A tough nut to crack

Are young male bullies putting on a show to impress the girls? **JON SUTTON**

MOST adults, and most psychologists, think bullying is a bad thing. But more important in tackling bullying are the views of children. Now a new study has suggested that many boys view it as a legitimate way of displaying dominance, and may bully in order to attract the opposite sex.

Anthony Pellegrini and Jeffrey Long (University of Minnesota) followed 129 children through the transition from primary to secondary school. The strength of the study was the multi-method, multi-informant approach, which used self-report, peer, teacher and observation measures of bullying, victimisation and dominance.

The researchers were particularly interested in whether children moving to 'big' school tried to create a reputation to match. They point out that because youngsters move from typically small, personal primary schools with well-established social groups into larger, less supportive secondary schools, they have to re-establish social relationships at a time when peer relations are particularly important. While not exactly taken from the pages of *How to Win Friends and Influence People*, bullying may be viewed as a deliberate strategy used to attain dominance in the new social group.

In a troubling trend from a policy perspective, views of bullying became less negative with time – especially among boys. Bullying increased with the move to middle school and then declined. Bullying mediated youngsters' dominance status during this transition. Victimisation decreased with age, suggesting that boys entering middle school were attempting to establish dominance by acting aggressively towards a specific small set of boys (e.g. tough boys, boys with low peer reputations). Boys rarely targeted girls: the authors suggest examining 'more closely the ecology surrounding boys' uses of bullying strategies…is it done in the presence of girls so that they can exhibit their physical prowess?'

Having collected so much information on the individual, Pellegrini and Long point to the need for information on school-level variables, such as policies toward bullying, access to counsellors, adult supervision, and opportunities to make friends. They say: 'A long standing critique of middle schools and junior high schools, especially in America, is that they do not support youngsters' formation of new cooperative, social groupings but instead exacerbate fractured social groups by having youngsters attend large schools that simultaneously stress competition over cooperation.'

Pellegrini, A.D. & Long, J.D. (2002). A longitudinal study of bullying, dominance, and victimization during the transition from primary school through secondary school. *British Journal of Developmental Psychology, 20,* 259–280.

CLOTHES MAKETH THE CUSTOMER

How dressing down fails to get attention. **NEIL MARTIN**

IF you've ever wondered why the service you get in your local outfitters might not be as efficient as you would like, perhaps you ought to think about the way you dress. Research by Pamela Regan and Veronica Llamas (California State University, Los Angeles) has suggested that formal wear is more likely to get you an assistant's prompt attention than would casual garb. They observed the time that assistants in women's clothing stores in Los Angeles took to approach a female confederate and talk to her. In one condition the confederate was dressed in 'informal attire, as if going to the gym' (leggings, oversized T-shirt and trainers); in the other, she was dressed as if 'on the way to work' (skirt, blouse, smart shoes).

The assistants were significantly quicker in approaching and talking to the formally dressed shopper. The results suggest that if you want prompt attention, at least in Californian boutiques, dress smartly. On the other hand, if assistants' attention grates on you, slip on your gym wear.

Regan, P.C. & Llamas, V. (2002). Customer service as a function of shopper's attire. *Psychological Reports, 90,* 203–204.

The brain in your trousers

Brain activation differs in male and female sexual arousal. **NEIL MARTIN**

WHILE studies have explored the neural machinery that allows us to perceive and experience emotions, one emotion that has been overlooked, perhaps for very good methodological reasons, is that associated with sex. A recent American study, however, has revealed how brain activation is time-locked to sexual arousal in healthy, young heterosexual men.

Bruce Arnow and colleagues from Stanford University Medical School used functional magnetic resonance imaging to determine which regions of the brain were recruited when men watched 'explicitly erotic' video material, or relaxing or sports-related material. During viewing, penile turgidity was measured using a custom-built device.

The right hemisphere showed the most consistent activation during arousal. Various regions, including the premotor region, subcortical parts of the motor system and the occipital and temporal cortex, were activated during tumescence (much more so than during non-tumescence). The authors suggest that the results are consistent with other, differently designed studies. However, they cite a study showing that there is little overlap between the areas activated in men and those in women. 'Further studies will be needed', the authors say, 'to determine if such discrepancies reflect gender or paradigm differences in sexual arousal related brain activation.'

Arnow, B.A., Desmond, J.E., Banner, L.L., Glover, G.H., Solomon, A., Polan, M.L. *et al.* (2002). Brain activation and sexual arousal in healthy, heterosexual males. *Brain, 125,* 1014–1023.

The language divide?

Studies continue to show sex differences in language tasks, but evidence is mixed. **NEIL MARTIN**

A COMMONLY reported sex difference in language is that men tend to exhibit a greater right visual field (RVF) advantage when responding to words presented to the left and right visual fields. That is, information received by the left hemisphere (via the right visual field) is processed more quickly in men. Susan Rossell and colleagues at the Institute of Psychiatry investigated whether sex-related asymmetries in brain activation could be seen during a task that shows consistent sex differences in language processes, a divided field lexical decision task.

The researchers asked 12 right-handed English-speaking participants to complete the task while brain activation was measured using functional magnetic resonance imaging. In the task, participants were asked to indicate the visual field in which they saw a target word or pseudoword. A control task required participants to indicate the field in which they saw the word 'PRESS'. Reaction time was measured in both conditions.

The results were not entirely clear cut. The men did show an RVF advantage but there was no significant difference between men's and women's RVF advantage; the women, conversely, showed a significant left visual field advantage. The brain-imaging data showed increases in activation in regions of the left hemisphere in men but a more symmetrical pattern in women. However, the women showed increased activation in a greater number of areas and significant increases in the right frontal and temporal regions (which perhaps reflects the speed of response when items were flashed to the left visual field). They also showed greater bilateral increases than the men.

While the behavioural results were not clearly supportive of men's RVF superiority, they did provide some evidence for a RVF lexical advantage in men but also more convincing evidence for a LVF advantage in women. The brain-imaging data were consistent with the behavioural findings.

Rossell, S.L., Bullmore, E.T., Williams, S.C.R. & David, A.S. (2002). Sex differences in functional brain activation during a lexical visual field task. *Brain and Language, 80*, 97–105.

VIRTUAL FEAR OF FLYING – AN UPDATE

There's good news for people afraid of flying. **NEIL MARTIN**

IN 'Research in brief' in April last year we reported an innovative study showing how exposure to virtual plane and plane environments alleviated the stress of those with a fear of flying. As with all treatments, success ought to be measured by its long-term effects. A recent 12-month follow-up study suggests that virtual reality (VR) flight exposure has lasting effects of anxiety relief.

Barbara Rothbaum (Emory University, USA) and her team of researchers followed up 24 patients who were either exposed to actual planes and an airport or to VR flying. Both interventions were successful at the first testing point. The follow-up study showed that the initial improvements were maintained. The results suggest that a very short-term treatment that imposes fewer practical demands than real exposure to planes and airports can have sustainable benefits.

Rothbaum, B.O., Hodges, L., Anderson, P.L., Price, L. & Smith, S. (2002). Twelve-month follow-up of virtual reality and standard exposure: Therapies for the fear of flying. *Journal of Consulting and Clinical Psychology, 70*, 428–432.

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