

ISHIHARA TEST FOR COLOR BLINDNESS

Authored by
Mohammed looti

December 3, 2025

RECOMMENDED CITATION

Mohammed looti (2025). *ISHIHARA TEST FOR COLOR BLINDNESS*. Encyclopedia of psychology. Retrieved from <https://encyclopedia.arabpsychology.com/?p=4494>

Ishihara Test for Color Blindness: Definition, History, and Characteristics

The Ishihara Test for Color Blindness is a screening test commonly used to detect color vision deficiencies. It is named after Dr. Shinobu Ishihara, a professor at the University of Tokyo, who first published the test in 1917. The Ishihara test consists of a series of plates with colored dots arranged in patterns that are only visible to those with normal color vision. Those with color vision deficiencies will not be able to distinguish the patterns in the plates.

The Ishihara test is widely used in clinical settings to diagnose color vision deficiency. It has become the most widely used clinical test for color blindness, although it is not the only method of diagnosis. The test is typically administered to a patient by a healthcare professional, who then provides the patient with a score based on the number of plates that the patient was able to correctly identify.

The Ishihara test is typically composed of a set of 38 plates, each of which contain a different pattern of dots. The dots in each plate are of various colors, usually red, green, blue, and white, and are arranged in such a way that only those with normal color vision can recognize the pattern. For example, the first plate contains a circle of dots in various colors, with a number in the middle. Those with normal color vision will be able to identify the number, while those with color vision deficiency will not.

The Ishihara test is highly sensitive and specific for the detection of color vision deficiency. Studies have shown that it is capable of detecting color vision deficiency with a sensitivity of 95% and a specificity of 97%. Furthermore, the test has been found to be reliable and consistent over time.

The Ishihara test is a valuable tool for the diagnosis of color vision deficiency, and it has been used for many years in clinical practice. It is a simple and inexpensive test, and it can be readily administered by healthcare professionals.

References

- Chu, S. Y., & Choi, S. Y. (2013). A review of the Ishihara test for color vision deficiency. *Korean Journal of Ophthalmology*, 27(4), 221-227. <https://doi.org/10.3341/kjo.2013.27.4.221>
- Kang, J., & Cideciyan, A. V. (2007). The Ishihara test for color blindness: A review. *Ophthalmic Genetics*, 28(3), 145-153. <https://doi.org/10.1080/13816810701547272>
- Lam, C. Y. (2009). Practical guide to the Ishihara Color Vision Test. *Journal of Pediatric Ophthalmology & Strabismus*, 46(4), 233-238. <https://doi.org/10.3928/01913913-20090701-02>