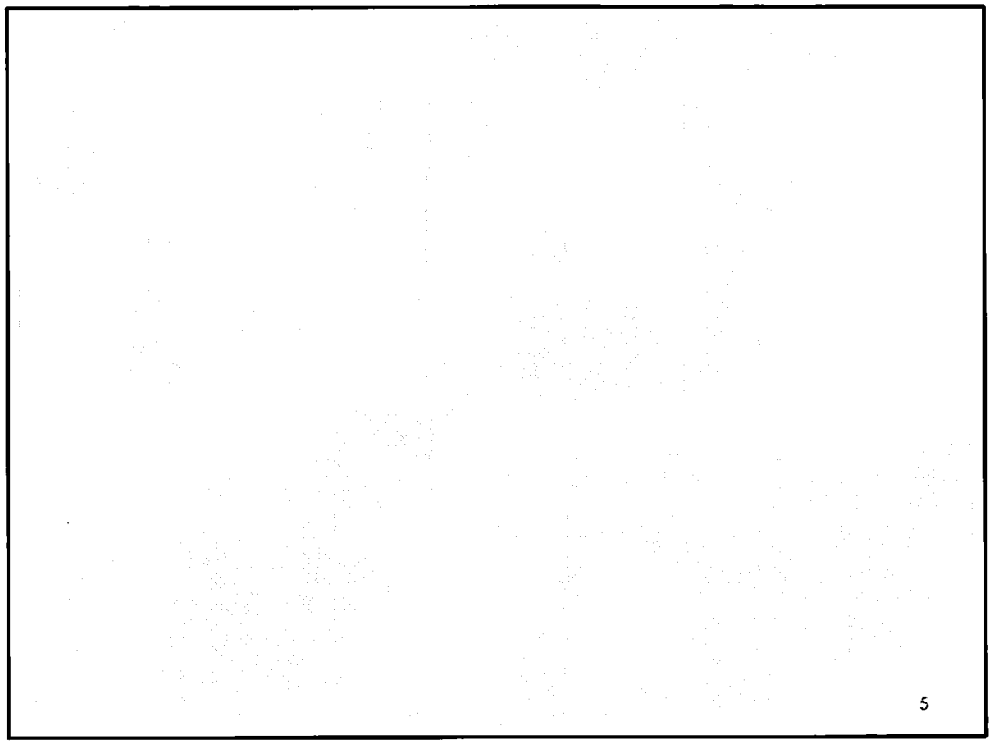
1. Ask participants to describe what they see.
    - Some will see a vase, others will see two people looking at each other.

2. Explain the purpose of the activity; perspective changes depending on what we focus on. An expanded/updated view of adolescent development may help us change our perspective about this stage and better understand adolescent behavior.




Today's presentation will establish a platform from which to explore the opportunities and challenges associated with this stage.

- It will provide the context for the workshops to follow
- We will explore what is happening inside adolescents, such as changes in brain anatomy and neurochemistry (hormones and neurotransmitters) to better understand what we see on the outside (behavior)
- Forthcoming workshops include:
  - Communicating with your Teen
  - Managing Stress and Enhancing Well-Being
  - Motivation: Understanding it, Encouraging it, and Maintaining it
  - Social Media and Your Adolescent
  - Special Education Referral and Exiting Process

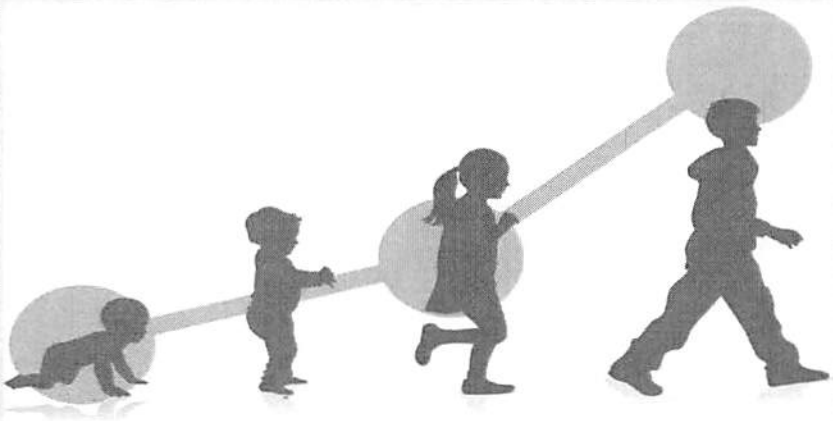



➢ **Ask parents to share their experience, as you uncover each set of pictures.**
- **Use questioning techniques and responses from parents to emphasize the shared experience of parenting adolescents.**

- **(Slides 1 & 2):** How many of your children are driving?
  Kids games and activities change in adolescence; entertainment can come with increasing risk.

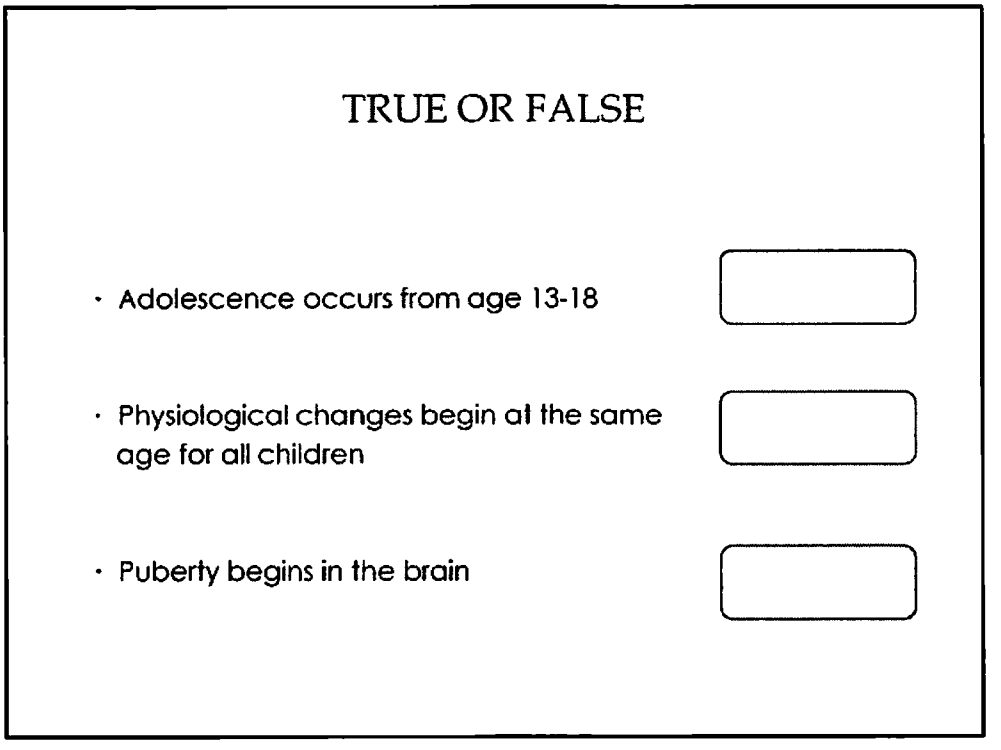
- **(Slides 3 & 4 ):** How many of your children feel that your rules are unfair?
  Young children often see their parents as superheroes, this changes in adolescence. Parents are perceived and or accused of being drill sergeants when they set rules and boundaries.

- **(Slides 5 & 6):** How many of you are comfortable with your child's appearance?
  Adolescents can become consumed by their self-image; they strive to fit in and do so by experimenting with their appearance.



WHAT'S GOING ON?

