

Color selection and the promotion of health and healing by means of clothing design

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Abstract:

Color is all around us from the time we were born and it is affecting our everyday life in many ways. By becoming aware of the power of color and its effects on our emotions, we can learn how to make positive changes in our lives. The color of your cloths reflects your personality, and influences your mood, it affects your home, your workplace, also our schools and hospitals. Color can be used in healing to bring balance and harmony within the psyche and the body. Depending what color we choose for healing, the invisible vibration of color can relax or stimulate us. In this study we are going to focuses on the relation between colors from the psychological point of view and dressing for health.

Keywords:

- *Colour,*
- *Color Psychology,*
- *Dressing*

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Introduction:

Color is a language and it is one of the most fulfilling elements in our lives. Color can attract your attention or change your mood.(16) The effects of color on life must have been of great significance to early human beings, whose very existence was governed by light and darkness. Most living things appear to be vitalized by the bright reds, oranges, and yellows of daylight and calmed and rejuvenated by the blues, indigos, and violets of the night. (5) The concept of color in using in therapeutic levels is based on the fact that our physiologic functions respond in predictable manner to specific colors. In fact every living thing depends on light and most of the living organisms depend on the colors. We should use Color in a way to promote health and healing. The different colors we see in the world around us are the result of light vibrating at different frequencies. Researches have shown that specific colors bring balance to our physical and emotional systems. (8)

Some colors have positive effects and negative effects on people and we have to look how we can gain a better understanding for these reactions. Also, there are differences between using natural colors and fabrics and artificial ones. In this study we assume that some color recommendations for different occupations in our life can be offered.

Research problem:

- Although there are several works written about colours, emotions, and their meanings, there is little really used by designers in dressings for health.
- Color should be used in a way to promote health and healing, which is generally ignored

by designers.

- Therefore the study question can be formulated as, Can colors be used as an healing agent of some physical or psychological known ailments?

Aim of the work:

The aims of this study are:

- Identify how can color be use in a way to promote health and healing through dressing.
- Investigate how to select colors in clothing and fabrics that matches our needs and can attract our attention or change our mood so we can become more healthy.

Research Methodology:

The study followed the descriptive analytical Approach, based on the collection of information to build a theoretical framework of the research.

Theoretical framework

What is color:

In 1666, Sir Isaac Newton raised a train gular glass prism, intercepted a beam of sunlight, and proved that white light is composed of all visible colors of the spectrum. This event initiated a fascination with the qualities of color.(7)

He established the colors of this spectrum as being red, orange, yellow, green, blue, indigo and violet. He included indigo as he liked the number seven because it matched the seven notes in the harmonic scale in music. Sir Isaac Newton's work with light forms the basis of modern physics which is surprising because his interpretations of what he discovered were very subjective and not all scientific.

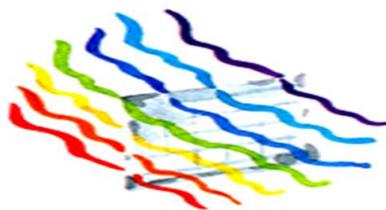
Scientists consider Isaac Newton's scientific

theory of light to be incorrect as only six distinct rays of light can be seen when refracted by a prism. The seventh 'Indigo' was contrived by Newton to suit his own philosophy of life - that of the sevenfold nature of man and the need to match color with the seven notes of the musical scale. He

could easily have chosen orange-yellow or turquoise as the seventh colour. It is therefore more correct to say that light (and the rainbow) is formed from three primary colors and three secondary colors (17)



Only the green vibration shines through green clothes



White fabric allows all wavelengths of light to pass through



Black color reflects all lights away from it.

