Understanding consumer perceptions of hotel toiletries

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A.S., Johnson County Community College, 2019
B.S., Oklahoma State University- Stillwater, 2019

A THESIS

submitted in partial fulfillment of the requirements for the degree

MASTER OF SCIENCE

Department of Food, Nutrition, Dietetics, and Health
College of Health and Human Sciences

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2021

Approved By: Approved by:
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Abstract

A hotel staple across the world is providing toiletries in guest's bathrooms. It is a common expectation from consumers to find complementary bath items during the duration of their stay. However, there is no research known that explores which specific features of these toiletries are preferred by hotel guests. Combining hotel industry and sensory research techniques will allow this thesis to gain a full profile of the different hotel toiletries along with consumer expectations, preferences, and usage of these products. The objectives of this research are to a) identify key features of hotel toiletries (specifically hotel shampoos and lotions) that maximize consumer acceptance, b) determine how variables, such as hotel price point (luxury vs. economy), affect consumer preferences for toiletries features, and c) determine the "ideal" model of hotel shampoos and lotions.

First, 22 frequent hotel guests and hotel toiletry users participated in four different focus group sessions. These sessions were divided based on the type of hotel toiletry the consumers used (i.e., lotion or shampoo) and the type of hotel the participant most regularly used (i.e., economy or luxury). The results showed that perceived differences were apparent between the economy and luxury hotel guests. The economy guests claimed that brand name and ingredients listed on the hotel toiletry were of high priority, while luxury hotel guests were not concerned with these characteristics. Luxury hotel guests were concerned with the initial appearance and display of the hotel toiletry products such as product color and packaging 'uniqueness'. Though this was true, these two types of hotel guests were shown as both groups wanted relaxing 'spa' like scents for shampoos and thick/creamy textures for lotions.

In the second study, a group of trained panelists was used to generate sensory characteristics of 33 shampoos and 30 lotions, to validate and determine any additional attributes

to describe hotel shampoos and lotions. This study concluded in six additional attributes being added to the list created during the focus group sessions. Two attributes were added for hotel shampoos, while four more attributes were included for hotel lotions. From this research a consumer-friendly attribute list was created to use in the final study of this thesis. This attribute list included 30 total features for hotel shampoos and 34 total features for hotel lotions. The second part of this study included a sorting task with trained and naïve consumers to determine the similarities and differences between hotel shampoos and lotions. There were various differences such as aroma strength, and also similarities such as thick texture.

In the final study, two Maximum Difference (Max-Diff) surveys (one for hotel shampoos and one for hotel lotions) were conducted. A total of 312 participants were recruited to determine the most and least important features of hotel toiletries. It was determined that in order to maximize consumer acceptance, specific packaging and sensory features should be used for hotel shampoos and lotions. For example, hotel shampoos should have the ability to lather and have a relaxing, spa-like scent. For hotel lotions, a non-greasy, moisturizing, and smooth feel on skin should be present.

This research will help the hotel industry identify the key features of hotel shampoos and lotions, how these features influence consumer acceptance, and the potential modifications that should be made in the product category. This thesis also explores the use of various sensory and consumer research techniques that could help identify and prioritize product features to maximize consumer acceptance of various product categories.

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Chapter 1 - Literature Review

A hotel staple across the world is finding various toiletries on the bathroom sink. Consumers expect to find these complimentary bath items during the duration of their stay. There is a wide variety of hotel industry research, but very minimal articles focus on those toiletries known to be provided during a hotel stay. Hotels are focused on research that studies which amenities should be used in hotels, or how to gain repeat consumers. Toiletries are not an area of emphasis in hotel research. Hotel toiletries can consist of the standard shampoo, conditioner, lotion, and soap or can include items such as sewing kits, makeup wipes, shower caps, body wash, etc. This gap in hotel research provides the optimal opportunity for exploration. The hotel toiletry category would benefit from a greater evaluation and understanding of the products, consumer experiences, and expectations of the hotel toiletries.

Hotel Toiletries Research

There is extensive research on which hotel amenities guests use when they stay at hotels. These can range from providing a gym, pool, spa, and even the little toiletries provided on the bathroom sink. When consumers take home those little bottles of toiletries or use the hotel amenities, the hotel concludes that they have done an adequate job at selecting the right type of products. When hotels add amenities, they add them based on what type of amenities they expect consumers to use, not the actual use. The Boston Hospitality Review conducted a detailed study to analyze the expected and actual use of hotel amenities (2019). The objective of this study was to understand the actual usage of amenities by consumers in hotels versus their intention to use them (Kumar & Dev, 2019). This objective was also accompanied by analyzing subgroups such as chain scale, gender, purpose of travel, length of stay, and location. By studying the expected and actual use of hotel amenities by consumers it was determined that there was growing

popularity of common spaces and concierge services. The in-room TV sets were also highly used. For toiletries specifically, the trend was that consumers under predicted their usage of individually packaged hotel toiletries, but over predicted the usage of dispensed hotel toiletries for the majority of the subcategories. This means that they predicted they would use individually packaged toiletries less than they actually did which indicates they used this type of toiletry more than they used dispensed toiletries. When analyzing the length of stay, location (urban, suburban, and resort), and two chain scales (upscale and luxury) by travel purpose (business and leisure), this trend for toiletries stayed true. When evaluating the gender and chain scale interaction, females typically over predicted dispensed (meaning they used dispensed toiletries less than they thought), but accurately predicted packaged toiletry usage. Males on the other hand over predicted both dispensed and packaged toiletry usage. From this research, it can be concluded that most consumers expect and use more individually packaged toiletries when compared head-to-head with dispensed toiletries. In the end, a key objective in the hotel industry is providing the right type of amenities to the right individuals, in the right location, for the right length of stay, and the right travel motivation (Kumar & Dev, 2019).

Similarly, The Cornell Center for Hospitality Research explored what hotel guests want when it comes to anticipated versus actual use of amenities (2018). This study was intended to assist hotels in choosing the appropriate amenities for their hotel-style (Dev et al., 2018). The study included 724 guests from 33 different hotels and six different chain scales. The chain scales ranged from upscale, upper-upscale, and luxury hotel types. Individually packaged toiletries were compared to dispensed toiletries in which yet again, (like Kumar and Dev in 2019) individually packaged bathroom products were under predicted, meaning that consumers believed they would use individually packaged toiletries less than they actually did. On the other

hand, dispensed toiletries were over predicted, meaning they thought they would use this type of toiletry more than they actually did. Individually packaged toiletries were one of the top ten most under predicted (meaning it was used more than predicted) amenities out of over 50 amenities evaluated. Again, it is concluded by Dev et al., (2018) that consumers expect and use more individually packaged bathroom products than those that are dispensed. Carefully tailoring amenities to hotels is a big responsibility for hotel owners. Knowing which amenities and what type of toiletries to provide to exceed guests' expectations is essential to the success of any hotel.