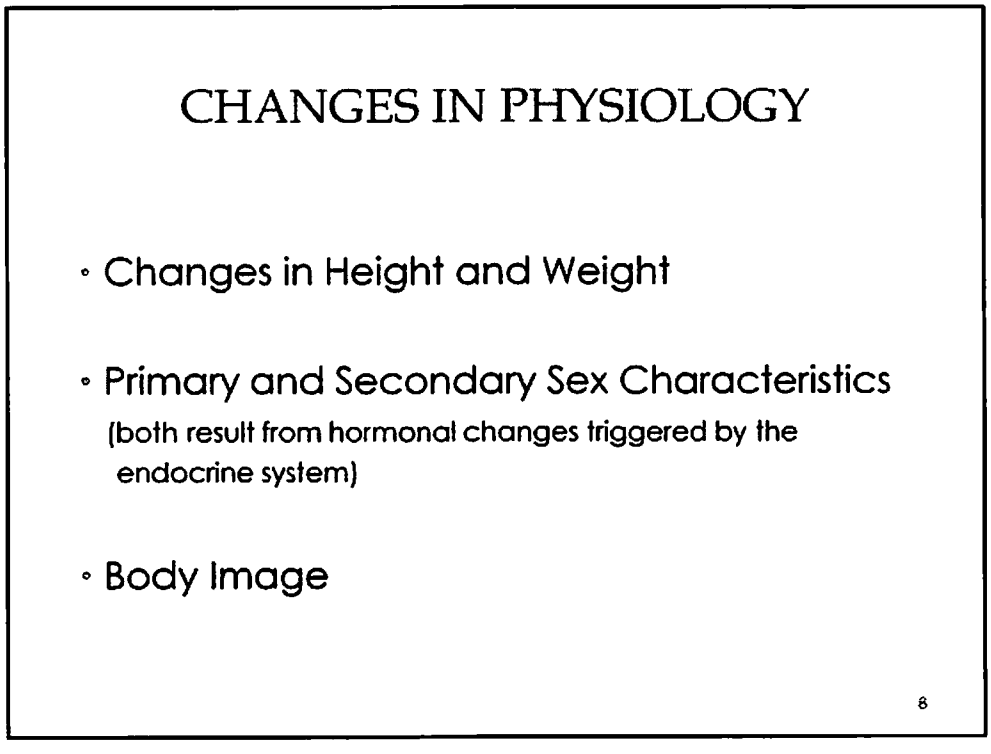
6




- There is no agreement on the time period we refer to as adolescence. Although some refer to the teen years (13-18/19), others propose a longer period; extending from age 11-24. Adolescence can also be divided in to stages: Early (~10-14), Middle ( ~15-17) ,and ...Late ~18- 24 (Siegel, 2013).

- Physiological changes are triggered by puberty. Children begin puberty at different ages. Culture and lifestyle influences teens when this stage occurs. Puberty typically begins at age 11 for girls and 13 for boys.

- Puberty refers to the physical markers of maturation. It begins when the hypothalamus (a structure in the brain which is part of limbic system - see slide 11 ) triggers hormone production in the pituitary gland and leads to the production of estrogen and testosterone.




**Changes in Height and Weight:**

- Changes in body composition take place. Fat-to-muscle ratio and skeletal growth are among the most obvious.
- Weight gain for girls can range from 15-50 lbs., for boys 15-65 lbs. (total).
- 95% of adult height is typically achieved by age 17.
- In addition to the aforementioned, changes occur in skin, hygiene, and nutrition needs.

**Sex Characteristics:**

- Primary Sex Characteristics: those directly related to reproduction such as development of gonads, ovaries, testes/menarche/menstruation, orgasm, and ejaculation.
- Secondary Sex Characteristics: those not required for reproduction such as hair, breasts, and changes in voice.

➢ **Questions for Discussion:**

- **How did you prepare for these changes in your children?**
- **How have your children learned about these changes?**

- **At what age were these topics discussed?**

**<u>The timing of these physical changes can have lasting developmental effects.</u>**

**Early Bloomers:**

- Boys – their physical appearance may cause others to treat them as if they are older/may grant access to privilege and leadership opportunities.
  - ❖ Disadvantages:
    - adults may expect too much or have unrealistic expectations
    - their physicality may not be aligned with their cognitive/social-emotional level
    - their physical strength may result in athletic advantage

- Girls -
  - ❖ Disadvantage:
    - premature developing body may draw attention and acceptance from older peers that may place them at-risk for unwanted attention and/or harassment

**Late Bloomers:**

- Boys-
  - ❖ Disadvantage:
    - others may have lower expectation of them
    - child may experience low self-esteem and/or lack of self-confidence due to peer comparison
    - adults/parents may place less demands and stunt the child's development and autonomy (small stature can result in coddling)

- Girls- may welcome anticipated changes observed in others/development is in line with boys rate

➢ **<u>Questions for Discussion:</u>**

- **Were you an early/late bloomer?**
- **Can you relate to any of these points?**
- **In hindsight, did you experience the advantages /disadvantages of being a early or late bloomer?**

**<u>Body Image</u>**

- Our view and evaluation of our body's physical features; rapid physical change

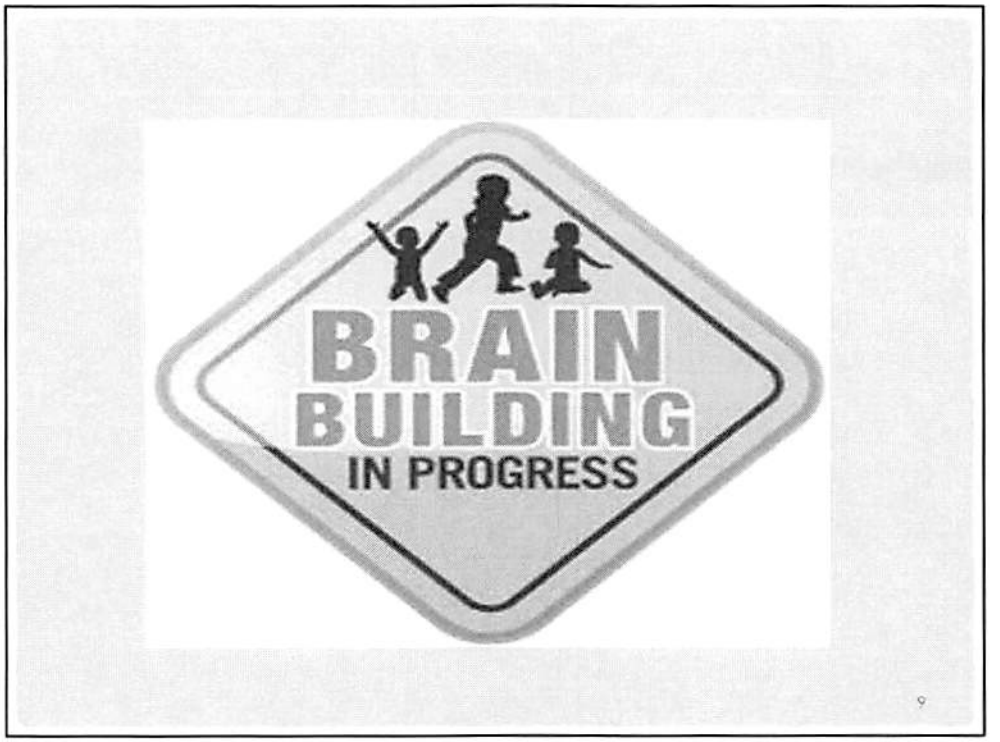
and growing interest to attract the opposite sex causes adolescents to become preoccupied and critical of their appearance.

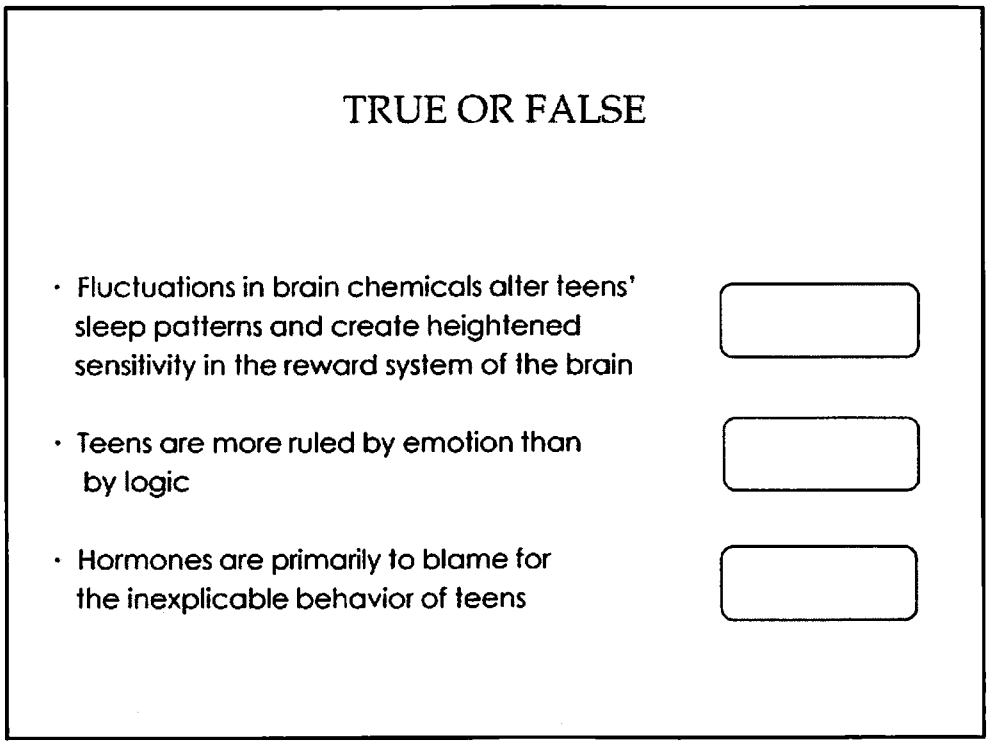
- Self –comparison with peers and media establish standard for attractiveness; adolescents can experience both pride and shame about their development; they are self-conscious

