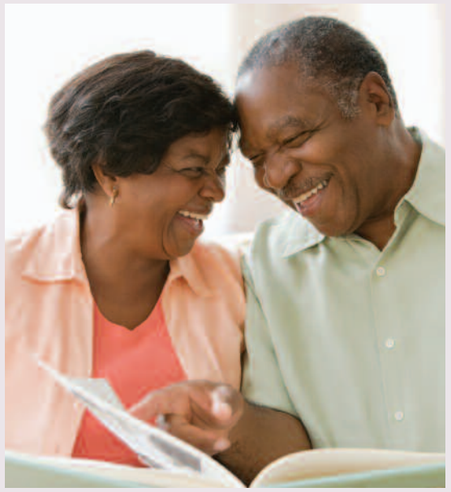
How long-term couples develop interconnected memory systems

Although it might seem a good idea to work with other people to remember important information, the evidence suggests that this typically isn't so. Individual recall is most efficient whereas social remembering comes with drawbacks, tripping up our flow and inhibiting memories. But this evidence mostly comes from asking people to collaborate with a stranger. What happens when you know each other really, really well?



In *Memory Studies*

Celia Harris and colleagues at Macquarie University recently reviewed their previously published and new research on social remembering by long-term intimate couples. Their data showed that on standard tasks, such as reproducing words from studied lists, couples working together often did as well as when they worked alone. This lack of a penalty from social remembering is itself notable, but it's just a gateway into more intriguing findings.

During another study, the researchers noticed that although couples did more poorly at listing their shared holidays when recalling together, these social sessions were filled with anecdotes and tangents that weren't generated in the solo sessions. This inspired them to depart from testing memory for lists of words and events, and to explore the amount of rich, in-depth information remembered by couples about experienced events. They found these social exchanges led to clear collaborative memory benefits, which could take three forms:

1. **'New information' such as finally snatching an elusive name of a musical thanks to a chain of prompts between the two parties.**
2. **Richer, more vivid descriptions of events including sensory information.**
3. **Information from one partner painting things in a new light for the other.**

Differences between the couples were crucial. Those who structured their approach together and were more prepared to riff off the other's contributions did better than those who were more passive or critical. Richer events were also better remembered by partners who rated their intimacy as higher.

The authors note that older adults tend to experience the greatest memory difficulties with firsthand autobiographical information, rather than abstracted facts. This is exactly where the couples gained the biggest benefit from remembering together, as evidenced by performance on the in-depth event recall task and the spontaneously emerging anecdotes. It's possible that as we grow older, we offset the unreliability of our own episodic systems by drawing on the memorial support offered by a trusted partner. This might explain why when one member of an older couple experiences a drop in cognitive function, the other soon follows. Our memory systems are more of a shared resource than we realise. AF

One of psychology's most famous experiments was seriously flawed

In *Teaching of Psychology*

Conducted in 1971, the Stanford Prison Experiment (SPE) has acquired a mythical status and provided the inspiration for at least two feature-length films. You'll recall that several university students allocated to the role of jailor turned brutal and the study had to be aborted prematurely. Philip Zimbardo, the experiment's lead investigator, says the lesson from the research is that in certain situations, good people readily turn bad. 'If you put good apples into a bad situation, you'll get bad apples,' he has written.

The SPE was criticised back in the 70s, but that criticism has noticeably escalated and widened in recent years. New details to emerge show that Zimbardo played a key role in encouraging his 'guards' to behave in tyrannical fashion. Critics have pointed out that only one third of guards behaved sadistically (this argues against the overwhelming power of the situation). Question marks have also been raised about the self-selection of particular personality types into the study. Moreover, in 2002, the social psychologists Steve Reicher and Alex Haslam conducted the BBC Prison Study to test the conventional interpretation of the SPE. The researchers deliberately avoided directing their participants as Zimbardo had his, and this time it was the prisoners who initially formed a strong group identity and overthrew the guards.