More often, guests' attention has been held by in-bathroom amenities such as shampoos, conditioners, and lotions. Many hotels have been in the process of upgrading their bathroom amenities with high-end toiletries in hopes to influence guests to stay at their hotel. Some of these hotels include Marriott and InterContinental (Heo & Hyun 2014). Though this is a common assumption by hotel owners, very little attention has been given to research on this topic. Heo and Hyun, explored guests' willingness to pay when offered luxury room amenities such as luxury hotel toiletries to determine if adding those 'luxury' toiletries will influence guest's willingness to pay for hotel toiletries (2014). Heo & Hyun (2014) identified whether consumers will be willing to pay more for a hotel if a hotel adds luxury brand amenities. Three different scenarios were implemented to achieve this goal. The first scenario included a regular hotel room with no luxury amenities. The second scenario included a regular hotel room with luxury amenities and the third scenario only had the addition of "table tents" to explain the luxury brand amenities included in scenario two. A total of 377 hotel guests analyzed the three different scenarios. Each guest analyzed only one out of the three scenarios and completed a questionnaire about the specific scenario they evaluated. From the participants analysis for the three scenarios, hotel toiletries were considered one of the most useful hotel amenities analyzed. Scenario two

and scenario three had a significantly higher willingness to pay than scenario one, but there was not a significant difference between scenarios two and three (i.e., luxury amenities with and without information). When luxury amenities were included in a hotel room, the consumers' willingness to pay increased. From this, two groups emerged. One group was willing to pay more for luxury amenities and the other would not be willing to pay more and were not concerned with luxury brands (Heo & Hyun 2014). These two groups could benefit from being able to select their amenities upon arrival. One group would be permitted to select those luxury toiletry amenities and the other would be capable of selecting those who were lower in luxury. Overall, the willingness to pay by consumers increases when including luxury amenities in hotel rooms.

Two standard segments of consumers have been discovered by previous hotel research. The first is consumers (or hotel guests) who are not as 'engaged' and do not have as much attentiveness on brand-named amenities. The second are those who are very 'engaged' and have an emotional connection and desire for specific brands (Yu and Timmerman, 2014). Yu and Timmerman (2014) explored these two segments to determine what chain scale these two segments belong to. They believe that to increase the chance of repeat customers, hotels must understand on a deeper level what type of experience they need to tailor towards their audience. They analyzed six different chain scales (luxury, upper upscale, upscale, upper midscale, midscale, and economy) to determine which type of consumer segments fall in each. Only guests from the luxury scale (who spent an average of $910 at a hotel over 12 months) agreed that they would be willing to pay more for improved hotel toiletries. Though luxury was the only chain scale that overwhelmingly said they would pay more for improved toiletries, it was determined that about "half of the guests" from all chain scales agreed they would pay more for "significantly" improved hotel toiletries (Yu and Timmerman, 2014). This research concluded

that for the other chain scales (except for luxury), it is not as important to the consumer to have brand named amenities. This suggests that hotels should modify the amenities given to guests based on the chain scale of the hotel. Along with that, the research could be furthered to analyze what improvements need to be made to the hotel toiletries to spark the increase in willingness to pay. By tailoring products, amenities, and even experiences to specific guest's needs, hotels have a higher likelihood of winning over those repeat customers.

Modifying hotel amenities is a time-intensive process, but whether guests inspect the amenities that are available in their hotel bathroom is their first course of action upon entering their room or not, the toiletries generally are used in forming an opinion about the hotel. Eversham (2016) explored one way to choose the right toiletries for a hotel. The top 'priority' they propose is to be assured that the toiletries fit the company's ethos (Eversham, 2016). Toiletries that provide the same ethos (or principles) as the hotel is a positive way to emphasize your hotel's values and atmosphere. Eversham (2016) found size truly matters. Hotel toiletries are typically available in sizes of 30-40ml and depending on how long each guest stays, this size is not adequate for more than one or two nights (Eversham, 2016). More products may need to be provided, depends upon the length of stay, or even the size of the bottles could be modified to accommodate consumer's needs (Eversham, 2016). Lastly, hotels should look towards the future (long-term) impact when making decisions, not just short-term options (Eversham, 2016). Brands and consumers can establish an emotional connection. This connection can intensify 'loyalty' to the brand in which can reflect the hotel where those brands are found (Eversham, 2016). Many hotels find it difficult to pinpoint certain brands of toiletries that follow their ethos or even the right size of toiletries. Therefore, creating hotel toiletries that reflected specific branding would be more important. Marriot and Starwood hotels are examples of a hotel chain

that searched the world for their toiletries and now there are many consumers with that 'emotional attachment' to their products. So even though toiletries might be one of the smallest components during a guests' stay, it is one of the most important.

Marriott and Starwood hotels used many of the same 'priorities' that were shown by Eversham (2016). Touryalai (2014) explored the involved process of selecting hotel toiletries for Marriott hotels (Touryalai, 2014). The director of design and development for Marriott is responsible for the selection process. This process selection can take months to complete. Marriott creates teams to do research on varieties of popular brands as well as testing prototypes that are created (Touryalai, 2014). This extensive process tested over 52 different brands of toiletries to ensure they choose the 'perfect' one that reflected their brand. From previous research conducted by Marriott developers, they determined two different brands needed to be selected, one for their hotels located in America and Asia and one for those located in Europe and Africa. This was the research showed that Americans and Asians preferred "hip and cool products" while Europeans and Africans wanted "products from a company that had a long, family-owned history" (Touryalai, 2014). After brands were selected, the packaging was taken into consideration for the different locations and types of hotels. For example, flip caps are much easier to use than screw caps as they "are easier to open with one hand" (Touryalai, 2014). Also, they wanted packaging that was dispensed easily and had big enough font for older guests. So, they combined the flip cap lid, with the easily readable font, and the caps for easy dispensing to create their 'ideal' packaging. The utilization of hotel toiletries is on the rise from where it was over 10 years ago. Hotel toiletries have become an increasingly used product.