- Often best not to call attention to body (compliments or criticism)

- A negative body image can place teens at-risk for eating disorders vs. a positive body image can contribute to self-confidence.

(Santrock, 2009)

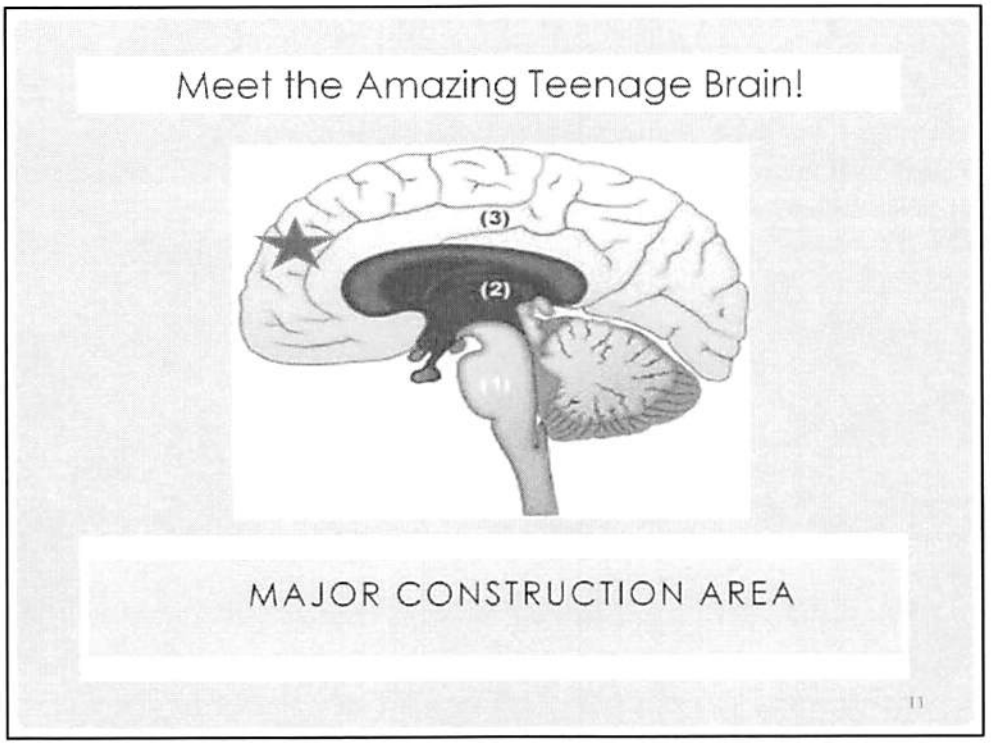

BRAIN
BUILDING
IN PROGRESS




- **Melatonin** (hormone associated with regulating sleep) levels are low, which causes teens to stay up later and have difficulty waking in the morning; **Dopamine** ("feel good" neurotransmitter/brain chemical) levels are also low making teens extra sensitive to boredom and highly susceptible to novelty seeking activities/behavior which spike dopamine levels (Jensen, 2005)

- Given that the **prefrontal cortex** is still under construction, teens are more likely to tap into the emotional part of the brain.

- As a result of advances in technology (**MRI** ***(magnetic resonance imaging)*** / **FMRI** (***functional magnetic resonance imaging***)), we now understand that the teen brain is undergoing major structural changes, particularly in the parts of the brain that control thoughtful reflective reasoning. Although hormones do account for change, we now know that massive changes in the brain's integrity better explains adolescent behavior. (Feinstien, 2009)




- The brain develops in regions; it begins with the brain stem and follows by the limbic system (which is partially mature at birth). The prefrontal cortex is the last to mature during adolescence. While structures are in place, the architecture changes over the course of teen's development.

- Brain stem (1) - regulates basic processes: heart, lungs and arousal (sleep and wake cycles)

- The limbic area (2) - controls emotions and motivations. The amygdala is a part of the limbic system; it regulates our emotional states and is considered our body's alarm system- it cues our body to fight, freeze, or flee. ( MIND UP, 2011)

★ **(See star on diagram above )**:
  - ★ Prefrontal Cortex: is the highest level of the frontal lobe; it creates links to widely separated brain regions.
    - ★ It is responsible for reasoning, decision making, and self-control, **does not fully develop until age 18-24 (Siegel, 2013). This explains why adolescents can be more impulsive and appear irrational.**
    - ★ Additionally it is important to remember that the amygdala/limbic regions (associated with emotion) are more fully developed at this stage and can become active without our awareness. Better decisions are made when teens (and us, too) are not in an emotionally aroused

state.

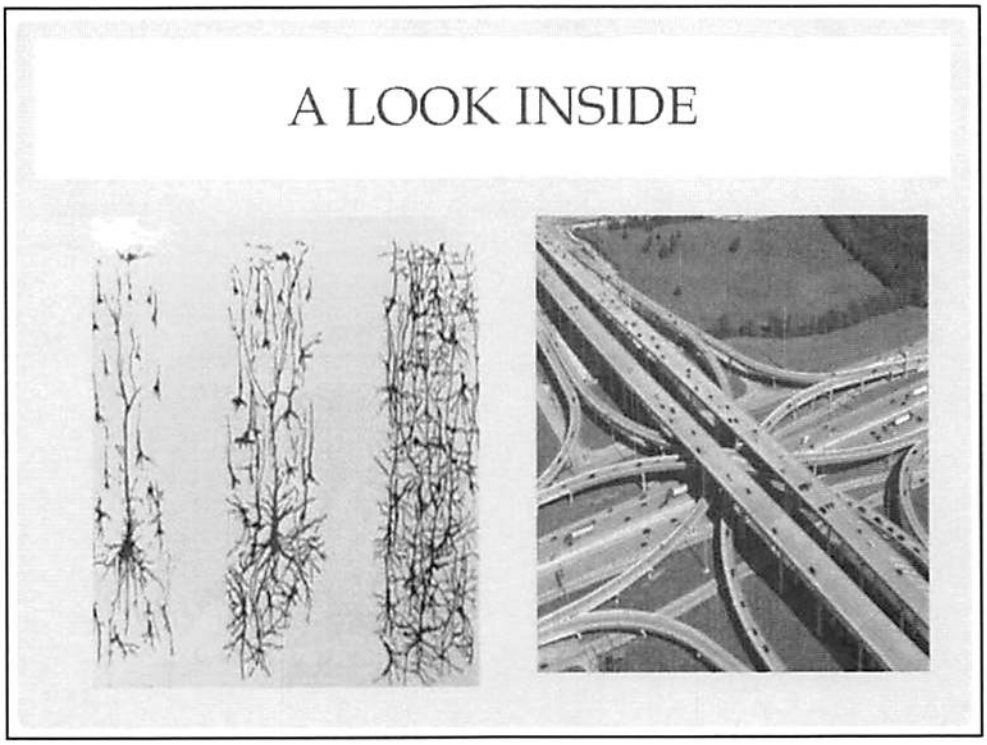
- **During adolescence the brain has an opportunity to reorganize, refine, and remodel it's structure. By doing so, the adolescent brain becomes specialized, more efficient and integrated.**

