

Paying attention without knowing it!

Neeraja Raghavan

As teachers, any tricks by which the attention of our students can be enhanced are always useful, aren't they? This month, the (freely downloadable) research paper that I am going to share with you may seem at first to have little to do with teaching and teachers. But I seek your patience. Just bear with me ... you are more than likely to find a useful takeaway to draw in keener attention from your students, after you read this column (or, better still, read the original paper, which is just two pages long).

The beverage station in an ordinary office in Newcastle, England, was just like any other. It was used by 48 office staff (25 female and 23 male) to make their cup of coffee or tea. The supplies were taken using an honour system, where each member was expected to drop the required amount in a box that was kept there. The amount for tea, coffee, milk and sugar was specified on an A5-sized notice posted at eye level. In addition, an email was sent out at a fixed frequency, reminding staff to pay for the beverage ingredients used. As you can expect, not everyone paid their dues, as they were not observed – and consequently, neither praised if they did, nor rebuked if they didn't.

So are you asking what all this has to do with research? Well, a researcher named Melissa Bateson decided to study the amount of milk being dispensed every week, as also the amount of money that was put in the box. She soon found that the amount of milk that was drunk by people did not tally with the amount of money that they paid. Some weeks, there was a

Cues of being watched enhance cooperation in a real-world setting

Authors: Melissa Bateson,* Daniel Nettle, and Gilbert Roberts

Source: Biol Lett. 2006 Sep 22; 2(3): 412-414.

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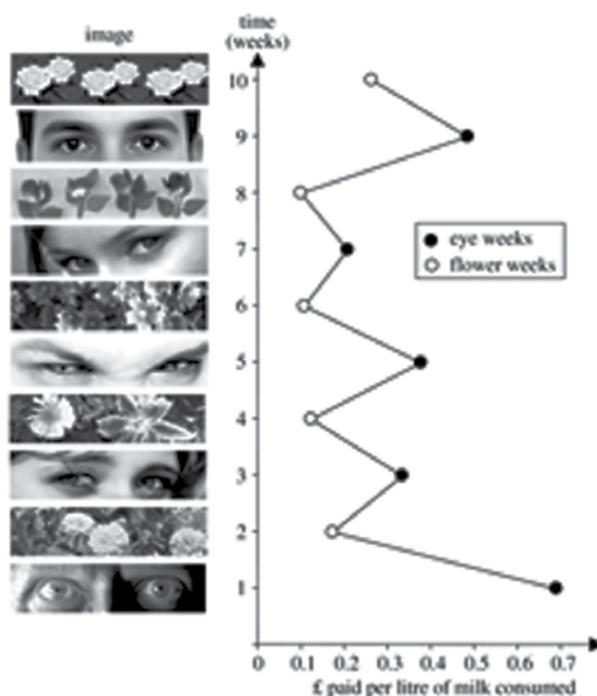


Figure: Pounds paid per litre of milk consumed as a function of week and image type (Source: Biol Lett. 2006 Sep 22; 2(3): 412-414)

lot of money in the box, while at other times, the collection was very low. She got different results every week.

What was the difference? Well, every week, she replaced the notice that reminded people of the amount that they had to pay for these things by inserting a small picture at the top of the notice. For five weeks, she used pictures (that she had downloaded from the Internet) of different pairs of watching eyes. For another five weeks, she printed pictures of different flowers. She switched back and forth between these two types of pictures for 10 weeks: one week, the office staff saw two eyes watching them, while the next week, they saw flowers. Can you guess when the honesty levels were

higher? Yes, when the ‘eyes were watching’! As the paper says:

Contribution levels always increased with the transition from flowers to eyes and decreased with the transition from eyes to flowers.

People paid nearly three times as much when the ‘eyes were watching’! Now here is the most interesting part: when the office staff were later asked about the alternating pictures, they were bewildered. You see, *no one had even seen the alternating pictures on the notice* – as they were small and rather grainy, as pictures downloaded from the Internet often are! All they had noticed was that a picture had been introduced above the routine notice, but no one had cared to take heed of the details. This does sound quite plausible, doesn’t it? After all, it is more than likely that while at work, people’s minds are churning with work-related issues and they go to the beverage station without really focusing on a routine notice that is posted there. Having made their cuppa, they quickly return to their workstation.

So Melissa Bateson then *examined if they drank less/more coffee/tea when the picture changed*. No, they didn’t, she found. It was only the *collection of money that was affected* by the watching eyes, *not the amount of coffee or tea that they drank!*

The researchers propose that this effect was due to a subtle perception that was induced in the participants: *of being watched*. They term this a *subconscious cue*. If you find that hard to believe – “How can something that the participants didn’t even notice affect their behaviour?” – here’s another startling research finding that may convince you.

I have taken this example from a fascinating book titled *Thinking Fast and Slow* by Daniel Kahneman, who boldly asserts: “Disbelief is not an option. The results are not made up, nor are they statistical flukes. You have no choice but to accept that the major conclusions of these studies are true.”

