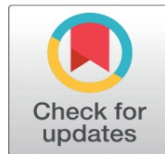
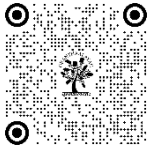


HEALTH CARE IN TEXTILES -A SUMMARIZE CASE STUDY ON THE UNIT OF MOUNT ART MUSEUM, PANCHMARHI

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ABSTRACT

The abstract provides an overview of a research study focused on sustainable textiles and their applications in healthcare, specifically in treating bodily discomfort and skin disorders. The research acknowledges the increased recognition of the value of organic and sustainable products, particularly during a pandemic. It highlights the prevalent issues people face, such as physical aches and chronic discomfort, often attributed to unhealthy lifestyles. The abstract alludes to recent developments in healthcare textiles, emphasizing the primary challenge of creating non-toxic and environmentally friendly healthcare solutions. The skin, being the body's first line of defense and the largest organ, is highlighted as a crucial factor in textile selection. The abstract points out the potential issues like rashes, itchiness, dryness, and easy bruising that may arise due to poor-quality or synthetic fabrics, as mentioned by Tankha in 2020. To gather primary data and insights into the healthcare benefits of fabrics in textiles, the abstract mentions visiting and interviewing salespersons at the Art Museum in Panchmarhi. This implies a practical approach to understanding the real-world implications of sustainable textiles in the context of health care. The detailed responses provide a comprehensive exploration of the research's key components, offering statistical data, survey questions, interview inquiries, and case study details. These responses further elaborate on the importance of sustainable fabrics in addressing skin-related issues, chronic pain, and overall well-being. The inclusion of a case study on a Micro, Small & Medium Enterprise (MSME) in Panchmarhi adds a practical dimension to the abstract, showcasing how organizations are aligning with sustainable practices in the textile sector. Overall, the responses offer a thorough and insightful expansion on the abstract's themes, providing a well-rounded understanding of the research focus.

DOI

[10.29121/shodhkosh.v5.i6.2024.1029](https://doi.org/10.29121/shodhkosh.v5.i6.2024.1029)

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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Keywords: Skin Allergy, Bodily Pain, Natural Fabrics, Sustainable Textile, Blankets, Clothing

1. INTRODUCTION

The foundation of fabrics lies in fibres, which can be sourced from natural or synthetic materials. This research distinguishes between natural and man-made fibers, providing insights into their production processes and characteristics. Natural fibers, obtained from animal, vegetable, or mineral sources, require processing to separate fiber strands. Man-made fibres, on the other hand, undergo significant chemical alterations during production. The diverse range of natural fibres includes cotton, hemp, jute, ramie, and others, while synthetic fibres encompass materials like polyester, polyamide, and acrylics (FIBER2FASHION n.d.).

Natural Fibres

Natural fibres are described as hair-like raw materials obtained directly from animals, vegetables, or minerals. These fibres undergo processing to separate them from other plant components. The removal of the natural glue that holds them intact is sometimes necessary. The process of retting, also known as degumming, involves the extraction of fibre bundles from harvested stems. This can be achieved through biological or mechanical processes, often requiring a combination of both. The passage emphasizes the diverse origins of natural fibers and the intricate processes involved in their extraction and preparation for textile production.

Certainly, let's delve into more details about natural fibers:

- **Origin and Sources:** Natural fibers are organic materials sourced directly from various elements of nature. These sources can include animals, such as sheep for wool or silkworms for silk; vegetables, like cotton from cotton plants or flax for linen; and minerals, as in the case of asbestos. The diversity in sources allows for a wide range of characteristics and applications for natural fibers.
- **Processing and Separation:** After obtaining the raw natural fibers from their sources, a crucial step is separating them from other plant components. This separation is necessary to isolate the desired fibers for subsequent use in textile production. The process may involve the removal of seeds, leaves, or other impurities to ensure the purity and quality of the fibers.
- **Natural Glue Removal:** Some natural fibers come with an adhesive substance, often referred to as natural glue, that holds the fibers together or binds them to other plant components. In certain cases, it becomes essential to remove this natural glue to facilitate further processing and ensure the fibers' suitability for textile applications.
- **Retting or Degumming Process:** The passage introduces the concept of retting, also known as degumming, as a significant step in processing natural fibers. Retting involves the extraction of fiber bundles from the stems of harvested plants. This process is crucial for separating the fibers from the woody parts of the plant and is commonly used for fibers like flax. Biological or mechanical methods, or a combination of both, can be employed in retting.
- **Biological Processes:** This may involve exposing the harvested plant material to microorganisms or bacteria that break down the non-fibrous components. Water retting and dew retting are common biological retting methods.
- **Mechanical Processes:** In mechanical retting, the plant material is physically agitated or crushed to separate the fibers. This can include methods like machine pounding or the use of special equipment.
- **Diverse Origins and Applications:** The passage emphasizes the diverse origins of natural fibers, ranging from animal to vegetable to mineral sources. This diversity not only provides a broad spectrum of raw materials but also contributes to the varied characteristics of natural fibers. Each type of natural fiber has unique properties that make it suitable for specific applications in the textile industry, such as clothing, home furnishings, and industrial applications (Express 2020).

The intricate processes involved in obtaining natural fibers, including separation, natural glue removal, and retting, underscore the complexity and craftsmanship required in preparing these materials for textile production. The passage highlights the importance of these processes in harnessing the unique qualities of natural fibers, making them valuable components in the textile industry.

Man-Made Fibers

The passage introduces man-made fibers, explaining that they undergo significant alterations in chemical composition, structure, and characteristics during the production process. The term "synthetic fiber" is used to describe materials created by humans through chemical and mechanical processes, as opposed to those derived from natural sources. Synthetic fibers are commonly referred to as man-made fibers and can be produced as either filament yarn or filament staple yarn, depending on the intended purpose. The passage notes that, despite being synthetic, these fibers can resemble natural fibers in terms of dimensional appearance and qualities, depending on usage requirements.

- **Chemical Alterations and Production Process:** Man-made fibers, also known as synthetic fibers, undergo substantial changes in their chemical composition, structure, and overall characteristics during the production process. This involves creating polymers, which are large molecules composed of repeating structural units, through chemical reactions. The raw materials used in the production of synthetic fibers are often derived from petrochemicals or other chemical compounds. These materials can include substances like polyester, polyamide (nylon), and acrylics. The creation of synthetic fibers involves a combination of chemical and mechanical processes. Chemical reactions transform the raw materials into polymers, and subsequent mechanical processes shape these polymers into fibers suitable for textile applications.
- **Synthetic Fibers vs. Natural Fibers:** The passage uses the term "synthetic fiber" to describe materials created by humans through chemical and mechanical processes. This is in contrast to natural fibers, which are sourced directly from living organisms. Despite being synthetic, man-made fibers can resemble natural fibers in terms of dimensional appearance and qualities. This versatility allows manufacturers to tailor synthetic fibers to meet specific requirements and mimic the properties of natural fibers.
- **Filament Yarn and Filament Staple Yarn:** This type of synthetic yarn consists of continuous strands of fiber. It is produced by extruding the molten polymer through tiny openings, resulting in long, continuous strands. Filament yarns are known for their smooth and shiny appearance. Examples include nylon and polyester filament yarns. Unlike filament yarn, filament staple yarn is made up of shorter lengths of fibers, called staples, which are twisted together to form a yarn. This process introduces a textured and bulkier feel to the yarn. Filament staple yarns are commonly used in applications where a softer and more natural texture is desired (Textile Article 2020).
- **Characteristics and Applications:** Synthetic fibers are versatile and can be engineered to possess specific characteristics, such as durability, resistance to wrinkles, and ease of care. These fibers find applications in various industries, including textiles, apparel, carpets, and industrial products. The

ability to customize their properties makes them suitable for a wide range of end products.

Man-made fibers undergo a complex process involving chemical alterations and mechanical shaping to create materials with specific characteristics. Despite being synthetic, these fibers can closely resemble natural fibers in their appearance and qualities. The distinction between filament yarn and filament staple yarn adds another layer of versatility, allowing for customization based on intended applications. The adaptability of synthetic fibers contributes to their widespread use in modern textile and industrial processes.

