

NAME: Hani Ashamalla

1. What is the recommended amount of activity per day for children in middle childhood? Why is this important and what are the short and long term benefits?

A: The recommended amount of daily activities for children in middle childhood is around 60 minutes. Most of this hour of activity should be focused on moderate or vigorous exercises especially aerobic physical activity. Experts also recommend the use of muscle and bone-strengthening exercises.

As far as the short and long term benefits of Physical Activity (PA): Numerous cross-sectional, meta-analyses, and correlational studies demonstrated the following:

1) Short term benefits:

- Improve cognitive abilities like attention and memory followed by IQ and reading performance, which in turn helps the learning process.
- Reduces the incidence of depression, anxiety, and insomnia.
- Regular PA sharpens thinking, learning, and judgment skills.
- Improve academic performance. Studies have shown that mathematics and reading are the topics that are most influenced by physical activity.
- PA may increase time on task, disciplinary behaviors, and attention in the classroom setting
- (Tomporowski, 2003; Budde et al., 2008) found that children tend to respond faster and with greater accuracy to a variety of cognitive tasks after participating in a session of physical activity.
- Higher-fit children exhibited increased inhibitory control and response resolution
- Chaddock and colleagues (2010a) observed a larger bilateral hippocampal volume in higher-fit children using MRI after vigorous exercises compared to those who did not undergo PA. They also found better performance on a task of relational memory in the first group.
- PA may improve the attitude of the children, likely because of the secretion of endorphins that regulate mood, pleasure, and pain. An elevated mood can contribute to an "I can do it" attitude

2) Long term effects:

- Obesity prevention, improvement of general fitness, and potentially improve BMI- as suggested by the L.E.A.D. (Locate Evidence, Evaluate It, Assemble It, and Inform Decisions) framework.
- Adult body mass index (BMI) at age 34 was related to childhood BMI at ages 10-12 in females but not males (Trudeau et al., 2001)
- Reduces the incidence of developing type 2 Diabetes, hypercholesterolemia, and Metabolic Syndrome in addition to reducing risk for cardiovascular diseases.

- Several studies observed poor future academic performance among children who entered school overweight.

References:

Educating the Student Body: Taking Physical Activity and Physical Education to School.

<https://www.ncbi.nlm.nih.gov/books/NBK201508/>

Physical Activity, Fitness, and Physical Education: Effects on Academic Performance

<https://www.ncbi.nlm.nih.gov/books/NBK201501/>

2. Explain Piaget's understanding of concrete operations and three of the cognitive skills that develop in this stage.

A:



Piaget (1954a) Developed the concrete theory as the cornerstone for children's cognitive development. Much of Piaget's interest in the cognitive development of children was inspired by his observations of his nephew and daughter.

This stage lasts around seven to eleven years of age, and is characterized by the development of organized and rational thinking, it marks the beginning of rational and logical thought.

Children gained abilities in several areas:

Conservation: Is the ability to perceive that re-distributing a material does not affect its mass, number, volume, or length

Reversibility: Is the awareness that actions can be reversed. The child grasps that somethings when changed can be returned to their original state.

Decentration: Concrete operational children do not think about one dimension of the object such as the height but rather consider changes in other dimensions such as the width or depth.

Seriation: the concrete operational child starts arranging items along a quantitative dimension, such as length or weight.

Transitivity: According to Piaget's theory, concrete thinking allows the child to understand how objects are related to one another. In this stage, children can draw conclusions based on that understanding of the respective relationships among objects.

Grouping: The child is capable of grouping together objects which share similar characteristics.

Time: Most children in this stage learn how to read time by looking at a clock, although not fully appreciate meaning of time.

3. What is the social/emotional crisis that needs to be resolved during middle childhood?
What happens if this “crisis” is not successfully resolved?
What did Erikson emphasize as a contributing factor?

A: During middle school, the child’s social world expands considerably as they enter school and gain new friendships with peers. This represents a true emotional crisis for these children.

According to Erickson, the child who successfully had moved from the earlier psychological crisis and becoming more trusting and autonomous will learn easily to become industrious and can defeat inferiority.

The child in this stage is expected to master several skills of life:

- (1) How to relate and communicate with no family members mainly peers according to rules.
- (2) Learn how to be part of a team not just to play alone, making the child learn the formal teamwork.
- (3) Mastering self-discipline on yearly basis, hence, learn new subjects like social studies, reading, arithmetic.
- (4) The psychological crisis is resolved in middle school when children develop a sense of competence in useful skills.

If this crisis is not resolved; the child’s self-confidence can be affected. According to Erickson, children who perform well in school are likely to develop a sense of confidence and vice versa. Moreover, children who do not successfully go through this phase will feel inferior compared to others. They will tend to doubt the future, experience shame, guilt, and subsequently defeat and inferiority.

Contributing factors:

- (1) **Friends and classmates** play a very important role in how children move to either industry or inferiority phases. Classmates can either help children to become more industrious or push them to feel more inferior. This occurs when classmates either please their abilities or belittle them.
- (2) During the industry versus inferiority stage, children learn how to perform more complex tasks. Children when **encouraged or commanded** by teachers or classmates develop a feeling of competence and move towards the industry side. On the other hand, those who receive either little or no praises from parents, teachers, or classmates will doubt their abilities and tend to move towards the inferiority side of that stage
- (3) **Performance in the school** carries a weight on how competent the children will be later on. Those who are excelling in school work whether academic or physical activities tend to gain self-confidence and become more competent.

4. What are social awareness and social cognition?

A):

Social awareness consists of social cognition and social perspective taking

1) Social cognition: It is the process by which children come to know about the others in their world. As children grow, they become more aware not only of their thoughts but also of the emotional states of others. They learn how to respond in social situations and understand how others feel. Children are excellent observers and they can watch and learn from others. Their observations will help them evaluate their talents and competencies.

2) Social Perspective taking: It's the skill of evaluating others' perspectives. It allows children to analyze the actions of others, making a mental note, and subsequently learn from them. The social perspective will help children to experience emotions such as empathy. Students who comprehend their classmates' values, perspectives, and motivations, can learn from each other as well as from their teachers

5. Families are the ultimate social influence on the development of children; what three factors are primary influences in the environment of the family?

A:

a) Multiple relationships within the family: It is important to have a healthy environment, not limited to mother-child, father-child, or even sibling-sibling effects but include how multiple relationships within the family. One out of three middle school students are living with a single parent, foster home, or grandparents, this results in a significant increase in the level of depression and anxiety, deterioration of academic performance, health issues, and behavioral problems.

b) Supportive parenting and parental involvement: parents' warmth and positive expressivity result in more healthy adolescents, more competent, and stronger self-confidence. On the other hand, harsh parenting and lack of parent involvement are associated with impulsivity, aggression, noncompliance, moodiness, and low self-esteem among adolescents.

c) Presence of conflict between the parents: research demonstrated that growing up in homes with high conflicts among parents, adolescents tend to display more aggressive and acting-out behaviors than other adolescents with parents whose marital relationships are more positive. The presence of parental fights threatens the emotional security of the adolescents and diminish the ability of parents to provide authoritative parenting.

d) Socioeconomic factors (Poverty): there is a negative impact of persistent poverty on adolescent emotional adjustment. Adolescents raised in these environments tend to be more irritable, helpless, and depressed. There is a higher percentage of students' dropout among lower socioeconomic families.

Reference: B. Fiese, M. Winter. *Family influence*. 2008 <https://www.sciencedirect.com/topics/medicine-and-dentistry/family-influence>