- **This is achieved through 2 processes: Pruning and Myelination**

(Santrock, 2009; Siegel, 2013; Wolfe, 2010)

# FROM GENERALIST TO SPECIALIST

12



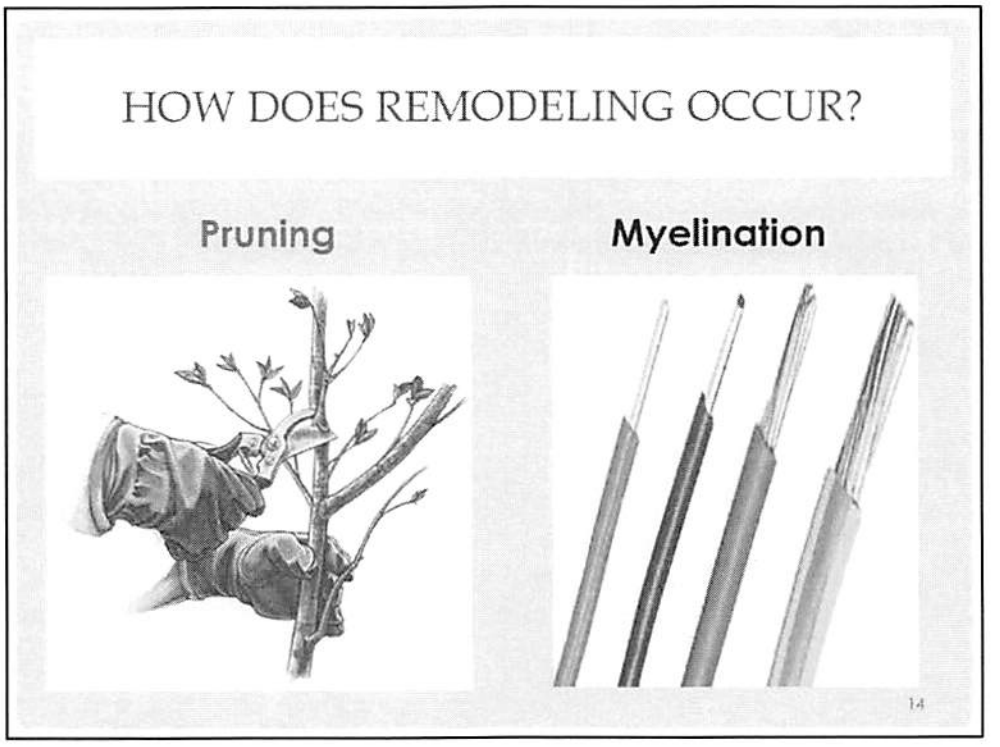

- **Learning occurs when neurons (brain cells) communicate with each other through synaptic connections.** Dendrites (small hair-like structures) receive information by connecting to another neuron's axon. Axons send information to other dendrites. The synapse is the space between a dendrite and an axon where communication takes place. (Wolfe, 2010)

- **<u>New experiences and information create dendrites, which in turn facilitate communication by strengthening circuits/connectivity.</u>**

- During early and middle childhood the brain acts as a sponge, creating an over production of dendrites and synapses. By age 3, a child has more connections than the average adult. This overproduction is gained through experiences. It continues through ages 11-12 (11 –girls, 12.5 for boys) and leads to excess dendrites and synaptic connections. (Feinstein, 2009)

- During adolescence the brain has an opportunity to reorganize, refine, and remodel it's structure. By doing so, the adolescent brain becomes specialized, more efficient and integrated. Areas of interest/affinity can develop into areas of expertise. Consider professional athletes, multilingual individuals, dancers, musicians and artists. Skills cultivated at this stage can carry into adulthood at a level not readily matched by later onset of practice. Can adults begin training to compete in the Olympics? (Siegel, 2013)

- Similar to a highway and traffic flow, alternative pathways result in increased connectivity, integration, and efficiency. (Willis, 2006)




- Pruning: is a reduction or trimming of synaptic connections and neurons. Experience/use will determine which connections remain through adulthood and which are permanently lost. Pruning eliminates unnecessary details (causes thinning of gray matter).

- Myelination: myelin is a fatty sheath that insulates neurons and creates faster, coordinated and more efficient communication (it enables electrical flow). This process of insulating neurons follows pruning (causing thickening of white matter).

- **Main point**: the brain structure that is responsible for reasoning is not fully formed, yet it begins to contemplate abstract thought.
    - Pruning and myelination occur at the same time. Intense emotions triggered by the limbic system prevail, and fluctuations in brain chemicals that affect arousal, attention and the reward drive steer behavior and explain the joy and turmoil of this developmental stage.

(Siegel, 2013; Willis, 2006 )

## WHY IS THIS IMPORTANT?


15

There are two (2) principles to remember relevant to how adolescents spend their time and how parents structure opportunity:

- **Neurons that fire together wire together:** repeated association to one piece of information strengthens and solidifies that connection, making it easier to access (multiple pathways make it easier to arrive at your destination). (Willis, 2006)

- **Use it or lose it principle (related to pruning):** Information/circuits that are used are retained; information/circuits that are not used are pruned or lost. This promotes efficiency by eliminating extraneous information, but it may also constrain future ability. (Feinstein, 2009)

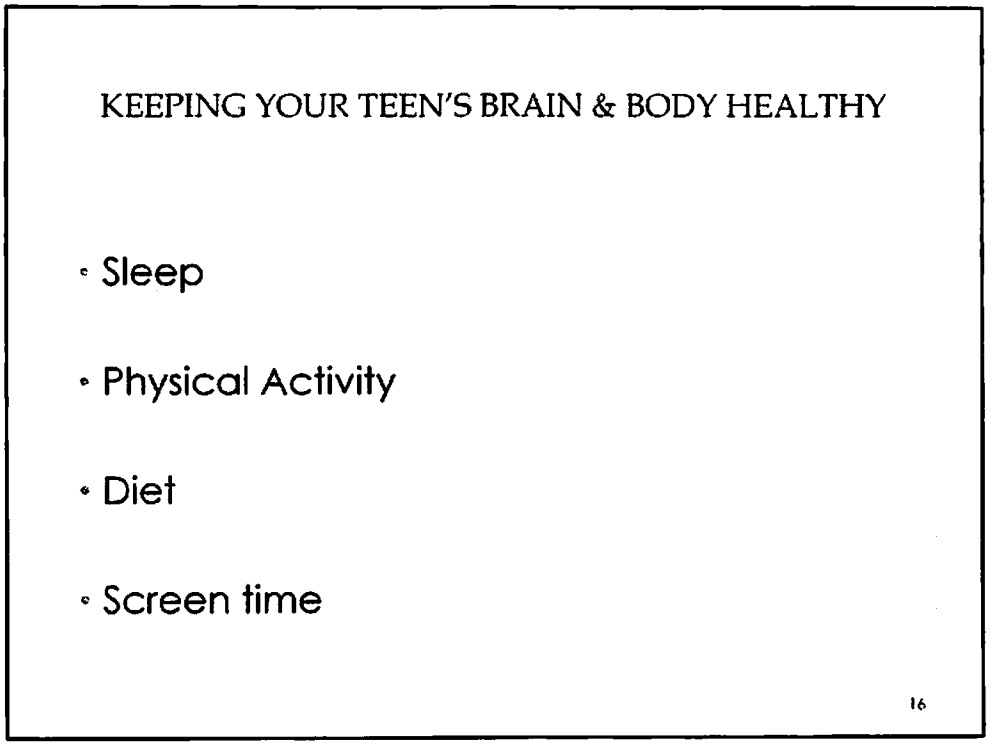
    - This principle explains why it is more difficult to learn a foreign language as an adult

➢ **Question: Consider your own skills/aptitudes. Which of these were cultivated during adolescence? (coordination/sports, crafts: needlework, crocheting, painting, reading etc…**

- How your child spends their time will determine, what competencies he/she may develop into adulthood.
    - An adolescent who spends much of their free time watching television is

limiting their opportunities to make these important connections; they will have more work to do as adults.

