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K Punitha Valli
II-MBA, Mepco Schlenk
Engineering College, Sivakasi,
Tamil Nadu, India

NM Gnanaprakash
Assistant Professor, Selection
Grade, Mepco School of
Management Mepco Schlenk
Engineering College, Sivakasi,
Tamil Nadu, India

Dr. Jaisun M
Assistant Professor,
Department of Business
Administration, VHNSN
College, Tamil Nadu, India

Corresponding Author:
NM Gnanaprakash
Assistant Professor, Selection
Grade, Mepco School of
Management Mepco Schlenk
Engineering College, Sivakasi,
Tamil Nadu, India

Household consumers' awareness, attitude and usage of flooring and wall covering materials with Special reference to Kajaria Ceramics

K Punitha Valli, NM Gnanaprakash and Dr. Jaisun M

Abstract

The research topic is about understanding how consumers perceive and use flooring and wall covering materials, with a focus on Kajaria Ceramics. The study aims to explore consumer awareness, attitudes, and usage patterns related to these materials. Specifically, it seeks to analyze product awareness, usage, brand awareness, factors influencing brand selection, and opinions about Kajaria Ceramics.

The findings indicate that ceramic is the most commonly considered option for flooring and wall covering, followed by granite. Vitrified tiles are expected to be a popular flooring material in the future, with ceramic being the next preferred choice. Ceramic is also the top choice for future wall covering, followed by paint.

Kajaria Ceramics gains awareness mainly through word-of-mouth and television advertisements. Consumers associate quality with Kajaria Ceramics, followed by brand reputation and durability. The research methodology used was descriptive research, and the sample size consisted of 364 consumer respondents.

Keywords: Top of the mind, flooring material, wall covering materials, awareness.

Introduction

The word "flooring" refers to both the permanent covering applied to a floor and the installation process itself. Any finish material placed over a floor structure to create a walking surface is referred to as a floor covering in general. Although the terms are interchangeable, floor covering primarily refers to materials that are laid loosely. Carpet, laminate, tile, and vinyl are materials that are nearly universally categorized as flooring.

The selection of flooring materials is influenced by various factors, including cost, durability, noise reduction, comfort, and ease of cleaning. Flooring is a popular option for both novice and expert interior designers. These days, this adaptable flooring choice is preferred for high-traffic areas of the house due to its reputation for longevity, ease of upkeep, and almost limitless pattern options. Experts say that the first consideration in selecting a flooring type is the intensity of the traffic to which the flooring would be exposed to, followed by durability and cost of cleaning.

The history of flooring, however, is a convoluted one, beginning with ornamental installations in ancient China and Egypt and ending with the ceramic tile seen in kitchens and bathrooms today.

You have a variety of options when it comes to covering the walls in your room, including stone, plaster, fabric, paper, wood, stucco, bamboo, imitation ivy, fake plants, and faux brick. When choosing wall cladding to cover the walls in each area, practicality and upkeep must be taken into account in addition to your desired look and ambiance. Painting is quickly contaminated by dust and needs to be covered or reapplied on a regular basis. Nevertheless, there are now lots of options for paint materials, paints that are excellent for usage in kid's rooms to easy care paints that can be cleaned.

Consumers' awareness on flooring and wall covering materials

Nachawit Tikul (2014) ^[1] in this title "Environmental and economic of flooring Building Materials" and purpose of finding is to calculate the environmental effects of three flooring types made in Thailand: Parquet, marble, and ceramic tiles, per square meter.

We calculate and compare the life cycle cost (LCC) of the three materials. Ceramic tiles have the biggest negative effects on the environment, according to the report, particularly when it comes to material extraction. When the entire life-cycle cost is computed, untreated solid wood parquet has the highest cost (Tikul, 2014) ^[1].

Ljungberg LY (2007) ^[2] in this title "Materials selection and design for development of sustainable products" the purpose of current methods as well as presents models on how to develop sustainable products. Different methods for achieving products with as low environmental impact as possible are shown as well as principles for product development with special regards to materials selection, design, the product in use and recycling are given (LY, 2007) ^[2].