Synthetic and Natural Polymer Bases

The passage underscores the significance of both synthetic and natural polymer bases within the textile industry. It starts by differentiating synthetic fibers as those entirely created through human-made methods using chemical substances. This distinction sets them apart from natural fibers, which are derived from living organisms. The focus is particularly on synthetic fibers, highlighting the control manufacturers have over their properties, thanks to the deliberate use of specific chemical compositions.

- **Role of Synthetic and Natural Polymer Bases:** The passage emphasizes that both synthetic and natural polymer bases are integral to the textile industry. However, it places particular emphasis on synthetic fibers, attributing to them a high degree of versatility. The ability of manufacturers to exert full control over the properties of synthetic fibers stands out. This control extends to various characteristics such as strength, durability, texture, and other performance attributes (Tankha 2020).
- **Synthetic Base Defined:** The term "synthetic base" is introduced, referring to fibers entirely created through human-made methods using chemical substances as the starting point. This definition establishes a clear distinction from fibers derived directly from natural sources. The use of chemical substances as origins for synthetic fibers highlights the controlled and deliberate nature of their production. This contrasts with natural fibers, which rely on the inherent properties of living organisms (Textile Article 2020).
- **Versatility and Adaptability:** The passage underscores the adaptability of synthetic fibers in meeting the varied needs of the textile industry. Manufacturers can tailor the properties of synthetic fibers based on specific requirements, showcasing their flexibility in addressing diverse applications. The adaptability of synthetic fibers is presented as a key factor in their widespread use across different sectors of the textile industry. This adaptability allows them to cater to a range of applications, from clothing to industrial textiles.

The passage provides a nuanced understanding of the roles of both synthetic and natural polymer bases in the textile industry. It sheds light on the controlled production process and adaptability of synthetic fibers, positioning them as a key player in meeting the dynamic needs of the textile sector.

Figure 1

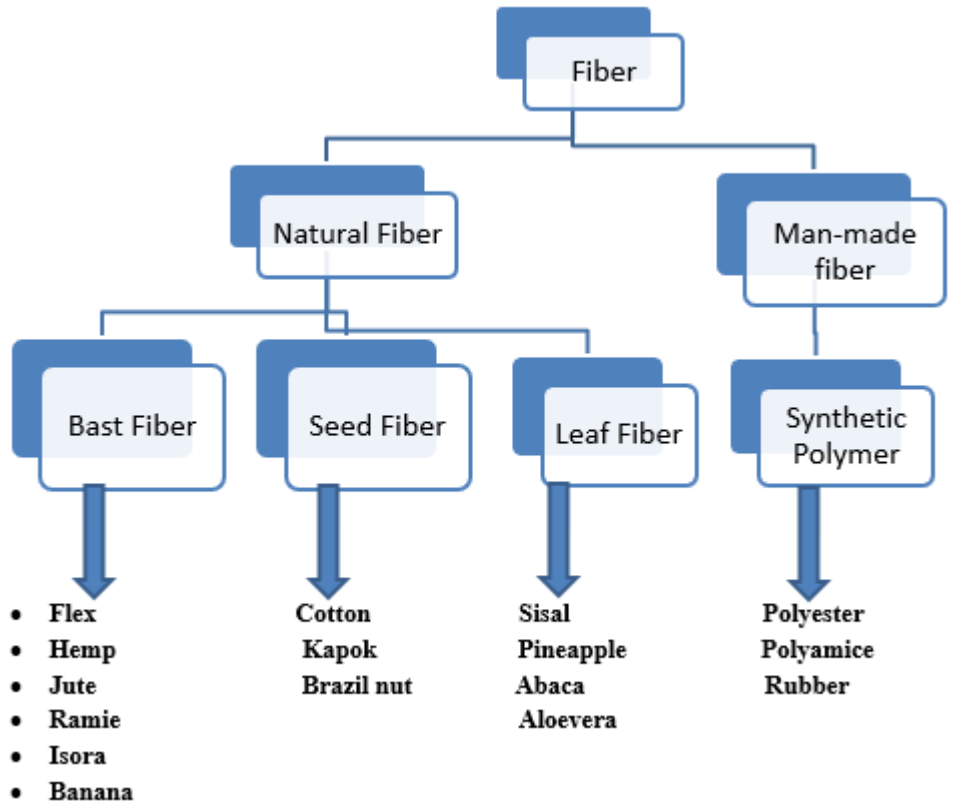


Figure 1 (developed by the author)

Healthcare textiles

Healthcare textiles are undergoing a transformative shift with a focus on antibacterial, eco-friendly, and comfortable apparel, significantly impacting both home furnishings and clothing markets. In today's fast-paced and hectic lifestyles, there is a growing concern about the impact on overall health. Issues such as body pain and skin disorders have become prevalent health concerns, particularly among individuals experiencing chronic pain, which is notably prominent among the elderly (Rapo-Pylkkö 2016). Chronic pain manifests in various ways, with individuals describing sensations such as aching, burning, shooting, squeezing, stiffness, stinging, and throbbing. Recognizing the importance of quality sleep for overall well-being, the passage highlights the link between sleep deprivation, weight gain, and the exacerbation of chronic discomfort. Additionally, sufficient sleep is acknowledged as a crucial component for effective stress management. As the pursuit of self-care gains momentum, the popularity of wellness fabrics is on the rise. These fabrics leverage cutting-edge technology to enhance health through wearable goods. Notably, there is a shift away from popular fabrics like polyester, acrylics, rayon, and nylon, which can be harmful to individuals with skin disorders (Espinal 2021). The majority of fast fashion items, often made from synthetic fibers, have been associated with adverse effects on sensitive skin. In response to these concerns, manufacturers are increasingly focusing on sustainable practices and producing clothing that promotes skin health. The emphasis is on creating garments that are not only gentle on the skin but also contribute positively to the skin microbiota, acknowledging the dynamic interaction between fabrics and the skin. This reflects a broader commitment to sustainability and the well-being of

individuals, aligning with the evolving preferences of consumers seeking both comfort and health-conscious choices (Fabrics-for-all-skin-type 2020).

Textile Fabrics and Health Care: Innovations for Well-being

Fabrics play a crucial role in our daily lives, directly in contact with our skin, the body's most sensitive part. The ongoing innovation in textiles has brought forth alternative plant-based fibers such as bamboo, Aloe Vera, Rose petal, and more, offering a sustainable alternative to synthetic fibers derived from petrochemicals (Mishra 2016). This shift is motivated by increased public awareness of the harmful effects of microbial growth on personal hygiene and health, prompting extensive research to mitigate microbial formation on textiles (Diana Santos Morais 2016). Textiles, especially clothing, have a dynamic interaction with skin functions, requiring consideration of age, gender, and activity-related changes in skin temperature regulation (U Wollina 2006).

- **Organic Bamboo Fabric:** Derived from the world's fastest-growing plant, bamboo fabric is known for its renewability, biocompatibility, and organic status. Its soft, ramie-like feel, antibacterial properties, moisture-wicking capabilities, and anti-static nature make it a versatile choice (Waite 2010). Bamboo fabric is hypoallergenic, making it suitable for individuals with sensitive skin. Its natural anti-anxiety characteristics and activation of deep touch pressure areas contribute to a soothing experience (Bamboo – The most eco-friendly fabric on Earth n.d.).
- **Organic Rose Petal Fabric:** This vegan fabric, derived from rose bushes, offers compostable and recyclable cellulose fiber. Its silk-like softness, rich antioxidants, and natural skin-toning properties make it suitable for all skin types (AYURKRUTI 2020). Rose petal fabric aids in cooling and smoothing the body, combating free radicals, excess sebum, and bacteria.
- **Aloe Vera Fabric:** Leveraging the therapeutic properties of Aloe Vera, this fabric is recognized for antibacterial, anti-viral, and anti-pruritic attributes. Its high breathability and moisture-wicking capability contribute to healthy skin (AYURKRUTI n.d.). Aloe Vera textiles maintain their therapeutic characteristics even after multiple washes, finding applications in innerwear, stockings, newborn wear, and more.
- **Organic Eucalyptus Fabric:** Utilizing eucalyptus wood, Tencel Lyocell Eucalyptus garments are biodegradable and renewable. The fabric is suitable for individuals with skin sensitivities or allergies, exhibiting natural antimicrobial properties (AYURKRUTI 2020). Eucalyptus fabric contributes to reduced pesticide usage and showcases antibacterial action against Gram-positive and Gram-negative bacteria.
- **Organic Cotton Fabric:** Organic cotton clothing, free from chemical residues, proves beneficial for individuals with allergies or chemical sensitivities. Being the world's most commonly used natural fiber, organic cotton blankets may aid in reducing chronic pain (Upadhye 2021). The weight and comfort of cotton contribute to improved sleep and overall well-being. Reduced exposure to allergens and dermatological disorders is emphasized, potentially leading to cost savings on medical treatments.
- **Flex Fabric (Flax/Linen):** Historical Significance: Flax textiles, known as linen, have been acknowledged for their therapeutic properties since ancient times. Linen acts as an effective filter against chemicals, radiation, and dust, reducing various skin problems (Hergenrather 2009). Linen's

adsorptive nature, lack of allergic responses, and benefits in treating inflammatory diseases make it suitable for various health applications. Linen clothes contribute to healthy air exchange and may assist with neurological conditions.

