Neitz Test of Color Vision

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We live in a color-coded world—Our global community increasingly relies on color to communicate. Yet 8% to 10% of all males and .5% of all females are color-blind. In a classroom of 20 children, it’s likely that at least 1 will have a problem discerning color.

Fortunately, there’s now an easy, inexpensive way to screen for color vision deficiencies. The Neitz Test of Color Vision is a revolutionary new approach to testing for color blindness. Developed at the Eye Institute of the Medical College of Wisconsin, the Neitz Test is accurate, quick, and inexpensive. It identifies the type and severity of color vision deficiency in just a few minutes. It can be used with people of any age, including very young children. And it can be administered in fluorescent light, daylight, or a combination of the two—making it much more convenient than competing instruments.

Because it can be given to large groups at a low cost, the Neitz makes routine screening not only possible, but also easy.

Like conventional color vision tests, the Neitz asks individuals to identify colored shapes within grey dot patterns. Unlike these tests, however, it does not require expensive color plates that eventually fade and need to be replaced.

Taking advantage of sophisticated new printing techniques, the Neitz presents nine dot patterns on a single sheet of paper. Below each pattern are five response options—a circle, a triangle, a square, a diamond, and nothing. The examinee simply marks the option that represents what he or she sees in the grey dot pattern. (The shapes are not visible to those who are color-blind.) Requiring no special training, the test is quite easy to administer.

The Neitz detects the presence and severity of the two main classes of color blindness: blue-yellow (tritan) and red-green. It further distinguishes the two subtypes of red-green color blindness (deutan and protan). You can see and score results instantly. If the examinee has a color vision deficiency, you’ll know on the spot exactly what it is and how severe it is.

Elementary school teachers can distribute, administer, and collect the test, in their classrooms, in less than 5 minutes. This means you can screen an entire student body without disrupting lessons or taking a single child out of class. Of course, the same administrative efficiency applies in business and government settings as well.

To prevent examinees from copying answers during group administration, there are three versions of the Neitz, each identified by a different symbol in the upper left hand corner of the test sheet. Because the test is a precisely calibrated instrument, reproductions do not yield good results. Color copiers cannot reproduce the colors well enough for accurate diagnostic screening.

Reliable, economical, and easy to administer on a large scale, the Neitz Test of Color Vision permits routine screening in schools, industry, public safety agencies, and the military—thereby reducing the likelihood of accident or educational disadvantage due to poor color vision.

HOW DOES THE NEITZ COMPARE TO THE ISHIHARA?

Studies reported in the test manual show that the Neitz is at least as reliable and accurate as the Ishihara and other conventional color vision tests* in identifying the presence, type, and severity of color vision deficits. And it’s a lot easier to use.

- Children diagnosed as color-blind using the Neitz also failed the Ishihara and other conventional color vision tests.
- None of the children who passed the Neitz was diagnosed as color deficient by the Ishihara and other conventional tests.
- The Neitz detects both red-green and blue-yellow color vision deficits, whereas the Ishihara identifies only red-green.
- The Neitz can be used with very young children (pre-K), while the Ishihara is not reliable when used with children under age 8.
- The Neitz requires no training—It can be administered and scored by virtually anyone. The Ishihara, on the other hand, must be administered and interpreted by a trained professional.
- The Neitz is easier to score than the Ishihara, and results are completely unambiguous.

* The A0-HRR Plate Test, the APT-5 Color Vision Tester, and the Nagel Anomaloscope