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Innovative Approaches to Designing Necklaces with Exceptional Qualities

Yasaman Jalalian[a]*

[a]*Department of Design and Clothing, Yazd Branch, Islamic Azad University, Yazd, Iran*

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Research Article

Abstract

The laboratory-produced fabric has been finalized with Limonene nano capsules that possess the capability to gradually release fragrance. Conversely, for the Choker design, our aim was to incorporate linear patterns that evoke a feeling of serenity. Additionally, through the application of color science in these designs, we have successfully created an anti-anxiety and calming effect for the audience.

Keywords: Choker; Necklace; Designing; Art.

1. Introduction

A choker is a close-fitting necklace, usually 14 to 16 inches long, worn around the neck. Chokers can be made of various materials including velvet, plastic, beads, latex, leather, metal, such as silver, gold or platinum, etc.

Whether a wealthy Victorian lady or a 1990s punk rocker, chokers have long been a staple of women's fashion. The history of chokers dates back to at least 2500 BC as of the 1990s. Sumerian jewelers were making chokers for thousands of years before they became part of the youth subculture. Additionally, nearly all early civilizations on the planet used chokers as part of their cultural identity. The ancient Egyptians, Sumerians, and Minoans all left evidence of their use of strangulation in their respective societies (Heather, 2019).

* Corresponding author. Tel: +98-9139929371.

E-mail address: jalalianjasmine@gmail.com

The chokers worn by these people were usually made of gold, and examples have been discovered that feature lapis lazuli - a stone that was widely used in ancient civilizations. Based on what is known today, these civilizations strongly believed that necklaces like these could provide protection as well as power. Chokers were originally used for this purpose and are also used as accessories today.

Although it has been confirmed by archaeologists that the choker was used in some form by various ancient civilizations, the choker has only been comparable to today's chokers for a few hundred years. The most prominent person we know of who wore a choker was Anne Boleyn. In her most famous portrait, she is depicted wearing a pearl pendant with a "B" pendant. As Anne Boleyn lived in the early 1500s, it's safe to assume that chokers have been associated with royalty and fashion for centuries. Fast forward several centuries, chokers had a divisive reputation in the 1800s.

The royals had a great influence on popular styles, and chokers were very fashionable among the upper classes of the Victorian era due to their popularity among the royal family. In the late 19th century, the choker was commonly worn by ballerinas and served as part of their costume. However, chokers were also heavily associated with prostitutes at this time. The difference in styles was clear, as the upper classes wore elaborate chokers set with precious stones, pearls, and precious metals, and prostitutes wore simple red or black ribbons.

At the end of the 20th century, the popularity of chokers continued with the influence of Queen Alexandra. The Queen regularly wore chokers of various styles to cover the scar on her neck. Alexandra's influence meant that the popularity of chokers - particularly pearl chokers - continued into the 1910s (Heather, 2019; Amiryan, 2018; Dundeby, 2010; Aghakhani, 2007; Nami, 2010; and Sadatnouri, 2015).

Fig 1 An ancient example of necklace

In the 1920s and 1940s, chokers were popular as a somewhat rebellious accessory. Young women in these decades wore chokers called "clairs de chine" or "dog collars". These chokers were made with more delicate materials than the Victorian period, such as lace and velvet. These chokers were limited to young women of the social elite, as the best examples were custom made to fit the neck and very expensive items were made for them.

The hippie culture and music movement of the 1960s and 1970s revived the choker necklace style. The choker became a unisex accessory that was particularly popular among men at the time.

Iconic rock stars such as Mick Jagger and Jimi Hendrix could be adorned with chokers, beads or studs or even feather detailing during performances.

In the late 20th century, in the early 1990s, chokers became popular again. As in the 1940s, these chokers were worn as an act of rebellion. These chokers were not made from the same luxury materials as their predecessors, many were made from stretchy plastic that allowed for mass production. Although chokers became fashionable at the turn of the century, they became popular again in the 2010s. Today, chokers are not strongly associated with rebellious subcultures. They are no longer associated with royalty and are often not considered glamorous unless they are made of precious gemstones such as pearls and diamonds.