This exploration of innovative textiles demonstrates their potential contributions to health and well-being, offering consumers sustainable and skin-friendly options in their daily lives. The characteristics of each fabric emphasize their unique benefits, ranging from antibacterial properties to eco-friendly and soothing features, contributing to a holistic approach to health through textile choices (Apexmills 2021).

2. RESULTS AND DISCUSSION

Micro, Small & Medium Enterprises (MSMEs) in Indian Economy: Fostering Growth and Innovation

In the Indian economic landscape, the Micro, Small & Medium Enterprises (MSMEs) sector stands as a cornerstone, playing a multifaceted role in driving self-employment, nurturing innovative startups, fostering entrepreneurial talent, boosting exports, influencing industrial output, and showcasing robust management skills. The MSME Department is dedicated to formulating policies that empower and catalyze the growth of MSMEs, with a keen focus on enhancing competitiveness. In the context of Madhya Pradesh, this department significantly contributes to socioeconomic development and job creation, particularly through initiatives aimed at empowering rural residents, especially women, through rural entrepreneurship programs. By providing access to technology, capital, and local and international markets, the MSME Department aims to facilitate the holistic growth of these enterprises. The creation of clusters with shared facilities further bolsters the support provided to MSMEs, fostering a collaborative ecosystem (MSME n.d.).

Innovation and Sustainability at Mount Art Museum, Panchmarhi: A Case Study

During a visit to a unit of Mount Art Museum in Panchmarhi, situated in the Hoshangabad district, it became apparent that this organization is aligned with the ethos of sustainable and innovative practices in the textile sector. The museum curates a diverse range of organic products, including oils, ointments, and bedspreads or blankets made from natural textiles. An interview with a salesperson revealed the unique qualities of their blankets, which are crafted from natural fibers such as bamboo, cotton, linen, and hemp. These blankets not only offer comfort but also boast therapeutic benefits, aiding in alleviating bodily pains and skin disorders caused by synthetic textiles. The museum's commitment to using organic fabrics extends to its bedspreads, renowned for their antibacterial properties, providing warmth in winter and coolness in summer. The clothing line at the museum features sarees and suits made from various organic fabrics like papaya silk, pineapple silk, rose petal silk, and banana silk. The utilization of these natural textiles reflects an eco-friendly and sustainable approach, offering not only comfort but also benefits for both human and environmental health (Textile Technology n.d.).

Mount Art Museum's Organic Product Curation

- **Philosophy of Sustainability and Innovation:** The Mount Art Museum's role as an advocate for sustainability and innovation is evident in its curation philosophy. The institution has embraced a forward-thinking approach, recognizing the importance of sustainable practices in the textile sector. This philosophy goes beyond mere product offerings, permeating every aspect of the museum's curation process.
- **Meticulous Curation Process:** The term "meticulous curation" emphasizes the careful and thorough selection of products within the museum's inventory. This process involves scrutinizing the sourcing, manufacturing, and overall environmental impact of each product. By meticulously curating the collection, the museum ensures that every item aligns with its commitment to sustainability and reflects a conscious effort to minimize the ecological footprint associated with textile production.
- **Diverse Range of Organic Products:** The museum's commitment to sustainability is exemplified by the diverse array of organic products it offers. Beyond traditional art displays, the inclusion of oils, ointments, and bedspreads or blankets showcases a recognition of the interconnectedness of various lifestyle elements. This curated range provides visitors with choices that extend beyond art, encouraging them to explore and embrace organic alternatives in their daily lives.
- **Holistic Approach to Organic Alternatives:** The term "holistic approach" signifies that the museum's curation is not solely focused on individual products but considers the broader impact of these offerings. The inclusion of oils and ointments, alongside textiles, indicates a holistic consideration of well-being, connecting artistic expression with health and lifestyle choices. This approach aims to inspire visitors to adopt a more conscious and sustainable lifestyle beyond their museum experience.
- **Emphasis on Sustainable Practices:** The emphasis on sustainable practices underscores the museum's commitment to ethical sourcing and production. By prioritizing products with minimal environmental impact, the museum actively contributes to the larger movement towards sustainable and responsible consumerism. This commitment is likely to resonate with visitors who are increasingly seeking products aligned with their values of environmental stewardship.
- **Advocacy for Sustainable Living:** Through its organic product curation, the Mount Art Museum emerges not just as a cultural institution but as an advocate for sustainable living. The museum's choices in curation become a form of advocacy, influencing visitors to make conscious decisions that contribute positively to both personal well-being and the health of the planet.

The Mount Art Museum's organic product curation reflects a purposeful and thoughtful approach to sustainability, emphasizing not only the products themselves but also the values and lifestyle choices they represent. This commitment positions the museum as a catalyst for change, encouraging a shift towards more sustainable and conscious living.

Mount Art Museum's Sustainable Practices

- **Organic Product Curation:** The Mount Art Museum in Panchmarhi stands out for its dedication to sustainability and innovation in the textile sector. The museum takes pride in curating a diverse range of organic products, including oils, ointments, and bedspreads or blankets made from natural textiles. This meticulous curation reflects a comprehensive commitment to promoting organic alternatives and supporting sustainable practices within the community.
- **Therapeutic Bedspreads:** In-depth insights from a salesperson interview reveal the exceptional qualities of the museum's blankets. Crafted from natural fibers such as bamboo, cotton, linen, and hemp, these blankets go beyond mere comfort. They are designed with therapeutic benefits, addressing bodily pains and mitigating skin disorders often associated with the use of synthetic textiles. This intentional focus on health and well-being positions the museum as a proponent of holistic living through sustainable choices.
- **The museum's commitment to organic fabrics** extends to items with specific features, notably bedspreads renowned for their antibacterial properties. The emphasis on antibacterial functionality adds a layer of practicality to the products. Bedspreads not only provide warmth in winter but also offer a cooling effect in summer. This dual-purpose functionality aligns with sustainability principles by promoting the longevity of the products and minimizing the need for seasonal replacements.
- **Eco-friendly Clothing Line:** Going beyond bedspreads, the museum's clothing line showcases a rich array of sarees and suits crafted from various organic fabrics like papaya silk, pineapple silk, rose petal silk, and banana silk. This diverse range demonstrates the museum's commitment to an eco-friendly approach to fashion. By incorporating these natural textiles, the museum contributes to reducing the ecological footprint associated with conventional fabric production (Yilmaz 2020).
- **Holistic Benefits for Health and Environment:** The museum's emphasis on utilizing natural textiles in both bedspreads and clothing signifies a holistic approach to sustainability. It transcends conventional notions of comfort and style by incorporating materials that not only serve immediate needs but also align with larger goals of societal and environmental well-being. The museum becomes a beacon for conscious consumerism, catering to individuals seeking products that resonate with their values of health and environmental responsibility (West 2021).

Mount Art Museum's sustainable practices are not limited to product offerings; they embody a broader ethos of ethical sourcing, health-conscious design, and environmental responsibility. This makes the museum a notable exemplar in promoting sustainable and innovative practices within the textile sector, setting a precedent for others to follow.

Antibacterial Properties in Bedspreads at Mount Art Museum

- **Incorporation of Organic Fabrics:** The emphasis on antibacterial properties in bedspreads at Mount Art Museum signifies a dedication to utilizing organic fabrics. These fabrics, derived from natural sources like bamboo, cotton, linen, and hemp, are known for their inherent antibacterial characteristics. This deliberate choice aligns with the museum's commitment to sustainable and health-conscious practices (M 2016).

