Essay #1- Color Perception

3 The evolution of color vision in human beings emerged as a survival mechanism 4 operating in a wide variety of situations wherein colors provide an essential source of information about the environment, assisting in such crucial areas as food foraging and seeing 5 6 through predator camouflage (Ware, 2013). However, the function of colors extends beyond 7 survivability. Since color vision is ingrained in human behaviour and perception, it has become 8 heavily used in representing and communicating information. The business and marketing 9 industry takes advantage of color's importance by deliberately applying color theory in product design and marketing. Despite some overlap, color conventions are not consistent across 10 cultures. Today's global markets require us to adjust advertising to appeal to varying 11 demographics. And to go even further, what about marketing to people suffering from color 12 vision deficiency (CVD) or what commonly referred to "color blindness"? With eight percent of 13 14 the population suffering from CVD, the industry would do well to take color vision deficiency into consideration when developing their products and advertising. 15

16 Color is a critical marketing tool used to convey meaning and evoke emotions affecting 17 the decision making of consumers. These changes according to culture. For example, while green is associated with 'life' in Western cultures, it indicates death in some Eastern cultures 18 (Ware, 2013). One investigation in color emotion has revealed that Chinese participants showed 19 20 preference for colors that appear clean and fresh where such preference didn't occur among British participants (Ou, Luo, Woodcock, & Wright, 2004). Such cultural difference may 21 contribute in explaining why successful advertisement in a given culture might not work in 22 another culture. The international marketing industry should consider varying color conventions 23 24 when designing logos, packaging, etc. Blue, green, and white tend to share similar preferences 25 and meanings across cultures. In contrast, black and red have considerably different meanings depending on location. Black is often associated with sadness in western cultures while rates as 26 27 "formal" in Taiwan and Brazil. Red is universally considered "active" and "hot" but gets the 28 added quality of "pleasant" in places like China (Madden, Hewett & Roth, 2000).

Another implication of color in marketing concerns people with CVD. This condition is 29 caused by the absence of either long or medium-wavelength-sensitive cones resulting in an 30 inability to distinguish between reds and greens. Color vision deficient individuals experience 31 uncertainty visualization and frequently have to make their decisions with incomplete visual 32 33 information (Oliveira, 2014). Since red is a "hot" color and tends to stand out against nearly any background, it plays a primary role in marketing, often identifying sale items. However, 200 34 million potential consumers in North America alone would not be drawn to the use of red since it 35 36 appears rather muddy and dull. Such problem can be avoided by considering other colors. For 37 instance, reds and whites can be replaced with yellows and blues to be more distinct. Marketers 38 can also reduce their reliance on chromatic dimensions, which depend mainly on colors, and 39 utilize other techniques which depend on luminance dimension (gray scale) to provide greater 40 contrast.

There is no combination of colors that is going to appeal to every potential customer.
Intended brand personality can be completely altered by regional color conventions. Marketers
may need to adapt their brand identity according to the location. Advertisers would also do well
to adjust the application of color theory with their products to include people with CVD.

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