Sensory Research

Though hotel toiletry-specific research is not very common, general hotel research and personal care research are more easily found. There are different types of sensory research that falls into two categories, analytical and hedonic. Analytical is used to determine what attributes a specific product has and how the products are different regarding those attributes. Analytical includes descriptive analysis and discrimination testing. The hedonic category houses two subcategories of its own: quantitative and qualitative approaches. These two subcategories are used to determine how well products are liked, what products are preferred and other information you can gather from naive consumers. The hedonic category includes focus groups, interviews, and consumer observation in the qualitative subgroup and includes acceptance, preference, consumption, and more in the quantitative subgroup. The hotel industry uses hedonic sensory research to analyze consumer perceptions of their hotels and preferences on the types of amenities to offer. Another industry that uses sensory research to better understand their products and their consumers is the personal care industry. Hedonic research is conducted to explore consumer experiences, expectations, and understand product performance. Alternatively, analytical sensory research can be used to determine what attributes of those products are most important to drive consumer acceptance.

Consumer Research – Qualitative

Qualitative research such as interviews, text chats, and focus groups have been used for some time to gain insights into consumers' minds. Interviews are used when researchers need to gain an in-depth understanding of consumer responses. Additionally, this type of research is used when the research topic is sensitive and not appropriate for group conversation (Meilgaard et al., 2015). Additionally, text chats can be alternatives to interviews or focus groups when consumers

are unable to devote a significant amount of time to a study and allows consumers to respond on their own time and throughout an entire day.

Focus groups are conducted by a moderator in a group setting to observe their emotions, attitudes, and opinions regarding a specific topic. Focus groups allow participants to speak freely with other participants and creates an interactive setting that permits individuals to generate ideas and correlating opinions from one another. The hotel industry uses this type of qualitative technique for many topics ranging from determining what amenities should be offered to why consumers select and stay at specific hotels. Wassler et al. (2015) conducted focus groups to understand the concepts behind hotel theming in China. Hotel theming is when a hotel encompasses a 'theme' throughout the hotel. Meaning that the hotel focuses on a specific culture or unique theme design and "decoration in addition to unique facilities and services" (Wassler et al., 2015). This has been used as a marketing strategy to attract more guests and has been considered to give "domestic Chinese hotels a competitive edge" (Wassler et al., 2015). Because hotel theming has become so popular, it was important to determine how this is perceived by consumers and how it could be improved. Seven 60-80 min. focus groups were conducted with 41 total participants. From these focus groups, the researchers were able to determine that theming in China is still misunderstood by guests and Chinese hotel managers (Wassler et al., 2015). Some issues were that hotels were unable to fit their employees into the theme that was selected. These focus groups also gave interviewers insights into what facilitators of hotel themes would be. These included specific themes that should be used (as many consumers had "difficulty accepting 'edgy' themes" and did not accept many Western paradigms), ways to incorporate all aspect of a hotel into its theme, and involvement of the government to support the themes (Wassler et al., 2015). Overall, results showed that there were certain issues with hotel

theming that were unknown to hotel managers. It was also determined that there were many themes deemed 'unfit' for Chinese hotels. These focus groups were highly important to the success of hotel theming in China.

Focus groups can also be used to understand purchase decisions. The hotel industry uses consumers' purchase decisions as a way to determine how much revenue they will receive and how to gain those 'repeat' customers. Lockyer (2005) used focus groups to understand the dynamics of the hotel accommodation purchase decision. He wanted to investigate the factors that could impact consumers to select a hotel. This study was completed by using four focus groups of 42 individuals. These focus groups went through a thorough process of a quantitative survey, group techniques, interactive discussion, and a follow-up survey. Through the focus groups and surveys, they found that cleanliness, price, location, and facilities were the four main categories that influenced consumers to choose a hotel (Lockyer, 2005). From these, location and price were deemed the most important, while facilities and cleanliness followed. They determined that price, location, and facilities were clear factors (or 'trigger points') and cleanliness was essential (or a 'must have') (Lockyer, 2005). From these focus groups, they were able to determine how different attributes influence consumers in hotel selection.

Consumer Research – Quantitative

Quantitative sensory research uses consumers' ratings to evaluate a variety of products. This type of research utilizes various methods from acceptance and preference central location tests, to how consumers use products at home in 'home use tests', or even online surveys. This type of research employs a wide variety of scales for measuring consumer responses. For example, central location and home use tests can ask liking questions on a 9-point hedonic scale (ranging from dislike extremely to like extremely) to determine how much consumers like or

dislike the product. Additionally, Just About Right (JAR) scales can be used to determine if a specific attribute is too much, not enough or just about right. For example, Li (2014), used JAR scales to determine if sweetness, milk flavor, thickness, and coffee flavor of a coffee-flavored dairy beverage was too much or not enough as to the flavor or thickness of the beverage.

Another quantitative sensory method is MaxDiff (maximum difference) or Best-Worst Scaling. This type of questioning instructs the consumer to determine the most important and least important item in a pre-determined set of relevant attributes. This analysis goes further than a basic rating question. It forces individuals to choose a most and least important concept from a given set of attributes, helping to determine what they deem important and not important, and pushing for differences. Kim et al. (2018) used best-worst scaling to identify which attributes and amenities of a hotel are preferred by consumers. Best-worst scaling was used to determine the most and least important attributes between all potential combinations of the attributes evaluated (Kim et al., 2018). The attributes used for the best-worst scaling were determined by analyzing previous literature. These attributes ranged from location, price, and security to room comfort / décor, and restaurant/food quality. In total 10 attributes were selected. Though there are a variety of ways to analyze best-worst data, the chosen method for this study was Best Worst (BW) scores. These scores were calculated by taking the values of being selected the best minus the values of being selected the worst. From their analysis, they segmented the consumers based on gender, upscale or budget consumers, income levels, and hotel use frequency. Upscale and budget consumers selected cleanliness as being the most important attribute, but upscale individuals were more concerned with the bed, service, and overall room comfort, unlike budget consumers that were concerned with price and security (Kim et al., 2018). When segmenting on gender, income levels, and hotel use frequency, they also determined that different segments

consider different attributes to be the most important. The one thing they all could agree on is that cleanliness was the most important attribute for those who were deciding amongst different hotels (Kim et al., 2018). By using best-worst scaling, Kim and associates provided a detailed investigation on how different aspects of a hotel impact a consumer's choice and what consumers consider to be the most and least important.