- **Warmth in Winter:** The bedspreads are designed to provide warmth during the winter season. Natural fibers such as cotton and linen have insulating properties that trap heat, creating a cozy and comfortable environment for users. This feature ensures that the bedspreads serve a functional purpose beyond aesthetics, contributing to the overall well-being of individuals during colder months.
- **Coolness in Summer:** Equally important is the ability of these bedspreads to offer coolness in the summer. Bamboo, in particular, is known for its breathability and moisture-wicking properties, making it an ideal choice for warmer seasons. The bedspreads adapt to varying climatic conditions, providing a refreshing and comfortable experience during hotter months.
- **Year-Round Versatility:** The dual functionality of warmth in winter and coolness in summer adds a layer of versatility to the bedspreads. This year-round usability reduces the need for seasonal replacements, aligning with sustainable principles. By promoting longevity and reducing the frequency of replacements, the museum encourages a more sustainable approach to consumer behaviour.
- **Reduction in Environmental Impact:** Sustainability is a key consideration in the museum's choice of bedspread properties. The antibacterial features, combined with the ability to cater to different seasons, contribute to a reduction in environmental impact. Extended usability minimizes the consumption of resources associated with the production and disposal of textiles, reinforcing the museum's commitment to eco-friendly practices.
- **Educating Visitors on Sustainable Living:** The intentional design of bedspreads with antibacterial properties serves as an educational tool for visitors. It communicates the potential benefits of choosing textiles that not only offer comfort but also align with sustainable living practices. Visitors, through their interaction with these bedspreads, gain insights into making conscious choices that positively impact both personal comfort and the environment.
- **Meeting Practical Needs with Sustainable Solutions:** The emphasis on antibacterial properties in bedspreads demonstrates the museum's understanding of practical needs while offering sustainable solutions. It recognizes that individuals seek not only functional textiles but also items that contribute to a healthier and eco-friendly lifestyle. This approach positions the museum as a provider of solutions that merge practicality with sustainability.

The antibacterial properties of bedspreads at Mount Art Museum showcase a thoughtful integration of organic fabrics, seasonal adaptability, and a commitment to sustainability. These bedspreads go beyond traditional textiles, embodying a philosophy that encourages visitors to rethink their choices in textiles and embrace options that contribute to a more sustainable and comfortable lifestyle.

Eco-friendly Clothing Line at Mount Art Museum

- **Diverse Range of Organic Fabrics:** The clothing line at Mount Art Museum boasts a diverse array of sarees and suits crafted from organic fabrics such as papaya silk, pineapple silk, rose petal silk, and banana silk. Each fabric is chosen for its unique properties, textures, and sustainability factors, offering visitors a variety of eco-friendly fashion choices.

- **Papaya Silk:** Papaya silk is known for being sourced sustainably from papaya plant fiber. The museum's use of papaya silk aligns with its commitment to eco-friendly practices by choosing materials that have minimal environmental impact during cultivation and production. Papaya silk provides a luxurious and smooth texture to the clothing, offering a comfortable and elegant wearing experience for visitors.
- **Pineapple Silk:** Clothing made from pineapple silk signifies the museum's embrace of innovative and sustainable materials. Pineapple silk is often derived from pineapple leaf fibre, promoting the efficient use of by-products from the fruit industry. The use of pineapple silk in the clothing line emphasizes the museum's consideration for the end-of-life impact, as pineapple silk is biodegradable and reduces environmental waste.
- **Rose Petal Silk:** Rose petal silk brings a unique touch to the clothing line, offering potential benefits for the skin. Rose petals are known for their soothing and toning properties, contributing to a sensory and holistic experience for individuals wearing these garments. The museum's commitment to sustainability extends to the dyeing processes used for rose petal silk, ensuring that eco-friendly methods are employed, minimizing harm to the environment.
- **Banana Silk:** Banana silk is often created from banana plant pseudostem, utilizing agricultural waste that would otherwise be discarded. This aligns with the museum's dedication to utilizing resources efficiently and reducing waste in textile production. Clothing made from banana silk showcases the strength and durability of this natural fibre, providing visitors with garments that have a longer lifespan, contributing to sustainable fashion practices.
- **Eco-friendly Approach to Fashion:** By incorporating these organic fabrics into the clothing line, Mount Art Museum actively contributes to reducing the ecological footprint associated with conventional fabric production. Organic fabrics generally involve fewer chemicals, pesticides, and synthetic materials, promoting a more sustainable and environmentally friendly fashion industry. The clothing line serves as an educational tool, informing visitors about alternative and eco-friendly materials. Visitors gain insights into the potential of sustainable fashion choices, fostering awareness and encouraging conscious consumer behaviour.
- **Aligning with Visitor Values:** The eco-friendly clothing line aligns with the values of conscious consumers who prioritize sustainability in their fashion choices. Visitors are presented with stylish alternatives that not only look good but also contribute to environmental conservation.

The eco-friendly clothing line at Mount Art Museum represents a meticulous curation of organic fabrics, showcasing a commitment to sustainability, innovation, and holistic fashion choices. The incorporation of papaya silk, pineapple silk, rose petal silk, and banana silk into the clothing line exemplifies the museum's role as a proponent of eco-conscious fashion, offering visitors a unique and environmentally friendly shopping experience.

Holistic Benefits for Health and Environment

- **Well-being Through Natural Textiles:** The emphasis on natural textiles in both bedspreads and clothing goes beyond conventional notions of comfort. These textiles, such as bamboo, cotton, linen, hemp, and various plant-

based silks, offer additional therapeutic benefits. The intentional use of these materials indicates a focus on promoting overall well-being.

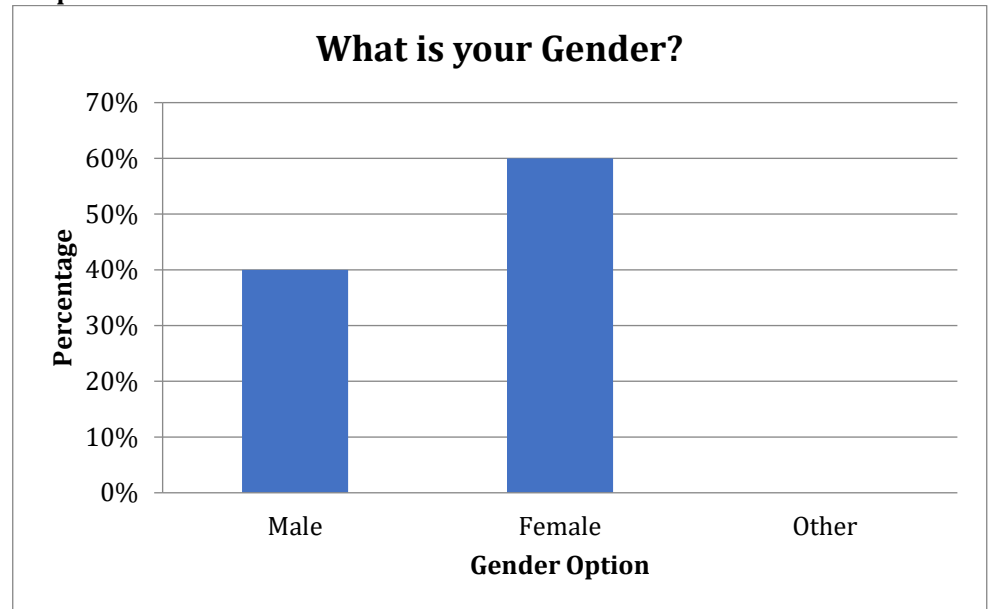
- **Therapeutic Qualities:** The use of natural fibres like bamboo, cotton, linen, and hemp in bedspreads is designed to address health concerns. These materials have therapeutic qualities that contribute to alleviating bodily pains and mitigating skin disorders often associated with synthetic textiles. Visitors are offered products that prioritize health alongside functionality.
- **Antibacterial Bedspreads:** The incorporation of antibacterial bedspreads demonstrates a commitment to promoting health in sleeping environments. These bedspreads, known for their antibacterial properties, provide a hygienic and health-conscious option for users. This feature contributes to a holistic approach to wellness.
- **Year-round Comfort and Sustainability:** Bedspreads designed for warmth in winter and coolness in summer offer year-round comfort. This adaptability aligns with sustainable practices by promoting the use of a single product throughout the year, reducing the need for seasonal replacements and minimizing environmental impact.
- **Eco-friendly Fashion Choices:** The museum's eco-friendly clothing line reflects a conscious effort to provide sustainable fashion choices. By incorporating organic fabrics like papaya silk, pineapple silk, rose petal silk, and banana silk, the museum promotes environmentally friendly alternatives. Visitors can make fashion choices that resonate with their values of environmental responsibility.
- **Educational Component:** The holistic approach includes an educational component, informing visitors about the benefits of natural textiles for both personal health and the environment. This awareness-raising aspect positions the museum as a source of knowledge and guidance for individuals looking to make informed and conscious consumer choices.
- **Conscious Consumerism:** The museum becomes a beacon for conscious consumerism, catering to individuals seeking products that align with their values. Visitors who prioritize health and environmental responsibility in their purchasing decisions find a curated selection of items that meet these criteria.
- **Environmental Stewardship:** The use of organic fabrics in both bedspreads and clothing contributes to environmental stewardship. Organic materials generally involve fewer chemicals and synthetic inputs, reducing the ecological footprint associated with conventional textile production. This aligns with larger goals of sustainable living and environmental conservation.
- **Promoting Sustainable Practices:** By prioritizing natural and organic materials, the museum sets an example for the textile and garment industries. It showcases that sustainability and holistic well-being can be seamlessly integrated into products without compromising style, comfort, or functionality.