Figure (1)

The universe is a magnetic field of positive and negative charges, constantly vibrating and producing electromagnetic waves. Each of these has a different wavelength and speed of vibration; together they form the electromagnetic spectrum. We can see about 40 percent of the colors contained in sunlight. So although white light appears colourless and intangible, it made up of distinct color vibrations, which have not only wavelength but also a 'corpuscular structure". The radiant energy of pure white sunlight is a vital factor in nourishing our bodies, our minds, and our spirits, and each color vibration has its own healing qualities (2/12)

Light is electromagnetic energy that can pass through transparent objects and empty space without requiring any medium for its transmission from one place to another. There are different views about colours. Light in actual effect is a combination of different frequencies and various wavelengths. Feeling of a particular wavelength, having a typical frequency, by the retina and the mind is known as color (6/5)

Each color vibration has a different wave length and quality that has strong effect on us. Blue-Violet is the shortest visible wave-length and has the highest frequency, while red has the longest wave-length and has the slowest vibration (3/12)

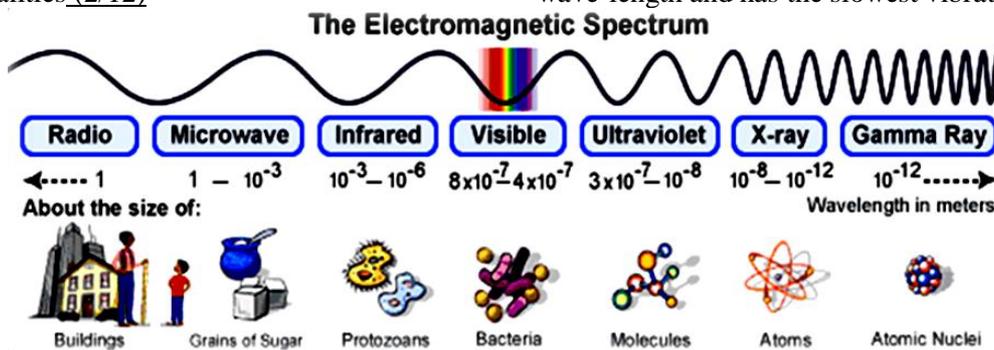


Figure (2)

Color is both a physical phenomenon and the spiritual one - a Rainbow Bridge that is visible but also has invisible vibrations. This is why color reflects the human spirit so well for it acts as a mirror simultaneously reflecting our inner being and outer being –our physical and spiritual nature (17)

How do we sense color:

Sensing colors through the eyes:

To see anything at all we need some tiny little helpers inside our eyeballs, the so called photoreceptors. There are two different types of them: rods and cones. Both of them are sitting on

the retina and pass information of light on to our brain. There are about 120 million rods which are very sensitive to light but not to color. The cones are the photoreceptors which are responsible for our color vision. They are only about 6 to 7 million of them but gathering together very closely in the center of the retina, the so called fovea centralis.

And here comes the clue: Each of those cones is carrying one out of three different photo pigments and therefore reacts differently on colored light sources. For each of this three types exists a specific color absorption curve with peaks at different points in the color spectrum.

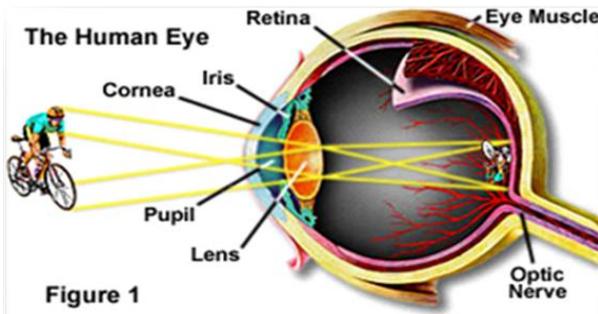


Figure 1

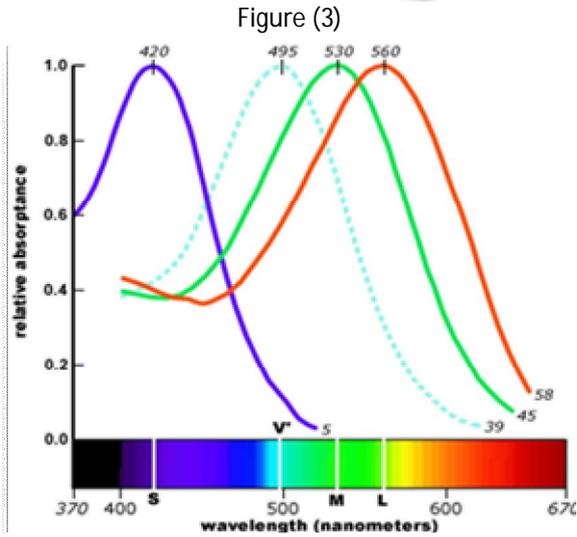


Figure (4)

