

# [Influences of colour on perception](https://assignbuster.com/influences-of-colour-on-perception/)

Introduction

The great mystery of colour has mesmerised humanity since time immemorial. For every second of the day we are enveloped by a seemingly infinite range of hues which oscillate through morning, noon and night. This incessant interaction with colour has manifested itself in some of the finest examples of artistic expression, such as Wordsworth’s ‘ Daffodils’ and Van Gough’s ‘ Sunflowers.’ From the cave paintings of pre-history to the conspicuous advertising hoardings of the modern era; all of the great civilisations have been infatuated by colour.

In recent years both academics and functionaries within the commercial domain have become increasingly interested in how human beings are influenced by colours. Much advancement has been made in the fields of colour psychology and colour marketing. It would certainly appear that colour has a profound effect upon the human psyche. As Diane Ackerman has noted ‘ Colour doesn’t occur in the world but in the mind.’ [1]

Colour and Perception

According to the Oxford Dictionary colour is defined as ‘ the sensation produced on the eye by rays of light when resolved as by a prism, selective reflection, etc., into different wavelengths.’ [2] It was Sir Isaac Newton who discovered this phenomenon by focusing a ray of white light upon a prism and creating a spectrum. His findings are illustrated in his 1704 work entitled ‘ The Opticks.’ Each colour has a unique frequency and wavelength, and all comprise the segment of the electromagnetic spectrum which is visible to the human eye.

Specific objects both reflect and absorb particular wavelengths of radiation. The reason that plants appear to be ‘ green’ is because they absorb all colours in the electromagnetic spectrum with the exception of green. [3] The green light is reflected by the plant and can consequently be detected by the human eye. All ‘ coloured’ objects surrounding us are in fact reflecting ‘ their’ colour towards us.

The complex process of colour identification and differentiation is initiated by the ‘ cone’ cells of the retina which can detect blue, red and green light. [4] This information is then transmitted to the optic nerve and onwards to the brain. Some scientists insist that blue, red and green are the true primary colours and that all colours are merely combinations of the three. However, many dispute this and argue that yellow is a primary colour. Aristotle and Goethe classified yellow as a primary colour and noted how it is the first to materialise from white light. [5] The ‘ pure’ quality of yellow is evident and it exhibits the highest reflectivity of all the colours. [6] Yellow is also a ‘ warm’ colour of long wavelength and the retina must enlarge convexly in order to focus objects of this hue. A bright yellow banana will seem larger and closer to the spectator than an object reflecting a cool shade of blue or green from equal distance. [6] Yellow is truly a highly prominent component of the electromagnetic spectrum.

The puissance of this colour is evident in its outstanding ability to attract the eye and it is commonly deployed for promotional purposes in the commercial sector. As E P Danger has stated it is an ‘ excellent attention getter.’ [7] Yellow is synonymous with the warmth, energy and vitality of the sun, and the theme of ‘ hope’ is evoked as it represented the first light of dawn to peoples of pre-history. [8] It is the hue of science, expansion, alacrity and swift decision making. [9]

The emotional impact of yellow was observed by Diane Ackerman whilst observing a brilliant piece of yellow sulphur. She described an overwhelming ‘ rush’ of pleasure and excitement. 1 [0] June McLeod noticed that ‘ we can sometimes lose our identity and focus with too much yellow. 1 [1] Students of colour psychology are familiar with the link between this colour and the emotional chakrah of the solar plexus. 1 [2]

Particular shades of yellow can have a detrimental impact upon the viewer. Negative concepts of disease, jaundice and decay have so often been associated with it. The notorious ‘ yellow-press’ and yellow of the coward conjure up less palatable images. 1 [3]

These factors, which have been ingrained into the collective consciousness of the human race, must be carefully considered and borne in mind by those wishing to utilise the colour yellow for academic and commercial purposes.

The Use of Yellow Paper for Academic Purposes

The increased use of dyes in the paper production process of the late eighteenth century, and subsequent developments in the industry, have provided the medium of coloured paper. 1 [4]

On a rudimentary level, coloured paper may be deployed by academic institutions for classification purposes. The Scottish Examination Board issue a different colour of exam paper for each respective subject. E P Danger has stated that yellow is ‘ one of the best of all colours for paper because of its high visibility.’ 1 [5] He also notes how ‘ it is said to stimulate the intellect and for that reason is often used in libraries.’ 1 [6] Librarians often choose to index by affixing yellow tags on the spine of books. This allows prompt recognition for those searching for a specific text. Card index files and ‘ post-it notes’ are also frequently provided in this colour. Strong shades of yellow can prove effective for presentational purposes in both the lecture theatre and the classroom.