- Remember, it takes time to adjust to fully developed frontal lobes; meanwhile, poor decision making, moodiness and increased reactivity may prevail. (Feinstein, 2009; Siegel 2013)




- Sleep: Remember that sleep cycles may be interrupted by fluctuations in the production of melatonin (a sleep inducing chemical). There is a delay in melatonin production in adolescents. This change accounts for adolescents' tendency to stay awake later and their difficulty waking in the morning. Sleep deprivation can lead to problems with memory, learning and mood.
    - **Encourage 9 hours of sleep; allow adolescents to sleep in during the weekend.** (Carskadon, 1998)

- Physical Activity: Obesity rates are rising among adolescents and with this an increase in Type II diabetes.
    - **Encourage daily activity; organic exercise- walking to school, running errands, participation in individual or team sports/activities/consider competitive and noncompetitive activities.**

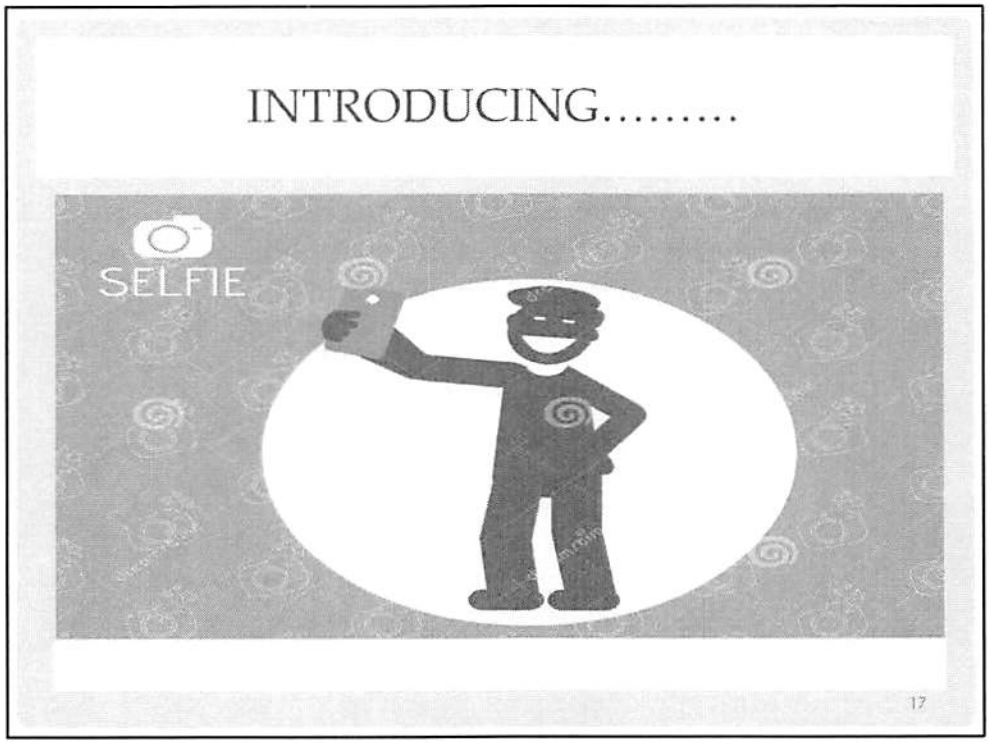
- Diet: What you eat influences how you feel.
    - **Encourage your children to eat a balanced diet and minimize consumption of processed foods (packaged food that has been altered and may contain added salt, sugar and fat for flavor enhancement)**

  Our brains require oxygen and glucose for fuel. Be careful of foods with high sugar content that create sugar highs followed by steep drops in blood sugar

levels. This can affect learning potential by impacting memory and mood.

- Screen time: Set limits; encourage teens to shut down screens 1 hour before sleep. Light exposure from blue screens can impact sleep cycles and result in wakefulness.

(Jensen, 2005; Santrock, 2009; Siegel, 2013)




- Identity is developed over the course of each developmental stage; it is a cumulative rather than discrete process.

- Erickson: **Identity vs. Identity Confusion;** this is a major developmental task for adolescents.

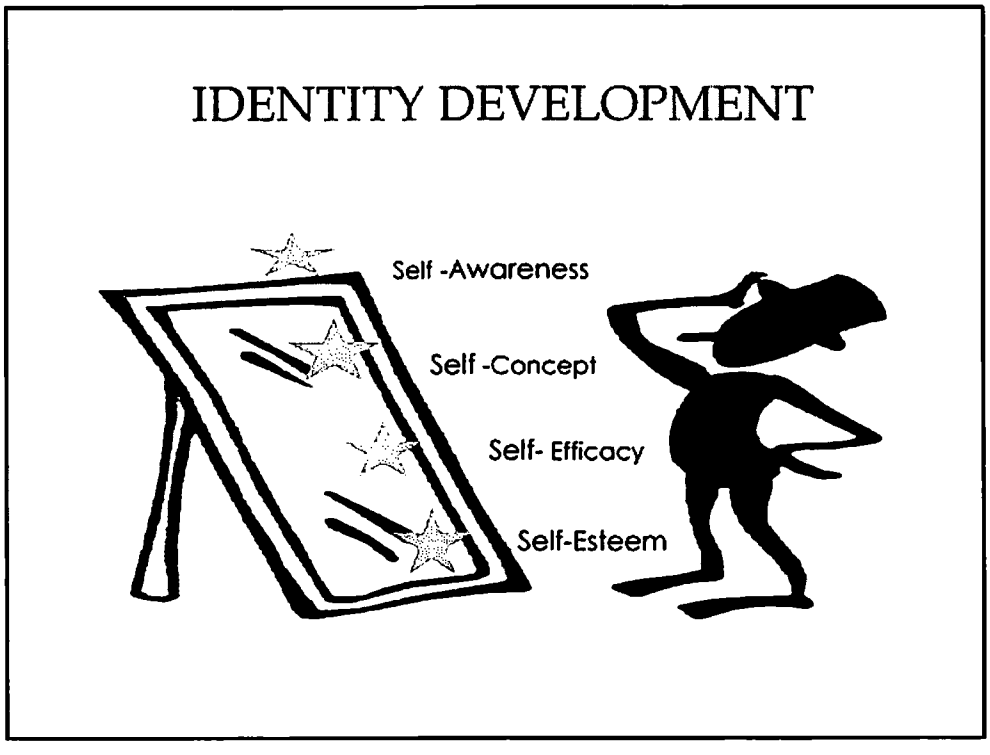
    - Identity answers the questions I am .....? What am I about? Where am I going? What am I worth?

- Answering these questions (identity formation) is a major task in adolescent development; it forms the foundation of adult expectations and goals.

- Adults can alter components of their identity based on life's circumstances; identity formation is a lifelong journey.

- According to James Marcia's (1980, 1994) research on Erickson's theory of identity development, identity involves breaking away from and challenging beliefs through exploration and commitment or personal investment in a new found identity.

(Feinstein, 2009; Santrock, 2009)




- Self-awareness, self-esteem, self-concept and self-efficiency are all components of identity.

- **Self-awareness-** is the ability to examine oneself as a separate entity of others; it develops at the age of two children (me/mine).

- **Self-concept:** is domain specific: evaluation of self; attitudes, beliefs, feelings about one's abilities; develops during the early childhood years...
- The expansion of self-concept leads to personality traits and attitudes.

- Personality – patterns of response, habits; this is **how others see you** and develops into adulthood.

    - In middle childhood, children begin to describe their own traits and social characteristics,

    - They become increasingly aware of social comparison and notice differences in appearances, abilities, and behaviors.

- **Self-efficacy:** task specific belief (about one's ability to perform a task or master a situation); self **efficacy is an essential component to motivation** and it creates a sense of agency – the idea that one can effect change **(cognitive judgment:**

Informed by what we think about a situation; I failed the exam because I didn't study enough - I will need to prepare differently next time)

- Attributions; explanations for success and failure are important to a child's developing sense of self-efficacy

- **Self-esteem**: global evaluation (includes self concept) of self that may or may not be based on reality **(affective judgment:** informed by feelings; I'm a loser because I failed the exam – I can't do anything right

➢ **Where does self-esteem come from?** culture, peers, parents, and child rearing...