S-cones: sensitive to short wavelength light with a peak at ca. 420nm (blue) M-cones: sensitive to medium wavelength light, peak at ca. 530nm (green) L-cones: sensitive to long wavelength light with a peak at ca. 560nm (red)

Mixing together the information of those three different types of cones makes up our color vision. This is also the reason that only three main colors are needed if we want to mix together all visible colors, because we have only three sources for mixing our whole color spectrum (11)



Figure (5)

Feeling colors through the skin :

Light enters our body also through our skin. We have all experienced the warming and indeed

burning rays of infrared light, when we have been out in the sun for too long. Even when we are clothed we still have a natural sensitivity to the color wavelengths.

Often we are only aware of the effects of color energy through our skin when we find some clothes uncomfortable to wear while others make us feel warm, relaxed, and confident. It is not only the texture of the fabric but also the different energies contained in the colors that affect us. Although our sensitivity to color through our skin is mostly unconscious, it is also possible to develop a sensitivity to color energy through our fingertips and other parts of our bodies. Many blind people are able to differentiate colors by passing their fingers or hands over an object and actually feel the quality of the colour. Some colors feel hot while others seem cool; often people with no sight also describe colors by their texture and feel. In Russia, sighted people have also been taught to identify colors through their hands. It takes only a few weeks of instruction for anyone to learn to do this. Like riding a bicycle, this skill is never lost. Many healers working with color are also sensitive to color vibrations and can identify them within our bodies.(12).

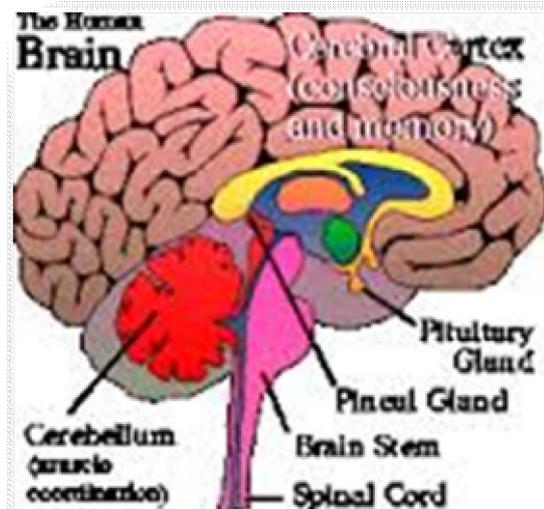


Figure (6)

How dose color affect our bodies:

The effect of color does not end when we close our eyes. Light is required for our cells to function normally, and individual color affect them by causing changes in growth and behavior. It therefore affect our system at a cellular level, and the vibrational patterns giving us life, hold us together. At death, these patterns are broken down and the body begins to decay. First coloured light affect the pituitary gland, called the "master gland" of the endocrine system since it produces substances that regulate the hormones produced by the endocrine glands. These control many of our body functions including our patterns of growth

