

**International Conference on Apparel, Textiles and Fashion Designing
– ICATFD 2015**

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GARI CONFERENCE

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Official website of the conference

International Conference on Apparel, Textiles and Fashion Designing – ICATFD 2015

Edited by GARI Conference Committee 2015

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PREFACE

Global Academic Research Institute (Pvt) Ltd is proud to present International Conference on Apparel, Textiles and Fashion Designing – ICATFD 2015 which is a continuation of a series of successful research symposium. The Inaugural Session and the Technical Sessions were conducted on 20th November 2015 at Galle Face Hotel, Colombo, Sri Lanka. The conference was organized into thirty tracks for which empirical, conceptual and methodological papers were received from academics, practitioners and public policy makers were accepted paying austere attention to the academic standards of the papers. To maintain consistency, authors were prescribed to follow the academic writing format of the GARI Publishers. The reviewing process was apparently transparent where papers underwent a double blinded review process by eminent subject specialists in respective areas. Thus refereed full papers selected to be presented at the conference were published here. It should be noted that the ICATFD 2015 committee and Global Academic Research Institute (Pvt) Ltd do not assume any responsibility for any errors or omissions in the research papers which rests solely with the authors.

Special thank goes to an enlightening key note addresses was delivered by Ms. Janet Best (Colour Consultant / Natic AG CCol FSDCC Text ATI), Prof.Dr. Marsha Dickson (Co-Director of Sustainable Apparel Initiative, USA), Mr. Muhammad Fawad Noori (Choreographer and Creative Design Head, GIFT University). And our special thanks go to Sri Lanka Convention Bureau which work with us as Strategic Hospitality Partners.

Our specially thanks to international media partner of the conference Oxford Business Group and Natic. The organizing committee specially thanks to our Journal Publications Horizon Research Publishing Corporation, The Journal of Infection in Developing Countries, IISTE journals, International Journal of Fitness, Health, Physical Education & Iron Games, International Association of Academicians, Scholars, Scientists and Engineers (IAASSE), Science and Engineering Publishing Company Study of Civil Engineering and Architecture (SCEA), Discovery Journal - India, The Journal of Nuclear Energy Science & Power Generation Technology, Advances in Computer Science : an International Journal, Cambridge Scholars Publishing, OMICS Group Journals – USA, Further the support given by Sri Lankan Air-line as our Air-line partner and Official Creative Partner Dream Angle, Black Mark as our Official logistic & Photography Partner.

The conference committee expresses deep gratitude to the panel of reviewers for the priceless service rendered. Finally the committee extends sincere thanks to the presenters and participants for the valuable contribution and active participation. Our sincere thanks also go out to our Sri Lanka media partners Independence Television Network and other Media.

Conference Committee

ICATFD 2015

ABOUT SRI LANKA

This is an island of magical proportions, once known as Serendib, Taprobane, the Pearl of the Indian Ocean, and Ceylon. Set in the Indian Ocean in South Asia, the tropical island nation of Sri Lanka has a history dating back to the birth of time. It is a place where the original soul of Buddhism still flourishes and where nature's beauty remains abundant and un-spoilt. Few places in the world can offer the traveller such a remarkable combination of stunning landscapes, pristine beaches, captivating cultural heritage and unique experiences within such a compact location. Within a mere area of 65,610 kilometers lie 8 UNESCO World Heritage Sites, 1,330 kilometers of coastline - much of it pristine beach - 15 national parks showcasing an abundance of wildlife, nearly 500,000 acres of lush tea estates, 250 acres of botanical gardens, 350 waterfalls, 25,000 water bodies, to a culture that extends back to over 2,500 years. Sri Lankan cinnamon, ivory and gems had been the main cause for invasion of two nations, Portuguese and Dutch, who followed the Moor traders to the country in search of the world's best spices and riches. According to the Dutch, who reorganized the cultivation and marketing of cinnamon in Sri Lanka, the 'shores of Sri Lanka had been full of it, that you can smell it eight leagues out to sea'. Even today the country produces the world best cinnamon and one of the world's top cinnamon exporters. With Endless beaches, timeless ruins, welcoming people, herds of elephants, killer surf, cheap prices, fun trains, famous tea, flavorful food, newly gained peace and improved infrastructure Sri Lanka had been repeatedly named the next tourist destination worth all the investments. Meanwhile Sri Lanka is fast gaining popularity in the MICE tourism industry, with 11% of the total visitors coming into the country representing the segment, while the industry anticipates the arrival of 240,000 MICE tourists by 2016, which is nearly 10% of the 2.5 million tourist target. With more than one million tourist arrivals in 2012 the Sri Lankan tourism service providers has set a target of 22,500 rooms in the next five years when tourist arrivals are expected to reach 2.5 million.

