

Regine Blackman
Prof. S. Maret
PSY 460 Topics in Prenatal Psychology
November 20, 2020

Maret Chapter 10

4. Discuss prenatal sensory capabilities.

5. Discuss prenatal capacities for learning.

Contrary to John Locke's "Blank Slate" theory, which predominated much of what we understood about prenatal cognizance and newborn learning during the 19th century, the advancements in technology during the postindustrial era have provided evidence unanimously supporting the idea that learning actually begins in the womb.

Researchers have studied everything from habituation (which describes diminished fetal responses after a stimulus "gets old", or becomes familiar to the fetus and occurs as early as 23 weeks after fertilization) to classical conditioning, to a fetus's ability to distinguish between voices, sounds, and languages. We have learned that habituation does occur in the intrauterine environment and that deficits in habituation can be an early indicator of delayed learning and cognitive abilities later in life. Likewise, fetuses can also be classically conditioned. In one study, fetuses that were classically conditioned between 22 to 36 weeks showed retention of conditioned responses as early as 6 minutes after birth. Another study focused on the fetus's ability to distinguish his mother's voice from any other voice, by having the expectant mom read the same story repeatedly her fetus. As expected there was no change in a newborn's sucking response when mom read, however, when another woman read the same story, they alternated their sucking pattern.

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6. Discuss prenatal emotional capabilities

It's a difficult for researchers to determine if fetal emotions exist in the manner in which adults experience emotion. However, what researchers can provide is "...evidence for... external behavior normally associated with internal emotion" (Maret 2009). While in utero, fetuses have been recorded "crying" when disturbed, smiling, and grimacing in disgust. The debate is ongoing as to whether fetus's or abortus's crying (yes, it has been documented that abortuses cry as well) is correlated with pain or discomfort. I say, why not?

Most newborns don't waste breath on crying unless there is an immediate need or threat, why should an infant in the prenatal stage be any different? In fact, much of what is observed in the prenatal stage- by way of emotional behavior- is exemplified in the neonatal stage, which suggests to me that these behaviors are not novel, and that newborns have had plenty of time to "practice" emotional responses in the womb. We know that fetuses can be startled by loud noises crossing the placenta, usually a physiological (increased heart rate) and an emotional (observable behavior) response follow. In [one study](#), an infant exposed to loud hip hop music began to present all the gestures displeasure that a neonate would demonstrate. In another [observation](#) a startled fetus went from grimacing to opening the mouth to expel sound, to body jerking while taking in more air to holler, to chin quivering (follow [link](#) for video).

If these isolated incidents capturing what appears to be prenatal emotions were further investigated, we could possibly turn a corner on the issue of abortion. Evidence exhibiting that fetuses can experience pain and emotions in the prenatal stage could shift the broad view of elective abortion as "OK" to an understanding that abortion is an inhumane act.

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7. Given your reading in this section, comment on how this information relates to the practice of abortion. Do you see it as relevant or not? Does it modify in any way your previous view of abortion?

It is evident based on the information presented that the prenatal fetus is a fully sensing, functioning, possibly emotional, and conscious human being even within the womb. Not only is the fetus conscious, but she is learning about her environment and the outside world every day and is capable of responding to stimuli. I believe that even in utero, the fetus can experience pain, but even if she could not, knowing what I know, I would tend to argue that elective and even medical abortions are inhumane and should be discouraged. However, when I consider the additional evidence, that a mother's emotional and psychosocial state can have physical and psychological implications on her developing fetus, I wonder how fair it would be to bring a child who is destined to suffer from these effects into the world. I find myself conflicted, worried for the developing fetus who would be introduced into such a chaotic environment of emotional neglect. These fetuses deserve to live too, but I find I now ask a host of other questions regarding their survival. I wonder about their quality of life, how much epigenetic damage has been done? Is nurture strong enough to thwart or reverse genetic predispositions for schizophrenia, depression, emotional disturbance, and poor physical health? Should infants born in these conditions remain with their mothers?

If every woman pregnant, at risk for pregnancy, or ever expecting to become pregnant would take this basic life course, I think women would make healthier choices concerning their bodies and would take more precaution to avoid pregnancy until they feel truly ready to sustain a

pregnancy and properly nurture a developing fetus. Although teen pregnancies and abortion rates in the U.S. seem to be trending downward, I would like to for a course in prenatal psychology to be integrated in the standard high school curriculum, if not a standard course, definitely an elective. Knowledge is power, and we need the next generation of U. S. to be the brightest and the healthiest, but it all starts with how well we educate their mothers and fathers right now.