Best-worst scaling has also been used in the beverage industry, specifically in studies of wine preferences. The University of South Australia used best-worst scaling to determine wine style preferences in two different countries (Goodman et al., 2005). The authors of this study wanted to present the usefulness of best-worst scaling and demonstrate how it can be used in other markets (Goodman et al., 2005). The study included three different best-worst questionnaires. For the first questionnaire, the researchers explored drink preferences in Australia in which the respondents were instructed to choose the best (appealing) and worst (not appealing) beverage (Goodman et al., 2005). For the second questionnaire, the researchers investigated wine style preferences in Australia (Goodman et al., 2005). In the last survey, the attributes that influence consumer wine purchasing were studied in Israel (Goodman et al., 2005). All of the questionnaires designed were used to determine what information the MaxDiff survey method can provide concerning the features that influence wine purchasers (Goodman et al., 2005). From the analysis of the first questionnaire, it was determined that wine from a particular variety was most important to the consumers. Meaning consumers liked a specific grape variety in their wines (Goodman et al., 2005). This questionnaire proved that drink preference can be achieved (or measured or even numerically measured) using MaxDiff surveys and that this instrument can ease the management of data analysis and findings (Goodman et al., 2005). The second questionnaire showed that the most popular wine style was Shiraz, which is

known as the largest "market share" of wine in Australia (Goodman et al., 2005). The best-worst style questionnaire validated that Shiraz is the most popular wine style. Lastly, the third instrument deemed that recommendation by friends or family is the most important attribute to influence their wine purchasing (Goodman et al., 2005). Using three different questionnaires, proved that this method could help market wine selections to wine consumers (Goodman et al., 2005). Overall, this paper proved that using best worst instrument is simple and easy and can be used for a wide variety of objectives.

Analytical Sensory Research

Analytical research such as descriptive analysis has been used to quantify and analyze sensory profiles of many products. The personal care industry uses analytical research to profile products during new product development, product improvement, product maintenance and determine potential drivers of liking. Descriptive analysis uses trained panelists that are trained to profile and quantify the tactile qualities of products. The American Society for Testing and Materials (ASTM) International has created standards for descriptive analysis for many personal care products such as shampoo, skin creams, and lotions (ASTM, 2012). These standards provide instructions on how to efficiently evaluate the sensory experience of personal care products by providing attributes, references, definitions for the analysis, and instructions on training and screening of panelists (ASTM, 2012). These were developed because of a need for more instruction in evaluating non-food products such as personal care. Personal care evaluations have different variables than food-based research. The type of skin, the inability to analyze more than one product on one spot of skin (restricting the number of products that can be analyzed in one setting), and the multitude of modalities are examples of the different variables that need to be

analyzed in non-food products. These standards are used to assist researchers in the challenging evaluation of non-food products.

Similar to ASTM, Civille, and Dus (1991) have also created a way to evaluate tactile properties of creams and lotions. This method is Spectrum Descriptive Analysis or Skin feel SDA (Civille and Dus, 1991). This method is very similar to ASTM as it has "clearly defined characteristics […] and physical references" (Civille and Dus, 1991). This method allows researchers to profile the sensory characteristics of a product. These methodologies have been used by many researchers in studying personal care profiles and developing personal care lexicons (Civille and Dus, 1991). Lexicons are described as the different verbiage that describes a specific category of products. These products can be in both the food and non-food world and have ranged from peppers and coffee to nail polish and lip products. Dooley et al. (2009) created a lexicon of sensory attributes for the texture and appearance of various lip products. Additionally, Sun et al. (2014) created a lexicon of sensory attributes to describe the application and removal of nail polish. Lexicons such as these have been publicized to be validated to display distinctions between different types of products within a category. The foundation of descriptive analysis can also be used as an informal 'rapid' method using trained panelists as discussed in the research following.

Research Objectives

The hotel industry uses a variety of sensory research techniques such as focus groups, interviews, and various surveys. Hotel toiletries, however, have not been extensively studied during any hotel industry research. There is no known research analyzing toiletries' features such as packaging and sensory characteristics. There are also no studies regarding consumer preferences or consumer perception of these toiletries. Combining hotel industry and sensory

research techniques will allow this thesis to merge hotel findings with sensory analysis to gain a full profile of the different hotel toiletries along with consumer expectations and usage of these products.

The objectives of this research are to a) identify key features of hotel toiletries that maximize consumer acceptance, b) determine how variables, such as hotel price point (luxury vs. economy), affect consumer preferences for toiletries features, and c) determine the "ideal" model of hotel shampoos and lotions.

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Chapter 2 - Consumer Perceptions and Feature Generation of Hotel Shampoos and Lotions

Abstract

Hotel toiletries are a standard complementary item found in hotel bathrooms around the world. Though these commodities are important to consumers during their hotel stay, minimum research has been conducted on consumers' perception of these hotel toiletries as well as the variables that can influence their preferences for hotel toiletries. The objectives of this study were to a) discover key features of hotel toiletries and b) determine how certain variables, such as the type of hotel, affects consumer preferences for toiletries features.

Four focus group sessions were conducted with frequent hotel guests. The focus groups were separated based on the type of hotel toiletry (i.e., shampoo or lotion) and the category of hotel the consumers most regularly visited (i.e., luxury or economy). Each focus group was 90-min in length and included 4-7 consumers. Each participant was asked to discuss the features of hotel toiletries, specifically shampoos or lotions, that they liked and disliked. By the end of all four focus group sessions, a list of 35 attributes for hotel shampoos and a list of 33 attributes for hotel lotions were generated. Participants also discussed their 'ideal' hotel shampoo or lotion.

Perceived differences were discovered between the luxury and economy hotel guests. Economy hotel guests stated that ingredients and claims were of importance, while luxury hotel guests were indifferent to these features. Economy hotel guests were prone to test the toiletries before use, while luxury hotel guests had a 'trust' factor in which testing the products is unnecessary. Some of the attributes that were important for hotel guests included relaxing 'spa' like scents for shampoos and thick textures for lotions. Follow-up research will be conducted to validate this information quantitatively. Overall, this study provides important consumer

opinions and perceptions of hotel shampoos and lotions that could help improve the hotel stay experience.

Introduction

Qualitative consumer research includes collecting and analyzing 'non-numerical data such as thoughts or opinions (McLeod, 2019). Qualitative hedonic research can include focus groups, interviews, text chats, and much more. This type of research is not a new concept but is a way for consumers to project opinions and various perspectives regarding a specific topic. Many industries such as personal care, food, and even the hotel industry conduct qualitative research. For the hotel industry, the consumers are grouped by type of hotel they most typically stay also known as chain scale (Yu & Timmerman, 2014). Yu & Timmerman (2014) used six different chain scales (luxury, upper upscale, upscale, upper midscale, midscale, and economy) to separate their consumer segments. Segments can be created by various means, such as the price point of the hotel or even the stars (rating) of each hotel. The Smith Travel Research company (a part of the CoStar Group that outlines data in the hotel industry) defines how standard hotel segments are created, which is most typically done by chain scale in hotel research (STR, 2020). The hotel industry uses this type of segmentation during their research to gain insights into how the hotel is performing, the purchase decisions of travelers, and what improvements and/or changes about the hotel itself. Though there are many ways in which the hotel industry uses focus groups, a prime example is Wassler et al. (2015), who used focus groups to understand the consumer perceptions of hotel theming in China. Hotel theming has become a popular concept across Chinese hotels. This has been used as a marketing strategy to attract more guests and has been considered to give Chinese hotels a competitive advantage (Wassler et al., 2015). These focus groups helped the researchers understand that hotel ethnic theming is still misinterpreted by most

Chinese hotel owners and that many hotels had issues with fitting their theme into the hotel due to this misunderstanding (Wassler et al., 2015). Focus groups also assisted Wassler and associates in determining the themes that were not 'enjoyed' by consumers.

