

## - Memory / Brain

# To make your message sink in, say it with ink

## Studies show information absorbed through print, rather than the digital medium, has better recall

The Times of India (New Delhi edition) · 22 Jul 2022 · 17

As TVs got bigger, bookshelves became smaller. And reading apps on phones made many printed books dispensable. But are words and images on a screen as effective as those printed on paper? Our changing content consumption patterns have made this an important question.

Some answers were available even a decade ago. For example, there were studies that showed reading a book printed on paper, and reading it on an e-reader, affected the brain differently.

Research done with advanced brain scanning techniques has thrown up even more interesting findings. A Forbes article by Roger Dooley, in fact, declares: "Paper Beats Digital in Many Ways".

The findings support what have already known: our brains are better at absorbing content from print. Dooley cites a study

TIMES sponsored by Canada Post that found marketing campaigns using old-school printed mailers had higher brand recall than digital-only campaigns.

As the researchers had used eye-tracking and EEG brain wave measurements, they were able to quantify some of the differences. Dooley says physical mailers were easier to understand and more memorable as they required 21% less cognitive effort to process.

Ideally, a message should have high persuasiveness and low difficulty of understanding. In case of printed messages the ratio of these two values averaged a healthy 1.31, as against 0.87 for marketing messages consumed through digital media.

And the ratio improved with the sensory stimuli a message could trigger. For example, mailers sent in scented envelopes touched a high of 1.75.

This seems to corroborate the findings of a study by the UK's Bangor University, which showed "physical material affects memory better". There was greater "emotional processing" with physical media and so the likelihood of its forming the associations needed for easy recall was higher.

Yet another study showed how tactile media could make advertising more effective. When researchers showed large and appetising images of one popcorn brand to people who had never eaten it, "their attitude towards the product became more favourable". Surprisingly, they also formed memories of having eaten the brand of popcorn.

Dooley cites research by Temple University, Pennsylvania, that might be able to explain this observation. Using fMRI brain scans the researchers found customers spend more time on printed ads than digital ads. And printed ads elicited a stronger emotional response even though the information gathered was not greater.

People, it was also found, were able to recall the source and content of a printed advertisement faster, which might translate into higher sales in a supermarket aisle.

More than anything else, participants in the Temple study felt a stronger subconscious desire for a product they saw in a print advertisement and ascribed greater value to it subconsciously. So whether you are an advertiser or a student, don't bid adieu to the printed word yet.