Given that the SPE has been used to explain modern-day atrocities, such as at Abu Ghraib, and given that nearly two million students are enrolled in introductory psychology courses in the US, Richard Griggs, professor emeritus at the University of Florida, says 'it is especially important that coverage of it in our texts be accurate'.

So, have the important criticisms and reinterpretations of the SPE been documented by key introductory psychology textbooks? Griggs analysed the content of 13 leading US introductory psychology textbooks, all of which have been revised in recent years, including: *Discovering Psychology* (Cacioppo & Freberg, 2012); *Psychological Science* (Gazzaniga et al., 2012); and *Psychology* (Schacter et al., 2011).

Of the 13 analysed texts, 11 dealt with the Stanford Prison Experiment, providing between one to seven paragraphs of coverage. Nine included photographic support for the coverage. Five provided no criticism of the SPE at all. The other six provided only cursory criticism, mostly focused on the questionable ethics of the study. Only two texts mentioned the BBC Prison Study. Only one text provided a formal scholarly reference to a critique of the SPE.

Why do the principal psychology introductory textbooks, at least in the US, largely ignore the wide range of important criticisms of the SPE? Griggs didn't approach the authors of the texts so he can't know for sure. He thinks it unlikely that ignorance is the answer. Perhaps the authors are persuaded by Zimbardo's answers to his critics, says Griggs, but even so, surely the criticisms should be mentioned and referenced. Another possibility is that textbook authors are under pressure to shorten their texts, but surely they are also under pressure to keep them up to date.

It would be interesting to compare coverage of the SPE in European introductory texts. Certainly there are contemporary books by British psychologists that do provide more in-depth critical coverage of the SPE.

Griggs' advice for textbook authors is to position coverage of the SPE in the research methods chapter (instead of under social psychology), and to use the experiment's flaws as a way to introduce students to key issues such as ecological validity, ethics, demand characteristics and subsequent conflicting results. 'In sum,' he writes, 'the SPE and its criticisms comprise a solid thread to weave numerous research concepts together into a good "story" that would not only enhance student learning but also lead students to engage in critical thinking about the research process and all of the possible pitfalls along the way.' CJ

Happy together now?

In the *Journal of Happiness Studies*

It's become a mantra of the modern Western world that the ultimate aim of life is to achieve happiness. Self-help blog posts on how to be happy are almost guaranteed popularity (the Digest has its own!). Pro-happiness organisations have appeared, such as Action for Happiness, which aims to 'create a happier society for everyone'. Topping it all, an increasing number of governments, including in the UK, have started measuring national well-being (seen as a proxy for 'happiness') – the argument being that this a potentially more important policy outcome than economic prosperity.

But hang on a minute, say Moshen Joshanloo and Dan Weijers writing in the *Journal of Happiness Studies* – not everyone wants to be happy. In fact, they point out that many people, including in Western cultures, deliberately dampen their positive moods.

Looking into the reasons for happiness aversion, Joshanloo and Weijers identify four: believing that being happy will provoke bad things to happen; that happiness will make you a worse person; that expressing happiness is bad for you and others; and that pursuing happiness is bad for you and others. Let's touch on each of these.

Fear that happiness leads to bad outcomes is perhaps most strong in East Asian cultures influenced by Taoism, which posits that 'things tend to revert to their opposite'. A 2001 study asked participants to choose from a range of life-course graphs and found that Chinese people were more likely than Americans to choose graphs that showed periods of sadness following periods of joy. Other cultures, such as Japan and Iran, believe that happiness can bring misfortune as it causes inattentiveness. Similar fears are sometimes found in the West as reflected in adages such as 'What goes up must come down'.

Belief that being happy makes you a worse person is rooted in some interpretations of Islam, the reasoning being that it distracts you from God. Joshanloo and Weijers quote the Prophet Muhammad: 'Were you to know what I know, you would laugh little and weep much' and 'Avoid much laughter, for much laughter deadens the heart'. Another relevant belief here is the idea that being unhappy makes people more creative. Consider this quote from Edward Munch: 'They [emotional sufferings] are part of me and my art. They are indistinguishable from me ... I want to keep those sufferings.'

