



# **Raising Boys**

**By**

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For the past thirty years the popular theory has been that there are no differences between boys and girls other than those we give them through conditioning. Many well meaning parents and teachers have worked to change social conditioning by doing things like having boys play with dolls and girls play with lego, in order to create an egalitarian □ unisex world. The proposal was that a girl could grow up to become anything she wanted just as a boy could grow up to be a nurse or a secretary. While this radical social theory has had profound affect upon modern societies, the theory has ignored the fact that there are in-built biological, bio-chemical and anatomical differences that affect not only behaviour but the very way boys and girls think.

In the past 5 years research into the nature of boys has brought about a fresh understanding of how the male brain develops and functions and how raising boys needs special attention.

From the time a baby is born, male and female brains are different. Indeed, from 6 to 7 weeks after conception, embryos designed to be male receive a ‘hormone bath’ of testosterone which influences the development of the brain. The testosterone actually damages the walnut-shaped brain and alters its structure and even its colour. The left cortex grows slower than the right but with the presence of testosterone in the blood stream, the left cortex of the brain in boys grows slower than in girls. Indeed, oestrogen, the hormone predominant in the bloodstream of girls, makes the brain grow faster. As the right half of the brain grows, it tries to make connections to the left. In boys, the left half isn’t ready as early as in girls and thus the nerve cells reaching across from the right can’t find a place to connect and thus turn back toward the right side and ‘plug in’ there. As a result, girls have better connection between right and left brain thinking, while boy’s right-brain is richer in internal connections.

Testosterone doesn’t just play a role in male development into manhood but has a profound impact on a boy’s development of mind and body from before they are born. At birth, a baby boy has as much testosterone in his bloodstream as a 12 year old boy. The levels drop a few months after birth, and will rise again at the age of 4 or 5, for reasons that no one understands, and again at about 14.

Throughout his life, testosterone will affect a male's every thought and action. Indeed, levels of testosterone can rise and fall in response to challenge, achievement or even failure in any given day. Most experts believe boy's tendency to take risks, to be more assertive, to fight and compete, to argue, to boast, and to excel at certain skills such as problem solving, maths and science is directly linked to how the brain is hardwired and to the presence of testosterone.

While testosterone is the fundamental determinant of male thinking and behaviour, there are two other aspects of male brain chemistry and makeup that warrant mention. The hormone serotonin, which carries information from one nerve cell to another works to pacify or soothe the emotions and to help an individual control his or her impulsive behaviour. It also facilitates good judgement. Inadequate levels of serotonin tend to make people more aggressive and violent. If testosterone is the petrol that powers the male brain, serotonin slows the speed and helps one steer. As you may have guessed, females have more serotonin than males.

The third aspect of neurobiology that help us understand the differences between males and females is the workings of that portion of the brain known as the amygdala. It is a structure about the size of an almond and functions as a small but powerful 'emotional computer'. When a physical or emotional threat is perceived by the senses, the amygdala instantly orders the adrenal glands and other defensive organs to swing into action. This process is designed to increase the chance of survival in times of imminent danger. What makes the amygdala of interest to us is its role in regulating aggression. When the amygdala perceives a threat or challenge it fires electrical impulses into the hypothalamus (the seat of the emotions in the brain) and puts it in a nasty mood. While the amygdala can emit a chemical and electrical impulse that may save your life, it can also precipitate violence and make matters worse. And, yes, the amygdala is larger in males than females and helps to explain why males are more likely to engage in physically violent and at-risk behaviours.

There are many differences between men and women brought about by the environments we live in but there is no doubt today that the differences in brain structure and chemistry cause men and women to think differently. It also means that boys and girls learn differently and have different learning needs.

In raising boys, there are two fundamentals to keep in mind: First, boys need order, and second, boys need the opportunity for physical activity. In terms of order, boys need to know who is in charge and what are the rules. In the absence of order, their testosterone-driven makeup leads them to want to set up hierarchies and they tend to jostle with each other to establish a pecking order. (Where the boys are the same age and size resolution of their problem is made difficult and the jostling continues) □ However, where there is structure and order, boys can relax and interact more effectively with others.

With regard to physical activity, boys high energy levels and competitiveness need to find expression in order for their bodies and minds to develop. Boys also tend to learn concepts more easily if they can see them put into practice and do physical things with their bodies to comprehend the idea being taught. This way, they can use their right-brain perceptions to give meaning to the left-brain concepts being introduced.