Discover refreshingly Sri Lanka!

International Conference on Apparel, Textiles and Fashion Designing - ICATFD 2015

The ICATFD is an international refereed conference dedicated to the advancement of the theory and practices in Apparel, Textiles and Fashion Designing. That promotes collaborative excellence between academicians and professionals from Education. This highly exciting and challenging International Conference on Apparel, Textiles and Fashion Designing is intended to be a forum, discussion and networking place for academics, researchers, professionals, Businessman, administrators, educational leaders, policy makers, industry representatives, advanced students, and others.

Participants will find opportunities for presenting new research, exchanging information, and discussing current issues. Research papers related to all areas of Art & Fashion, Fashion Trends, Modeling trends, Modeling trends Eco textiles-sustainability development, Coexistence of craft & Technology in Fashion and textiles, Contemporary Art & fashion, Fashion trends and its impact on society, Colour Psychology, Narrative textile Art & Craft, Art and Skill of traditional dyers, Innovations in Apparel and Textiles, Technological advancement in Traditional Textile processing methods, IT application in Fashion and Textiles, Latest trends in Organized Fashion & Apparel Retailing, E-commerce for Traditional, Art and Craft, Fashion drive and Social media, Challenges in Supply chain of Apparel and Handicrafts, Fabric technology, Textile Chemistry and Finishing, Textile Dyeing and Printing, Fashion and textile product design, Garment industry and merchandise, Clothing science and technology, Quality control and testing in textile branch, Manufacturing, Nano Textiles, Nonwoven Spinning, weaving and knitting, Technical Textiles, Textiles (but are not limited to) are invited for the above international conference which is expected to be attended by the authors from all countries.

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International Conference on Apparel, Textiles and Fashion Designing – ICATFD 2015

Co – chair



Ms. Janet Best
Colour Consultant / Natific AG CCol
FSDCC Text ATI



Prof. Dr. Marsha Dickson
Chair
Co-Director of Sustainable Apparel Initiative
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Key Note Speaker



Ms. Janet Best
Colour Consultant / Natific AG CCol
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Choreographer and Creative Designer



Mr. Muhammad Fawad Noori
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Key Note Address

Ms. Janet Best

Colour Consultant / Natic AG CCol FSDCC Text ATI

Tomorrows Colours Today – Challenging the Tradition

Insight to the global fashion industry resistance to change. We now live in a world where we naturally change and upgrade our personal technology every couple of years with new phones, TV"s, tablets and download new APPS software on a daily basis. In contrast many global fashion businesses and their supply chains still run on armies of people looking at thousands of colour samples and completing duplicate excel spreadsheets. We review of the traditional way colour has been managed for the past 100 years and the tried and tested colour technology methods already embedded in the textiles industry. How brands with a millennial mind set are capitalising to deliver faster, improved colour quality, while contributing to sustainability with lower costs for all supply chain partners. Taking a look to the new wave of technology and services to empower designers as change agents.



Do your teams have the tools they need to be the best?



Fashion or famine

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Abstract

This paper addresses itself towards the progression of Fashion Trends overall the world. Human beings are the most superior intelligence dwelling on earth. Using this intelligence, they continually strive to make their lives more and more comfortable. They have been shaping their surroundings throughout the course of history to suit their comfort. Creating clothes is also among these discoveries. A lot of historians belief and have found evidences to support this belief that the first time the humans felt the need for covering themselves was due to extreme weather conditions . The very first step towards covering their bodies was by using leaves. Then as the humans started hunting animals, they started using their skins as clothes. But all these forms were very primitive and could not provide full and proper covering of their bodies until clothes were invented. Discovery of cloth got human beings to think about modifying it according to their needs. Thus fashion and trends came into being. With the advent of fashion and trends in clothing, a whole industry known as the fashion industry came into existence. To attract people, fashion designers started making their products more provocative, focusing on women thus objectifying them. In fact the supposed progress in some areas of the fashion industry rather took dressing to its most primitive form by leaving more and more parts of the body uncovered failing to fulfill the basic need for clothing. So is this a progress of fashion industry or is it rather regression towards Stone Age.

