

Anyway, back to the article.

Matthews found a German study which looked at what he called 'mixed-handedness', that is, the capacity to use both left and right hands equally. It looked at mixed-handedness in 40 musicians on a variety of instruments. Researchers examined a number of variables, e.g. type of instrument played, regularity of practice undertaken and length of time playing instrument . . . and found the following: keyboard players had high levels of mixed-handedness, whereas string players like cellists and violinists strongly favoured one hand. Also those who started younger were more mixed-handed.

Q34

Matthews also reports studies of handedness in apes. Apes get a large proportion of their food by 'fishing' ants from ant hills. The studies show that apes, like humans, show handedness – though for them right- and left-handedness is about equal, whereas about 85% of humans are right-handed. Studies showed that apes consistently using the same hand fished out 30% more ants than those varying between the two.

Q35

Matthews started researching several different sports and found different types of handedness in each. By the way, he uses 'handedness' to refer to the dominant side for feet and eyes as well as hands. Anyway, his team measured the hand, feet and eyes of 2,611 players and found that there were really three main types of laterality: mixed – you work equally well on both sides – both hand and eye; single – you tend to favour one side but both hand and eye favour the same side; and cross-laterality – a player's hands and eyes favour only one side but they are opposite sides. Let's start with hockey. Matthews found that it was best to be mixed-handed – this is because a hockey stick must be deployed in two directions – it would be a drawback to have hand or eye favouring one side. An interesting finding is that mixed-handed hockey players were significantly more confident than their single-handed counterparts. Things are slightly different in racket sports like tennis. Here the important thing is to have the dominant hand and eye on the one side. This means that there is a bigger area of vision on the side where most of the action occurs. If a player is cross lateral the racket is invisible from the dominant eye for much of the swing. It means that they can only make corrections much later . . . and often the damage has been done by then.

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And moving to a rather different type of sport which involves large but precise movements – gymnastics. It's been found that cross hand-eye favouring is best. The predominant reason for this is because it aids balance – which is of course absolutely central to performance in this sport.

Q40