His Brain, Her Brain: Vive la Difference!
Linda Sasser, Ph.D.  linda@brainandmemoryhealth.com

Male and Female Brains
“The sexes are different because their brains are different. The brain... is differently constructed in men and women; it processes information in a different way, which results in different perceptions, priorities and behavior.” - Dr. Anne Moir

Scientists have identified at least 100 differences between male and female brains: developmental, structural, chemical, and processing.

The Socialization Explanation
For most of the 20th century, gender differences in behaviors and choices were explained by social conditioning. Sex differences begin with the X and Y sex chromosomes a person is born with, but whether the brain and nervous system are wired as female or male depends heavily on the early influence of estrogen (female hormone) and testosterone (male hormone). The brain’s sexual identity is first established when those hormones are briefly released before and shortly after birth, and may influence a child’s preference for dolls or trucks.

Simon Baron-Cohen’s Empathising-Systemising (E-S) Theory
Empathising is the drive to identify another person’s emotions and thoughts, and to respond to these with an appropriate emotion. The empathiser intuitively figures out how people are feeling, and how to treat people with care and sensitivity.
Systemising is the drive to analyze and explore a system, to extract underlying rules that govern the behavior of a system, and the drive to construct systems. The systemiser intuitively figures out how things work, or the underlying rules controlling a system.
“Reading the Mind in the Eyes” test measures the ‘cognitive’ component of empathy, the ability to recognize or infer another’s state of mind. In hundreds of studies it shows reliable sex differences in typical individuals, with women on average scoring higher than men.

Brain Chemistry
Male brains tend to have more testosterone (influencing impulsiveness, aggressiveness, competitiveness, and spatial ability), while female brains tend to have more oxytocin (stimulating bonding and cooperation) and serotonin (promoting calmness).

Sensory Differences
Females have a better sense of taste and smell, and are more easily able to hear higher pitched sounds. Females can also see colors better than males, and have wider peripheral vision.
Women are Like Spaghetti
The corpus callosum (bundle of nerve fibers connecting left and right hemispheres) is larger in females, and results in faster transfer of information between hemispheres. Female brains process language in both hemispheres, often resulting in females being more verbal.

Men are Like Waffles
The male brain experiences approximately 15% less blood flow, so is more compartmentalized and better suited to a singular task focus. It has more cortical areas devoted to spatial processing, so is better suited to symbols, pictures, maps. Mental rotation (see figures to right) is often easier for males than females. The task is to determine if each pair of objects is identical.

Books

About the Speaker
Linda Sasser, who holds a Ph.D. in Educational Psychology, has more than three decades of experience as a professional speaker, university professor, and workshop facilitator. Her diverse background includes developing and delivering keynotes, training, and continuing education for associations, businesses and professionals. She authored BE! Brain Enrichment, a course curriculum to help people learn about brain health and improve memory and other cognitive skills. Through her business, Brain and Memory Health, she offers individual and corporate solutions for brain wellness and emotional intelligence, and exercises her passion for motivating people to fully utilize their brain’s potential. Her website is www.brainandmemoryhealth.com

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