Key words: Fashion trends, fashion progression, regression, need of cloths

Product innovation ‘for customers’: a study of innovation process

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Abstract

Innovation is recognized as a mandatory requirement to enhance, distinguish and differentiate the products offered to create additional value as perceived by the customer within the fast changing business environment. Though the literature proposes various innovation process models, yet little is known regarding how to maintain the innovation process „for customers” in the apparel context. Thus, the main focus of this paper was to study the existing innovation process to explore the input channels used to identify the customers and their preferences and the method of using this knowledge to shape the innovation process to fulfill the needs and expectations of the target customers. Mainly considering the objectives of the study, qualitative multiple case studies were carried out based on semi-structured interviews, documentation and archival data in two companies operating in the Sri Lankan apparel industry. The principle of template analysis was adopted for studying the results. Basically, eight main activity stages and five decision gates were identified within the three simplified phases. The process is initiated with the opportunity identification activity. Though it is revealed that conventional methods are still applied to identify customer needs and expectations, the main focus during the conception and development phases is to evaluate innovative ideas with market potential and competitive advantage together with the aspects of technical feasibility and internal production capabilities. It also shows that there are ample opportunities for future researchers of different industries, since this research sheds much light on what actually occurs during the innovation process.

Key words – product innovation, for customer, innovation process, stages of the process, decision points, sources of information

The new product development (npd) process: a systematic review of literature applicable for the apparel industry

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Abstract

The New Product Development (NPD) is one of the key factors to gain and maintain the competitive advantage among leading industries. Consumers are demanding for value added innovative products for competitive prices. This trend is more applicable among apparel consumers and major markets. Hence, apparel producers are facing immense pressure on producing new products with unique features for competitive prices. Therefore, apparel industrialists are insisted to adopt systematic NPD models to experience successful new product developments. In the study, each NPD model was extracted from a verity of diversified industries and critically evaluated, to examine the applicability for the apparel industry, using relevant performance indicators (PI) and characteristics. Those PIs are the variables that reflect key determinants which need to be considered by industrialists when selecting most appropriate NPD models to apparel industry. Such evaluation criteria is urged to screen, most effective NPD model to Apparel industry, as apparel product design and development operations are pertaining unique set of characteristics. This systematic literature review is more important to apparel industrialist as well as academia in order to develop adoptable NPD models for Apparel. The authors have presented the limitations of existing market driven NPD models and highlighted the need for dynamic, collaborative, engineered NPD models to optimize internal resource utilization. As concluding remarks the study shows the directions to academics and practitioners to develop hybrid NPD models specifically for apparel with the use of emerging NPD strategies and tools.

Keywords: Apparel Industry, New Product Development Models, Performance Indicators

The effect of art movements on design elements in the transition period from haute couture to ready made clothing

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Abstract

Fashion is a concept used to more apparel terms with different meanings in related fields that are included are spread along a wide area. When it is examined various factors influencing the formation of fashion since; fashion is seen as a close relationship with other disciplines. Art is one of these disciplines; It is considered to be conceptually different from the fashion but these two terms are known to interact with each other. In this study mainly depending on the visual art movements ranging from fashion and design elements were investigated in the transition period from Haute Couture to Ready Made clothing. The topic is made with data obtained by reviewing the literature covers the mentioned period of the fashion and art movements. In this study; by the formation process of fashion design, concepts such as Haute Couture and Ready-to-Wear is intended to be interpreted in context Arts and Crafts, Art Nouveau, Bauhaus, Constructivism. Research results involving some fashion concepts acquired in this paper, the influence of art movements for the periods being questioned in what direction these concepts has changed. As a result of this survey; the forms of fashion design elements influenced by visual art movements such as Arts and Crafts, Art Nouveau, Bauhaus, Constructivism; that were examined how interactions and similarities seen in other branches of art forms and structures such as architecture, painting, sculptures.