The museum's holistic approach to utilizing natural textiles in both bedspreads and clothing reflects a commitment to overall well-being, conscious consumerism, and environmental responsibility. The intentional curation of products that address health concerns, promote sustainable practices, and educate visitors positions the museum as a proactive advocate for a holistic and eco-friendly lifestyle. Visitors are

not only offered products; they are invited to participate in a broader movement towards health-conscious and environmentally responsible living.

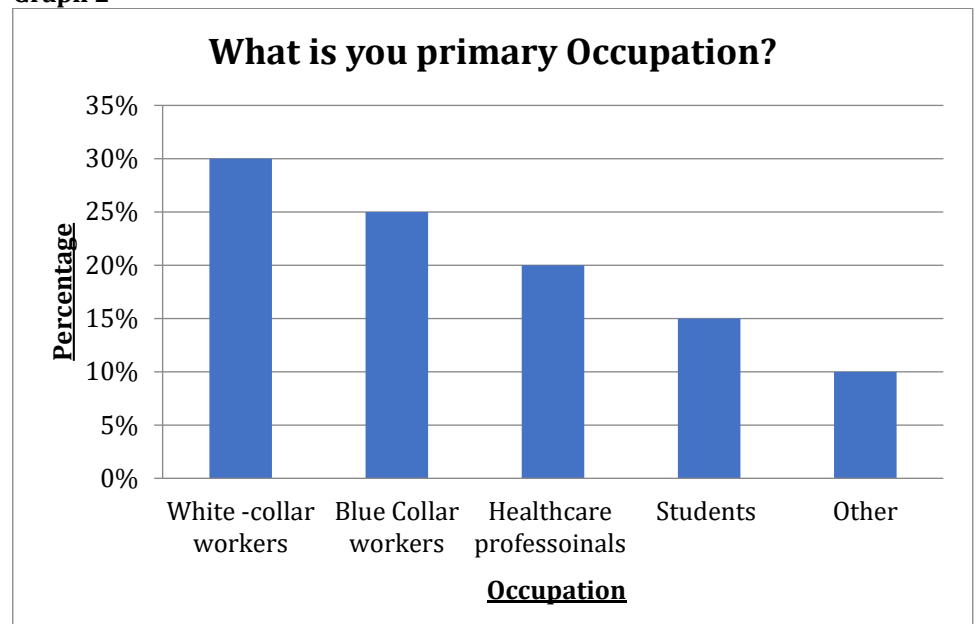
Demographic Information

Graph 1



Graph 1 Gender distribution is slightly skewed towards females.

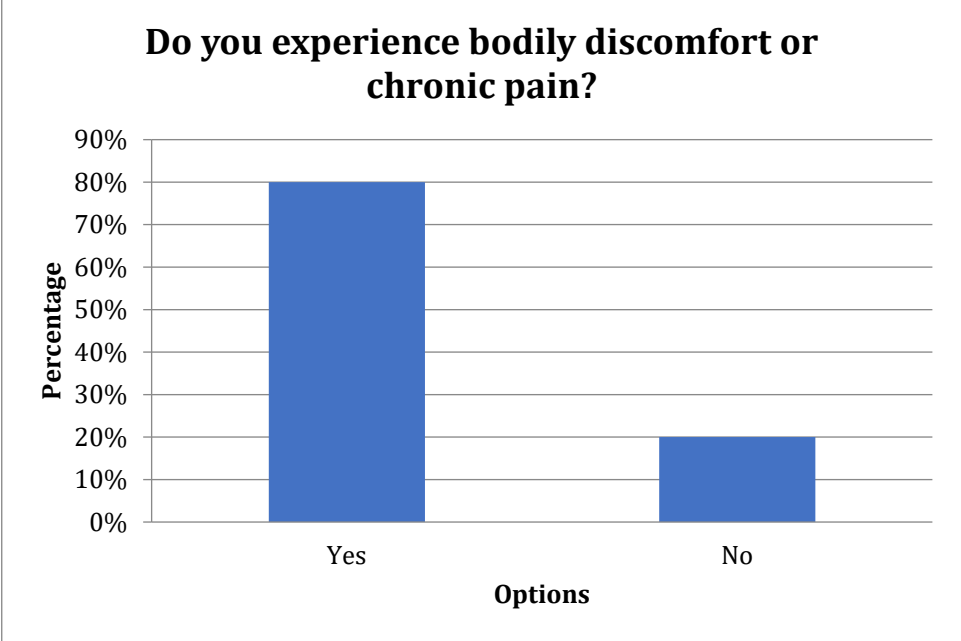
Graph 2



Graph 2 Occupationally, there is a diverse mix with a notable presence of white-collar workers.

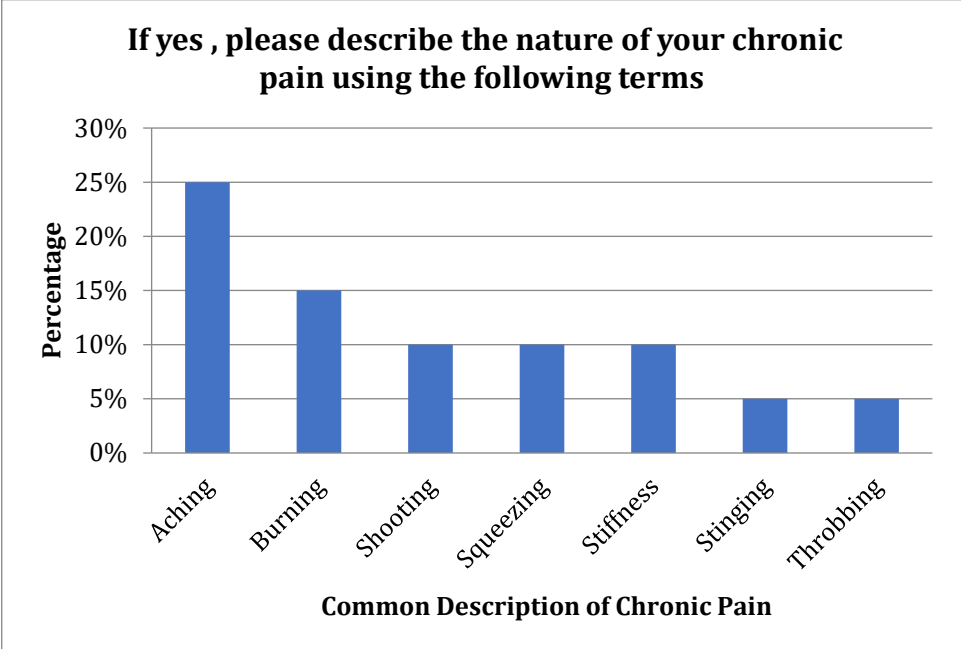
II: Health Concerns

Graph 3



Graph 3 Almost more than half of the participants report experiencing bodily discomfort or chronic pain, indicating a substantial portion of the population dealing with health issues.