Lockyer (2005) used focus groups to understand hotel consumer's purchase decisions based on different facilities and amenities. They determined that cleanliness, price, location, and facilities were the four main categories that influenced consumers to choose a hotel (Lockyer, 2005). From these, location and price were deemed the most important influence, while facilities and cleanliness followed. Lockyer (2005) also determined that consumers expected hotels to be clean and so were ranked lower in importance, but the price, location, and facilities vary across all hotel locations. They determined that price, location, and facilities were clear factors (or 'trigger points') and cleanliness was essential (or a 'must have') (Lockyer, 2005). Similarly, the research being discussed in this chapter uses focus groups to gain insights, opinions, and perceptions of hotel toiletries, specifically shampoos, and lotions.

The hotel industry uses a variety of sensory research tools such as focus groups. Hotel toiletries studies specifically however have not been reported in published literature. There is no known published research analyzing toiletries features in the hotel industry such as packaging and sensory characteristics. To understand the hotel toiletry category and gather insights on consumer usage of hotel toiletries, focus groups were conducted with individuals who stay at hotels regularly. The objectives of this study were to determine how variables, such as hotel price point (luxury vs. economy), affects consumer preferences for toiletries features and to identify key features of hotel toiletries.

Methodology

Recruitment

A total of 22 individuals participated in this study. Consumers were recruited through the Kansas State University Database at the Center for Sensory Analysis and Consumer Behavior (Olathe, KS, USA) using Compusense (Compusense Inc., Guelph, Ontario, Canada) software. An online screener targeted both female and male participants with a quota of 75% and 25%, respectively. The participants were also required to have traveled and stayed at a hotel at least once every six months (before the Coronavirus Pandemic or March 2020) to qualify for this study. Furthermore, they had to use hotel-provided toiletries including shampoos and lotions. Additionally, recruitment of those who stayed in luxury and economy type hotels was preferred to compare the attitudes and opinions of the various hotel types. This study screened using the standard hotel segments along with examples of hotels that fall into each segment (Table 2.1).

Table 2.1. Hotel Segments used to Screen and Recruit Focus Group Participants

Hotel Segment	Examples of Hotel Type
Economy	Ecolodge, Super 8, Fairfield Inn, Four Points, Aloft
Midscale	Hampton inn, Courtyard, Holiday Inn, Drury Inn
Upscale	Marriott, Hilton, Hyatt, Sheraton
Upper Upscale	JW Marriott, Westin
Luxury	Ritz Carlton, Waldorf Astoria, St. Regis

Those who qualified were emailed to confirm their participation in a 90-min online focus group. The participating individuals were divided into four total focus groups. These groups were conducted based on the type of toiletry they used (shampoo or lotion) and the type of hotel the individuals frequently visited (luxury or economy). The focus groups ranged from four-to-seven members in total (Table 2.2). Out of the participants, 32% were male (seven individuals)

and 68% were female (15 individuals). There was at least one male participant in each focus

group and a maximum of two, the rest were female. The average age of the participants was

between 35 and 44 years old. 10 of the participants most frequently stayed at luxury hotels and

the rest (12 individuals) most commonly stayed at the economy and midscale hotels. Nine

participants discussed hotel lotions and 13 discussed hotel shampoos during the focus groups.

The majority of the individuals traveled at least once every three months for leisure or business.

Though they were not required to have traveled during the pandemic, 55% of the participants had

traveled since March 2020.

Table 2.2. Focus Group Participant Demographics

Number of Participants	N=22				
	Focus Group 1 (n=5)	**Focus Group 2** (n=7)	**Focus Group 3** (n=4)	**Focus Group 4** (n=6)	**Total** (n=22)
Gender					
Female	80%	71%	50%	67%	68%
Male	20%	29%	50%	33%	32%
Age					
25-34	0%	14%	50%	0%	13%
35-44	60%	71%	25%	50%	55%
45-50	40%	14%	25%	50%	32%
Type of Hotel	Economy	Economy	Luxury	Luxury	Economy / Luxury
Type of Toiletry	Lotion	Shampoo	Lotion	Shampoo	Shampoo / Lotion
Pre-COVID-19 Travel (per year)					
6-10 times	60%	57%	75%	17%	50%
11-15 times	20%	29%	0%	33%	23%
16-20 times	20%	14%	0%	33%	18%
20 or more times	0%	0%	25%	17%	9%
COVID-19 Travel (since March 2020)					
Have not traveled	80%	14%	50%	50%	41%
1-5 times	20%	71%	25%	17%	41%
6-10 times	0%	14%	25%	33%	18%

Homework

Before the study, a 'homework' assignment was given to the participants. They were to create a collage that reflected their favorite and least favorite types of hotel toiletries (such as shampoo, lotion, soap) they've used, and the reasons for them being their most or least favorite. They were allowed to use cutout photos from magazines, digital photos online, or their personal photos to complete the collage and it could either be presented on paper or in a digital format (see appendix for examples). This homework was used as a topic introduction so that each participant had viewpoints on hotel toiletries before arriving at the focus group. This homework was also used as a visual representation of the types of hotel toiletries, including packaging that the consumers liked and disliked. All participants submitted their collage following their respective focus group sessions.

Focus Group

To gain feedback on opinions regarding hotel toiletries, 4 focus group interviews were used. In this study, there were four 90-minute focus groups conducted (Table 2.1). Guest et al., states that after approximately three focus groups on a specific topic, about 80-90% of the information is discoverable (Guest et al., 2016). The purpose of the study was to explore what aspects of hotel toiletries consumers like and dislike, and also to determine how consumers use hotel toiletry products. Due to the COVID-19 Pandemic, the focus groups were conducted online through the Zoom (Zoom Video Communications, San Jose, California, USA) platform. Each focus group session had 4-7 participants, the moderator, and the spectator. The moderator of each focus group was the same individual and had taken moderator training to become qualified to conduct focus groups. During the study, the participants were taken through a discussion by a moderator and the observer took notes, recorded the discussion, and also presented

supplementary materials as needed. In the beginning, the moderator gave an introduction to themself and the discussion topic. The topics discussed ranged from how each participant uses hotel toiletries, how COVID-19 has affected the usage of hotel toiletries, as well as their likes and dislikes of different attributes of hotel toiletries. There were five parts to each focus group. These five parts included an introduction, homework discussion, and two main topics.