Bruna Barreto Przybulinski (2023) ^[5] In this title "Characterization and Energy Potential of Broiler Manure Reared under Different Flooring Materials" and the purpose for comprising cellulose, dung, feathers, and feed, broiler deep litter can be recycled through multiple flocks and subsequently utilized as a fertilizer. Although alternative litter materials, such plastic flooring, have been studied, little is known about the waste's properties. We examined the characteristics of broiler dung from various flooring systems and evaluated its biodegradability (Przybulinski, 2023) ^[5].

Paweł Sokołowski (2022) ^[6] In this title "Analysis of the Impact of Flooring Material and Construction Solutions on Heat Exchange with the Ground in a Historic Wooden Building" examines the impact of chosen building materials and techniques on the exchange of heat with the earth for a floor in a historic timber building. The effort encompassed ongoing assessments of specific factors related to the interior and external microclimate, which were subsequently employed for numerical evaluation of particular computation alternatives. The investigation took place in a historic wooden church situated in southern Poland. The study period lasted 2019 and all measurements were taken every hour. A structure featuring a floor composed of stone and wood was chosen for the variant analysis. An analysis was conducted on the impact of the heating system on the heat exchange between the ground and hardwood and stone flooring. A thorough investigation revealed that the heating system, the choice of materials, and building techniques all significantly affect how the heat exchanges with the earth.

Consumers' attitude on flooring and wall covering materials

Bovea MD, Gallardo (2006) ^[3] In this title "A The Influence of Impact Assessment Methods on Materials Selection for Eco-design" and the purpose of finding is An ideal scenario would involve getting a single indication that assesses the environmental behavior of materials in a way that allows it to be directly integrated into a multi-criteria decision problem alongside other design factors. This report presents the results of a parallel testing and application of five Life Cycle Impact Assessment techniques to various polymer materials used in packaging. The study's objective was to show that, in order to improve a product's environmental performance, a sensitivity analysis must be carried out when choosing materials based only on one environmental score (Bovea MD, 2006) ^[3].

Nicoletti GM (2002) ^[4] In this title "Comparative Life Cycle Assessment of flooring Materials: Ceramic versus marble

tiles" and the purpose of the study Flooring materials, especially ceramic and marble tiles, play an important role in the Italian economy, as the country accounts for 23% and 18% respectively of the world production of this sector. In this paper, a comparative life cycle assessment of two floor code materials was performed to identify the material with the best environmental profile and the hot spots of the two systems. The analysis showed a better environmental profile of the marble slab, especially important energy consumption for both the system and the ceramic system, the critical point is found in the raw material used to make the glaze, which is responsible for the corresponding arsenic emissions during the combustion process (GM, 2002) ^[4].

Consumers' usage of flooring and wall covering materials

Ljungberg LY, Edwards KL (2003) ^[8] In this title "Design, Materials Selection and Marketing of Successful Products" the purpose of a complete tool to help you understand how to develop products, especially in relation to integrated product development. Materials selection, marketing and design analysis in the form of a design manual are presented as a tool for product developers. During the last decades, many different methods of material selection and design have been introduced. However, most methods are limited to the material as a physical unit to give shape to the product. The method presented in this paper introduces the materials selection model, which is an integral part of the integrated product development model, where both the physical entity and metaphysical properties are analyzed for different types of products. The new Integrated Product Materials Selection (IPMS) model introduced takes into account, among other things, fashion, market trends, cultural aspects, aesthetics and recycling, as well as the target group. We present interesting examples of successful product countermeasures and material examples. Choice for different products. In connection with the presented IPMS method, different material selection methods are discussed and analyzed (Ljungberg LY, 2003) ^[8].