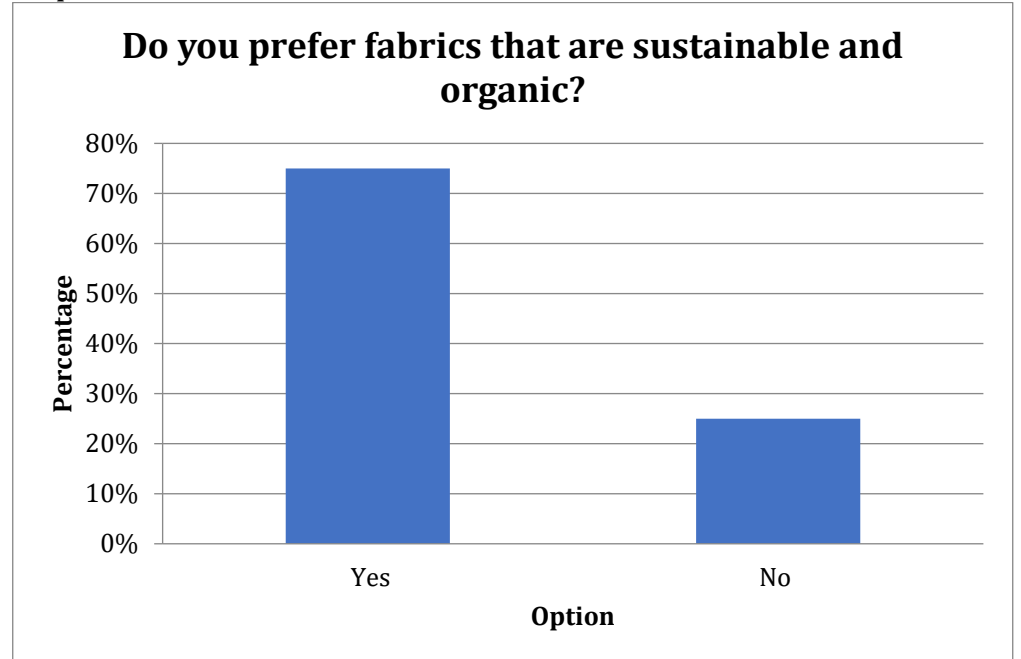
Graph 4



Graph 4 Chronic pain is reported by a fifth of the participants, with varied descriptions such as aching and burning.

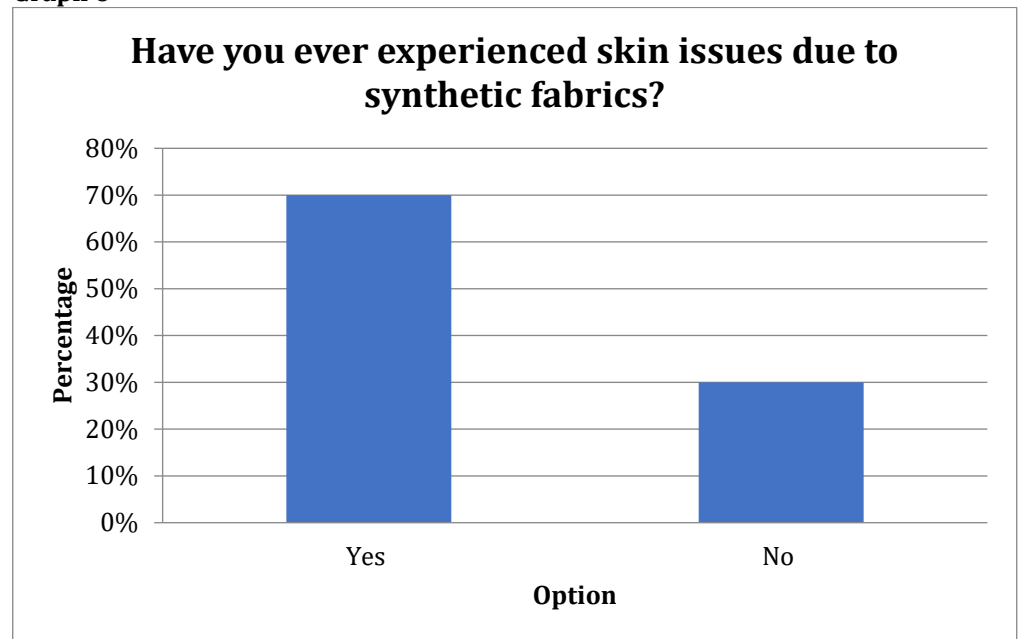
III: Textile Preferences

Graph 5



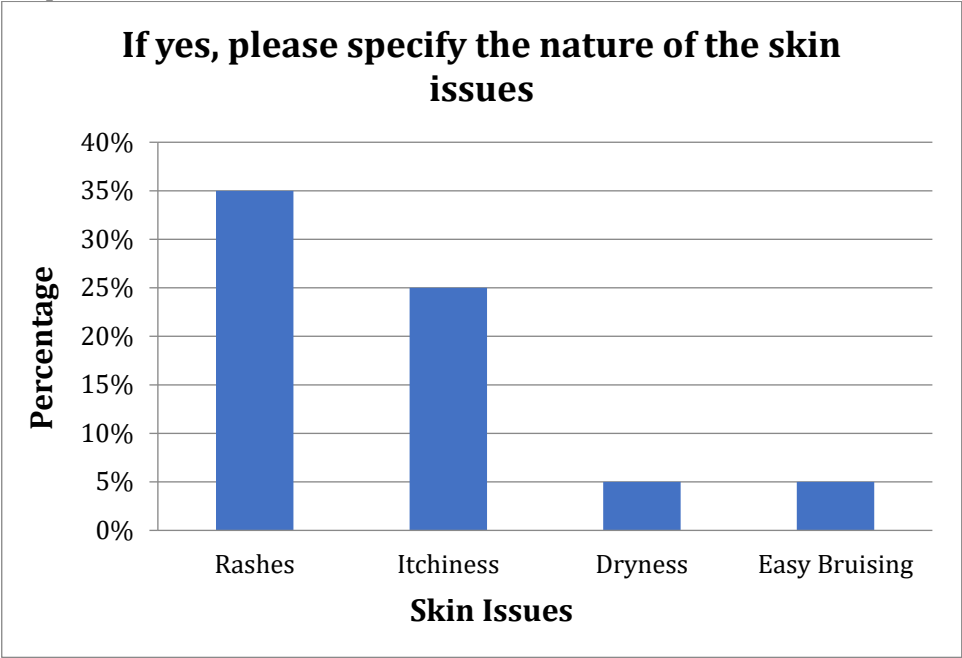
Graph 5 A substantial majority (75%) prefer sustainable and organic fabrics, suggesting a growing market for eco-friendly textiles.

Graph 6



Graph 6 Around 70% of participants have experienced skin issues due to synthetic fabrics, highlighting a potential concern in the market.

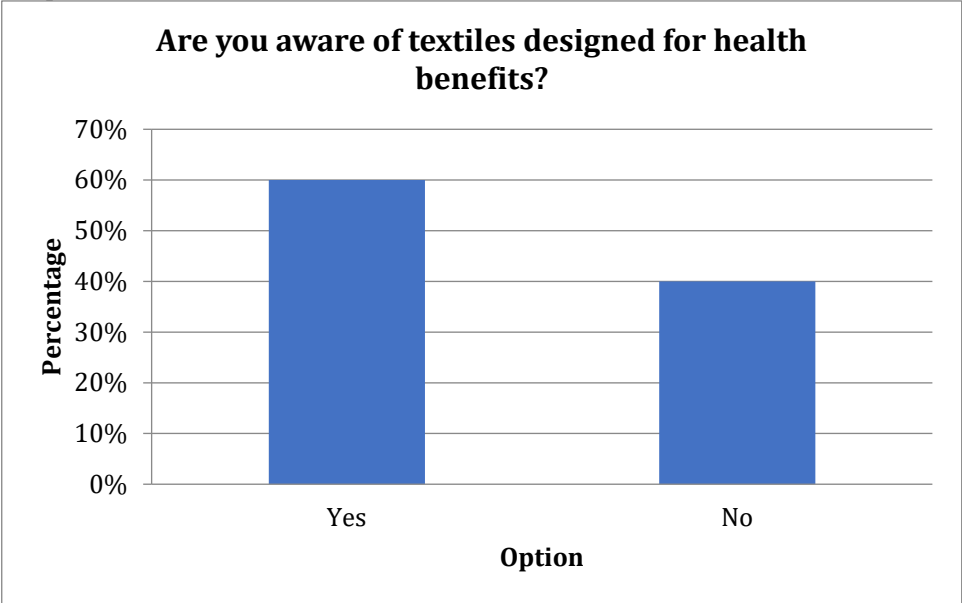
Graph 7



Graph 7 The nature of reported skin issues is diverse, with rashes being the most common.

