

PSY 244

Chapter 2

Question #4

Turner syndrome is an example of chromosome abnormalities. Turner syndrome occurs in females. A chromosomal disorder is when either an X chromosome is missing, which makes the person XO, or part of one X chromosome is deleted. Women with Turner syndrome have a webbed neck and are short. Some women are infertile. They usually have difficulty in math, but their speaking skills are pretty good.

Klinefelter syndrome is a chromosomal disorder where males have an extra X chromosome. As a result, males with this disorder usually have enlarged breasts, their testicles are not fully developed, and they often become tall.

Fragile X is an abnormality in the X chromosome. As a result, the chromosome becomes restricted and breaks. This causes learning disabilities, intellectual disabilities, autism, or a short attention span. This disorder is more common in males.

Phenylketonuria is a genetic disorder in which a person cannot metabolize the amino acid phenylalanine found in many food sources. This is a result of a recessive gene. It is easily found in infancy and is treated with a diet to prevent excess phenylalanine.

Sickle-cell anemia is a genetic disorder that is often found in African Americans. It is a disorder that impairs the functioning of the body's red blood cells. Healthy red blood cells that carry oxygen to the body's other cells are shaped like disks. With sickle-cell anemia, a recessive gene causes the red blood cell to become hook-shaped "sickle," cannot correctly carry oxygen, and dies quickly. This causes inadequate oxygen causing anemia and early death.

Question #5

Ultrasound sonography is a procedure that is done seven weeks into a woman's pregnancy. This medical procedure is when high-frequency sound waves are directed into the woman's stomach. The sound's echo transforms a picture on a screen showing the baby's inner structures. This test can determine many abnormalities. For example, microcephaly shows the fetus has a small brain which can cause intellectual disabilities. In addition, Spina bifida can be identified during this procedure. This is a condition that affects the spine.

Chorionic Villus Sampling is a procedure where a tiny tissue sample is taken from the placenta and analyzed. The results from these samples can show if there are genetic defects and chromosomal abnormalities.

Amniocentesis is a sample of the amniotic fluid. This usually is performed between the 15th and 18 weeks of pregnancy. The amniotic juice is taken out by a syringe and tested for chromosomal or metabolic disorders.

Maternal blood screening is done during the 16th to 18th weeks of the pregnancy. This can identify elevated risks for congenital disabilities. The blood test is called the triple screen because it measures three substances in the mother's blood. This test identifies congenital disabilities such as Down syndrome, spina bifida, and congenital heart disease.

Fetal MRI is used to diagnose fetal malformations. An MRI is a powerful magnet and radio image that generate images of the body's organs and structures. Like ultrasound, which is still the first choice but provides better images. The abnormalities seen by MRI may be in the central nervous system, chest, gastrointestinal tract, genital/urinary organs, and placenta.

Question #6.

Infertility is when a woman cannot conceive a child after regular intercourse for 12 months without any contraceptive. Infertility can be on the part of the woman or the man. The woman's role could be that she is not ovulating. Her ova might be abnormal. The fallopian tubes may be blocked, making it impossible for the ova to reach the womb. Other unknown conditions can obstruct the embryo's implantation into the uterus. The man can be infertile because of the small number of sperm he produces. The sperm may be blocked from a passageway or cannot move. Some surgeries can help correct fertility. Some issues are structural, and surgeries can fix the infertility issue. Other couples go the route of hormone-based drugs. In vitro fertilization is another technique used to help infertile couples conceive. This is a procedure in which the eggs and sperm are combined in a laboratory dish. If any of these are successful and become fertilized eggs, they are transferred into the woman's uterus.

Question #13

A teratogen is any agent that damages the development of the fetus causing congenital disabilities or adversely affecting the fetus's cognitive and behavioral outcomes. The dose of the agent, the woman's genetic susceptibility, and the specific time the fetus is subject to the agent influences the severity of how much damage is done embryo or fetus and the type of defect it has caused.

Gestation takes a long time in a human because of the important development and growth the fetus goes through in the three trimesters while in the womb. The length is also due to the important phases of brain development. I researched outside our text and found that the mom's

metabolism also sets the pregnancy length as her pelvis adapts to fit the baby.

<https://www.livescience.com/16937-body-pregnancy.html>

Psychological studies during prenatal development are important to learn how the outside world affects the fetus. These ongoing studies of the mother's mental health during her pregnancy have shown indicators that what the mom experiences affect the fetus. Psychology helps to distinguish the relationship between the mother's psychological state in observing the change in the fetus's heart rate, which can help the mothers to prepare as new moms. This information can help educate people on the importance of physical, mental, and emotional health for pregnant mom and their environment.