The different skills that develop in boys and girls at an early age in language or problem solving, for example, lead to general areas of different interests, as we all know. But the difference in the brain of boys and girls has a profound affect upon their learning capacities and development. For a variety of developmental reasons, when compared to girls, boys are 6 times more likely to have learning difficulties than girls. Michael Gurian, in his book *The Wonder of Boys*, points out that in the US, from elementary grades through to high school, boys receive lower grades than girls. Eighth-grade boys are held back 50% more often than girls and by high school, boys account for two-thirds of students in special education classes.

But boys are not inferior, just different. Accordingly, the way they learn, and, their readiness to learn, is different. At the age of 6 or 7, when children start serious schooling, boys are 6 to 12 months less neurologically developed than girls. They are especially

delayed in what is called fine-motor coordination, which is the ability to use their fingers carefully and to hold a pen or scissors. And since they are still needing 'gross-motor' development, they will be itching to move their large muscles around. Boys have 30% more muscle than girls and therefore their senses seek to move more than girls to flex their muscles. Boys fidgeting in class and roaming around the room is just their bodies trying to find expression, not them being naughty children.

Boys, like girls, really do want to succeed at school, but when in trouble girls tend to *ask* for help while boys tend to *act* for help - leading to what is sometimes seen as 'bad behaviour'. To try and help boys through school there needs to be some radical changes in the philosophy of education to take into account the neurological developmental needs of children. Having said that, there are several things teachers and their schools can do on a practical level to improve learning environments for boys. First, look for ways to bring more energy into the classroom. As a rule, children are supposed to be quiet and compliant in class, which is not the natural tendency for boys. While many teachers already do this, it is a good idea to try and bring some fun and excitement into the classroom. For boys, learning needs to be physical, energetic, concrete and challenging. Second, schools could seek to employ more men as teachers as boys tend to hunger for good male examples and male encouragement.

**Things parents can do to encourage learning and development in their children.**

**Take time to communicate**

In general, girls are better at language skills than boys. Indeed, the two regions of the brain dedicated to language are 20 to 30 percent larger in females than males. Thus, boys need extra support in developing their communication skills.

**'Talk them up' one step at a time.**

Children acquire spoken language one step at a time. First they start to babble and gesture and then words come as naming people and objects. Kids learn best if we speak back to them one step in front of the stage they are at. When they start on single words move them up to phrases and short sentences.

### **Explain things to children**

Conversation and explanation for a child does more for their brain than any amount of expensive education. During everyday experiences, there are many opportunities to talk to children and answer their many questions about what is going on around them.

### **Read to your kids from an early age**

Parents can start reading to their children as early as one year old. Move your child up one step at a time by starting with story books with lots of pictures and lots of rhymes, like Humpty Dumpty, and, while making reading fun seek to expand their minds just a little each time on details by asking questions and using imagination. While these exercises are good for boys as well as girls, boys need that extra assistance to progress.

### **Let them help**

Children are great imitators and they love to be involved in the things that mom and dad do. From babies lying on the floor rolling oranges, to later helping mom with making a cake, helping out can be fun. Adding flavouring, shelling peas, or even washing the dishes, does great things for developing relationships and marvellous things for communication and learning.

At home, as well as in school, boys need help with their learning needs. In the past, demand for high levels of literacy was not so common and children with learning difficulties went mostly unnoticed or simply dropped out of school as early as possible. Today, as learning has become more important so has the accent on learning capabilities.

Learning is a function of the brain, and for a child to learn information the brain has to do four things: It has to be perceived and received through the sensory systems of the body; be organised to make sense; to stored in memory; and be brought out again when needed. Where there is a dysfunction in this neurological process, children develop learning difficulties. But professional help is available.

There are many boys that need support to learn effectively and to improve their learning capabilities. Where a child is suspected of having a learning difficulty, specialist help is available to children through sensory integration therapy.

While we all struggle at times to raise our children, and particularly our sons as they cause concern in their performance at school, children essentially need our love and care, and understanding. Appreciating that boys do think differently to girls and learn at different stages and in different ways than girls, can allow us to be better parents and teachers.

In encouraging and supporting boys develop and progress as boys, we can help them in their journey to becoming happy, capable and caring young men.

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