Dear Alice,

What career opportunities are there for people who are colorblind?

Answer

Dear Reader,

Whether you are completely color blind (monochronatism), an extremely rare condition in which things are seen only in shades of white, black and gray, or you have a color vision deficiency that makes distinguishing between colors difficult, the work world is wide open to you.

Color vision deficiencies are usually caused by deficits in one or both classes of cone cell in the retina. More specifically, these irregularities impair light-sensitive pigments in the eyes—a genetically inherited trait. Color deficiencies can also result from optic nerve and retinal diseases, breakdown, or injury. A small number of blue color abnormalities (tritanopia) are also inherited, or may result from poisons and drugs that cause, or contribute to, retinal or optic nerve degeneration. To date, there are no successful medical treatments for inherited color vision deficiency.
People with color vision impairments often become aware of their condition when job duties call for color identification and differentiation. This does not mean that, upon this discovery, their positions are terminated. In fact, The American Medical Association names only these few careers that could be particularly challenging to people with color vision impairments: train driver, airplane and marine pilot, electrician, jeweler, commercial artist and color photographer. It's possible that colorist (are you a "Winter" or a "Summer") and personal shopper could be added to this list. However, these and other jobs can be made easier with adaptive aids like magnification devices and high-intensity lighting and florescent lighting with blue or red shades which can enhance color recognition. The Lighthouse for the Blind, Visually Impaired, and Dyslexic also recommends labeling on stickers, tags or pins for colors that you don't have to see instantly: clothes, diagrams in books, files, wrapping paper, etc. Cutting down on glare and varying the distance from which you view something may also make color identification less anxiety-ridden. Technological advances have allowed some people with total color blindness to identify colors with the help of an electronic "eye" that calls out "blue," "red," etc. via an audio synthesizer.

It's important for you to know that the Americans with Disabilities Act [2] (ADA) guarantees equal opportunity for individuals with disabilities (including color vision impairments) in public accommodations, employment, transportation, state and local government services, and telecommunications. Employers must allow and support reasonable accommodations (such as the ones mentioned earlier) so that an employee can perform his or her job requirements. Other national resources that help visually impaired people to function successfully in a sight-oriented world include The Job Accommodation Network [3] and The Lighthouse, Inc. [4]

The combination of laws, advocacy organizations, and countless technology solutions hopefully mean more opportunities across careers for all.

Alice!
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