and sleep, our temperature control, our sexual drive, and energy levels, our metabolic rate, and appetite (2/16) The pineal gland is often referred to as the 'third eye' because it has a crystal-like structure which refracts light like a prism. It was always thought of by ancients to have mystical powers and connect us to the spiritual world. The French philosopher Descartes decided that the pineal gland was the seat of the human soul, the location of what we call the mind. On a physical level the pineal does contain a complete map of the visual fields of the eyes and also plays several significant roles in human functioning. It is the centre of production for the hormone melatonin, which regulates daily body rhythms especially the day/night cycle known as the Circadian rhythm. Melatonin is released at night when we sleep. It also co-ordinates fertility and allows for deep sleep rest patterns. In animals the pineal gland and melatonin is their master clock. It has been shown in animals that melatonin can inhibit the growth of some tumours and therefore may play a part in cancer inhibition. This is significant when we think of the pineal as the master gland which acts as a prism sending out coloured rays to different energy centres throughout the body. When you remove the pineal gland the possibility of cancer is increased. The other interesting discovery about the pineal gland is that it has been proven to hold electromagnetic material in birds and other animals. This allows birds and animals to use the earth's magnetic fields to navigate across great distances. It is quite logical to suppose that our own pineal gland is also the source of magnetic energy; after all it is the electro-magnetic wavelengths of light which activates the pineal gland. It is therefore of prime importance that we receive a balance of color energy contained in natural sunlight in order to be healthy. If we do not receive enough sunlight we may suffer from SAD or seasonal defective disorder whose symptoms are wide ranging but often take the form of depression, nausea, dizziness and moodiness.(17)

Color Recommendations to suit your mood:

The colors we wear can offer protection against many physical ailments and also give us emotional inspiration and protection. Of course clothing also protects us from the elements and is a form of self-expression. It shields us from the world and affects the way we feel and think.

Red

WEAR when you are tired and lethargic or need to encourage physical exercise and a competitive spirit. Red will help with positive progress and success, and to put your plans into action. Wear red when you want to feel sensuous and vivacious.

AVOID when you are easily tired, or are suffering from bad flu, ME(myalgic encephalomyelitis), infectious mononucleosis, or chronic fatigue syndrome. Do not wear if you have a ruddy complexion, high blood pressure, or are quick to anger. Avoid also if you are nervous or tense.

Pink

WEAR if you are affectionate, loving, and need to be compassionate and sympathetic. Pink encourages self-nurturing and being kind to yourself. Shell pink and rose pink will promote the two-way flow of love. Salmon pink and deep rose will surround you with universal and selfless love. Shocking pink or maroon stimulates the more sensual pleasure, fun-loving and risk-taking.

AVOID if you are emotionally immature, need a father or mother figure, or too dependent on others. You may be feeling overburdened by outside dependencies.

Orange

WEAR when you are suffering from depression, or need to bring joy or lightness into your life. Orange relieves seriousness or thought and promotes laughter. It encourages independence of spirit and self-motivation, and will help release creativity and negative emotions related to a poor self-image. Orange is good if your adrenals are drained and you suffer from aches and pains especially in your neck, arms, and joints.

AVOID when you feel confused, frustrated, or claustrophobic. Orange is not good if you feel sick or nauseous, because it will make you feel worse.

Yellow

WEAR when you wish to be alone so that you can become detached and impartial. Yellow promotes rational thought and reasoning, and can improve memory. It aids communication, sharing, and self-expression. Yellow is a good color for accessories when going for a job interview. Golden-yellow promotes sparkle and vitality and the ability to meet new challenges. Yellow is empowering and confidence-building.

AVOID if you are prone to criticism and suffer from a loss of anchorage and stability. Yellow can encourage egotism and is not good if you place too importance on material wealth. Yellow can cause irritability and a feeling of nausea.

Green

WEAR if you are hyperactive but find it difficult to make decisions or exercise clear judgment. Apple green promotes health, happiness, and innovation. Grass green gives you understanding and help to others, and encourages abundance in your life. Blue-green promotes optimism and faith in yourself and others.

AVOID when action is needed- green offers

balance, but arrests movement. Green provides space and time when you do not want to make decisions, but can promote boredom, repression, and inactivity.

Blue

WEAR if you need quiet and relaxation and want to unwind and are suffering from mental fatigue. Blue helps self-reliance, independence, and responsibility for others. Blue brings insight and wisdom, encourages decision-making, and helps you to link to your sense of intuition. Turquoise is good for the tense and nervous; it makes you feel fresh and young.