I will cite just one example here, from a study done by social psychologist John Bargh¹ and his collaborators at New York University. Two groups of students were asked to construct sentences from a given set of five words. One group received words that were connected to old age, like *bald*, *wrinkled*, *forgetful*, etc. Upon completion of this task, the participants were asked to walk down a hallway to another room for the second part of the task. Little did they know that the study was actually focusing on *how they walked to the other room*.

What do you think the researchers found? The group of students who had received the set of words related to old age *actually walked significantly more slowly than the other group!* Termed the “Florida Effect” (many elderly people in the US tend to settle down in Florida) it consists of two steps:

1. Words prime the *thought of old age*, even though the term ‘old age’ is never explicitly mentioned
2. These words then *trigger behaviour* that is associated with old age, and this *happens outside the awareness* of the participants.

This is known as social or behavioural priming. (Advertisers are priming naïve consumers all the time!)

As Kahneman points out:

When they were questioned afterward, none of the students reported noticing that the words had had a common theme, and they all insisted that nothing they did after the first experiment could have been influenced by the words they had encountered. The idea of old age had not come to their conscious awareness, but their actions had changed nevertheless.

As teachers, don’t we hope to draw out behaviour from our students that manifests the desired learning outcomes? And if there is a gentle way to do this – without our students even being aware of our efforts – isn’t it worth trying? Rather than hammer a concept down their throats, what if we adopted subtler ways of aligning their attention towards what needs to be learned? Even in the domain of language, psychologists have found that people recognize and process words faster if they have already been primed with related words, e.g., after seeing the word ‘doctor’, they recognize ‘nurse’ faster than they do unrelated words.

As teachers, (how) can we *offer subtle cues* to draw in the attention of our students? Let’s say the next week’s geography lesson is going to be on Australia. [And the 8th graders that are going to learn this next week don’t know that yet.] As their teacher, what would happen if you casually posted pictures of kangaroos, koala bears, a map or two of Australia, etc., on the corridor walls, a couple of weeks ahead? Perhaps even played some aboriginal music in the assembly? Without their knowing it, your 8th graders would be getting ‘primed’ to receive your lesson next week. Does that sound plausible?

But I must caution the reader that there have been numerous critics of priming research who have pointed out that such studies are seldom replicable.

Now bring it into the classroom!

1. Examine your lesson plans for the forthcoming week(s) and see if and how the concepts lend themselves to priming.
2. Select a suitable strategy for priming: would you like to use pictures? Words? Music? Games?
3. Now try out your selected strategy a week or two before you transact that lesson. E.g., if Australia is the chosen theme, soft background music that is actually an aboriginal melody could be playing while students file into the Hall for the morning assembly. Or posters lining the corridor walls could all be about Australia.
4. Examine the level of attention of your students to the lesson when you later transact the lesson. How did the 'backbenchers' respond? Did they?
5. Repeat the same exercise (by employing a priming strategy) with a well-thought-out method to first *make your students care about the particular concept* that you are going to teach. (In the same example, timing your lesson on Australia with an India-Australia cricket match would be one way of pulling their interest, so that they see the value in it before going into it in depth.)
6. Now see what happens. Have their attention levels changed in any way?
7. What makes you conclude this?

Send in your findings to
thinkingteacher22@gmail.com.

This article² gives you ample cautionary advice:
<https://www.nature.com/articles/d41586-019-03755-2>.

That being said, there are researchers who declare that even though earlier studies may be doubtful, the central idea of social priming is still valuable. Citing numerous research papers that serve to strike at the root of the above-mentioned study (and related ones), this article also mentions a meta-analysis of 352 priming studies by Dolores Albarracín of the University of Illinois at Urbana-Champaign. To

quote:

It looked at 352 priming studies that involved presenting words to people, and it found evidence of real, if small, effects when the prime was related to a goal that the participants cared about.³

So willy-nilly, our work as teachers to first *get our students to care about what they learn* is something that never leaves centre stage! If we can bear that in mind, what's the harm in playing around with some priming too? Even if it doesn't enhance their attention significantly, surely it can't harm them? Would you like to give it a try?

References

1. Bargh, J. A., Chen, M. & Burrows, L. J. *Pers. Soc. Psychol.* 71, 230-244 (1996).
2. *Nature* 576, 200-202 (2019).
3. Weingarten, E. et al. *Psychol. Bull.* 142, 472-497 (2015).

The author is Founder Director of Thinking Teacher (www.thinkingteacher.in), an organization that networks with teachers across the country. Thinking Teacher aims to awaken and nurture the reflective practitioner within each teacher. By taking (action) research out of the classroom, Thinking Teacher develops the (action) researcher in the teacher. And then, by bringing research into the classroom – as in this series – Thinking Teacher's goal is to help build deep inquiry and rich learning into the teaching process. The author can be reached at <neeraja@thinkingteacher.in>.

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The next issue of **Teacher Plus** is a special double issue focussing on **Home Economics**. The issue will reach you in June 2021.

Please note that you will not receive any issue in the month of May 2021.