Guenter Berger, A. Petut schnigg, Hermann Katz (2006) ^[9] In this title "What consumers feel and prefer: Haptic perception of various wood flooring surfaces" The purpose of this title is to consistently distinguish the properties of oil parquet, varnished parquet and laminate parquet and their preferences. Our results show that most consumers were able to distinguish the floor with their hands and feet. They mostly liked the characteristics of oiled floor surfaces, and there was no significant difference in the perceptions of women and men to improve future product development, sales tactics and product presentations at stores (Petut schnigg, 2006) ^[9].

Hans Ricardo Klunter (2020) ^[10] in this title "The implementation of circular economy in the Portuguese natural stone sector" and the purpose of finding is a complete tool to help you understand how to develop products, especially in relation to integrated product development. Materials selection, marketing and design analysis in the form of a design manual are presented as a tool for product developers. During the last decades, many different methods of material selection and design have been introduced. However, most methods are limited to the material as a physical unit to give shape to the product. The method presented in this paper introduces the materials selection model, which is an integral part of the integrated

product development model, where both the physical entity and metaphysical properties are analyzed for different types of products. The new Integrated Product Materials Selection (IPMS) model introduced takes into account, among other things, fashion, market trends, cultural aspects, aesthetics and recycling, as well as the target group. We present interesting examples of successful product countermeasures and material examples. Choice for different products. In connection with the presented IPMS method, different material selection methods are discussed and analyzed (Klunter, The implementation of circular economy in the Portuguese natural stone sector, 2020) ^[10].

Nazanin Sabet (2021) ^[11] In this title “Sustainability communications and the ceramic tile industry” the purpose of study is to analyze the importance of communication according to the success and publicity of ceramic factories, especially in a sustainable production process, to observe how communication works in spreading sustainability and how it can be an advantage for factories, being an important part of their communication strategies. Therefore, this work deals with issues related to the sustainable development of the ceramic industry (Nazanin Sabet, 2021) ^[11].

Paolo Liberati (2011) ^[7] In this title “A New portable instrument to evaluate soft flooring materials in dairy cow housing” find the purpose of In recent years, there has been much research into alternative materials and techniques that result in floors that are less hard, slippery and abrasive than conventional concrete floors. In particular, a soft floor made of rubber mats looks very interesting based on the results of an extensive study, which shows their positive effect on the health and well-being of animals. On hard floors, the coefficient of friction depends only on their properties. Surface so that the values do not depend on the contact pressure that the device applies to the material under test. Considering elastic floors, hoof penetration has a large effect on the contrary, since slip resistance also depends on the pressure of the hoof on the material (Paololiberati, 2011) ^[7].

Kun Li (2023) ^[12] in this title “Comparison between Mullite-Based and Anchorite-Based Porcelain Tiles: A Review” This article begins with an introduction to porcelain tiles. An overview of the main scientific and technological characteristics of mullite-based porcelain tiles (MPT) and anorthite-based porcelain tiles (APT), focusing mainly on raw materials, processing and phase development. Then there is presented the mechanical behavior. Based on the combustion behavior of porcelain tiles and a series of possible physical and chemical changes, the comprehensive comparison the final section discusses the future development prospects for MPT and APT (Li, 2023) ^[13].

Hanzhe Liand Hui Chen (2023) ^[13] In this title “Research on Green consumption based on visual evaluation method evidence from stone flooring industry” and the purpose To explain the current consumer demand for stone floor images, the large sales volume of stone floors in the visual style market, which can guide consumers to make an effective choice according to visual needs, can improve communication between consumers and vendors. It can also help the company limit the demand of market consumers for conventional products to achieve the goal of green consumption and ensure the sustainable development of the decorative stone floor market (Chen, 2023) ^[13].

Ragnar Jonsson (2003) ^[14] in this title “The end consumer’s choice of floor covering in the Netherlands and the United

Kingdom: A comparative pilot study of substitute competition” and the purpose To understand the competition in the wood market, it is important to think about the end user of the building material. Understanding the factors that influence the end user to choose the building material for a particular purpose, i.e. less emphasis on the product. There are limited mechanisms of substitute competition. Field research on the floor covering market in the UK and the Netherlands showed that context, application context and general life situation are key factors in substitute competition (Jonsson, The end consumer’s choice of floor covering in the Netherlands and the United Kingdom, 2003) ^[14].

