

Out of the Asch study

With the help of five to eight 'confederates' (research assistants posing as naive participants), Solomon Asch in the 1950s found that when it came to making public judgments about the relative lengths of lines, some people were willing to agree with a majority view that was clearly wrong.

Asch's finding was hugely influential, but a key criticism has been his use of confederates who pretended to believe unanimously that a line was a different length than it really was. They might well have behaved in a stilted, unnatural manner. And attempts to replicate the study could be confounded by the fact that some confederates will be more convincing than others. To solve these problems Kazuo Mori and Miho Arai adapted the MORI technique (Manipulation of Overlapping Rivalrous Images by polarising filters), used previously in eyewitness research. By donning filter glasses similar to those used for watching 3-D movies, participants can view the same display and yet see different things.

Mori and Arai replicated Asch's line comparison task with 104 participants tested in groups of four at a time (on successive trials participants said aloud which of three comparison lines matched a single target line). In each group, three participants wore identical glasses, with one participant wearing a different set, thereby causing them to observe that a different comparison line matched the target line. As in

Asch's studies, the participants stated their answers publicly, with the minority participant always going third.

Whereas Asch used male participants only, the new study involved both men and women. For women only, the new findings closely matched the seminal research, with the minority participant being swayed by the majority on an average of 4.41 times out of 12 key trials (compared with 3.44 times in the original). However, the male participants in the new study were not swayed by the majority view.

There are many possible reasons why men in the new study were not swayed by the majority as they were in Asch's studies, including cultural

differences (the current study was conducted in Japan) and generational changes. Mori and Arai highlighted another reason – the fact that the minority and majority participants in their study knew each other, whereas participants in Asch's study did not know the confederates. The researchers argue that this is a strength of their new approach: 'Conforming behaviour among acquaintances is more important as a psychological research topic than conforming among strangers,' they said. 'Conformity generally takes place among acquainted persons, such as family members, friends or colleagues, and in daily life we seldom experience a situation like the Asch experiment in which we make decisions among total strangers.'

Looking ahead, Mori and Arai believe their approach will provide a powerful means of re-examining Asch's classic work, including in situations – for example, with young children – in which the use of confederates would not be practical.



In the October issue of the *International Journal of Psychology*



Accentuating the unbelievable

In the November issue of the *Journal of Experimental Social Psychology*

Speakers with a foreign accent are perceived as less believable than native speakers. A new study shows this isn't just because of prejudice towards 'outsiders'. It also has to do with the fluency effect, one manifestation of which is our tendency to assume that how easily a message is processed is a mark of its truthfulness.

Shiri Lev-Ari and Boaz Keysar recruited nine speakers to utter 45 trivia facts, such as 'A giraffe can go without water longer than a camel'. Three of the speakers were native (American) English speakers; three had mild foreign accents and originated from Poland, Turkey or Austria/Germany; and three had strong accents and were from Korea, Turkey or Italy.

Twenty-eight undergraduate participants rated the veracity of each of the spoken facts (which speakers uttered which of the facts varied from participant to participant in a balanced design). Crucially, participants were led to believe that the study was really about using intuition to judge facts. Also, it was made clear to them that the facts had been penned by the researchers – that the speakers were merely acting as messengers. To drill home this idea, the researchers also had the participants go through the charade of themselves uttering a few facts, ostensibly to be presented to other participants.

On a 0–14cm scale from 'definitely false' at one end to 'definitely true' at the other, the participants rated facts spoken

by mild and heavily accented speakers as less believable than facts uttered by native English speakers (the mean ratings were 6.95, 6.84 and 7.59, respectively – a statistically significant difference).

What if participants are made aware that the difficulty they have processing a foreign accent could be interfering with their judgements? A second study with another 27 undergrads tested this very idea. It was similar to the first but this time participants were told the explicit aim of the study. Now, facts spoken by a speaker with a mild accent were judged to be just as credible as facts spoken by a native English speaker. However, facts spoken by a heavily accented speaker were still judged to be less true. It seems we can override our bias for assuming easily processed utterances are more truthful – but only up to a point. Also, it's worth remembering that in real life, prejudice towards foreign speakers is likely to augment the effects observed here.

'These results have important implications for how people perceive non-native speakers of a language, particularly as mobility increases in the modern world, leading millions of people to be non-native speakers of the language they use daily,' the researchers concluded. 'Accent might reduce the credibility of non-native job seekers, eye-witnesses, reporters or news anchors.'



How to form a habit

In the October issue of the *European Journal of Social Psychology*

This has nothing to do with nuns' clothing. Habits are those behaviours that have become automatic, triggered by a cue in the environment rather than by conscious will. Health psychologists are interested for obvious reasons – they want to assist people in breaking unhealthy habits, while helping them adopt healthy ones. Remarkably, although there are plenty of habit-formation theories, before now, no one had actually studied habits systematically as they are formed.

Phillippa Lally and her team recruited 96 undergrads (mean age 27) and asked them to adopt a new health-related behaviour, to be repeated once a day for the next 84 days. The new behaviour had to be linked to a daily cue. Examples chosen by the participants included going for a 15-minute run before dinner; eating a piece of fruit with lunch; and doing 50 sit-ups after morning coffee. The participants also logged onto a website each day, to report whether they'd performed the behaviour on the previous day, and to fill out a self-report measure of the behaviour's automaticity. Example items included 'I do it automatically', 'I do it without thinking' and 'I'd find it hard not to do'.

Of the 82 participants who saw the study through to the end, the most common pattern of habit formation was for early repetitions of the chosen behaviour to produce the largest increases in its automaticity.

Over time, further increases in automaticity dwindled until a plateau was reached beyond which extra repetitions made no difference to the automaticity achieved.

The average time to reach maximum automaticity was 66 days, although this varied greatly between participants from 18 days to a predicted 254 days (assuming the still rising rate of change in automaticity at the study end were to be continued beyond the study's 84 days). This is much longer than most previous estimates of the time taken to acquire a new habit – for example a 1988 book claimed a behaviour is habitual once it has been performed at least twice a month, at least ten times. In fact, even after 84 days, about half of the current study participants had failed to achieve a high enough automaticity score for their new behaviour to be considered a habit.

Unsurprisingly perhaps, more complex behaviours were found to take longer to become habits. Participants who'd chosen an exercise behaviour took about one and a half times as long to reach their automaticity plateau compared with the participants who adopted new eating or drinking behaviours.

What about the effect of having a day off from the behaviour? Writing in 1890, William James said that a behaviour must be repeated without omission for it to become a habit. The new results found that a single missed day had little impact on later automaticity gains, either early in the study or later on, suggesting James may have overestimated the effect of a missed repetition. However, there was some evidence that too many missed repeats of the behaviour, even if spread out over time, had a cumulative

effect, reducing the maximum automaticity level that was ultimately reached.

It seems the message of this research for those seeking to establish a new habit is to repeat the behaviour every day if you can, but don't worry excessively if you miss a day or two. Also be prepared for the long haul – remember the average time to reach peak automaticity was 66 days.

This research has a serious shortcoming, acknowledged by the researchers, which is that it depended entirely on participants' ability to report the automaticity of their own behaviour. Also, the amount of data made it hard to form clear conclusions about the need for consistency in building a habit. However, the study does provide an exciting new approach for exploring habit formation and future research could easily remedy these shortcomings.



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