AVOID if you are feeling depressed, since blue can make you feel worse. If you need to recharge, need energy, or are nervous, blue will not provide any support. If you are relying totally on your mental faculty to provide solution for your life, you may need to become more in touch with your emotions.

Purple/Violet

WEAR if you want peace and love without anxiety, and authority without demand. Violet clothing provides peace and calm suitable for meditation and prayer, helping you become aware of your sensitivities and inner guidance. Wearing purple will help you to open your mind to higher forces thus making a channel for creative energy.

AVOID if you do not like silence or have feelings of invasion of personal privacy. Do not wear if you are feeling oversensitive and need to be socially accepted or you are feeling imposed upon by rules and regulations.

white

WEAR if you need a greater awareness and insight in your life- you may be indulging in being separate from reality. Wear white if you need to be open-minded, clear, and receptive to new ideas and plans without action. White gives you time to stop and think, to reflect without decision-making.

AVOID if you are feeling lonely, isolated, or cut off in any way, or you need to participate, act, or make decisions.

Black

WEAR if you are self-sufficient, in authority and control, and are in a position to protect. If you need to be opinionated and not swayed by others, idea, black will protect you. You have to be in control of yourself in order to communicate an authoritative image. Make sure you always wear black with highlights of a strong color in order to

counterbalance the negative effects. Diamond jewelry will inspire and protect you with a rainbow of color; a scarf, belt, or shawl will not only look stunning but add vibrancy and life to the black.

AVOID if you are depressed or despairing because of lack of self-recognition and self-denial. Black rejects help from others and promotes isolation. (13)

Natural and artificial colors and fabrics:

The body is a living organism that reflects the softness and texture of a natural form. The beauty of our subtle and natural- looking colouring can be lost if it is surrounded by harsh artificial colors and materials. With the vast choice in fabric types available to us these days it is not surprising that most of us have clothes made from artificial fibers. Unfortunately, although these fabrics are easy to wash and often cheaper than natural fibers, they can also have an adverse affect on our health (2/51)

Natural and artificial colors

People have added color to cloth for thousands of years. It is only recently (the first artificial dye was invented in 1857) that the textile industry has turned to synthetic dyes. Today, many are rediscovering the joy of achieving color through the use of renewable, non-toxic, natural sources (14)

Many clothing manufacturers and fashion houses are now offering garments made from organically grown plant materials that are not bleached in manufacturing process. These natural fibers are pigment dyed, producing softer colors more in keeping with those seen in nature, which harmonize with our skin tones.

None of the natural fibers that are used to weave cloth have a brilliant white colouring. This is obtained by bleaching cloth in harsh chemicals. Although most of the bleach is washed away, traces of the chemicals are absorbed into the fibers of the cloth. If we wish to wear neutral hues, it is much better to wear clothing made from undyed cloth; the subtle variations of soft whites, beiges and creams are much more flattering than bleached whites when worn next to the skin.

With the use of synthetic, manufactures are now able to produce an astounding array of aniline dyes; these tend to be out of tune with our natural colouring. Synthetic colours, such as electric green and orange, can make us appear pale and ill. Often artificial fabrics also have patterns with bright clashing colors and strong geometric design, giving off conflicting vibrations that are not in tune with any of our bodily organs or functions and can contribute to behavioral problems. (2/51)

Natural and artificial fabrics

When early people realized they needed more than their own hair and skin to protect them from the weather, they looked around to see what was available. People lived in a cold climate, saw animals with skins that kept them warm. They hunted these animals for food and used the fur to cover their body. Ancient people used Grasses, reeds, leaves and stems to cover their body. He also learned to spin the fiber, convert it into yarn and these yarns are interlaced to form a cloth. Flax and wool were the first of the fiber to be used because they were easier to twist into yarn than cotton (15)