Each focus group began with an introduction and brief overview of the focus group guidelines. These guidelines were shown on screen in a PowerPoint slide. The participants were first introduced to the moderator and observer. They were then informed that the session was being recorded and then taken through a set of guidelines. These guidelines included talking one at a time so the zoom recording could pick up everyone's voice. After guidelines were discussed, each participant introduced themselves and shared their homework collages. Questions like "why were these pictures chosen for the collage, are there any stories behind these toiletries, and what are the characteristics that you like and dislike about the toiletries in your collage" were asked. After each participant was given an adequate amount of time to discuss their collages, the discussion was transitioned into the first discussion topic.

During the first discussion topic, hotel toiletry usage was explored. Consumers were asked to explain which hotel toiletries they use and why, and which toiletries they do not use or not. If consumers used specific toiletries, specifics were explored like packaging, aroma, and other characteristics. When consumers explained which toiletries they did not use, reasons why were investigated. A brief discussion relating to the COVID-19 pandemic was discussed in this section as well. For those who had traveled since the pandemic had begun, they explained any differences or similarities between staying at a hotel and using hotel toiletries before and during

the pandemic. Once an understanding was created upon consumer's rationale behind using hotel

toiletry products the discussion was transitioned to the second topic.

The second topic of discussion, consumer likes, and dislikes were explored. A series of

questions were asked about the various packaging, aroma and feeling attributes to pinpoint the

attributes consumers liked and disliked about hotel shampoos and lotions. During this section,

two different activities commenced. In the first activity, an example of a hotel shampoo or lotion

was shown, and consumers were instructed to give their first impression of that toiletry. Their

likes and dislikes of the features of this toiletry were also explored. The second activity required

the participants to create an 'equation' that would equal their perfect hotel shampoo or lotion

(Table 2.3). Each consumer put together all of the characteristics that would create their ideal

hotel product. Once each participant had their equation, they presented their equation on their

zoom screen. The moderator then reviewed all of the attributes that were discussed and

questioned any that needed further clarification.

Table 2.3. Examples of Equations made by Focus Group Participants

Ideal Lotion Equations	Ideal Shampoo Equations
Lavender scent (inoffensive) + squeezable bottle + white colors on packaging + bold + blocky font (can read from afar) = Ideal Hotel Lotion	2 oz bottle + clear product + bottle being clear + squeeze bottle + upside down tube + black print + clean fresh scent + ingredients do not need to be there = Ideal Hotel Shampoo
Brown see-through bottle + natural not gender specific scent + want to see ingredient list + thicker lotion + neutral tone packaging + brand name + flip top + simple packaging = Ideal Hotel Lotion	Coconut scent + flat lid + black writing + clear color + lather ability + thicker shampoo + Ideal Hotel Shampoo

Data Analysis

The focus groups were conducted one at a time, over one week. Each focus group session was recorded and later transcribed. Additionally, all collage homework assignments were collected to review and examine. The discussion topics during the focus groups were tied back to the original research objectives of the study. Each focus group was transcribed manually and also transcribed with the help of the Otter.ai (Otter.ai, Los Altos, California, USA) software. Both methods were utilized to ensure no feedback was missed. All four focus groups were analyzed separately and then like products were combined to analyze commonalities between shampoo focus groups and lotion focus groups. Common themes across all four focus groups were also determined and a list of all attributes discussed was created for lotions and shampoos. Once a list was consolidated of all attributes, the list was refined by removing repeating and redundant characteristics. Consumer terms such as 'packaging is pretty' were removed as well.

Results and Discussion

Part 1- Hotel Shampoos

This section is based on the findings from two hotel shampoo focus groups. One with economy hotel guests and one with luxury hotel guests. Male and female economy hotel guests and users of hotel shampoos had varying opinions and use of hotel toiletries. Females typically brought their toiletries when traveling to a hotel, but tried (smelled, tested, and observed the brand) the hotel provided toiletries before pulling out and using their own. These toiletries can be described as "luxurious" and "fun" to women and overall, they would like to use the complimentary items (referred to as "freebees" during focus groups) if they can. Men on the other hand relied on the hotel products to get them by on a trip and did not have a process for trying the hotel-provided bath items before use. Both men and women take all of the hotel toiletries with them on the rest of their trip, or once they head home. Some even go as far as to purchase the brand they used at the hotel if they enjoyed the product.

Luxury hotel guests and shampoo consumers (like economy hotel guests and shampoo users) also take hotel toiletry products with them upon completion of their hotel stay. The toiletries that luxury hotel guests "do not normally buy at home" are more appealing and are more likely to be taken by luxury hotel guests. Some of them even go as far as to donate the products to a supply closet at high schools and homeless shelters.

Economy and luxury participants were both shown an image of a shampoo that could be present in an economy or luxury type hotel and asked about their first impressions (Figure 2.1 and figure 2.2). During this exercise, the economy panelists expressed that they liked the type of bottle that was shown; the fact that it had a bigger lid size and that the cap was upside down so that "gravity can pull the rest of the shampoo towards the dispensing area". The participants

opposed the color of the shampoo, which gave economy hotel guests and shampoo users a "perfume smelling" impression even though 'lemongrass' was the intended aroma. If the shampoo indeed smelled like lemongrass, consumers would believe that it is a gender-neutral scent. Additionally, this color indicated there to be chemical additions to the shampoo. One of the participants stated: "the yellow 5 and red 40 dyes are a turn off". Those ingredients were a negative for this consumer group. Also, just from the picture, consumers believed the texture of this shampoo to be an undesirable gel. Lastly, this consumer group was unimpressed with the brand overall. They claimed, "Eco brand is sneaky because it looks good from an eco-friendly standpoint, but the ingredients they use in the shampoo are bad".

Figure 2.1. Example of a Shampoo Used During Economy Focus Group

During the discussion with luxury participants, it was revealed by participants that this type of product was unacceptable. Some participants claimed it reminded them of "baby shampoo" while others claimed it looked like "a cleaning product". These first impressions were based on the color of the product. Participants claimed that the shampoo looked "too generic" and "was not special enough for luxury hotels". Typically, these luxury hotel guests, and

shampoo users did not look at ingredient lists, but because of the color of the shampoo, they claimed they "might look at ingredients because the product does not look natural, but other than that, there is no need". Furthermore, the packaging did not please this consumer group. They disliked the screw-top lid and font size of text. Many consumers claimed that "if they wanted to read the packaging, they would have to put their reading glasses on, which cannot be done in while in the shower".

