Self-control is vital

Psychologists have provided a dramatic demonstration of how childhood levels of self-control are linked with outcomes later on in life. This is important because unlike other traits that are associated with life outcomes – including cleverness, tallness, and beauty – lots of research suggests that self-control is readily amenable to improvement through training.

Terrie Moffitt and her team assessed the self-control of 1000 New Zealand children at the ages of 3, 5, 7, 9 and 11 and then interviewed them when they’d reached the age of 32. The striking finding was that the study participants with poor childhood self-control were more likely in adulthood to have children of their own in a one-parent situation, more likely to have credit and health problems and more likely to have been convicted of a criminal offence, even after factoring out the effects of intelligence and social class. These associations held, albeit to a far weaker extent, even when restricting the analysis to self-control scores obtained at age 3.

To flesh out some examples, the top fifth of the sample in terms of childhood self-control had rates of serious adult health problems at 11 per cent versus 27 per cent for the bottom fifth of the sample. The crime rates in adulthood were 13 per cent for those high in childhood self-control versus 43 per cent for those with low childhood self-control.

The relationship with adult outcomes held across the full range of childhood self-control scores. In other words, there doesn’t appear to be a level of self-control beyond which no more benefits are gleaned. Neither is there a nadir of self-control beneath which no further costs are incurred.

There was also evidence in the data for what the researchers called adolescent ‘snares’ that trapped individuals in harmful lifestyles. For example, children with lower self-control were more likely to smoke in adolescence, to leave school with no qualifications and to become a teenage parent. In turn, these teenage ‘snares’ predicted the chances in adulthood of having poor health and financial problems or being a criminal.

Moffitt and her colleagues said their results, which chime with Walter Mischel’s classic ‘marshmallow’ study findings, strengthened the case for introducing self-control enhancement interventions in both childhood and adolescence in what they called a ‘one-two punch’. ‘Interventions in adolescence that prevent or ameliorate the consequences of teenagers’ mistakes might go far to improve the health, wealth and public safety of the population,’ they said. ‘On the other hand, that childhood self-control predicts adolescents’ mistakes implies that early childhood intervention could prevent them.

The researchers recommended universal, rather than targeted, intervention programmes – doing so would help reduce stigma, they said, and could provide benefits even to those who already score highly in self-control.

How much do you know about the reliability of memory?

In Applied Cognitive Psychology

In the latest in a series of investigations into how much people know about eyewitness memory, Svein Magnussen and Annika Melinder have compiled 12 questions about memory and put them to 857 licensed members of the Norwegian Psychological Association. The correct answers were based on the latest consensus findings in the field of memory research. The Norwegian psychologists scored an average of just 63 per cent correct, no better than achieved by Norwegian judges (63 per cent) in prior research, and only slightly ahead of the general public (they scored 56 per cent on average). To see how you would have fared, visit the Research Digest blog entry at tinyurl.com/62ubwj2.

This blindspot for understanding memory isn’t a uniquely Norwegian problem. Past research has established that US and Chinese judges, US law students and undergrads all have limited knowledge about the factors that affect eyewitness testimony.

The findings have serious implications for the understanding of memory processes in court, especially the limitations of eyewitness accounts. Magnussen and Melinder said their findings support the official guidance of the British Psychological Society’s Research Board that being a fully credentialed psychologist does not by itself make someone a memory expert. ‘A memory expert is someone whose expertise is recognised,’ states the 2010 version of the report. ‘Recognition of relevant expertise should usually be in the form of outputs that are publicly verifiable, for example, peer-reviewed publications, other publications, and presentations at professional meetings. Of these, peer-reviewed publications are the most important.’

As well as their overall relatively poor performance, Magnussen and Melinder found that psychologists performed better than the public on the question ‘Is a person’s confidence in their memories a good predictor of the accuracy of those memories?’ [No], but actually performed worse on ‘Does the presence of a weapon tend to impair a witness’s memory for a perpetrator’s face?’ [Yes] and ‘Does most forgetting tend to occur soon after an event?’ [Yes]. It is particularly surprising that so few psychologists were familiar with the normal course of forgetting, the classic Ebbinghaus function,’ they said.

Some of the answers may strike you as more controversial than others. On the question of recovered memories, Magnussen and Melinder wrote: ‘Repression is not among the mechanisms of forgetting acknowledged by current memory science, and the available evidence does not support the idea of repression.’ They go on to say that well-controlled prospective studies of childhood sexual abuse victims
How losing can increase your chances of winning

In Management Science

suggest strongly that memories of abuse are not forgotten.

What about the idea that criminals can’t selectively forget a criminal act? Although psychogenic amnesia is a real phenomenon (that is, amnesia in the absence of any detectable brain damage or disease), Magnusson and Melinder argue that these ‘mnestic blocks’ typically cover periods of weeks or even years, not the specific instances in time that are often claimed by offenders.

The researchers call for better scrutiny of memory expertise by the courts, and they lament that ‘psychlore appears to be a stronger determinant of empirical research’ than are the results of empirical research, even among the majority of qualified Norwegian psychologists.

When is losing the route to winning? When you’re losing by just a little. That’s according to Jonah Berger and Devin Pope who think the paradoxical effect works because losing by a whisker is highly motivating.

Berger and Pope began by studying over 18,000 NBA basketball games. Specifically they compared half-time scores with final results. Much of the data was as you’d expect – the further in the lead a team was at half time, the more likely they were to win the game, and vice versa for teams losing at half time. In fact, there was a reliable pattern – for every two points a team was in the lead at half time, they were 6 to 8 per cent more likely to win out.

But there was also a clear blip in the data. Teams that were behind by one point at half time were actually more likely to end up winning than teams that were ahead by one point. Compared against the larger trend, teams behind by one point were approximately 6 per cent more likely to win than you’d expect – an effect about half the size of the benefit of playing at home. The researchers don’t think it has to do with coaches changing strategy or giving inspiring half-time talks: the ‘losing leading to winning’ effect was no greater among teams with more successful coaches. Rather, Berger and Pope think the effect is purely to do with the motivating influence of being just a bit behind.

The pair tested this idea with a simple lab task. Participants tapped two keyboard keys alternately as fast as they could for 30 seconds in a race against a partner. Then there was a pause in which they were given false performance feedback: told they were far behind their partner, just behind, tied, just ahead, or given no feedback. The 30-second key-tapping was then repeated. The result was striking. Those participants told they were just behind increased their effort in the second phase far more than all the other participants.

A final study was identical except that the researchers also measured the participants’ self-efficacy – that is, their belief in their ability to succeed. The just-behind benefit was replicated and for these participants only, self-efficacy made a big difference. That is, participants told they were just-behind at half-time and who had high self-efficacy were the ones who most increased their effort in the second phase. Losing by a whisker is highly motivating it seems, especially if you think you can do something about it.

Berger and Pope think their findings have real-life implications, in business as well as in sport. ‘Managers trying to encourage employees to work harder, for example, might provide feedback about how a person is doing relative to a slightly better performer,’ they said. ‘Strategically scheduling breaks when someone is behind should also help focus people on the deficit and subsequently increase effort. This should lead to stronger performance and ultimately success.’