The subliminal effects of yellow paper can clearly have a positive effect on those engaged within the realms of academia. June McLeod recognises yellow as the colour of ‘ mental energy’ and highlights how typing or writing on to yellow paper will keep you alert and focused on the job at hand.’ 1 [7] Dee and Taylor have decreed that yellow is the colour of ‘ those who must concentrate.’ 1 [8] Yellow paper is also less stark than white paper and thus more conducive to study.

Much research has been conducted using ‘ colour cards.’ It has been discovered that humans ‘ sense’ colour through the skin. Suzy Chiazzari has explained how ‘ many blind people can differentiate colours by passing their fingers or hands over an object.’ 1 [9] Yellow paper can be readily deployed by academics and colour therapists alike in order to harness the properties of this specific colour.

Yellow Paper and Advertising

The vibrant world of advertising and marketing draws considerably upon the profound qualities of the colour yellow. The prominent hue of the ‘ Yellow Pages’ directory is instantly discernable, internationally recognised, and affords prompt access to a vast array of service providers. The presentation of black type upon yellow pages focuses the mind excellently and provides high visibility. 2 [0] The reader may deploy ‘ skimming’ skills and be less likely to overlook the desired information. Many phone directories and publications have now emulated the success of the ‘ Yellow Pages’ when exhibiting classfied sections. Yellow paper is commonly the medium of flyers, which are distributed freely in urban areas, and for posters in public places. It can swiftly transmit a specific message to the target audience.

The importance of colour in advertising is of paramount importance and can transmit powerful messages via company logo, stationery, packaging and design. 2 [1] Yellow is favoured by the travel and leisure industries with its promise of sunshine. The cover of the current Tropical Locations travel brochure is a dazzling shade of rich yellow. Low budget travel operators and airlines make liberal use of yellow in their advertising campaigns as they strive to coax potential clients with notions of instant Mediterranean climes. The ‘ holiday’ concept has been masterfully exploited by the Kodak photographic company for many years now and ‘ Kodak yellow’ has become almost synonymous with sun, sea and sand.

Food promotion shares a close relationship with yellow in most cultures 2 [2] as the colour has an appetising effect upon consumers. 2 [3] Products such as cheese and butter are usually marketed and packaged in this hue. The recent Cadbury’s Twirl product was successfully promoted with yellow lettering emblazoned upon a violet background. This is interesting as violet is the complimentary colour to yellow on the Colour Wheel. 2 [4] Products which are promoted using yellow frequently utilise shades of blue and violet to harmonise visual appeal. A rich yellow implies a strong taste and more golden shades represent quality. The world famous MacDonald’s logo with its large yellow ‘ arches’ embodies the concept of ‘ fast food.’

Yellow paper is used for the labelling and promotion of soft drinks. A paler shade signifies a lemon or milder taste. 2 [5] However, the use of a stronger yellow to promote Lucozade epitomises the concept of ‘ energy’ excellently. Alcoholic beverages such as Tennents Lager and Boddington’s Ale utilise yellow for marketing purposes. This is extremely effective as it symbolises the very appearance of the product. Cardboard packaging and place mats may be eye-catching, but also serve to kindle images of the drink in the mind, as well as whet consumer appetite.

Products targeted at younger people are generally advertised using yellow. It has been discovered that children like yellow and teenagers respond positively to the colour. 2 [6] Children’s wear and cosmetics are often advertised using yellow. This colour is associated with newness, youth and optimism. 2 [6] This may be why the ‘ Job Centre’ in the United Kingdom has recently been conducting its employment campaign in the colours of yellow and green, which combined, are symbolic of spring-time and new beginnings.

Conclusion

Danger has emphasised that colour ‘ motivates people in a way that is largely subconscious’ and that it is extremely difficult to discern ‘ where physical, visual processes end and mental processes begin.’ 2 [7] Ackerman has also commented that ‘ scientists have known for many years that certain colours trigger an emotional response in people.’ [28] The development of the ‘ Colour Effects System’ since the 1970s highlights that there is a definite correlation between colour and human response to colour.

It is generally accepted that yellow provides the most powerful psychological stimulus. It is for this reason that it has been utilised by academics and advertisers for a wide variety of purposes. When one considers the high incidence of yellow paper within academic institutions and the commercial sector it clearly has a profound influence. The overwhelming amount of logos, promotional literature and products which have harnessed the colour is truly astounding. It is even more intriguing that we are often not even consciously aware of its potent subliminal messages. The mysterious appeal of the colour yellow ensures that yellow paper shall continue to be produced and utilised for academic and promotional purposes for many years to come.

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### Footnotes

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[7] EP Danger) 573

[8] EP Danger) 586

[9] J Dee, L Taylor) 59

[0] 10 D Ackerman) 254

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[2] 12 A Wright) 27

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