**Why using an e-reader makes it harder for you to remember what you've read(Daily Mail)**

Readers using electronic books are less likely to absorb what they have read because the information is presented in such simple form.   Devices such as the Amazon Kindle and Sony Reader display text in such a clear, legible format that this encourages the brain to be 'lazy', making it more difficult to *take things on board*, research suggests.   The findings go against the conventional wisdom that legibility makes it easier for people to learn and remember information.

A study by Princeton University found that a significant number of those tested could recall more information when it was presented in unusual typefaces.   The research suggests that introducing 'disfluency' - by making information superficially harder to understand - deepens the process of learning and encourages better retention.   The psychologists said information which has to be actively generated rather than 'passively acquired' from simple text is remembered longer and more accurately.

The study raises questions over how much fonts like Times New Roman and Arial, which are used in the majority of academic books, help readers revise for tests.   American author and psychologist Jonah Lehrer had written about the idea of disfluency in his Wired.com blog before the research was published.

Mr Lehrer revealed he found it less easy to remember information he had read using his Kindle e-reader.   Although Kindle users can alter the size of text, they cannot change the Caecilia font, which he described as relaxing to read.

It has been argued that e-readers and computers hinder us from absorbing information because their screens and fonts tell our subconscious that the words they convey are not important.   Mr Lehrer said the study showed the whole history of typography had missed the point when it comes to learning.   He said: 'It has been a movement towards easy to read fonts. We assume that anything which makes it easier to see the content is a good thing.

'This is especially the case in classrooms where teachers assume legibility makes it easier for kids to learn and remember information.

'That turns out to be exactly backwards.

*The pangerish*
- *Ten feet tall*
- *Eats green, leafy vegetables*
- *Has blue eyes*

The norgletti
- Two feet tall
- Eats flower petals and pollen
- Has brown eyes

**Between the lines: Scientists found people remembered more of what they'd read after reading text in Comic Sans MS font (top) than in Arial font (bottom)**

'Disfluent fonts, the ones people tend to *laugh off*, fonts that are comically ugly, they tend to be the best for learning and for memory.'   'When we see a font that is easy to read we're able to process that in a mindless way, but when we see an unfamiliar font, one full of weird(strange) squiggles, we have to work a little bit harder.   'That extra effort is a signal to the brain that this might be something worth remembering.'

He added: 'Familiar sentences rendered on lucid e-ink screens are read quickly and effortlessly. 'Meanwhile unusual sentences with complex causes and smudged ink tend to require more conscious effort, which leads to more activation in the *dorsal pathway*. All the extra work, the slight cognitive frisson of having to decipher the words - wakes us up.'   (611)