Many styles of jewelry are typically in and out of fashion. Chokers may fall out of fashion temporarily, but they always rise in popularity once again (Heather, 2019; Amiryan, 2018; Dundeby, 2010; Aghakhani, 2007; Nami, 2010; Sadatnouri, 2015; Tanabian, 2011; and Monavari, Zohoori, and Davodiroknabadi, 2022).

2. Nano Technology

Nanotechnology refers to a branch of science and engineering that is dedicated to the design, production, and use of structures, devices, and systems by manipulating atoms and molecules at the nanoscale, that is, having one or more dimensions of 100 nanometers (100 millionths of a millimeter) or less.

In the natural world, there are many examples of structures with dimensions of one or more nanometers, and many technologies have incidentally involved such nanostructures for years, but only recently has it become possible to do so intentionally.

Many applications of nanotechnology involve new materials that have very different properties and novel effects compared to similar materials made at larger sizes. This is due to the very high surface-to-volume ratio of nanoparticles compared to larger particles and effects that appear at that small scale but are not observed at larger scales.

The applications of nanotechnology can be very beneficial and have the potential to have a significant impact on society. Nanotechnology has already been embraced by industrial sectors such as information and communication sectors, but it is also used in food technology, energy technology, as well as in some medical products and pharmaceuticals. Nanomaterials may also offer new opportunities to reduce environmental pollution.

3. The Science of Smell

How small particles can bring us happiness. As we smell a scent, the molecules travel to the back of our nose where they hold the sensory cells. This is where we "feel" the smell - basically, this is where our brain decodes the smell. When our brain decides what a scent is, it decides whether the smell is positive or negative. Since the 'smell zone', 'emotion zone' and 'memory zone' are all located in close proximity to each other, our emotions play a large role in determining whether or not a particular scent is positive.

When we smell a fragrance, that olfactory information is transmitted directly to our limbic system and hypothalamus, creating profound emotional and behavioral changes. Studies have linked the smell of oranges to improved emotional and immune responses, from antidepressants to energizing and restorative agents. In fact, a 2000 study in a dental office found that patients experienced less anxiety during visits when orange oil was diffused.

Exotic citrus scents like lemon or orange have been proven to give us a little bit of happiness. These happy scents have spicy aromas and stimulate serotonin (happy hormone) in our brain. Moreover, they stimulate our alertness while boosting our brain power

The effect of smelling orange scent on human psycho-physiological functions

Calming effect of orange - lower level of state anxiety, more positive mood and higher level of relaxation

Orange is also historically and symbolically important. Originating in China, oranges are considered by Chinese culture to symbolize good luck and fortune. Oranges are also associated with wealth in China, as the Chinese term "orange" rhymes with the term "gold". For this reason, they are very popular during Chinese New Year and are freely shared around the country to encourage wealth and good luck. Oranges are also round, so they are associated with the pure and endless cycle of a circle, and are considered a symbol of wholeness as well as providing bright and positive energy to any space. Even now, oranges and other citrus fruits are used to brighten up food and visual effects on the plate.

Chemical compounds of oranges

In terms of chemical compounds, oranges are rich in vitamin C. In its skin, an essential oil is found that contains di-limonene, dicyclic aldehyde linalool, dl-terpineol and... Its fresh leaves contain L-stachydrin, glycoside and hesperidin

4. Limonene

Limonene is a chemical substance found in the skin of citrus fruits such as lemons, Shirazi lemons, and especially orange peels, and it constitutes about 97% of the essential oils in it.

Limonene, also known as d-limonene, belongs to the family of terpene compounds, these compounds protect the plant against the attack of external factors due to their strong aroma.

Limonene is one of the most common terpenes in nature and has many properties, including anti-inflammatory, antioxidant and anti-stress properties, and reduces the risk of many diseases.

4.1. Common Uses of Limonene

Limonene is one of the most popular food additives and is used as a lemon flavor in products such as soft drinks, desserts, and candies.

This oil is extracted by hydrostatization, a process in which the skin of the fruit is soaked in water, after which the compound is heated and its volatile molecules are released through steam, compressed and separated.

Limonene has a special place in the production of cosmetics and cleaning and hygiene products such as soap, shampoo, lotions, perfumes, detergents and air fresheners, and because of its strong aroma, it is used in the preparation of pesticides, including insecticides.

Limonene oil is also used as an aromatic and relaxing oil in aromatherapy, and because of its health benefits, it is usually produced and sold in the form of capsules and soluble supplements.

