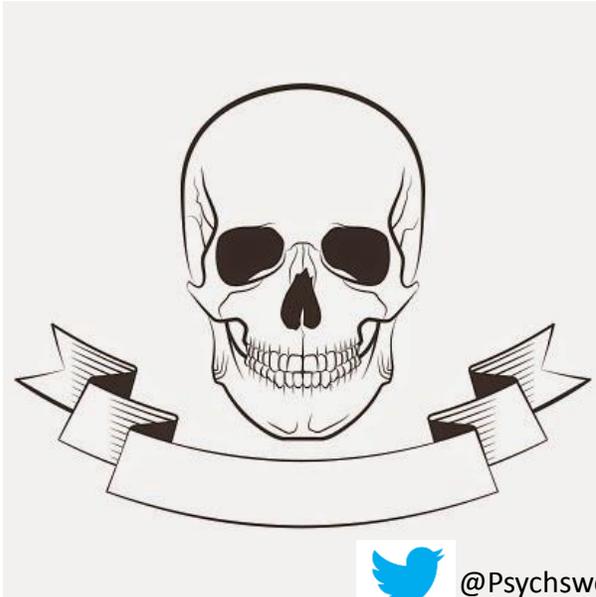


1. "Think about what will happen as you die" (purpose: studying existential threat)

In this study from 2007, researchers wanted to test the idea that we have an inbuilt psychological defence mechanism that protects us from the potentially paralysing fear of death. To do this, they prompted students to contemplate their own death via two instructions: "Briefly describe the thoughts and feelings that the thought of your own death arouses in you" and "Please describe in as much detail what you think will happen as you die and once you are physically dead." After this, the students completed word stems, like "jo". Compared with a control group who thought about a painful dentist visit, the students who'd thought about their own death were more likely to complete the stems to create positive words such as "joy". "Death is a psychologically threatening fact, but when people contemplate it, apparently the automatic system begins to search for happy thoughts," the researchers said.



@Psychswot



Psych Swot



PsychSwot.com



PsychSwot

2. "Lie in Bed in a Cell Doing Nothing For Days" (purpose: studying sensory deprivation)

At McGill University in Canada in the 1950s, male college students were paid \$20 a day to don translucent goggles, wear cotton gloves and to lie on a bed in a tiny room, air conditioning humming in the background. They stayed for as many days as they could bear, with breaks for meals and toilet visits. The idea wasn't to test complete sensory deprivation but to see "how human beings would react in situations in which nothing at all was happening". The students soon became irritated and paranoid, their mental function impaired, and they experienced increasingly disturbing hallucinations, including seeing squirrels marching with bags over their shoulders, and having the feeling of being hit by pellets from a miniature rocket ship. "Prolonged exposure to a monotonous environment has definitely deleterious effects," one of the researchers concluded in his write-up



3. "Imitate a 5-Year-Old Having a Temper Tantrum" (purpose: studying embarrassment)

When we're embarrassed we're more willing to answer other people's calls for help. That was the finding from this 70s classic, which involved student participants arriving at the psychology lab only to be told they had to perform a series of four ridiculous tasks while another student watched them from behind a one-way mirror: "turn on a tape recorder and dance to the record; laugh for 30 sec as if they had just heard a funny joke; sing the Star Spangled Banner; and imitate a 5-year-old having a temper tantrum because he does not want to go to kindergarten." Students who performed these embarrassing stunts subsequently showed enhanced willingness to help other people when asked (e.g. help them with a class project), as compared with controls who'd performed non-embarrassing tasks. The researchers concluded that complying with requests for help generates positive feelings that offset the awkwardness of embarrassment.



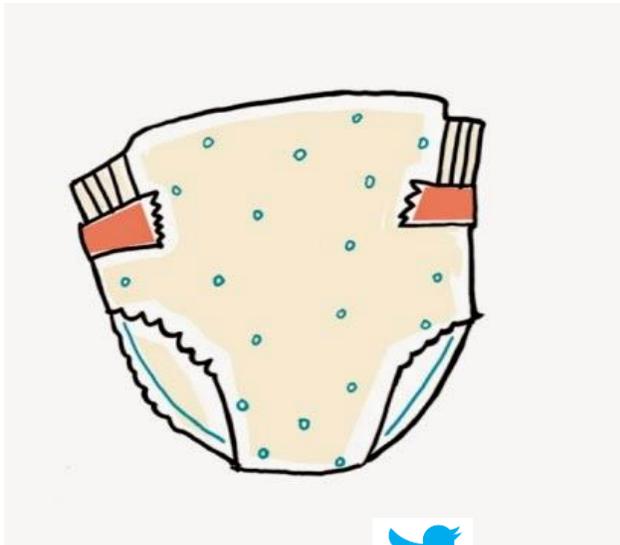
4. "Lie in a brain scanner with a live snake" (purpose: studying the brain circuits associated with fear)

Participants with a fear of snakes were invited to lie in brain scanner and to press a button to transport a 1.5M long corn snake into the scanner with them, near their heads. Crucially, the participants had control over the snake's position, allowing the researchers to monitor brain activity associated with overcoming or succumbing to fear. A part of the frontal cortex buried under the corpus callosum (the sgACC) emerged as a key area involved when participants chose to overcome their fear. When people reported high fear but chose to bring the snake closer, sgACC activity increased, while physiological markers of fear dropped, and activity in emotion processing regions, such as the amygdala, was reduced. The fact that bodily signs of fear were reduced during moments of courage, even while subjective fear was high, raises a concern with studies that use physiological measures (such as sweatiness of the skin) as a marker for fear.