And it is not only the coloring of the fabric itself that can set up harmonious patterns in our clothing, but the texture and type of fabric also alter the way the light waves affect us. Natural cloth as similar vibrations to our own, so will be harmonious to our health; while synthetic fabrics emit their own vibrations that will interfere with any light vibration, so distorting their vibratory rate. Such materials interfere with our natural body electricity. This is particularly the case with leisure and sports clothing, which is frequently made with nylon. Wearing nylon does not allow the skin to breathe and produces a lot of static electricity. Other synthetic fabrics include acrylics and polyesters, the manufacture of which is not environmentally friendly. Natural fibers, on the other hand, have a positive effect on the body – cotton, wool, silk and even 50 percent cotton /polyester mix, allow the skin to breathe and natural sunlight to penetrate. (2/52)

How to choose your dressing colour:



Figure (6)

We should dress for our own-well and not just for the external impression we want to create. If we feel happy and comfortable in ourselves we will be naturally attractive to other people. We should surround ourselves with the colors we need, especially if we live alone.

Infants

Infants are very sensitive to their surroundings, and experience the world through all their senses simultaneously. A young baby will not only look at a toy, but will taste and smell it. Colors have a profound effect on babies. Light colors are more gentle; all pale colors give off soft vibrations that are more in keeping with the skin and sensitivity of a young child. It is a good idea to clothe a baby in natural colors or soft pastels. Pink, peach, and warm earthy tones mimic the color of the mother's skin and give off supporting and loving vibrations to boys and girls equally. Light blue and green are cooling and sedating and it would be a particularly good idea to clothe a child in such colors if he or she is hyperactive or has a skin rash.



Figure (7)

Older children

As a child grows, its needs change. Like adults, some children are quiet and sensitive, while others are active and outgoing. Parents and designers should pay attention to these differences, rather than foisting their own color preferences or fashion trends on children. We all have past experiences that hold color associations for us - colors worn at school, uniforms, colors associated with relatives and their houses. Until very recently children and boys especially, were dressed in sensible colors that did not show dirt so obviously. However, most children — if left to choose their own clothes — will choose brightly coloured garments. They need to dress for energy and fun,

for laughter and excitement. They sometimes mix and match strange and shocking color combinations, but this is perfectly natural. They are experimenting with how to use color in much the same way as they experiment in other forms of play. Gentle guidance will help them understand the nature of color and discover their own color preferences.



Figure (8)

In work

Until the 1960s, drab and restricted colors were usually worn for most jobs where a uniform wasn't required. Workers had to be seen, as upright, responsible, hard-working citizens, and dark, restrained colors not only helped give this impression but if worn frequently they only keep our true personalities under wraps. We often use color in our work clothes to alter the way people see us and feel about us at work and to promote image and status in the world, rather than to suit individual needs.

Business suits:

A dark suit is recognized internationally as appropriate for business. Black worn in business denotes power. Going into a meeting in a black or charcoal suit gives out the message that you are a force to be reckoned with and that you are there to give orders. Red with black indicates that you consider yourself to be dynamic, action-oriented, and a leader. Yellow used with black conveys mental superiority, and a preference for persuading by using logic and reason. Pink worn with black shows superior social standing. Green is seldom worn with black; its soothing vibrations would cancel out the dominance and power conveyed by black.

If your business approach is always one of cooperation and negotiation, a navy or dark blue outfit would be more appropriate than black. Dark blue promotes authority but also sends out the message that the wearer possesses fairness and integrity. Light neutrals of beige or tan tones indicate approachability and are better worn by

those who work in a people-oriented field. Someone with a quiet or introverted personality could be overpowered by dark gray or black. If so, try wearing a suit of deep, rich blue or golden brown and see how it affects you. (2/53-54) Black and white when used together in a costume create the strongest possible contrast if employed in equal or nearly equal quantities. This makes the wearer most conspicuous. (1/46)

Using colours:

Brighter colors can be used as accents in your accessories. This allows you to keep an expression of your own identity and personality while conforming to work requirements. Dynamic colors are exciting and ideal to wear for giving lectures and presentations — the brighter the colour, the more attention grabbing. Turquoise aids communication, while a golden—yellow helps clear logical thinking. If we are talking to large audiences in person or in front of a camera, striking rich colors hold their attention, whereas wearing light or dark neutrals in a lecture hall would result in your fading into the background.