Properties and benefits of limonene

Based on animal studies, limonene oil has anti-inflammatory, antioxidant and anti-cancer properties and protects the body against heart diseases, although more human research is needed in this field.

1.Anti-inflammatory and antioxidant

Some studies have shown that limonene helps reduce inflammation.

Short-term inflammation is actually the body's natural response to pressure and stress and is beneficial for health, but since chronic inflammation is dangerous and the source of many diseases, it is very important to deal with it.

Limonene appears to help reduce the inflammatory symptoms associated with osteoarthritis and reduce nitric oxide in cartilage cells. Nitric oxide is an important cause of inflammation in the body. According to animal studies, ulcerative colitis is another inflammatory disease on which the consumption of limonene has been effective and has reduced the inflammation and damage of the colon. Limonene also has antioxidant properties that counteracts the activity of free radicals - especially in leukemia cells - and prevents the occurrence of oxidative stress and inflammation.

2. Anti-cancer

According to some studies, people who consume citrus peel are less susceptible to skin cancer than people who only eat citrus fruit or juice.

Also, regular consumption of limonene seems to help reduce tumor cells in women's breast cancer.

The results of animal studies have also shown that the use of limonene along with the anti-cancer drug doxorubicin reduces the common side effects of the drug, including oxidative damage, inflammation and kidney damage.

3. Heart health

Limonene reduces the risk of heart disease by reducing some risk factors such as blood cholesterol, blood sugar and triglycerides.

Some animal studies suggest that limonene reduces the accumulation of fat in the liver and lowers blood pressure.

4. Other benefits of limonene

Other properties of limonene include the following:

Loss of appetite; The aroma of limonene is useful for reducing appetite

Reducing stress and anxiety; Limonene can be used in aromatherapy as an anti-stress and anti-anxiety aromatic oil.

Improve digestion; Limonene prevents stomach ulcers.

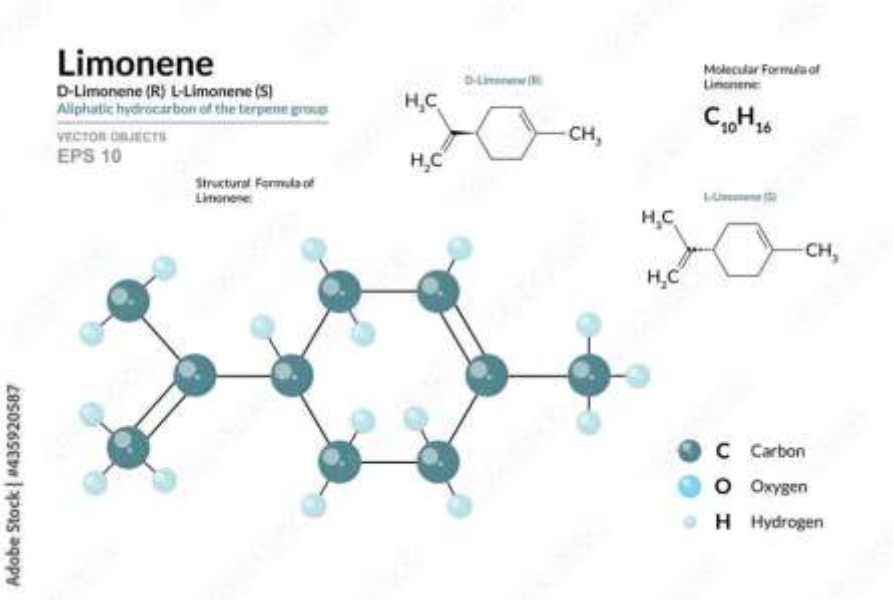

Fig 2 Schematic of Limonene

In this choker, the symbol of happiness is well used in several places, the fabric is curved and the metal hanger is made of jade stone in orange and green colors, which apart from its anxiety and happiness properties, can also show the appearance of an orange (Sadatnouri, 2015; Tanabian, 2011; Monavari, Zohoori, and Davodiroknabadi, 2022; Dadkhah Tirani, Davodiroknabadi, and Zohoori, 2018; and Soltani, Zohoori, and Davoodi Rokanabadi, 2022).