Anders Roos, Anders Qvale Nyruud (2008) ^[15] in this title “Description of green versus environmentally indifferent consumers of wood products in Scandinavia: Flooring and decking” and the purpose of study is Eco labeled wood products from DIY stores were studied in a multi-product study with multiple population groups. The study focused on end consumers in two floor code applications: Wood for outdoor decks and eco-labeled wood products generally preferred this type over consumers who reported not liking the characteristics of eco-labeled wood. Green consumers were low price sensitive and more often women. Other characteristics of green consumers observed in sub-surveys included a higher proportion of married couples/couples, high school education, less developed purchase plans and product warranty preferences. The results can help manufacturers create rough descriptions of green consumers, but socioeconomic and demographic variables should be supplemented with other information that reflects attitudes and intentions to obtain a more comprehensive understanding of green consumers of wood products (Roos, 2008) ^[15].

Methodology

The present study was taken up in Madurai city. The information required for this research was collected from the Consumers, using a Structured Questionnaire.

The Questionnaire contains multiple choice questions, open-ended, and demographic questions. The research approach used here is survey research as survey is done from the users. The Research instrument used is questionnaire. Selected flooring option. Structured Questionnaire was used as the data collection instrument. Simple Random Sampling (SRS) Technique was adopted for selecting the sample in such a way that all individuals in the defined population have an equal and independent chance of being selected for the sample.

Results and Discussion

From the analyse of data Ceramic appear to be the most commonly considered flooring & wall covering option, following ceramics, granite emerges as another popular choice for flooring. Granite is valued for its durability, aesthetic appeal, and versatility, making it A preferred option for many homeowners. Paint emerges as another popular choice for wall covering. Vitrified tiles as the future flooring material for their home, with ceramic being the next popular choice Ceramic emerges as the top choice for future wall covering in home, followed by paint. RK Marble is the most recognized natural stone brand, followed by Classic Marble Company. Brand awareness is high for Kajaria Ceramics, followed by KAG tiles. Century Plyboards Ltd is

the most recognized brand in the wood category, followed by Greenpanelmax MDF. RAK Ceramics is the most recognized synthetic brand, followed by Centuryply. Trust in professional interior designers/architects when selecting flooring and wall covering materials, following by customer reviews. Ceramic tiles are the most widely recognized product, followed by glazed vitrified tiles. Kajaria through word-of-mouth from friends and family, followed by television advertisements. A significant portion of respondents are not aware of Ultima tiles. This indicates a lack of awareness or visibility of Ultima tiles among the

surveyed population. Consumers primarily associate quality with Kajaria Ceramics, followed by brand reputation and durability. Kajaria ceramic is perceived as a brand known for its high-quality products, with a strong reputation in the market for delivering durable and reliable solutions. A strong inclination towards purchasing Kajaria tiles in the future, with most likely to buy and a significant portion definitely willing to buy. This positive sentiment indicates favorable brand perception and potential for sustained growth in sales and customer loyalty for Kajaria Ceramics.

Table 1: Difference in top of the mind awareness among the respondents from different Location

		Types of Flooring Materials									
		Athangudi	Vitrified	Ceramic	Marble	Granite	Limestone	Cement Floor	Mosaic	Hardwood	
Location	Rural	Count	4	13	84	5	12	1	19	7	0
		%	2.8%	9.0%	57.9%	3.4%	8.3%	0.7%	13.1%	4.8%	0.0%
	Urban	Count	6	16	108	24	32	0	18	12	3
		%	2.7%	7.3%	49.3%	11.0%	14.6%	0.0%	8.2%	5.5%	1.4%

Regarding the choices of flooring material in the home, it can be observed that the choices of materials were Athangudi, marble, vitrified tiles, mosaic tiles, ceramic, granite, stone flooring, and cement floor.