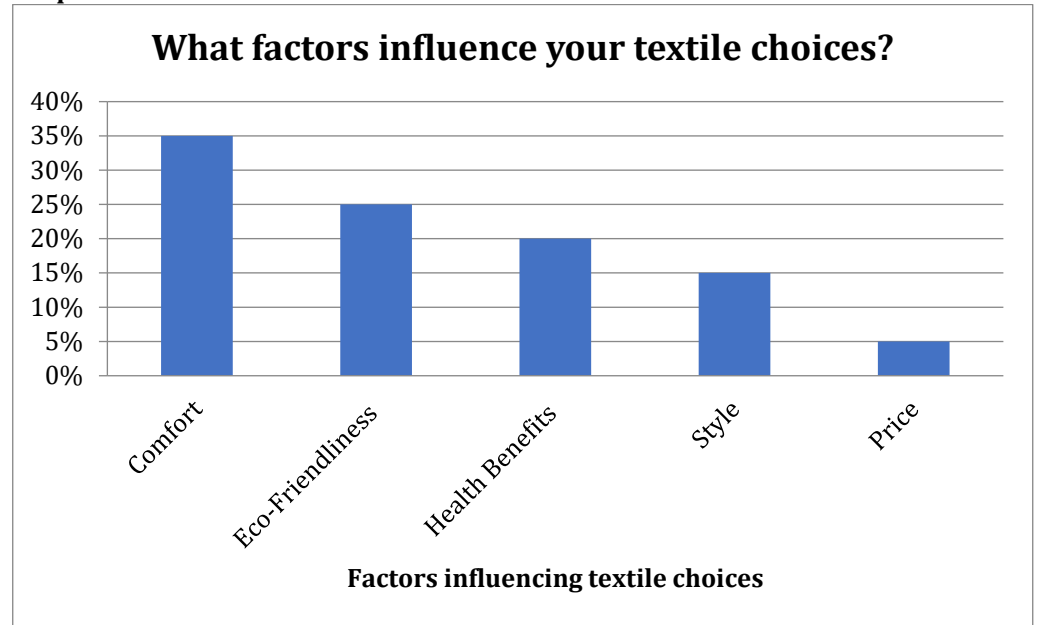
IV: Awareness of Health Textiles

Graph 8



Graph 8 60% of participants are aware of textiles designed for health benefits, indicating a moderate level of awareness.

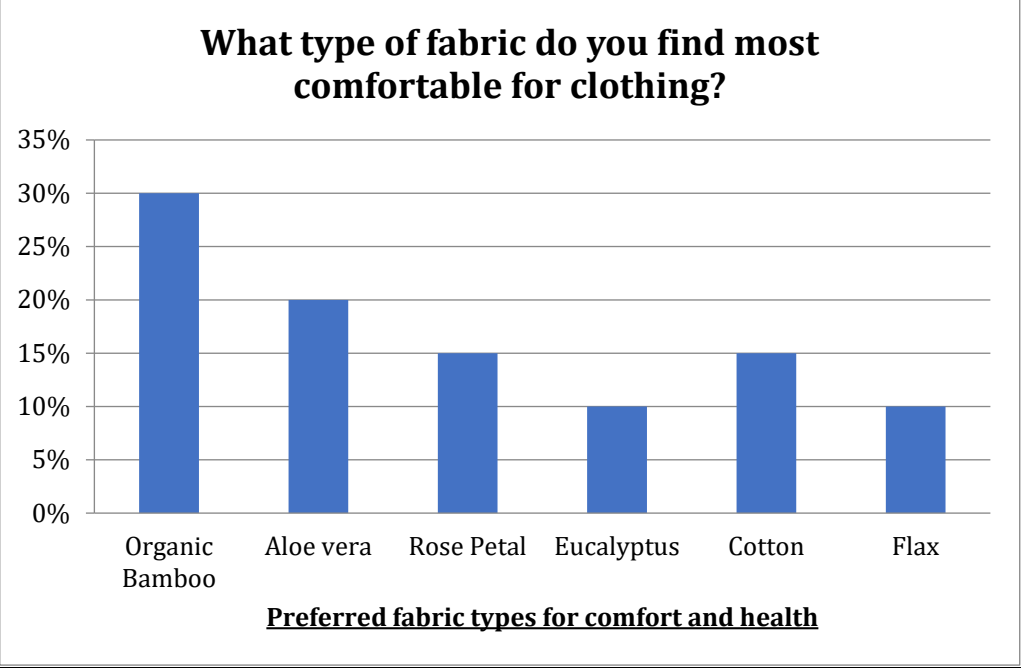
Graph 9



Graph 9 Comfort is the most influential factor in textile choices, followed by eco-friendliness and health benefits.

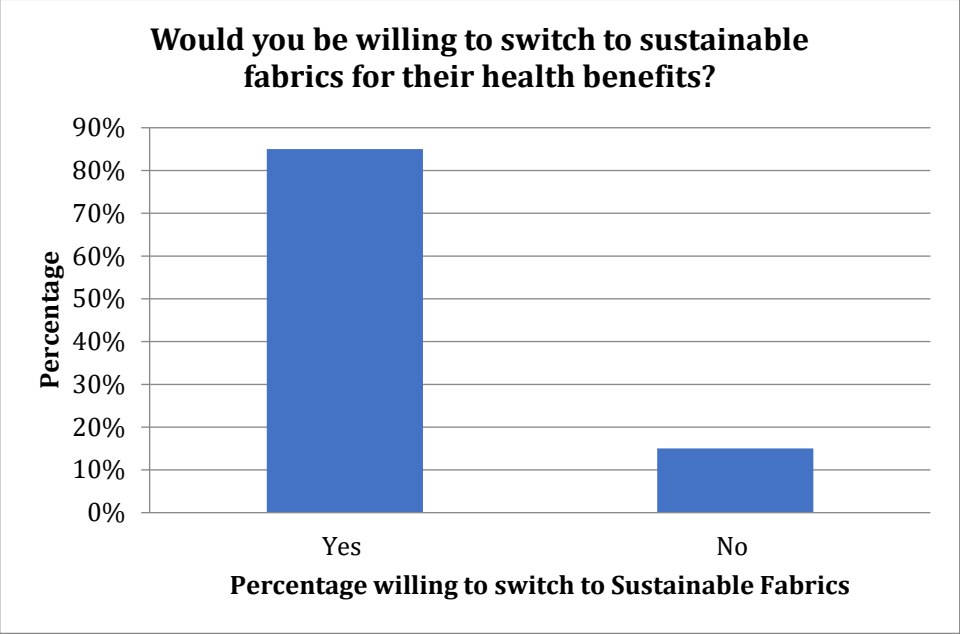
V: Fabric Preferences

Graph 10



Graph 10 Bamboo and Aloe Vera fabrics are the most preferred, indicating a potential market shift towards these sustainable options.

