

Male-Female Brain Differences

Cell numbers -- men have 4% more brain cells than women, and about 100 grams more of brain tissue. Many women have asked me why men need more brain tissue in order to get the same things done.

Cellular connections - even though a man seems to have more brain cells, it is reported that women have more dendritic connections between brain cells.

Corpus collosum size - it is reported that a woman's brain has a larger corpus collusum, which means women can transfer data between the right and left hemisphere faster than men. Men tend to be more left brained, while women have greater access to both sides.

Language - for men, language is most often just in the dominant hemisphere (usually the left side), but a larger number of women seem to be able to use both sides for language. This gives them a distinct advantage. If a woman has a stroke in the left front side of the brain, she may still retain some language from the right front side. Men who have the same left sided damage are less likely to recover as fully.

Limbic size -- bonding/nesting instincts - current research has demonstrated that females, on average, have a larger deep limbic system than males. This gives females several advantages and disadvantages. Due to the larger deep limbic brain women are more in touch with their feelings, they are generally better able to express their feelings than men. They have an increased ability to bond and be connected to others (which is why women are the primary caretakers for children - there is no society on earth where men are primary caretakers for children). Females have a more acute sense of smell, which is likely to have developed from an evolutionary need for the mother to recognize her young. Having a larger deep limbic system leaves a female somewhat more susceptible to depression, especially at times of significant hormonal changes such as the onset of puberty, before menses, after the birth of a child and at menopause. Women attempt suicide three times more than men. Yet, men kill themselves three times more than women, in part, because they use more violent means of killing themselves (women tend to use overdoses with pills while men tend to either shoot or hang themselves) and men are generally less connected to others than are women. Disconnection from others increases the risk of completed suicides.