

Big answers from little people essay sample

[Technology](#), [Development](#)



Article Review: “ Big Answers from Little People” by Dobbs

In the article “ Big Answers from Little People,” Dobbs (2005) aims to explain how infants start gaining knowledge and skills if they do not know anything when they are born. In other words, because knowledge is usually acquired and built upon previous knowledge, Dobbs explores how infants start learning without any previous knowledge by reporting Spelke’s findings. Spelke is a Harvard psychologist who conducts studies with infants that aim to clarify how human learning occurs in the early stages of life. Spelke’s findings explain what humans experience during their first days, weeks, and months in the world, and most of the evidence amounted by Spelke answers some of the most difficult questions related to nature and nurture and genetic and acquired traits.

The first significant finding was presented in Spelke’s Ph. D. thesis that aimed to clarify how babies perceive sound and sight. In that experiment, the babies were shown two events on two different screens, and one speaker was constantly switching between the sounds of those two events. Because the infants switched their gaze between the visual events as the sound changed and because they observed the correct event each time the sound changed, Spelke was able to conclude that infants can recognize the link between the visual and auditory input.

While Spelke was unable to conclude how the brain could make those correlations, the experiments did prove that the brain did have a certain innate mechanism that allowed the infants to understand some fundamental concept. For example, infants look at objects they never saw longer than the objects they have already memorized. Also, all infants comprehend

movement, but only 8-month-old infants show understanding of inertia.

When it comes to numbers, 6-month-old babies can understand the difference between numbers. At 12-months, the infants know which object the actor will take based on observing their facial expression.

Although the findings are still considered controversial, the Spelke used them to create the theory of core knowledge, which explains that all humans possess basic cognitive skills that allow them to comprehend objects, space, movement, numbers, and people. The system based on the core knowledge theory explains that those cognitive skills are the fundamentals humans use later in life to learn new skills, and that system is inborn to every human.

Because the theory suggests nature provides fundamentals for acquiring skills later in life, it is possible to suggest that some people are better endowed innately than others, and the core knowledge theory possibly opens a lot of issues regarding gender and racial differences.

However, it is evident from Spelke's research that discrimination based on gender or culture occurs in society rather than innately. The innate core knowledge system develops equally in all human beings, and the potential to master any skill is not influenced by gender or race. With that in mind, it is possible to suggest that society, including parents, teachers, and caretakers, can take an active role in the infants' and toddlers' cognitive development.

For example, because infants can memorize objects by looking at them and understand movement, it is possible to show them various objects and move them slowly in front of them. That way, the infants will learn more about how objects can move through space or how different objects can be shaped.

Because they learn through new sensory experiences, activities like listening

to music, reading to infants, or singing can facilitate their cognitive development.

While facilitating cognitive development in infants requires only the active participation of the educator, parent, or caretaker, the development of toddlers also required encouraging their interaction in learning. For example, encouraging them to participate by naming the objects they are shown or naming objects shown in books and having them point the object is the type of active participation that encourages cognitive development in toddlers.

References

Dobbs, D. (2005). Big answers from little people. *Scientific American Mind*, 16(3), 38-43. doi: 10. 1038/scientificamericanmind1005-38