Chapter 3

Question #14

An example of cephalocaudal development is the largeness of the infant's head. The early growth begins in the top part of the body and works its way down. The cephalocaudal basis is a physical and motor development pattern from infancy to early childhood. The development follows a head-to-toe progression. Sensory and motor development are the same in the cephalocaudal pattern. An example is infants seeing objects before being able to control their torso. Another example is that infants can use their hands long before being able to crawl or walk.

Proximodistal development follows patterns where motor development radiates from the infant's center to the periphery. It is a growth sequence that begins at the body's center and then to the extremities. An example is that infants can control their trunk muscles and arms before they control their hands. They also use the whole hand before being able to control their fingers.

Question #17

The positive aspects of breastfeeding are that the infant gains the appropriate weight and the risk of obesity is reduced. The risk of SIDS is also reduced. In addition, infants have fewer gastrointestinal infections and lower respiratory tract infections.

I found breastfeeding to be convenient. I felt my children digested the breast milk well. It was free, and I was a stay-at-home mom, so I didn't need to pump. Another reason I breastfed my children was that breast milk contains immunoglobulins, providing passive immunity for my children. I found this most beneficial to their health and immunity. I also loved the bond we shared. I eventually bottle-fed my children after they were weaned from breastfeeding. The cons of bottle feeding are that it isn't as convenient. The formula can be difficult for some infants to get used to, especially with digestion. The formula can be very costly, and the supplies for the bottles can be costly. Also, the formula does not contain Immunoglobulins. Finally, carrying the bottles and their supplies becomes cumbersome. I feel that either way, what the mother chooses is perfectly fine for the child. Today, hospitals, other moms, and particular organizations tend to guilt new moms into breastfeeding. They are very opinionated about breastfeeding. This has put significant pressure on moms. I believe it is a woman's choice for her, her child, and her family, and no one should be judged. Especially considering that the studies are primarily correlational, none prove causality.

Question # 18

I would tell my friend that reflexes are built-in reactions to certain stimuli. These stimuli guide a newborn's movements. They are genetically carried survival mechanisms that are automatic and involuntary. Before they have an opportunity to learn, the infant's reflexes allow them to respond

and adapt to the environment. The example I would give my friend is the reflex of breath in an infant. My dad did this to my siblings and me as infants, teaching us to swim. When immersed in water, the newborn automatically holds its breath and contracts the throat to keep water out. Sucking and rooting reflexes is another example of a survival benefit of reflexes to receive their nourishment from the mother's breast. The rooting reflex occurs when the infant's cheek is stroked, or the side of the mouth is. The infant responds by turning its head to look for something to suck. Sucking occurs when newborns automatically suck an object placed in their mouth.

Chapter 4

Morelli's Strange Situation Task

In watching the child's separation from the caregiver, an attachment is so great that the child has difficulty letting go. In the Strange Situation test, the researcher observes the interaction between the mom and the infant by monitoring the infant's reaction to being separated and then reunited with the caregiver. This is known as a Strange Situation Test, where researchers identify if an infant is insecure or securely attached.

The behaviors that the researchers are interested in are the infant's attachment to the mom. They are looking to see if the child is insecurely attached or securely attached. Researchers studied attachment behaviors with people and children in Africa. They set up a study with a mom and her child. The child's living area was quite busy, with many people around. So, it looked like the child had frequent interactions with other people than mom. The experiment began with a stranger caring for the child while the mother went out. The child did not detach easily when the mom left. He kept his eyes on the door until the mom returned. The child paid no mind to the stranger. He was very anxious and sad until she came home. The behaviors the researcher was

looking for were how the child was going through separation anxiety or whether he could feel secure and comfortable when his mom left. Also observed was watching how the child observed the environment and whether he used the mom as a safe place. Finally, seeing how the child reacts when mom leaves and when they are reunited. The video on the Strange Situation Test was fascinating to watch.

Question #46

Reciprocal socialization is the socialization that is bidirectional. What is meant by this is that parents and children socialize with one another. The behaviors that are a part of reciprocal socialization in infants are temporary and mutually conditional. For example, when a mom or dad responds to the child's hands or feet while interacting with each other. Another form of reciprocal socialization is scaffolding. For example, when parents time their interactions with their children, they learn how to take turns while playing. The example the text gives is peek-a-boo with a blanket, which excites the little one, and eventually, the infant responds by covering themselves with their blanket, now engaging too.

Another example might be using one's hands to play peek-a-boo. This way, the child learns by using their hands and is taught another way to play peek-a-boo.