Keywords: Haute Couture, Ready-to-Wear, Art Movements, Fashion Design



Narratives of sustainability initiatives through craft design education

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Abstract

Fast Fashion And Consumerism Have An Embedded Association With The Exponential Growth Of Mass-Produced Goods Which Erode Previously-Cherished Systems And Processes Leading To The Crisis Of Languishing Crafts. The Design Academia Of Higher Education Institutions Has A Responsibility Of Addressing These Problems And To Conserve Systems Which Epitomize The Cultural Ethos Of The Land. An Innovative Institutional Approach To Introduce Students To The Crafting Traditions Is A Vital Link To National Identity Which, If Not Sustained Through Academic Vigour, May Be Irretrievably Lost. It Is Therefore Considered Imperative That Academics Be Aligned With Design Innovation, Sensitivity Towards The Socio-Cultural Environment, Strategizing Business Opportunities And Exploring New Marketing Avenues For Handcrafted Products And Textiles. The Envisaged Learning Outcome Often Requires Different Ways Of Re-Enforcing Cultural References And Design Nuances Beyond The Classroom To Actual Ground Realities. This Requires Interface Between Academia And Other Government/ Non-Government Agencies And Artisan Clusters To Synergize Their Efforts Towards A Common Goal. The First-Hand Experience Of Students Engaging With Craftspeople Enabling The Former To Imbibe The Everyday Reality And To Understand The Embedded Challenges Faced By The Latter, Is An Important Educational Component In The Disciplinary Culture. Analyzing The Need For Re-Iteration Of Craft Traditions As A Unique Curricular Aspect Of Design Education In India, This Paper Focusses On Theoretical Underpinnings And Processes Of The Craft Cluster Initiative Of National Institute Of Fashion Technology. Using Selected Case Studies, It Narrates The Experiential Learning Outcomes For Students And Its Incorporation In Future Entrepreneurial Design Ventures.

Keywords: Design education, entrepreneurship, handcrafting traditions, sustainability



A guide for practice led projects: exploration of craft practice with textile design

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Abstract

Before the separation of Pakistan, subcontinent was famous for its crafts around the world. The crafts of Pakistan are considered the pride of the country. All provinces are famous for its crafts but every province has its own signature style, specially in doing embroideries or printing and dyeing fabrics in different ways. This practice led research is done in Jhang which involves the crafts of the city in final project of craft and textile design. The exhibition reveals the knowledge about craft's persons and their practices from so many years. True documentation has been done of the actual practice of artisans/craft's men. And the same practice is revised in more innovative way by designers. In most of the projects country's famous crafts are used. The main objective of some projects was to promote craft of the city and craft person. The exhibition shows that how author applied her industrial practice and her post graduate experience in given project to students. This exhibition did ignore technology. Digital culture has spread all over the world. In this crucial time, it's hard to maintain the importance of cultural crafts in the presence of textile printing technology. The most important point is to realize the designer's responsibility to bring these crafts in fashion again with the usage of new technology. This research aims to theoretically inform practitioner's knowledge and process so that the same practice could be more polished in future to get inspired by this project and practice.

Key words: design technology, textile design, craft and design process, artisans/ craft persons



Learning, teaching and assessment strategies: how the fashion programme promotes the attainment of graduate attributes

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Abstract

The demands made by globalization on higher education institutions are that they should go beyond providing learners with necessary cognitive skills and competencies, but prepare them for working in a knowledge society (du Pre 2009: 31). If our goal is to develop “globally portable citizens, able to engage effectively with knowledge generation and management in increasingly diverse and globalized workplaces” (Kift, 2008), then DUT’s curriculum and pedagogy has to be intentionally designed to prepare our graduates for employment, while simultaneously preparing them for critical citizenship in an emergent and still fragile democracy (DUT’s „General Education Guidelines“ document, submitted to Senate, 29 August 2012). In keeping with the mission of the university and the faculty, as well as the changes taking place in industry, the Department of Fashion and Textiles embraced graduate attributes to build a more student-centered approach to teaching, learning and assessment. The curriculum renewal process was seen as a vehicle through which the department could create space for an engaged and vibrant process of learning and development for both staff and students; a dialogue that placed student-centredness, student engagement and graduate attributes at the centre. This paper highlights the pedagogies that were implemented to shape the undergraduate curriculum; the deconstruction of the subject content; and the move towards flexible learning, blended learning, and self-directed learning, using technology. It also addresses the challenges associated with graduate attributes and curriculum renewal in respect of academic staff engagement, the time needed for innovations to be completed, and evidencing achievement of graduate attributes.

Keywords: curriculum, teaching learning and assessment, student-centredness, graduate attributes



The right colour sells, how do i get it?