5. Artistic and Practical Work Process

A total of 21 compounds were identified in orange peel essential oil, the main compounds of which are limonene (94.3%), myrcene (1.5%), linalool (0.9%), decanal (0.5%), alpha-pinene (0.4%) and octanol (was 0.3%). After the deterpenization process, which was done by partial distillation and using a vacuum pump, various changes occurred in the orange peel essential oil.

In this article, Limonene Nano capsule have been used to desensitize fabrics used in fabric organizers. In this way, the fabrics were hypoallergenic and have been sent in the laboratory using ultrasound.[8] After studying the theory parts and getting information about the world of fabric art; First of all, a storyboard was prepared from the textures and applications of Choker and samples of textures were prepared by designing and taking into account the coloring, efficiency, elements such as the roots of the work, prominent texture, landscape designs and it was shown in the format of the storyboard; After creating a set of some linear etudes of design, selected design was completed (Figures 3-4).

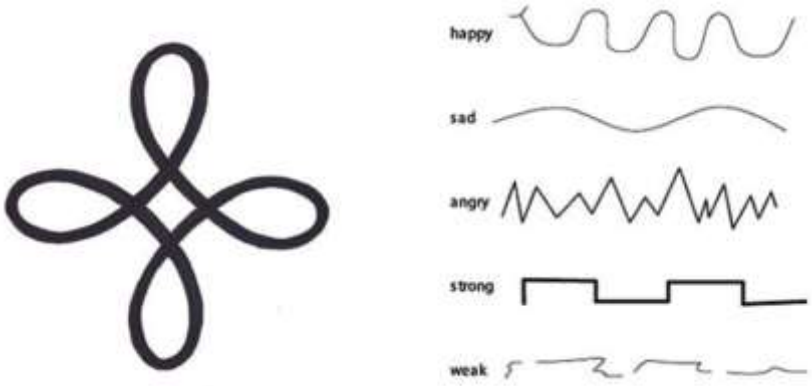

Fig 3 The initial etudes

Fig 4 The final design

6. Conclusion

The fabric prepared in the laboratory was completed by Limonene nano capsules, which will have the ability to spread the scent over time. On the other hand, in the design of Choker, we have tried to use linear motifs to induce a sense of peace. On the other hand, by using the science of color in these designs, we were able to achieve a design that is anti-anxiety and induces calm to the audience.

References

Aghakhani, H. (2007). *Intermediate visual arts 1 (art major)*. First edition, Payam Noor University, Tehran.

Amiryan, A. (2018). *Designing women's evening wear using tapestry texture*. Thesis for receiving a bachelor's degree, Hazrat Ruqiyeh College, Yazd.

Dundeby, D. (2010). *Fundamentals of Visual Literacy* (Sepehr, M. Trans.). 4th edition, Soroush Publishing House, Tehran.

Dadkhah Tirani, A., Davodiroknabadi, A., & Zohoori, S. (2018). Combining Traditional and Modern Art to make Fabric using Poly Vinyl Alcohol Material. *International Journal of Applied Arts Studies, 2*(4). Retrieved from http://ijapas.ir/index.php/ijapas/article/view/111.

Heather, W. (2019). *Investigating The Reasons Women Wear Choker Necklaces*. https://www.researchgate.net/publication/337926447_Investigating_The_Reasons_Women_Wear_Choker_Necklaces.

Monavari, M., Zohoori, S., & Davodiroknabadi, A. (2022). Anti-inflammatory and bactericidal effect of keratin/harmaline/ginkgo biloba electrospun nano fibres as band aid. *Micro Nano Lett. 17*, 210–215. https://doi.org/10.1049/mna2.12125.

Nami, Gh. (2010). *Fundamentals of visual arts*. Third edition, Tos, Tehran.

Sadatnouri, H. (2015). *Effect of Aesthetics on the Consumer's Lifestyle of a Case Study of Paten Jameh Clothing in Tehran Province*. Master's Thesis in Business Management, Department of Management, Islamic Azad University.

Soltani, B., Zohoori, S., & Davoodi Rokanabadi, A. (2022). Design of Portable Fabric Pots by Hydroponic Method. *International Journal of Applied Arts Studies, 6*(4), 71-78. Retrieved from http://ijapas.ir/index.php/ijapas/article/view/350.

Tanabian, Sh. (2011). *Investigation of fabric texture and its application in evening and party wear*.