



### **Activity 1 –**

Some differences between males and females are quite clear. For instance, males are, on average, consistently taller than females. However, sex differences in psychological and cognitive traits are typically much smaller in magnitude; indeed, the sex difference in height has been reported to be more than double the size of the sex difference in many psychological and cognitive traits (Hines, 2004). Overall then, when considering psychological/cognitive skills, males and females appear to be more similar than they are different (Hyde, 2005).

That said, a few specific psychological differences between males and females are reported across studies. These sex differences include mental rotation (which shows a male-typical advantage), the propensity towards rough-and-tumble play and physical aggression (also a greater in males), and differences in toy preferences, with boys being more likely to show a preference for vehicles and girls displaying a greater interest in dolls (Hines, 2004). The various mechanisms that underpin these sex differences have been the subject of scientific scrutiny.

Alexander & Hines (2002) suggested that gender differences in the preference for certain objects is innate. Supporting this view, very young male and female babies (at an average of 37 hours of age) show preferences for physical-mechanical objects versus social objects, respectively (Connellan et al., 2001). Male-typical toys are thought to possess certain properties which afford a greater amount of activity and movement (Alexander & Hines, 2002). A greater desire to engage in activities which afford more movement and activity have been suggested to underlie a preference in boys for toys like cars.

Furthermore, it has been suggested that play with toys that afford movement and action utilise areas of the brain, such as those dedicated to spatial abilities (Newcombe et al., 1983). As a consequence, due to the plasticity of the brain (its ability to change with experience/environmental input), males develop an advantage in spatial tasks, like mental rotation, which as mentioned previously, shows a male advantage. Such a causal explanation is merely theoretical and virtually impossible to test empirically.

In addition, as noted by Newcombe et al. (1983), it is also possible to identify female-typical activities that require spatial abilities. Nonetheless, such an explanation exemplifies how social and biological forces undoubtedly form a complex causal chain in the manifestation of sex differences, and highlights how complex it can be to answer questions about sex differences.

**Can you think of some examples of toys that boys and girls play with?**

**Based on your examples, do you think that play with these toys could lead to the development of different skills?**



**Do you think sex differences in toy choices could relate to sex differences in later life, such as occupational choices? Can you think of some examples?**