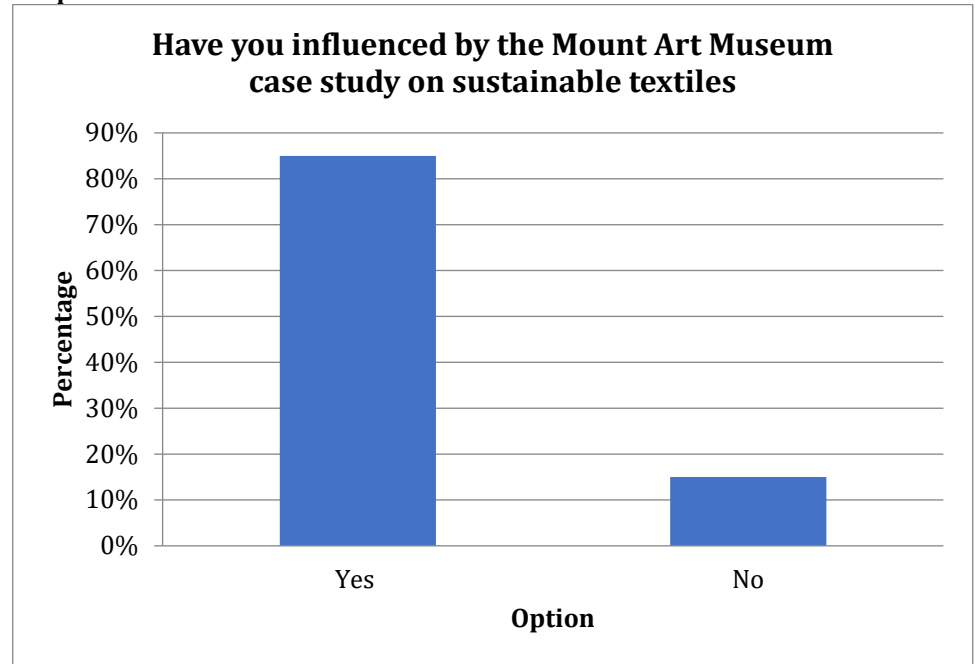
Graph 11



Graph 11 A significant portion (85%) is willing to switch to sustainable fabrics, underlining a potential shift in consumer behaviour.

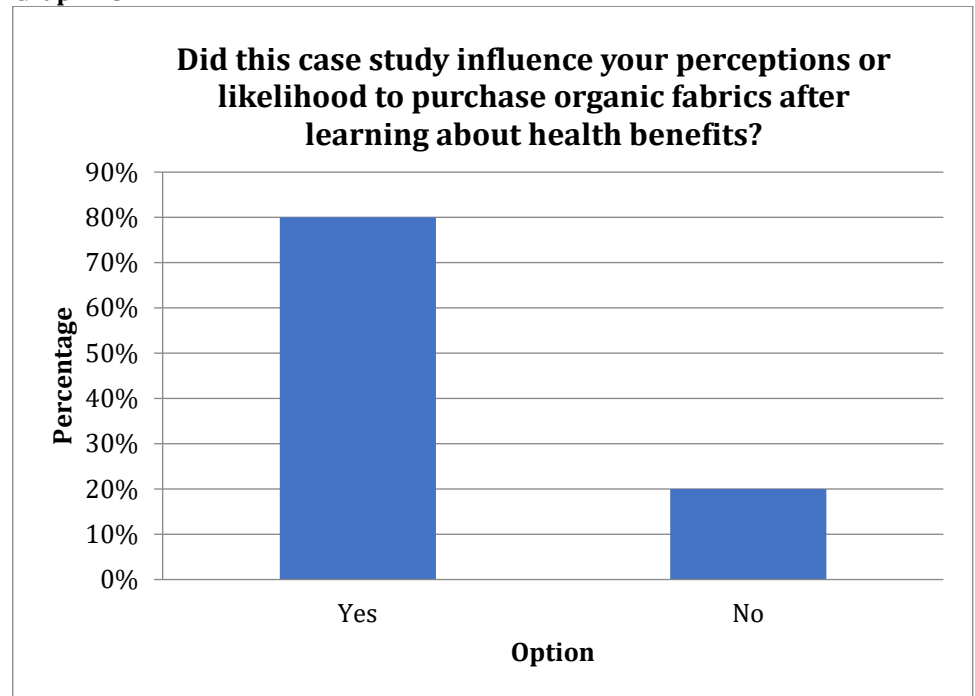
VI: Case Study Impact

Graph 12

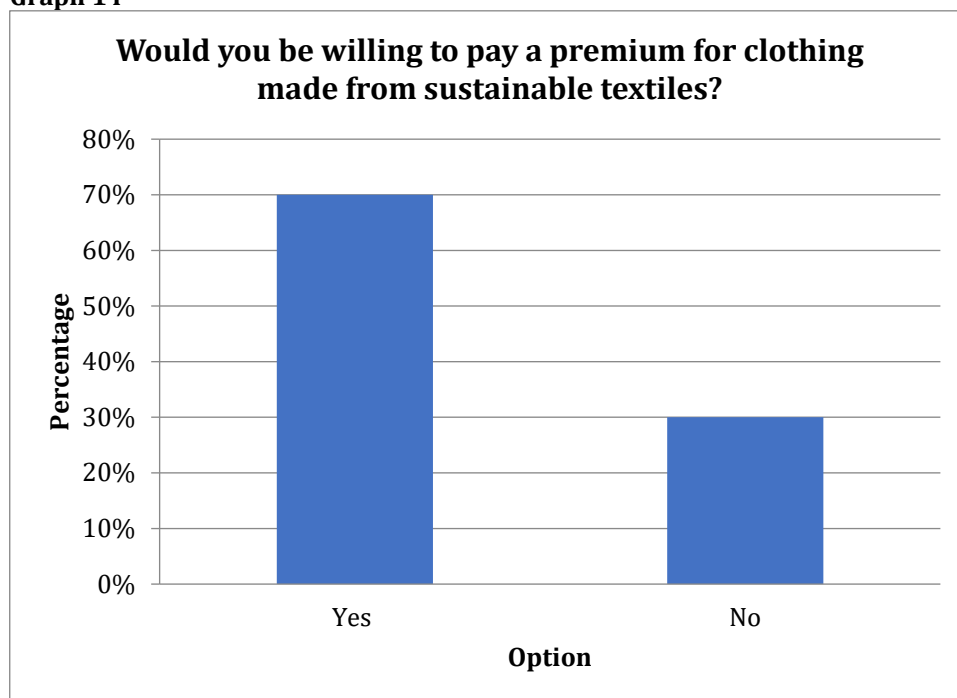


Graph 12 The case study has influenced a substantial portion (82%) of participants, indicating the potential of such initiatives in shaping perceptions.

Graph 13



Graph 13 A considerable number (80%) are more likely to purchase organic fabrics after learning about health benefits, showing the persuasive impact of the case study.

Graph 14

Graph 14 There is a notable increase (20%) in willingness to pay a premium for sustainable textiles, suggesting a positive shift in consumer attitudes.

3. OVERALL IMPLICATIONS

The data suggests a growing interest in sustainable and organic textiles among consumers. Health concerns, particularly related to skin issues, play a role in textile choices. Initiatives like the Mount Art Museum case study can have a positive impact on consumer perceptions and purchasing decisions. There is a potential market for innovative fabrics like bamboo, Aloe Vera, and others that offer health benefits. These insights could guide businesses and policymakers in tailoring products and initiatives to meet consumer preferences, emphasizing the importance of sustainability and health benefits in the textile industry.

4. CONCLUSION

This comprehensive study on sustainable textiles and health-conscious consumer preferences has provided valuable insights into various aspects of the textile industry. The demographic analysis showcased a diverse representation across age groups, with a notable presence and a slight gender imbalance favouring females. The prevalence of bodily discomfort and chronic pain among participants underscores the importance of health-related considerations in their lives, emphasizing the need for textiles that address these concerns. A significant majority expressed a strong preference for sustainable and organic fabrics, indicating a burgeoning market for eco-friendly textiles. The diversity of reported skin issues due to synthetic fabrics, particularly rashes, underscores the significance of fabric quality and its impact on skin health. The study also highlighted a moderate level of

awareness regarding textiles designed for health benefits, with comfort, eco-friendliness, and health benefits identified as key factors influencing textile choices. Bamboo and Aloe Vera fabrics emerged as popular choices, suggesting a paradigm shift towards sustainability. The Mount Art Museum case study demonstrated its influence on participants, with increased willingness to purchase organic fabrics and pay a premium for sustainable textiles. Overall, the findings signal a transformative period for the textile industry, emphasizing the growing importance of eco-friendly practices and health considerations in meeting evolving consumer preferences. Businesses in this sector are poised to benefit by aligning their products with these emerging trends.

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

None.

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