

**A Review of Adolescence: Developmental Explanation**

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At some point in a child's life, they will hit a stage called adolescence. Presetting young adulthood, adolescence is described as starting at the onset of puberty and continuing until about the age of twenty-four, where adolescents are more apt to become themselves while still requiring support from people and environments to thrive (National Academics of Sciences, Engineering, and Medicine; Health and Medicine Division, 2019). During this stage, teens find themselves changing physically, emotionally, cognitively, and socially. This developmental explanation of this turbulent moment in a young teen's life will explain the key features associated with adolescence as well as a main theoretical perspective to better encapsulate the meaning of adolescence and how to make it an easier transition for everybody.

### **Physical Features**

With adolescence comes the start of puberty, which is "the biological process that results in physical maturity and reproductive competence" (Dumontheil, 2015, p. 120). Puberty, providing many changes during adolescence, releases a hormone called gonadotropin (GnRH) which comes from the hypothalamus and "controls the release of luteinizing hormone and follicle-stimulating hormone" from the pituitary gland (Best & Ban, 2021, p. 272). This GnRH release is responsible for sexual maturation and fertility (Best & Ban, 2021). Physical changes, such as menstruation and breast development in females and "descent and enlargement of testes" in males as well as growth in height and build in all genders, are all attributed to puberty (Best & Ban, 2021, p. 272). This maturation also includes pubic hair growth, changes in voice, and skin affliction such as acne (Best & Ban, 2021).

Additionally, sleep is crucial for adolescents' physical development as sleep becomes more of a necessity during puberty. If proper sleep habits are not acquired by the child by

puberty, then it can result in sleep disorders which will affect the “educational and social” development of the adolescent (Stores, 2022, p. 83). It is apparent that the physical changes during adolescence can be overwhelming for the child entering the next stage of development.

### **Emotional Features**

The emotional development of adolescence comes with wide fluctuations in the emotional stress that hinders teenagers daily while they gradually learn to manage such emotions to aid them later in adulthood, although some believe that emotional development during adolescence is unclear (Larson & Brown, 2007). By the time the child has entered adolescence, the young teens have a decent idea of the emotions they feel. They are aware of their emotional variations and have begun learning how emotions relate and the situations that cause those emotions. Adolescents also begin to learn empathy while learning how to regulate their emotions based on situations and self-control (Larson & Brown, 2007). The new emotional knowledge that teens possess during adolescence give them the ability to understand their self, others, and social groups as well as other cultures while allowing them to tell apart emotions from personality traits, to understand how emotions like pride, shame, and embarrassment are processed within other cultures, and to find how to better utilize emotions (Larson & Brown, 2007).

According to McLaughlin et al (2015), studies show that teens “experience frequent and intense emotions that accompany a marked increase in their risk for mental disorders characterized by problems with emotion regulation” (p. 403). This provides further evidence that the events that transpire during adolescence is what paves the way into adulthood. With these sudden changing emotions, it makes traumatic events much more emphasized thus harder to mentally process into logical comprehension. In the same article by McLaughlin et al (2015), she stated that moods drop to a more negative state from early adolescence to mid-adolescence with

another decline in mood from mid-adolescence to late adolescence. The reasoning behind these declines in mood are based on teens' quality of life throughout adolescents, usually surrounding high-stress events (McLaughlin et al, 2015). Adolescents experience stress much stronger than children or adults due to their rapidly changing emotions, so 'simple' stress events could seem like an apocalyptic disaster to a teenager (McLaughlin et al, 2015).

### **Cognitive Features**

Once a child hits adolescence, their mind becomes more conscious, self-directed, and self-regulating which further implies a more developed emotion regulation (Herd et al, 2022). To regulate emotion though, it requires cognizance and behaving in a way to change an emotional situation (Herd et al, 2022). They state that recognizing the negative thought patterns and changing that pattern may be exhibited more during adolescence as they form a stronger self-awareness (Herd et al, 2022). With the rapidly changing emotions of adolescents, it can make cognitive development a little more difficult, but as the stage progresses, the teen should be able to process and regulate their emotional capacity better than during childhood.