In relation to the overt expression of happiness, a 2009 study found that Japanese participants frequently mentioned that doing so can harm others, for example by making them envious; Americans rarely held such concerns. In Ifaluk culture in Micronesia, meanwhile, Joshanloo and Weijers note that expressing happiness is 'associated with showing off, overexcitement, and failure at doing one's duties'.

Finally, the pursuit of happiness is believed by many cultures and philosophies to be harmful to the self and others. Take as an example this passage of Buddhist text: 'And with every desire for happiness, out of delusion they destroy their own well-being as if it were their enemy.' In Western thought, as far back as Epicurus, warnings are given that the direct pursuit of happiness can backfire on the self, and harm others through excessive self-interest. Also, it's been argued that joy can make the oppressed weak and less likely to fight injustice.

There's a contemporary fixation with happiness in the much of the Western world. Joshanloo and Weijers' counterpoint is that, for various reasons, not everyone wants to happy. From a practical perspective, they say this could seriously skew cross-cultural comparisons of subjective well-being. 'It stands to reason', they write, 'that a person with an aversion to expressing happiness...may report lower subjective wellbeing than they would do otherwise.' But their concerns go deeper: 'There are risks for happiness studies in exporting Western psychology to non-Western cultures without undertaking indigenous analyses, including making invalid cross-cultural comparisons and imposing Western cultural assumptions on other cultures.' CJ

How "You can do it!" beats "I can do it!"

In the *European Journal of Social Psychology*

We know self-talk can help people's self-control (e.g. 'Don't do it!'), and boost their morale (e.g. 'Hang in there!') in sporting situations. However, before now, no one has investigated whether self-talk is more effective depending on whether you refer to yourself in the grammatical first person (i.e. 'I can do it!') or the second person (i.e. 'You can do it!').

Sanda Dolcos and her team first asked 95 psychology undergraduates to imagine they were a character in a short story. The character is faced with a choice, and the participants are asked to write down the advice they would give themselves in this role, to help make the choice. Crucially, half the participants were instructed to use the first-person 'I' in their self-advice, the others to use the second-person 'You'. Right after, the participants completed a series of anagrams. Those who'd given their fictional selves advice using 'You' completed more anagrams than those who'd used the first-person 'I' (17.53 average completion rate vs. 15.96).

A second study with 143 more psychology students was similar, but this time the students gave themselves self-advice specifically in relation to completing anagrams, and this time the researchers finished up the study by tapping the students' attitudes to anagrams, and their intentions to complete more in the future. Students who gave themselves self-advice in the second-person managed to complete more anagrams, and they said they would be happier to work on more in the future (as compared with students who used the first person, or a control group who did not give themselves advice). The greater success rate for the second-person students was mediated by their more positive attitudes.

Finally, 135 more psychology students wrote down self-advice in relation to exercising more over the next two weeks. Those who referred to themselves as 'You' in that advice subsequently stated that they planned to do more exercise, and they also went on to report more positive attitudes towards exercising, than those students who referred to themselves as 'I'.

Dolcos and her colleagues said theirs was the 'first experimental demonstration' that second-person self-talk is more effective than the first-person variety, thus complementing 'past intuitions and descriptive data" suggesting that people resort to second-person self-talk when in more demanding situations. The researchers speculate that second-person self-talk may have this beneficial effect because it cues memories of receiving support and encouragement from others, especially in childhood. 'Future work should examine ways to actually training people to strategically use the second-person in ways that improve their self-regulation,' they said.