Figure 2.2. Example of a Shampoo Used During Luxury Focus Group

Both group of consumers analyze hotel products based on three main characteristics, the aromatics, packaging, and the texture of the product. Regarding the aroma of the shampoo, these types of consumers look for a 'gender neutral' aroma (Table 2.3). This aroma can range aromas such as citrus, herbal, and light floral scents. One important feature for economy hotel guests and shampoo users was "the smell of the shampoo should not leave the room with them", this means the aroma intensity should be light and not strong. Hotel guests stated that "the scent of the shampoo equates the quality, so the better the smell the higher quality the product". The focus group participants also explained that shampoos should have an "intense smell and the aroma

should linger and be apparent even after use". This intense aroma can range from a generic fresh/clean smell, coconut and lime verbena, or eucalyptus aromas, but should steer clear of any perfume-like aromas, such as "musty or an old lady like smell". Perfume-like is an undesirable aroma and too overwhelming for this type of consumer.

For shampoo users, hotel shampoos need to be thick in texture and not runny, while also having the lather and 'sudsy' characteristic while wet. One participant noted that "the hotel shampoo should be creamy almost like conditioner". A thick and creamy texture indicates a high level of moisturizing ability, which is another ideal characteristic according to focus group participants (Table 2.4). Additionally, participants mentioned that they can tell a good hotel shampoo from a bad hotel shampoo because "a bad hotel shampoo will get itchy on your scalp". Hotel shampoos should be thick in texture. They claimed that the hotel shampoos should "make you feel clean, have no residue, and lather a lot". Additionally, mint or eucalyptus aromatic shampoos should be accompanied by a tingly sensation as a "tingly sensation indicates a high level of cleaning ability" for this type of consumer.

The packaging (in general) was the least most important aspect of hotel shampoos. The participants indicated that they want to make sure they know what they are using and what components are in their products. Additionally, females expected ingredients to be listed on the packaging and are hesitant to use the product if they are not. Many say not having an ingredient list would be "okay for a night or two, but not for the longer-term". Economy guests and shampoo users are drawn to shampoos that have claims attached to them such as organic, natural, recycled, etc. The brand is also an important factor (Table 2.4). This type of consumer has recognizable and trusted brands they look for in hotel rooms. According to participants, the brand name "makes you feel better to know what it is as you don't have to think about it".

Brands such as Neutrogena, Matrix, Paul Mitchel, Beekman, Aveda, and Bath and Body Works are a handful of brands that were positive to these consumers. Consumers can experience a strong connection with brands they trust (Eversham, 2016). The brand is one of the first and most important features this type of consumer looks for. Brands such as Bath & Body Works, Matrix, Paul Mitchell, Aveda, and Neutrogena were a handful of brands that luxury hotel guests and shampoo consumers know and trust to clean their hair, but if they saw a brand, they did not recognize, they would still use it. One participant said that, "It is nice to see a brand you recognize, it doesn't necessarily have to be super fancy, but if the name is recognizable, it makes you feel better about it".

There were a variety of packaging features that hotel consumers expected out of hotel shampoos. These ranged from the size of the bottle, the shape of the bottle, lid characteristics, and packaging design. The participants wanted a large enough shampoo bottle for more than one use. The standard 30ml bottle that the majority of hotels provide, was just not enough for females, especially those that have long or thick hair. Though the size is a general problem, the shape of the bottle is a huge ordeal. The economy hotel guests, and shampoo users preferred two types of bottles: either a tall cylinder-shaped bottle or a squeeze-tube type bottle (Table 2.4). The tube shape was most preferred as it is "squeezable and you can get every single drop of the product out of the bottle". Both of these bottles are typically accompanied by softer plastic that is easier for the product to be removed. For luxury consumers, a squeeze-tube bottle was ideal because they "do not want to pound it out in the shower". They also claim a non-ideal-shaped bottle is a bottle in a cylinder shape as it is difficult to remove the product from the package. A flip-top cap is also required as a screw-off cap can "be easily dropped in the shower". Additionally, the bottles, lids, and dispense holes need to be bigger. For shampoo color, luxury

hotel guests disliked specific colored hotel shampoos if the appearance does not match with the aroma. When green or blue shampoos have aromatics that match a 'green' or 'blue type aroma such as eucalyptus or ocean respectively, then luxury consumers accept colored shampoos (Table 2.4). This applies to colors other than blue and green, but brown or gold colors are not appealing to this consumer group.

Comparison of Economy and Luxury Hotel Guests and Shampoo Users

COVID-19 has changed the trust in specific hotel toiletry products. This type of consumer will not do anything different when using hotel toiletries, but when staying at a hotel through the COVID-19 pandemic they will take hand sanitizer and sanitizer spray for the hotel room. Economy hotel guests and shampoo users wipe everything down with a sanitizer when they stay at hotels, including the soap, shampoo, lotion, and conditioner bottles (if applicable). Though the cleaning and sanitation have increased, the usage of the hotel toiletry products has stayed consistent for this group. On the other hand, luxury hotel guests will not use dispensed toiletries because they believe that these pumps can be manipulated easily by the hotel or previous guests and do not know if they have been properly sanitized.

It was determined that economy hotel guests analyzed the hotel toiletries before using, by smelling and feeling the product while luxury hotel guests have a 'trust' factor in the hotel they are staying at. Furthermore, luxury guests do not bring their toiletries and rely on those provided by the hotel. The economy hotel guests, and shampoo users were concerned with brand, ingredients, and claims while luxury hotel guests were less concerned. Luxury hotel guests and shampoo consumers on the other hand were very concerned with the sustainability of the hotel toiletry products. Additionally, both groups were equally passionate about the shape, size, and

diverse features of the shampoo packages. Similar to the economy hotel guests, luxury hotel guests believe that the hotel shampoo sizes are often not large enough.

Both of these groups of consumers proved the research by Dev (2018) and Kumar & Dev (2019). They claimed consumers preferred and expected individually wrapped toiletries when compared to wall distributed toiletries. It was shown in these focus groups that during the pandemic of COVID-19, consumers are expecting and wanting individually packaged hotel toiletries versus the dispensed products typically found in the shower. Color of shampoo was a polarizing attribute for hotel shampoos. Luxury hotel guests disliked the look of non-natural-looking hotel shampoo products because it reminded them of cleaning products and baby shampoo, while economy hotel guests disliked the look of colored shampoos because of the association with a perfume aroma. The aroma and texture of the product were the most important features for both groups as they wanted 'gender neutral' aromas and thick and sudsy textures. Additionally, both consumer types wanted to have moisturizing hotel shampoos. From these focus groups, consumers were able to pinpoint various features that were preferred when using hotel shampoos. Combining both the economy and luxury hotel guests features created a list of 32 attributes. Further studies using these attributes will be used to determine which attributes are the most and least important regarding hotel shampoos.