Interestingly, during the recent pandemic, studies have shown that teens have utilized their screentime to help regulate their stressors and emotions (Nagata et al, 2021). This shows that teens are receptive to their environments and find ways to cope when teens are overwhelmed with emotions.

### **Social Features**

There is major development that occurs socially during adolescence as this stage is usually where the teen finds their self (identity); they become aware of their inner thoughts (self-consciousness); and become better at building their social connections. Adolescents become more socially active and create deeper connections, hoping for acceptance among peers

(Dumontheil, 2015). According to Dumontheil (2015), social competence and social behavior evolve to a great degree by dwelling on other's frame of mind. Additionally, Dumontheil (2015) found that "the ability to take another person's perspective to direct appropriate behavior is still undergoing development" in ages 14-17 (p. 119). This can explain the type of 'tunnel vision' that teens can have as they have only been exposed to a single perspective of life until this point in development. Dumontheil (2015) also notes that social interaction is necessary during early learning, which raises the question of whether social networking is an adequate tool for social interaction during adolescence. This can be noted on in the previous section as well, since the current adolescents have just experienced a full-blown pandemic and were able to use social media and screen time to cope with the isolation of quarantine and stressors related to the pandemic, showing a stronger development in cognitive abilities. As changes in brain structure continue through adolescence, research into the understanding of social behavior can also shape learning and scholarly performance (Dumontheil, 2015).

Crone and Achterberg (2021) used MRI (magnetic resonance imaging) technology to find that there is a "pronounced change in the cortical neural development during adolescence" affecting thoughts, emotion, and reasoning (p. 221). Studies performed by Crone and Achterberg (2021) also found that environmental factors also affect social development during the adolescent stage. This can also be supported by the thought process that people of good character should surround adolescents since they are so heavily impressionable during this stage. Since teens are coming into their 'self' currently, opening the communication with them is important to establish expectations and boundaries.

### **Environmental Factors on Adolescent Development**

There are plenty of ways that environmental factors can affect adolescent development. Since there are varied factors to the environment, this will be broken down into physical environments, cognitive environments, emotional environments, and social environments.

### **Physical Environment**

Physical environmental effects on adolescent development can be characterized by neurocognitive complications and mental health issues (Ferschmann et al, 2021). For example, if a child is exposed to a negative physical environment such as an unhealthy home with illicit drug use or gun violence, it is likely that the child will experience mental health problems as they enter adolescence.

### **Cognitive Environment**

The major factor that affects the cognitive development during adolescence is socioeconomic status (SES) which usually reflects the “influence of parental education, the influence of income in the quality of the school and number of extracurricular activities, and the influence of the neighborhood in the type of peers and services available” (Klingberg et al, 2022, para. 2). Klingberg et al (2022) goes on to explain that “children who are born and raised to parents with low SES have on average a worse development in a wide range of areas such as lower cognitive abilities, worse academic performance, and to suffer more frequently from mental disorders” (para. 2). However, other factors can also be factors under SES such as “toxins, infections and stress during gestation, inferior nutrition, chronic stress, and lack of cognitive stimulation during childhood and adolescence” (Klingberg et al, 2022, para. 9).

### **Emotional Environment**

Providing a stable emotional environment is necessary for the adolescent child as their emotions are already unstable and frequently changing as they experience new things for the first

time. The Institute of Medicine (US) and National Research Council (US) Committee on the Science of Adolescence (2011) states that children who are raised in a positive emotional environment show minimal behavioral problems. Alternatively, children raised in high-stress environments with little to no attention to emotional security are shown to experience problems in substance abuse and other inappropriate behaviors (Institute of Medicine and National Research Council Committee on the Science of Adolescence, 2011).

### **Social Environment**

As mentioned in the physical environment explanation, social environmental factors can also affect the neurocognitive responses in adolescents in the same way the physical environment does. Lower income neighborhoods may not have adequate social opportunities to offer adolescents who are coming into adolescence, looking for a healthy social interaction (Ferschmann et al, 2021). This also bears the same worry as mentioned in the social development section that adolescents need to be surrounded with people of good character as they are impressionable at this stage of learning who they are.