The most favoured option was ceramic tiles (57.9%) in the rural area. Marble stone (11%) and Granite (14.6%) were almost equally preferred in both the independent houses and apartment homes. Less than 7 per cent of the sample used stone, Athangudi, and hardwood.

From rural locations, ceramics emerge as the top-of-mind flooring material, with 57.9% of respondents indicating a

preference for this option. This suggests that ceramics are highly favoured among rural residents, possibly due to factors such as affordability, durability, and availability.

In contrast, among urban respondents, marble is the top-of-the-mind flooring material, with 11.0% indicating a preference for this option. This indicates that marble is relatively more popular among urban residents, possibly due to its luxurious appearance and status symbol associated with marble flooring. Followed by Cement floor also garners attention among rural respondents, with 13.1% indicating it as their top-of-the-mind option.

Table 2: Difference in top of the mind awareness response among the respondents from different Housing type

		Types of Flooring Materials									
		Athangudi	Vitrified	Ceramic	Marble	Granite	Limestone	Cement Floor	Mosaic	Hardwood	
Housing Type	Apartment	Count	0	1	4	2	3	0	0	0	1
		%	0.0%	9.1%	36.4%	18.2%	27.3%	0.0%	0.0%	0.0%	9.1%
	Villa	Count	10	28	188	27	41	1	37	19	2
		%	2.8%	7.9%	53.3%	7.6%	11.6%	0.3%	10.5%	5.4%	0.6%

The majority of respondents living in apartment prioritize granite and marble as their top of the mind flooring materials. This suggests that individual residing in apartments tend to favor luxurious and durable options like granite and marble. Among respondents living in villas,

ceramic emerges as the top of the mind flooring material for the majority of respondents. This indicates that individuals residing in villas are more inclined towards practical and versatile options like ceramic, which may offer a balance between aesthetic, durability, and cost effectiveness.

Table 3. Difference in usage among the respondents from different Location

		Living room flooring present usage							
		Athangudi	Vitrified	Ceramic	Marble	Granite	Cement floor	Mosaic	Kota stone
Location	Urban	1	36	89	14	25	27	26	1
	Rural	1	24	55	4	4	40	17	0

It is inferred that urban respondents predominantly have flooring materials such as vitrified tiles, ceramic, granite, and marble in their living rooms, while rural respondents commonly have cement floors. This suggests a disparity in flooring preferences between urban and rural areas, with urban dwellers opting for more diverse and possibly upscale materials compared to rural counterparts, who often prefer practical and cost-effective options like cement floor.

It is inferred that respondents consider durability and aesthetics as the most important factors when selecting flooring and wall covering materials. With a weighted average mean response of 4.88 for durability and 4.81 for

aesthetic appeal, it is evident that respondents prioritize materials that are durable and visually appealing.

Table 4: Important factor-Selecting flooring & wallcovering materials

S. No	Items	Mean response
1.	Durability	4.88
2.	Aesthetic appeal	4.81
3.	Maintenance requirements	4.49
4.	Cost-effectiveness	4.33
5.	Environmental sustainability	3.70
6.	Health aspects	4.21

Conclusion

In conclusion, our study on household consumers' awareness, attitude, and usage of flooring and wall covering materials with special reference to Kajaria Ceramics has provided valuable insights into consumer preferences and behavior within the industry. Through our research, we have identified key factors influencing consumer choices, including durability, aesthetics, and affordability. Overall, the findings highlight Kajaria Ceramic's position as a trusted and preferred choice among household consumers for flooring and wall covering materials. By leveraging its brand reputation, diverse product range, and understanding of consumer preferences, Kajaria Ceramics can continue to thrive in the competitive market landscape. Further research and targeted marketing efforts can help capitalize on emerging trends and consumer needs, ensuring continued success and growth in the industry.

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