Here are some color guidelines for different occupations:

Fine artists and designers should wear inspirational lavender tones. They should also use beautiful orange tones to aid their creativity and green for insight and intuition.

Writers, journalists, and media people will find inspiration by the use of clear blue. They will have their creativity and self-expression enhanced by golden yellow tones.

Teachers, scientists, physicians, nurses, and healers will be strengthened by deep blue, which imbues power with understanding in the service of others. They will be strengthened by using soft pure violet, gold, and orange. Lilac, lavender, orchid, cream, apricot, and peach are all colors that reflect either the violet or orange ray.

Mothers and babysitters and nursery teachers will be greatly aided by pinks and greens. **Chefs, dietitians, naturopaths, herbalists, guards, and police** will be helped by magenta, together with a clear healing violet and pure orange.

Ministers, lawyers, people in public office, and politicians will enhance their powers of service and benevolence by use of rich blues and pure purple.

Engineers, architects, and interior designers will have their practical skills and attention to detail enhanced with oranges.

Accountants, statisticians, and storekeepers will find their business acumen improved by blue-green.

Athletes, soldiers, farmers, gardeners, and people who work outdoors will increase their energy and endurance by the use of clear reds₂(2/55). And it is evident that athletes relate to colors on an emotional level and that uniform color is a direct channel for this connection.(4) **Pregnant mothers** should use mist like green and silver tones during their pregnancy.



Figure (9)

Uniforms:

Many large businesses have a corporate identity, incorporating the company logo and colors into their staff uniforms. It is of utmost importance that designers of corporate colors are sympathetic and knowledgeable about the psychology of colour, both from the point of view of the client as well as from that of the employee. Great care must be taken when using company colors in a decoration scheme to make sure the colors are suitable for the building, workspace, type of work, and general well-being of the people who are to be surrounded by them. It is better to consult the workers when designing a uniform, and if possible their views on colors for their workplace should be given consideration.

Uniforms should, where possible, be designed around a neutral colour. Distinctive strong colors can be added to the accessories — such as the tie, scarf, buttons, or hat. This will allow for the wide variety of shapes, sizes, and colouring of the staff who will be wearing the uniforms, and any strong colors will have to be tolerated only in small doses. Directors should remember that although a uniform is a good idea in places where staff identification is required, the attitude of staff will be even more important. You cannot hide sour—faced, unhappy people behind the mask of a uniform. If staffs are discontented, the uniform will reinforce the connection between your business and bad service.



Figure (10)

After work

In our leisure time it is a good idea to choose clothing to promote freedom from the constraints of dark work colours. People who have to wear a business suit of dark or neutral colors often come home and change into comfortable clothes of a softer color with soothing qualities. These softer tones help you to relax and ease away the stresses of the day. Choose blues and greens, neutrals, or pastels if you wish to be let down gently and calmed. On the other hand, if you are going out after work you may wish to wear a rich or warm coloured outfit, for instance in red or orange, to give you more energy and dynamism for the evening. Only wear black at night if you are feeling in optimum health, otherwise you will not only look pale and drained but you will also tend to be introverted and withdraw into your “black cloak.”

With the shift in modern psychology it is becoming acceptable for men as well as women to express their individuality and emotions, and we have seen a sudden explosion of wonderfully coloured clothes. Men especially have at last been set free and now revel in wearing color in their leisure and sportswear. (2/56-57)

Conclusion :

Color is the byproduct of the spectrum of light and it is one of the most fulfilling elements in our lives as it is reflected or absorbed, as received by the human eye and processed by the human brain. We defined colors as a whole process involving physics, physical and psychological procedures. Although there are several works written about colour, emotion, and its meanings, there is little written about its using in dressings for health.

Learning to analyze color will help you select clothing and fabric that works the way you want and can attract your attention or change your mood so we should be careful with using colours.

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