### **Vygotsky's Sociocultural Theory of Cognitive Development**

Vygotsky was focused on studying "higher order cognitive processes" which ended up coming from a social root rather than a "psychic" root (Harre, 2006, p. 30). He found that the development of cognitive abilities was found coming from linguistics and the communication among peers (Harre, 2006). According to Burkitt (2006), Vygotsky believe that the first step in studying the mind is to note the changes it makes. This now opens communication regarding what is happening in one's mind when events transpire. The second step that Burkitt (2006) states is that Vygotsky believes all "higher mental functions originate in social activity" (para. 1). Learning how to communicate with others is something that is picked up by influence, naturally.

By applying this to adolescence, a positive influence of communication can affect an adolescent in an effective way by showing them that it is easier to talk about things with transparency and honesty to be better understood. This is how build the cognitive development to be stronger. The third main theme as explained by Burkitt (2006) is that it “relates to how higher mental functions are mediated by signs and tools” (para. 1). An example of a tool used to activate higher mental functions would be how speech opens the doors to cognitive learning for a child as they learn how to communicate with the world (Burkitt, 2006).

In an article by Mills (2010), she states that “Vygotsky argued that adults should not deny students abstract learning experiences on the basis of their supposed level of development but rather take learners to the upper limits of their potentiality within the ‘zone of proximal development’” (p. 38). With great emphasis on linguistics, Vygotsky found that cognitive problems are solved within interpersonal conversations (Harre, 2006). With this information, one can gather that from Vygotsky’s perspective, adolescence is best dealt with by opening the modes of communication for adolescents to aid in their struggle of emotional regulation and cognitive development. As mentioned earlier, adolescence comes with finding the self, which Vygotsky believes can be developed through cultural conversation and linguistics.

### **Solutions and Ethical Considerations**

#### **Solutions**

Vygotsky’s theoretical perspective explained his insight into the cognitive and social development of adolescents: opening communication and instilling adequate and proper social skills. As for the emotional and physical aspects of adolescent development, it is important to understand the sensitivity of those aspects to an adolescent. With their emotions changing rapidly and with little comprehension of said emotions, adolescents can be moody and aggressive at



times. The best solution is to be patient with the adolescents. Pairing patience with opening communication to adolescents will make the transition much easier to tackle. This, too, will also work with the physical aspects of adolescents as well. Some children are completely caught off guard with their changing bodies and will not know how to start that conversation. It is best to make the decision to talk to adolescents once there is a smallest idea that they might be struggling with their changes.

### **Ethical Considerations**

As a psychologist, my job would be taken very seriously when it comes to adolescents (as with any other stage as well) due to how important this developmental stage is in terms of setting up the groundwork for the upcoming three stages of adulthood. Preceding any sessions with an adolescent child, informed consent would be established with the parent or guardian as well as an acknowledgement from the child that they also understand the purpose of the sessions as outlined in the APA Code of Ethics (2017), section 3.10 and 10.01.

As noted in section 10.02 of the APA Code of Ethics (2017), if the sessions would include the parent(s) as well then, I would ensure who we are focusing these sessions on and the nature of our interactions between me (the psychologist) and the parent(s) and child.

### **Conclusion**

After analyzing the adolescent stage of development from the perspective of Vygotsky, the dominant factor of easing the adolescent stage is communication. As development starts during infancy, it can be explained how things that affected people since the beginning of development at birth can affect them later, even into adulthood. This also explains how stagnating at a specific stage can alter or change the “normal” development. Overall, adolescence can be a confusing and overwhelming experience for children and the root of all the theoretical

perspectives is that support of peers can benefit and make the transition from one stage to the next stage more comfortable. Communication and patience are necessary for the parents of adolescents to be able to effectively and healthily break down the wall that adolescents instinctively build up. With this advice, the new generation of adolescents should be ready to tackle that frightening stage.

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