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Abstract

Colour is the first thing we notice in anything that we see. Colour is responsible of our perception about things around us. It's the most important criteria customers use when they buy clothes. Retailers around the world make losses when they are not able to provide the right colour in the right season at the right price. They give discounts to sell the accumulated stocks and this is probably the biggest loss to them. Colour forecasting is a multimillion dollar business and it takes some serious research to get colour and trends that customers would like to buy. Understanding your customer goes a long way in making your business a success.

Keywords: Colour, Color, Textile, Fashion, Colour Forecasting, Colour Psychology



To study of the percentage absorption of natural dye on dyeing of linen with dry pomegranate rind

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Abstract

The textile industry uses much different kind of fibers as its, raw material some of this fiber was known and used in the earlier years of civilization, as well as in modern times. Many types of fiber are available some are natural and other are synthetic. Natural fibers that occur in nature can be classified as vegetable, animal and mineral fibers. Silk is most beautiful, lustrous and a perfect fiber, it has been known and used as a textile material for thousands of years. No other fiber was so highly prized by the conquering races of the ancient world. This ancient preference is justified by the latest conclusion of science. Chemical analysis has shown silk to be mainly constituted of fibroin. From soft mucous substances, fibroin hardens into filament shape and becomes a strong fiber, strong, bright, flexible and elastic. Minutely separable, the fibers of silk, if spun together, make a compact and even thread. These are the characteristics, which the textile worker seeks in every fiber. The ideal is actually found in silk because it is made up of filament so slender, that it can be woven into robes for consumers. Because it is so tender and flexible, that the thread of silk combine in fabric of impenetrable density, and impervious to light, moisture or heat. Silk is the protein excreted by the silk worm. The appeal of color, is universal it repeatedly serves as a common language. Consumers are usually more concerned with color, than with any other characteristics of a textile product. The textile industries are aware of the consumer's desire for appealing colors. Manufacturers and retailers know that the consumer, who selects an item because of its color will be extremely annoyed if the color is not maintained from the anticipated life of the product. Consequently, research by dyestuff manufacturers has resulted in coloring agent that satisfies the esthetic demands of consumers and provide lasting pleasure if the color is properly applied in the fabric care fully maintained. However, it is important to note, that there are some dyestuffs that do not produce durable colors when applied to some types of fibers. An expert who knows what dyes work with what types of fiber and how durable they will be in end use must use the dye. Mainly there are two types of dyes natural dye and synthetic dye. Synthetic dye is toxic and environment unfriendly. Many drawbacks of synthetic dye have inspired environmentalists to look for eco-friendly product. Therefore, natural dyes now give more importance. Many researches were undertaken for extraction of dyes from different natural coloring sources. Researchers conduct study of Tamarind leaves to prepare dye for, dyeing of silk fabric.

Key words:- Natural dye., Color ,Linen fabric, , Dry Pomegranate Rind' Mordents , Optical density, Dyeing.

Transport properties of integrated textile

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Abstract

Transport properties of heat, moisture and air are among the main physiological properties of textile materials, which is due to the human needs while wearing clothes and to the basic physiological activities of the skin. The physiological properties of textiles depend mainly on structure fibres and structure textiles fibrous assembly, which is defined by their composition and construction. Thus, fibrous materials consist of fibres and air, both having an important influence on their physiological and utility *properties*. Good clothes are those with suitable thermal insulation (low thermal conductivity λ) and the water vapour permeability as high as possible.

$$\lambda_{\text{textile}} = \lambda_{\text{air}} + \lambda_{\text{fiber}} + \lambda_{\text{radiation}}$$

The mobility of such trapped air should be as low as possible in order to maintain a sufficiently high value of resistance of heat transfer:

$$r = h/\lambda$$

λ – thermal conductivity (W.m-1.K-1), h – thickness of measured textile (m), r – thermal resistance of heat conduction (W-1.K.m2).

The main properties of integrated knitted fabric is that they contain a hydrophobic, hygienic „diffusion“ layer on their reserve side (towards the skin), which is composed of polypropylene or other synthetic hydrophobic fibres. The front side is a hydrophilic „absorption“ layer, containing natural or chemical fibres, such as cotton, wool, bamboo, or a mixture with viscose or other chemical fibres with higher water absorption.