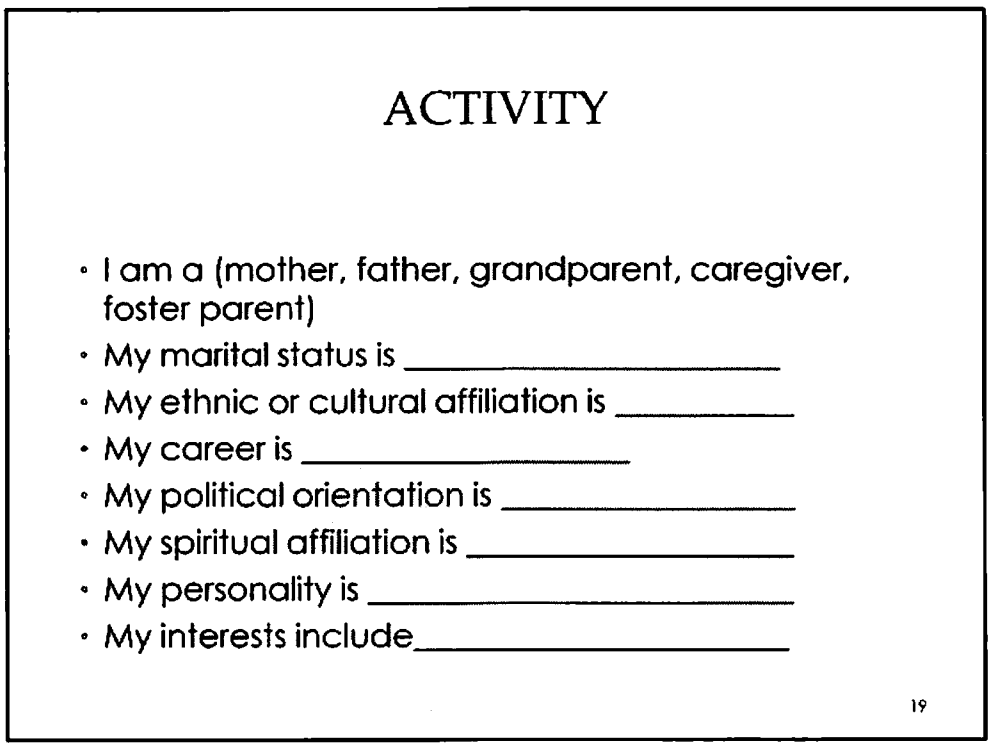
- By age 7-8, children develop 3 separate forms of self-esteem: academic, social, and physical.

    - Too much or not enough can be a problem...

    - Where it comes from and how we get it matters...

    - Problem can arise if it relies on social comparison...

(Phillips, 1983; Santrock, 2009)




➢ **Note to presenters:**

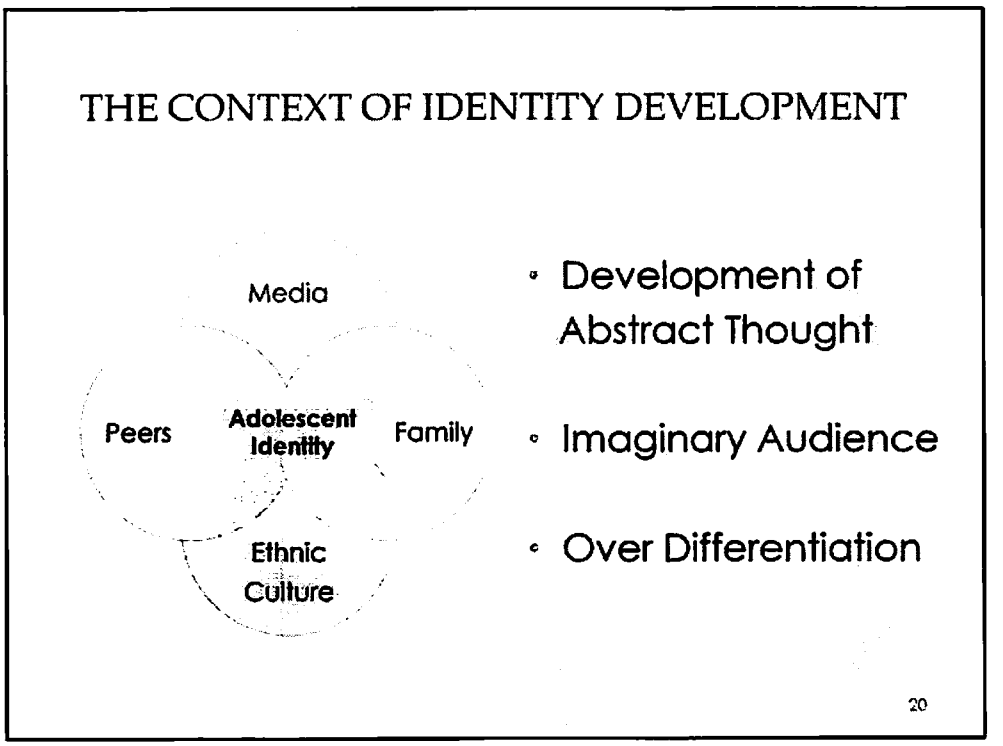
**Please consider the dynamics of your group before selecting how to proceed with the following activity.**

- **If your group is reserved and or has limited literacy skills, you may pose the questions to the group and ask participants to volunteer to respond aloud. Or...**
- **If you think your participants would feel comfortable working with a partner, then you may follow the optional partner activity.**

➢ **Optional Partner Activity: Have participants complete the identity inventory...**

1. **Share responses with partner**
2. **Partners can share responses with group**
3. **Discuss the process of arriving at your response/level of certainty**
4. **Connect to how and when identity is developed**
5. **Did it feel safe to share?**

**(Fienstein, 2009)**




- Identity development neither begins nor ends in adolescence...
- Internal and external factors create the context for identity development.

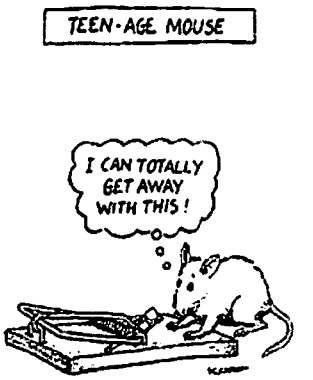
➢ **Discuss influences of: family, peer, media and ethnic culture.**

- The ability to use abstract thought allows adolescents to think hypothetically and distinguish their ideas from their parents; they seek self and intellectual autonomy.
- (Imaginary audience) **Self-consciousness** develops with teens developing the ability to understand the perspective of others. This leads to increased self-comparison and a sense of being on stage which can explain their dramatic behavior (teen may feel as if everyone is looking at his/her pimple).
- Over differentiation leads to the belief that no one else shares their unique experiences (personal fable); no one understands me – particularly my parents!. I'll be the laughing stock of the school if I can't go the party!

(Santrock, 2009; Siegel, 2013)

