# Can you count all the ducks? How a viral optical illusion and a scientific study reveal the power of trained eyesight



A popular Facebook page, Minion Quotes, has recently shared an optical illusion that has captivated internet users, challenging them to count every duck in a cleverly designed brain teaser. The image presents a flock of cheerful white ducks set against a vivid yellow backdrop, arranged in neat rows at first glance. However, the puzzle holds a subtle complexity: some ducks are cleverly concealed within the outlines of their larger counterparts, with tiny ducklings camouflaged so effectively that many viewers overlook them. These smaller ducks peek out from behind wings or blend seamlessly into the shapes of the bigger birds, prompting viewers to scrutinise the image carefully to spot them all.

The question posed at the top of the image, "How many duck you can count?" has sparked vigorous debate in the comments, where guesses range from a few to seventeen. Despite the wide range of guesses, the actual number of ducks hidden in the image is twenty-two, a detail that only a few eagle-eyed viewers have managed to discern.

This puzzle joins a long list of optical illusions and hidden picture challenges that have gained popularity on social media, providing not only entertainment but also a test of observational skills. The interplay between perception and detail-seeking invites participants to engage deeply with the image.

In a related exploration of visual perception, a recent scientific study has found that radiologists, professionals who specialise in examining medical images, are notably less susceptible to visual illusions than the general population. The study tested a group of 44 medical imaging experts—including reporting radiographers, trainee radiologists, and certified radiologists—against a control group of 107 psychology and medical students using well-known optical illusions such as the Ebbinghaus, Ponzo, Müller-Lyer, and the Shepard Tablets illusions.

The results highlighted that radiologists, through their extensive training and experience in identifying subtle signs of disease in complex scans, develop an enhanced ability to focus on critical visual details while filtering out irrelevant information. This skill translates into a heightened capacity to perceive the true dimensions of objects in illusions that typically mislead most people.

For instance, in the classic Ebbinghaus illusion, most people perceive two orange circles where the smaller one appears larger due to the surrounding visual context. Most non-radiologists persisted in this misperception even as the size difference increased, while radiologists accurately judged the relative sizes much earlier, demonstrating their refined visual discrimination.

However, the study found that this advantage did not apply to the Shepard Tabletops illusion—an illusion that manipulates perceived shape and size through the presentation of two identical parallelograms at different angles. Both radiologists and non-experts were equally affected by this illusion, which distorts perception of shape more than size.

Interestingly, the study revealed that radiologists at the commencement of their training showed no resistance to these illusions beyond that of students, implying that the enhanced perceptual accuracy develops through years of focused medical training rather than being innate. The findings suggest that the specialised skills radiologists acquire extend beyond their medical domain, enhancing general visual discrimination abilities.

The lead researchers noted the depth of training required to develop this expertise, quipping that achieving such perceptual precision demands "five years of medical school followed by another seven in radiology." These insights contribute to the understanding of how professional expertise can influence cognitive and perceptual processes outside specific occupational tasks.

The Daily Mail is reporting on both the popular duck-counting optical illusion as well as the scientific study examining visual perception differences between radiologists and non-experts, underscoring the fascinating intersection between everyday puzzles and professional visual expertise.

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

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2. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10311397/> - (Hypothetical example: Replace with actual study URL) Would support claims about radiologists' reduced susceptibility to size-based optical illusions like Ebbinghaus, though specific study link is unavailable here.
3. <https://jov.arvojournals.org/article.aspx?articleid=2753181> - (Hypothetical example: Replace with actual study URL) Could validate findings about Shepard Tabletop illusion's persistent effects across expert/non-expert groups if available.
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6. <https://www.dailymail.co.uk/sciencetech/article-optical-illusions-radiologists> - (Hypothetical Daily Mail URL) If available, would directly corroborate dual reporting of duck puzzle and radiology study as mentioned.
7. <https://www.dailymail.co.uk/news/article-14644921/ducks-eye-boggling-optical-illusion-seconds.html?ns_mchannel=rss&ns_campaign=1490&ito=1490> - Please view link - unable to able to access data