Many readers will likely be disappointed by the dependence on purely psychology student samples. You might wonder too whether writing down self-advice is truly equivalent to internal self-talk; and maybe you'll have doubts about the extent to which anagram performance and exercising intentions tells us about potential effects in the real world. Another issue is that the study didn't investigate people's preferences for self-talk – is it a rule that second-person self-talk is superior for everyone? CJ

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How your mood changes your personality

In *BMC Psychology*

Except in extreme cases of illness or trauma, we usually expect each other's personalities to remain stable through life. Indeed, central to the definition of personality is that it describes pervasive tendencies in a person's behaviour and ways of relating to the world. However, a new study highlights the reality – your personality is swayed by your current mood, especially when you're feeling down.

Jan Querengässer and Sebastian Schindler twice measured the personality of 98 participants (average age 22; 67 per cent female), with a month between each assessment. Before one of the assessments, the participants either watched a 10-minute video designed to make them feel sad, or to make them feel happy. The sad clip was from the film *Philadelphia* and Barber's *Adagio for Strings* was also added into the mix. The happy video showed families reunited after the fall of the Berlin Wall, together with Mozart's *Eine kleine Nachtmusik*. Before their other personality assessment, the participants watched a neutral video about people with extreme skills.

When participants answered questions about their personality in a sad state, they scored 'considerably' higher on trait neuroticism, and 'moderately' lower on extraversion and agreeableness, as compared with when they completed the questionnaire in a neutral mood state. There was also a trend for participants to score higher on extraversion when in a happy mood, but this didn't reach statistical significance.

The weaker effect of happy mood on personality may be because people's supposed baseline mood (after the neutral video) was already happy. Alternatively, perhaps sad mood really does have a stronger effect on personality scores than happiness. This would make sense from a survival perspective, the researchers said, because sadness is usually seen as a state to be avoided, while happiness is a state to be maintained. 'Change is more urgent than maintenance,' they explained.

These results complement previous research suggesting that a person's personality traits are associated with more frequent experience of particular emotions. For example, there's evidence that high scorers on extraversion experience more happiness than lower scorers. However, the new data highlight how the relationship can work both ways – with current emotional state also influencing personality (or the measurement of personality, at least). We are familiar with this in our everyday lives – even our most vivacious friends can seem less friendly and sociable when they're down. With strangers though, it's easy to forget these effects and assume that their behaviour derives from fixed personality rather than temporary mood.

Although this research appears to challenge the notion of personality as fixed, the results, if heeded, could actually help us drill down to a person's underlying long-term traits. As Querengässer and Schindler explained, 'becoming aware of participants' emotional state and paying attention to the possible implications on testing could lead to a notable increase in the stability of assessed personality traits'. CJ

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10,000 hours of practice is no guarantee for greatness according to an analysis of elite chess players and musicians. Amount of 'deliberate practice' was found to account for 34 per cent of variance in chess ability and 30 per cent of variance in musical ability. (In the journal *Intelligence*)

'Cool kids' don't fare so well when they reach early adulthood. Researchers found that popular, precocious 13-year-olds who engaged in minor acts of rebellion were, in their early 20s, more likely than their peers to be involved in criminality and have relationship problems. (In *Child Development*)

People tend not to like spending time alone with their own thoughts, according to a series of provocative studies. In one, 67 per cent of men who said they would pay to avoid a mild electric shock subsequently chose to shock themselves during a 15-minute period of quiet contemplation. (In *Science*)

Neurosurgeons have identified a small area, buried deep near the front of the brain, that appears to act like an 'on/off switch' for consciousness. The discovery was made while applying electrical stimulation to the brain of a woman with intractable epilepsy, in the search for the locus of her seizures. (In *Epilepsy and Behavior*)

Well-being at work tends to dip when people are in their 30s, now researchers think they know why. A survey of hundreds of employees in the Australian construction industry uncovered that this period of life is associated with less support from co-workers and increased time pressure. (In *Journal of Occupational Health Psychology*)

When you're depressed, you feel a disconnection from your body, your relationships and your past and future. That's according to interviews with seven therapy clients – three women and four men – who'd been diagnosed with depression for the first time. Researchers hope the insights will help therapists talk to their clients about the condition. (In *Psychology and Psychotherapy: Theory, Research and Practice*)