## IDENTITY

- Sexual
- Racial /Cultural
- Religious/Spiritual
- Gender

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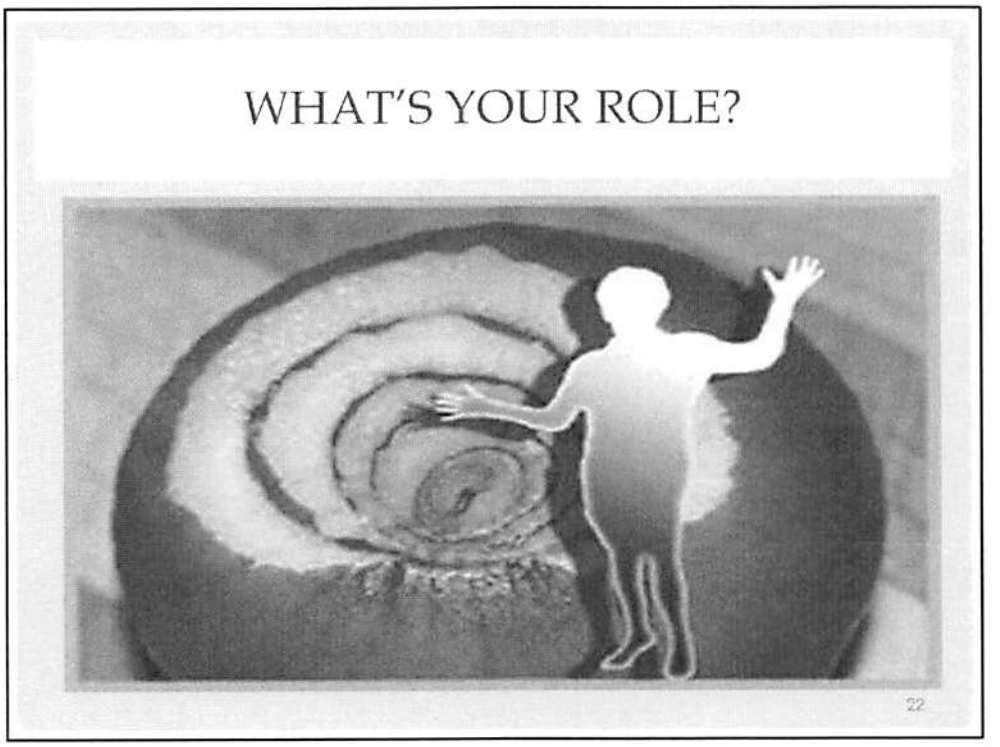
- Identity involves questioning, testing, practicing, and risk-taking; it involves group membership and fitting in.
- Experimentation with sex, drugs, jobs, and risk-taking behavior (i.e. driving, technology, skateboarding, piercing, attire, etc.) is accompanied by increased desire for privacy.
- Sexual Identity – exists within our cultural assumption of heterosexuality; who are we attracted to? Adolescents who are unsure may experience feelings of isolation and guilt. Their sexual identity evolves as they learn about dating, flirting, and intimacy.
- Racial/Cultural – minority adolescents must decide to what degree they will embrace their racial or cultural background; issues surrounding inequality and racism may complicate this decision. Response may result in denial of the minority or dominant culture and can result in the embrace of a subculture/acculturation vs. assimilation (consider the differences between an urban and rural upbringing. It is important for parents to be cognizant of what teens bring to the table during this time of self-discovery.
- Religious /Spiritual – although it is likely that adolescents will embrace their parents' beliefs, it is important and necessary that they question these beliefs. Although this

may appear confrontational, often it stems from their desire to use their developing cognitive skills (analysis and reasoning skills).

- Gender – cultural concepts of femininity and masculinity... What are considered feminine and masculine traits?

- Socio-economic factors can shape one's environment and play a part in identity development. Consider access to resources and the context for development inherent in one's community.

(Santrock, 2009)




➢ **Discuss: What is a parent's role in their adolescent's identity development?**

- Remain engaged: allow adolescents the space and autonomy they demand, but reassure them that they are loved and accepted as they are. In their effort to fit in, they may have to make painful concessions to their sense of self and find a safe place of retreat.

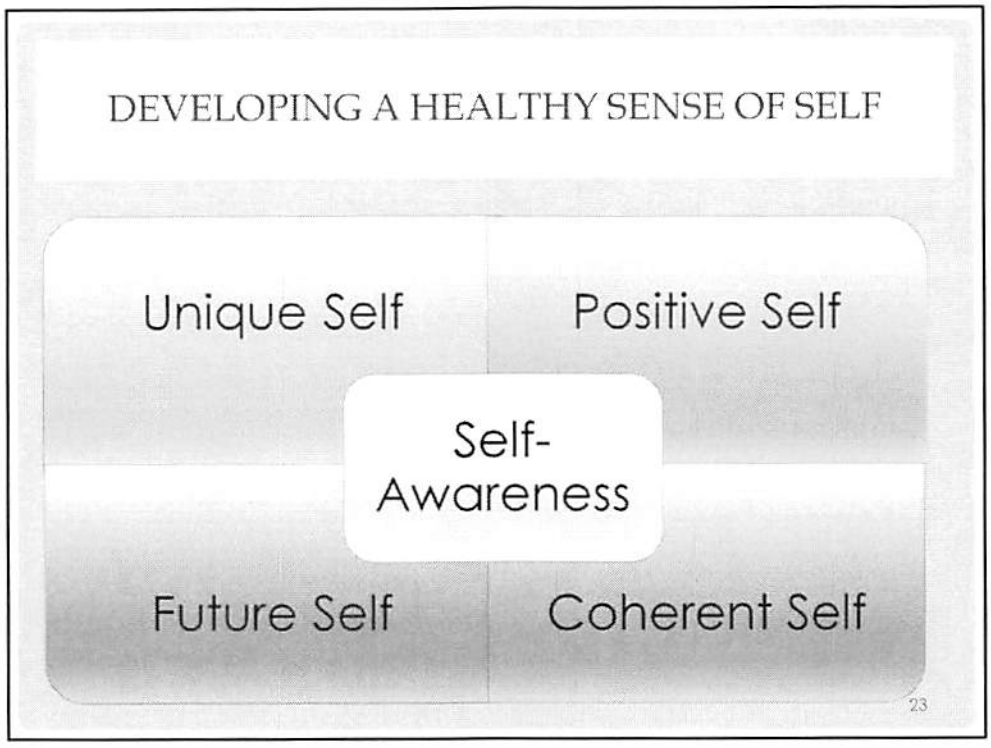
- Support your son/daughter's exploration: observe, advise, negotiate, and direct as the situation may demand.

- Respect their differences: avoid teasing or calling attention to their experimentation.

- Do not lose sight of your own identity: **remember that <u>you are the parent</u>**; adopting their style of music or dress may be confusing to both of you.

- Model a coherent self that is principle-centered: choose the principles you embrace and live by them; principles are laws that govern the human world, they are secular, they apply to everyone, and are not bound to culture/ethnicity: hard work, honesty, love, service, respect, gratitude, loyalty, integrity, respect, and equality. (Covey, 1998)

- At this stage, principles are more readily learned by observation and action rather than lecture. (Cline & Fay, 2006; Covey, 1998; Phelan, 2012, Santrock, 2009; Siegal, 2013)




Adolescents who develop a positive sense of self typically develop into healthy adults; those who do not, withdraw and or are easily led; they become followers.

A healthy/strong sense of self requires that an adolescent feel:

- loved
- that they have enough skills to manage/compete in their environment
- that they can take responsibility for the choices they make and the consequences that come with them

(Cline & Fay, 2006)

Self-awareness is make up of 4 parts:

- **Unique Self**: an understanding of individual characteristics that make your adolescent stand out in a crowd (concrete attributes, likes/dislikes, beliefs, vulnerabilities, preferences, cultural influences).
    - ***Parents are encouraged to observe and listen without judgment ...be present!***

- **Positive Self:** includes the ability to identify positive traits/achievements that connect the current self to the self they can become...
    - ***Parents can help cultivate these attributes through opportunity,***

***reinforcement, and acknowledgement.***

- **Coherent Self :** includes the ability to integrate multiple aspects of self - including strengths/vulnerabilities from the past to the present and across settings...
    - ***Parents can help by building a sense of connectedness and community through modeling principle-centered actions.***

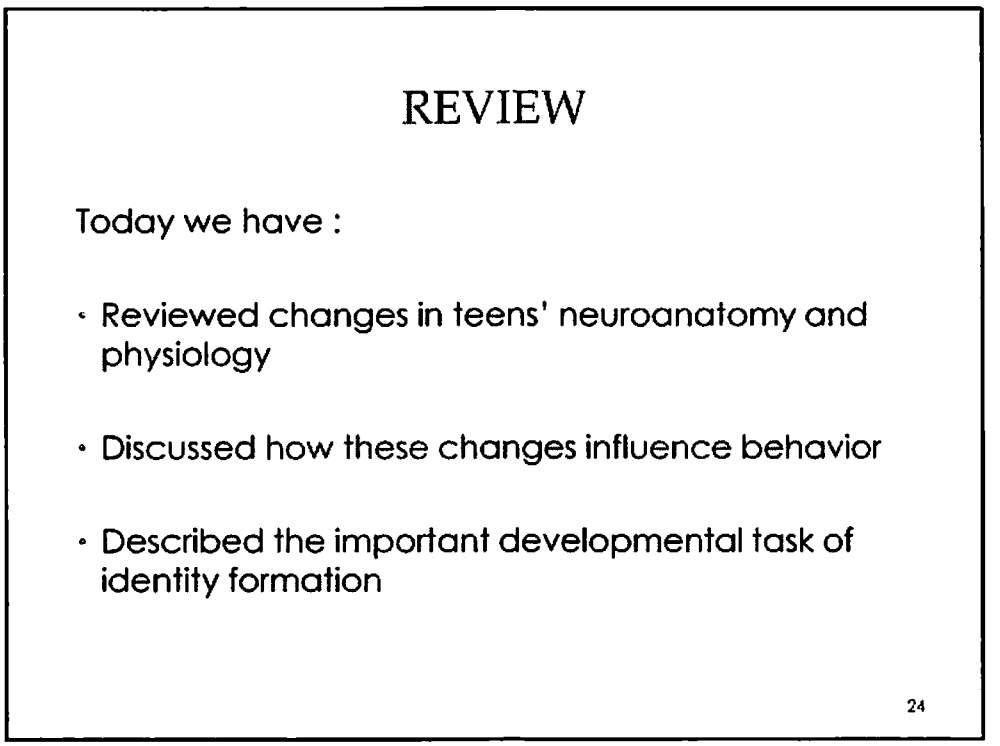
- **Future Self:** includes the ability to imagine the future and to connect current choices to future outcomes...
    - ***Parents can help by modeling and supporting goal-oriented behavior. Allow teens to identify their own goals; these can be short or long-term ones.***