5. "Smell These Dirty Nappies" (purpose: studying disgust)

In this research from the noughties, 13 brave mothers smelt successive pairs of buckets, one containing a soiled nappy produced by their own infant, the other containing the soiled nappy belonging to someone else's baby. Even when the origin of the nappies was concealed from the mothers, they rated the smell of their own baby's nappy as less disgusting. The researchers said this result provides an example of how our disgust reactions can be tempered. This makes evolutionary sense, they explained – in the case of mothers and babies, excess disgust could impede the ability to care for offspring. Also, we often share microbial flora with relatives, making their bodily products less of a hygiene threat. Whether the mothers' reduced disgust for their own babies excrement was due to habituation, or to some airborne signal of relatedness, remains unknown.



@Psychswot



Psych Swot



PsychSwot.com



PsychSwot

6. "Lie in a brain scanner while your partner brings you to orgasm" (purpose: investigating the function of the pituitary gland)

Eleven participating women and eleven men each lay in a PET brain scanner for this study, while their partners stimulated their (the participants') genitals until they reached orgasm. Shy people need not apply! The idea was to see if it were possible to monitor pituitary gland activity, which previous brain scanning studies had failed to achieve. The pituitary controls hormone release, and this study found that female orgasm increased pituitary blood flow (thought to be a marker of increased activation) whereas fake orgasm or stimulation without orgasm did not. By contrast, male orgasm was not correlated with increased pituitary activity. The researchers explained this difference is likely due to the fact that female orgasm is associated with increased release of the hormones oxytocin and prolactin (controlled by the pituitary), whereas male orgasm is not, or far less so.



7. "Look at these photos of delicious food while you're hungry" (purpose: to investigate attention to food)

After fasting for 17 hours, female participants (half of whom were obese or overweight) were asked to visit a psychology lab and assessed via eye tracking and EEG (brain wave recording) while they looked at pictures of foods such as doughnuts and and chocolate. For comparison, other women performed the same task after being given a milkshake to satisfy their hunger. The study revealed a number of differences between the obese and normal weight women, among them the fact that the hungry obese women's brain waves showed evidence of reduced attention to food. The researchers surmised this might reflect their attempt to inhibit their interest in food, perhaps driven by a fear of eating too much once food was available again. Possibly consistent with this, the hungry obese women (compared to hungry normal weight women) ate significantly more food during the next part of the study, which they were told was a taste test of snack food.



@Psychswot



Psych Swot



PsychSwot.com



PsychSwot

8. "Solve these frustrating anagrams while I wind you up" (purpose: studying the effects of provocation on subsequent aggression)
Imagine trying to solve some tricky anagrams, while an experimenter keeps telling you that you're not uttering the answers loudly enough. In a final rebuke the researcher says: "Look, this is the third time I have had to say this! Can't you freshman follow directions." Oh, and all the while the "storm passage" from Beethoven's 6th symphony is playing the background. This was the scenario encountered by half the participants in a study published in 2000. The researcher wanted to find out what effect this initial provocation would have on so-called "displaced" aggression towards a third party. After student participants endured the annoying anagram situation, they received feedback on their performance from another student (and in turn they rated him). When his feedback was neutral, provoked students actually showed reduced aggression towards him compared with unprovoked controls. However, provocation followed by unfair feedback produced a toxic combination – in this case the provoked students lashed out, giving their partner participant particularly harsh ratings and feedback, including saying they wouldn't hire him for a job opening.



9. "Complete this psychology test with an uncomfortably full bladder" (purpose: to test the idea that inhibitory signals generalise)

In one experiment from this Nobel-winning research, half the participants were first put into a state of having a full bladder. They were told they were taking part in a water taste test and as part of this they drank 5 cups of water (approx 700ml), then waited 45 minutes, then answered a series of questions about whether they'd choose smaller financial rewards now, or larger rewards later. Participants put into a state of urination urgency showed greater restraint in their choices, as compared with control participants who'd only sipped at the cups of water. The researchers said this shows how inhibitory signals involved in bladder control "spill over" (their words) into other domains, "resulting in increased impulse control").



@Psychswot



Psych Swot



PsychSwot.com



PsychSwot

10. "Swallow this balloon so we can inflate it inside you" (purpose: studying pain)

If you agree to take part in pain research, full credit to you – this is an incredibly important field that ultimately strives to understand and help reduce people's suffering. Often such research involves relatively mild heat stimuli, ice buckets or mild electrical shocks. This study from 2009 is a little different because it was about visceral pain – to this end, participants were asked to swallow (or insert nasally) a special deflated balloon, which was then repeatedly inflated once it was in their oesophagus. The level of every inflation was determined by each participant's pain threshold. Among their findings, the researchers (led by Peter Paine; seriously) uncovered an apparent effect of personality – in participants who scored more highly in neuroticism, repeating the visceral pain stimulus led to increases in parasympathetic nervous system activity, as identified through heart-rate variability, whereas repetitions of the pain in those lower in neuroticism led to reduced parasympathetic activity. One possible explanation is that increased parasympathetic nervous system activity corresponds to a 'freeze' response in the participants higher in neuroticism.

