brain and behaviour

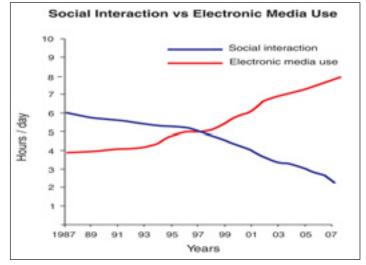
'Social networking': keep it real

Dr Aric Sigman explores the effects of social networking sites on young children's development.

hile many of us think of social networking as something done mostly by late teens and 20-somethings it is now being increasingly done by children a quarter of that age. Childwise Monitor recently found by age 5 at least a quarter of children own their own laptop or computer and most have direct broadband Internet access. The report also showed that British children are watching more TV while at the same time Internet use is growing at a much faster rate with social networking being the main reason to use the Internet.

Young children can now join the website "MyCBBC" which the BBC describes as: "This is about trying to develop their Internet skills and social networking ..." And while we adults may have heard of Second Life there is now a preschool version 'MyCBeebies' where pre-schoolers are about Internet use increasing people's ability to make snap decisions and filter large amounts of information, new research is finding that this may come at the cost of children's social and emotional skills. A study by Stanford University School of Medicine found that when using the Internet, the areas of the brain associated with empathy show virtually no increase in stimulation. 'Young people are growing up immersed in this technology and their brains are more malleable, more plastic and changing than with older brains ... As the brain evolves and shifts its focus towards new technological skills, it drifts away from fundamental social skills.

A study published in Proceedings of the National Academy of Sciences (2009) examined the brain function and development, which underlie abstract qualities such as compassion and morality. The



conversations especially within their own family. This is more likely to ensure that they become emotionally literate and able to interpret others. Children will not acquire these skills through an Internet screen. Social and emotional skills can also only be learned through ongoing intensive system 'may indeed be relevant to social functioning in everyday life during typical human development'.

Real socializing allows our children to learn to interpret, respond to and cope with the nuances of real emotion, relationships, disappointments and

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encouraged to "create your own CBeebies Me: a personal avatar that represents you". The Controller of BBC Children's Television says that this will "inspire a child's imagination, help a child understand itself and its place in the world". The Times recently published their 'Top seven social networking sites for kids.' Yet, as children increasingly make virtual 'friends' online, they are making fewer friends in real life and spending far less time with the few friends they do have. They are also spending far less time looking at or talking to their own parents. In 2008, The Children's Society reported that television alone is displacing the parental role, eclipsing "by a factor of five or ten the time parents spend actively engaging with children". Interaction with virtual friends is displacing vital time that should be spent experiencing real social interactions with real people faceto-face.

scientists drew specific attention to the effects of electronic media in altering a child's moral compass: 'the digital age, might reduce the frequency of full experience of such emotions, with potentially negative consequences. ... For some kinds of thought, especially moral decision-making about other people's social and psychological situations, we need to allow for adequate time and reflection. If things are happening too fast, you may not ever fully experience emotions about other people's psychological states and that would have implications for your morality.

Among other things, face-to-face interaction confers linguistic skills along with the ability to have conversations – to know when and how to listen and contribute. This is quite a technical process; children learn to read cues in someone's facial muscles, eye movements, voice harmonics and body language from repeatedly experiencing face-to-face exposure to real social situations. Children learn through observation and/or copying the 'right things' through face-to-face interaction. In fact, neuroscientists now believe they've identified specialised brain cells called 'mirror neurons', which, when activated, literally make children and young people absorb, mimic and integrate social behaviours. They're also thought to underlie our children's ability to 'adopt another's point of view' and develop empathy. A study of the brain activity of ten-year-olds who observed and imitated emotional expressions and social skills found a direct relationship between the level of activity in the children's mirror neuron systems and 'two distinct indicators of social functioning in typically developing children': empathy and social skills. In the journal Neuroimage, the scientists report that the importance of observing and copying everyday social behaviours and the mirror neuron

disagreement - the human condition. Fortunately, the answer is simple: ensure your children don't start 'social networking' until they are older and when they do, count it - along with TV, DVDs or computer games - as screen time, to be limited. Face-to-face time between family members produces tremendous measurable benefits to our children's wellbeing. For example a study at Columbia University reports that having at least one parent eat dinner with their child regularly was found to prevent depression, anxiety and substance abuse in children, who also achieve higher grades in school.

Most of all, ensure the ratio of real friends and time spent with real people heavily outweighs virtual 'friends' and time spent online with them. Keep it real.

Dr Aric Sigman explores this more fully in a dedicated chapter of The Spoilt Generation published by Piatkus. www.aricsigman.com.

Although the media often crows