(Blaustein & Kinniburgh, 2010)

❖ Cultivate Self-Efficacy:

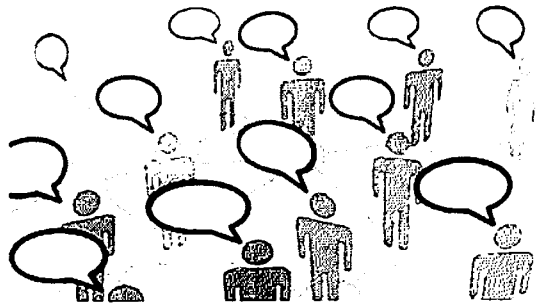
- **Self-efficacy** is a task specific belief (about one's ability to perform a task or master a situation); it is an essential component to motivation and creates a sense of agency – the idea that one can effect change (cognitive judgment). ( Phillips, 1983)

- **Remember adolescence is a time to loosen, not to let go.** (Simpson, 2001)




- **If time allows, ask participants to review presentation details aloud.**
- **Select one thing they learned or will remember.**

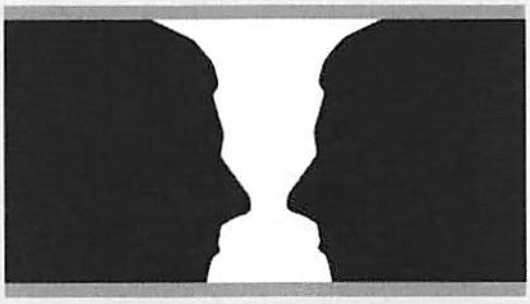
# QUESTIONS/DISCUSSION



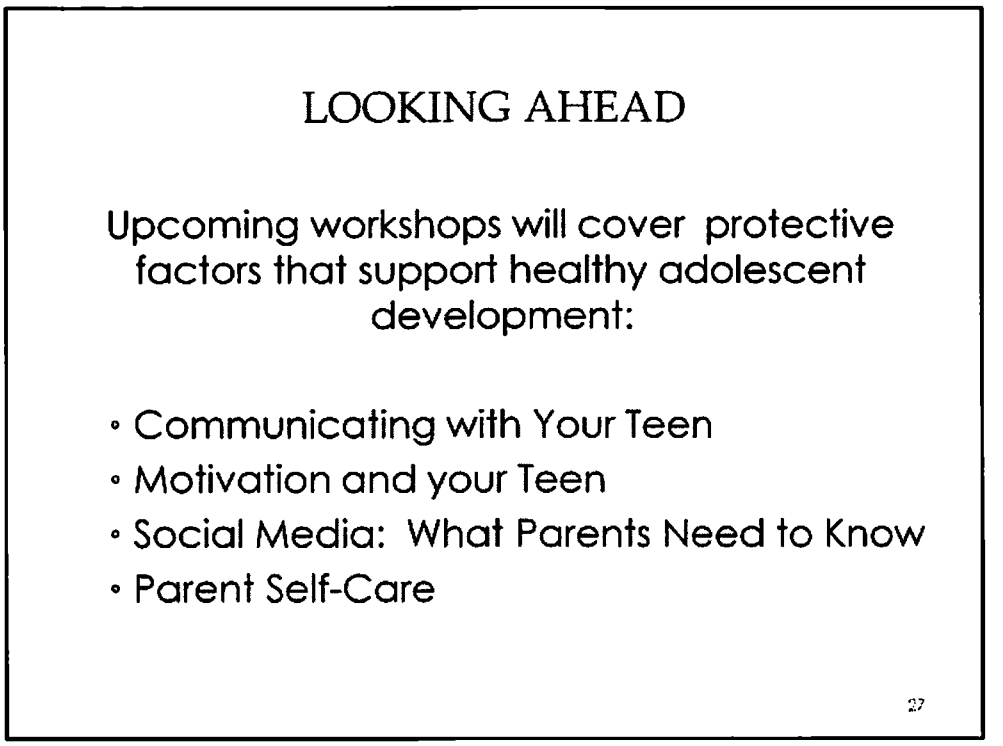
25

# NEW PERSPECTIVE?

We hope that you leave today with an alternative perspective of this challenging developmental stage.



26




**Parent Self-Care presentation is called: Managing Stress and Enhancing Well-Being.**

**The objectives of this presentation will include:**

- **Defining stress and its purpose**
- **Learn how to manage stress more effectively**
- **Learn mindfulness practices so we can respond to life more wisely and better care for ourselves and our family.**


Thank You
Mahalo
Kiitos
Tack
Toda
Grazie
Thanks
Obrigado
Takk
Gracias
Merci
THANK YOU FOR YOUR ATTENTION!

# REFERENCES


- Blaustein, M.E., & Kinniburgh, K. M. (2010). *Treating traumatic stress in children and adolescents: How to foster resilience through attachment, self -regulation, and competency*. New York, NY: Guilford Press.
- Carksadon, M.A., Wolfson, A.R., Acebo, C., Tzischinsky, O., & Seifer. R. (1998).Adolescent sleep patterns, circadian timing, and sleepiness at a transition to early school days. *Sleep*. 21 (8), 871-881.
- Cline, F., & Fay, J. (2006). *Parenting teens with love & logic: Preparing adolescents for responsible adulthood*. Colorado Springs, CO: Piñon Press.
- Covey, S. (1998). *The seven habits of highly effective teens*. New York, NY: Franklin Covey Co.
- Feinstein, S.G. (2009). *Inside the teenage brain*. Lanham, MD: Rowman & Littlefield Education.
- Feinstein, S.G. (2009). Secrets of the teenage brain: Research-based strategies for reaching and teaching today's adolescents (2nd ed.). Thousand Oaks, CA: Corwin Press.


29

# REFERENCES


- Guerra, N.G., & Bradshaw, C.P. (2008). Linking the prevention of problem behaviors and positive youth development: Core competencies for positive youth development and risk prevention. *New Directions for Child and Adolescent Development*, 122, 1-17.
- Jensen, E. (2005). *Teaching with the brain in mind (2nd ed.)*. Alexandria, VA: ASCD.
- Levine, M. (2002). *A mind at a time. New York, NY: Simon & Schuster.*
- Phelan, T. W. (2012). *Surviving your adolescents: How to manage and let go of your 13-18 year olds (3rd ed.)*. Glen Ellyn, IL: Parent Magic Inc.

# REFERENCES


- Phillips, S. (1983). Self Concept and Self Esteem: Infancy to Adolescence. In *A Cognitive Developmental Outline with Some Reference to Behaviour and Health Effects. A unit for Child Studies* (pp. 1-23). Kensington, Australia: New South Wales University. Retrieved from ERIC (27).
- Santrock, J. W. (2009). *Life span development (12th ed.)*. New York, NY: McGraw-Hill.
- Siegel, D. J. (2013). *Brainstorm: The power and purpose of the teenage brain*. New York, NY: Penguin Group.
- The Mind Up Curriculum Grades: Brain Focused Strategies for Learning and Living, Grades 6-8. (2011) The Hawn Foundation. New York, NY: Scholastic.
- Willis, J. (2006). *Research-based strategies to ignite student learning*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Wolf, P. (2010). *Brain matters: Translating research into classroom practice (2nd ed.)*. Alexandria, VA: ASCD.


31