Keyword: Transport properties, fibres and air, hydrophobic, hygienic



Comparative study on volatile organic compound neutralization and uv protection property of cotton fabrics pigment printed with different ratios of titania nano particles

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Abstract

This research is conducted to reduce air pollutants found in indoor and outdoor through pigment printed fabric. This is an attempt to target Volatile organic compounds as Air pollutants which are one of the causes of air pollution and global warming. Vocs are widely used in industries, alcohol beverages, perfumes and fuels etc. Pigment printing is performed on Cotton fabrics with the use of Nano Titanium Dioxide particles. Titania nano particles synthesized on a sonication bath machine by preparing three different recipes of nano titanium dioxide finish by adding various ratios of titanium prop oxide, ethanol at different ph levels of distilled water. These three finishes were mixed with binder, thickener and Ammonia Liquor to form a printing paste with blue color pigment. Cotton fabrics were printed with flat bed screen printing machine. Fabrics were dried on 120 degree on stenter frame machine and cured at three different temperatures. Nano titania particles were determined by electron microscopic machine. Volatile Organic compound meter determines the neutralization of voc compounds in an enclosed wooden box with a door of glass against a plate of Volatile organic compound i.e. ethanol and UV protection factor of pigment printed cotton fabrics is tested by Ultra violet visible spectrophotometer. All pigment printed fabrics tested by Volatile Organic compound meter showed neutralization of Ethanol and Ultra Violet Visible Spectrophotometer ensured Ultra Violet protection of pigment printed fabrics. Pigment Printed fabrics with Nano Titanium Dioxide particles can be effectively used in home apparels, industry areas to reduce indoor air pollution effectively.

Keywords: *Titania nano particles, Titanium Dioxide, Volatile Organic Compound, Ultra Violet.*



Everyday technologies from space: nasa space suit design concepts/theories and applications in the context of clothing design

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Abstract

This paper explores design concepts and theoretical approaches to space suit design from mercury to shuttle missions. It will also analyze the sensory, digital and electronic systems that can be applicable to fashion and textile design. A space suit is specially designed to be worn in the harsh environment of outer space and temperature extremes. Space suits augment the basic pressure garment with a complex system of equipment and environmental systems designed to keep the wearer comfortable, and to minimize the effort required to bend the limbs, resisting a soft pressure garment's natural tendency to stiffen against the vacuum. A self-contained oxygen supply and environmental control system is frequently employed to allow complete freedom of movement, independent of the spacecraft. A space suit must perform several functions to allow its wearer to function safely and comfortably. It must address issues such as: a stable internal pressure; mobility; temperature regulation; a communication system, with external electrical connection; and means of collecting and containing solid and liquid bodily waste.

Key Word: Nasa space, context of clothing design, temperature regulation



Perception of brick and mortar store atmospherics: the cross-cultural impact on consumer behavior

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Abstract

Color, lighting and space planning have proven to affect consumer behavior and shopping experiences (Finlay, Marmurek, Kanetkar, & Londerville, 2010). Cultural norms can also be influential on a consumer's reaction to the interiors of retail spaces; finding them either pleasant or unpleasant. Studies have been conducted to see whether or not these design aspects impact consumer behavior (Machleit et al., 2000), but studies are lacking that measure whether or not these emotions are culturally tied. Kotler (1974) is credited with defining the term „atmospherics“ as the intentional control and structuring of environmental cues. Turley and Milliman (2000) argued that buying atmospheres can be designed to produce specific emotional effects in shoppers, increasing their purchasing potential based on the environment alone. The primary focus of this study is to identify those attributes that affect store preference and purchasing behavior. Focusing on color, lighting and space planning and their effects from a more cultural perspective takes on a new meaning for interior designers who will inevitably be working with people across many cultures. This research attempts to uncover answers to the following: Do cultural influences, with regard to a collectivist versus an individualistic society, affect the opinions of a perception of an interior environment in retail spaces?; Do store atmospherics affect whether an individual finds a retail store environment appealing?; Do store atmospherics across cultures blend enough that they do not have an effect on the level of appeal of the space?; Do the perceptions of store atmospherics vary between different cultures?

Keywords: Atmospherics, Culture, Consumer Behavior

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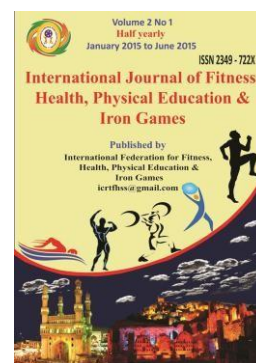


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