Table 2.4. Hotel Shampoo Attributes Generated during Focus Group Discussions

Aroma	Packaging	Appearance	Texture
Gender-Neutral Aroma**	Listed Ingredients	Clear**	Suds**
Light Clean Scent	Brand Name**	Pale in Color*	Moisturizing**
Essential Oil Scent	Sufficient Labeling	White in Color*	Thick*
Eucalyptus*	Larger Bottle**		Tingly Sensation*
Fresh Scent*	Sulfate Free		
Intense Smell*	Cruelty Free		
Coconut Lime Verbena*	Tube Bottle**		
	Big Cap Size		
	Upside Down Bottle		
	Squeeze Bottle		
	Unique Label Design**		
	Flip-Top Lid**		
	Big Font		
	Tall Cylinder Shape		
	Refillable		
	Organic**		
	See Through Packaging**		
	Local Product		
	Flat Lid*		
	Monochrome Packaging*		
	Soft Plastic		
	White Bottle		

* = Luxury **= Both Economy and Luxury

Part 2- Hotel Lotions

This section is based on the findings from two hotel lotion focus groups, one with economy hotel guests and one with luxury hotel guests. The groups discussed the fact that if a hotel toiletry is provided to them, and they like the product, the hotel lotions will end up being brought back home with them. Though this is the case, presentation is key for hotel guests. Hotel guest's first impression comes from the packaging. Participants indicated that "higher end' and more expensive looking packaging is best". Generic packaging, such as "one letter on the front of the package" is not appealing, but they also do not want the packaging to be overwhelmed with labels and designs. Chris, aged 45-50 years old, said that he "does not want the packaging to try so hard, but unique packaging is ideal". The second 'impression' comes from the sensory characteristics such as the aroma and texture of the product. A visually appealing and unique presentation shows luxury hotel guests and lotion consumers that the hotel put effort into their bath products.

Both consumer groups were also asked about first impressions of specific hotel lotions. An example of an economy and luxury hotel lotion was shown, and participants were asked to share their thoughts on the lotion (Figure 2.3 and 2.4). From this activity, economy hotel guests and lotion users immediately recognized the Paul Mitchell brand. This brand influenced the economy hotel guests and lotion users as they said they would "at least try the product because of the brand", and this consumer group also indicated that "because it is a name brand, the product would be less runny than some other hotel lotions". Consumers also liked the look of this packaging and believed that the color of packaging and labeling aligned with the product aroma. Elizabeth, aged 25-34, was "excited by the front of the packaging as lemon sage sounds good". While another participant indicated that "the lemon sage aroma could smell like kitchen

soap and would need to be smelled before putting it on the body". Unfortunately, the economy

hotel guests, and lotion users did not like the 'energizing' claim. One participant indicated that

this claim made her believe that the brand "put in extra chemicals to make you energized".

Additionally, the ingredient list is very "off-putting" due to all of the chemicals. Elizabeth, aged

25-34, who was excited by the front of the packaging, was "not as excited at the back of the

lotion because of all of the chemicals". The shape of the bottle was also not the type of bottle

they would have preferred as this bottle looks like a "hard plastic" that would be "difficult to

remove from the bottle". Generally, economy hotel guests and lotion users liked the product

because they recognized the brand name, but they did have critiques of the features in this

example.

Figure 2.3. Example of a Lotion Used During Economy Focus Group

The participants were asked to look at an example of a luxury hotel lotion and give their

first impression of the product (Figure 2.4). From this exercise, it was disclosed that this example

was appropriate for the types of hotels they most typically stay at. By looking at the lotion, the

women participants claimed that "the packaging looks chic and unique and could be designer".

The white colored packaging was not overpowering. Additionally, Jenni, aged 25-34, noted that "the 'goat milk' claim on the front of the lotion indicated the lotion is of high quality. If this lotion had mentioned essential oils, that would also indicate it is of high quality". The only feature that repressed full approval was the hard plastic. This lotion package looks as if the hard plastic would make it difficult to remove from the bottle. It was determined that this type of hotel lotion would be close to ideal for luxury hotel guests and lotion users based on first impressions.

Figure 2.4. Example of a Lotion Used During Luxury Focus Group

The aroma for lotions is so important for hotel guests because it can "linger on your skin upon using the product". The aroma is especially important for males. Chris, aged 45-50, explained that "aroma is a big thing [for hotel lotions]. It cannot smell like flowers; it needs to be a plain jane smell". A gender-neutral scent was acceptable to both males and females. A non-scented lotion was also acceptable to this consumer group. Hotel lotions with a perfume-like or highly fragrant aroma were undesirable because hotel lotions that are "highly fragrant don't work and tend to dry out [the skin] more than work". If an aroma is present, rosemary, lavender, essential oil, and clean aroma are some examples of aromas that fall under the 'gender neutral' and 'not feminine' categories that would be deemed acceptable for hotel lotions. Luxury hotel

guests and lotion users were more specific on the aroma requirements. Male luxury hotel guests and lotion users were passionate about the aroma characteristics of their hotel lotions. Male participants preferred a hotel lotion that is "either non-scented or a scent that is not too strong". Men did not want the aroma of the lotion to linger and stay on their skin. Connor, aged 25-34, indicated "I want the scent to be quick and short, but decent smelling all at the same time." Females on the other hand were not as particular. A gender-neutral or essential oil aroma is preferred from females that use luxury hotel lotions. The essential oil aroma can range from eucalyptus, citrus, or even lavender as long as it is not too overpowering.

The texture of the lotion was the second most important attribute. The participants stated that "lotions are meant to moisturize your skin and help prevent dryness". If a hotel lotion does not live up to this standard, it will not be accepted by this consumer group. Heather, aged 35-44, indicated the hotel lotion should be "a thick, almost cream-like, lotion that you rub in and still feel on your skin and does not just evaporate". All participants agreed with Heather's statement. Additionally, the texture of the hotel lotion should not have a greasy or oily feeling, nor should it have a watery consistency. A thick and creamy texture is the ideal texture for luxury hotel guests and lotion consumers as well. Additionally, a quick absorption, a smooth feeling on the skin, and a non-greasy lotion are characteristics that a hotel lotion should have.

For packaging, participants did not want to "pound the product" out of the bottle, they wanted an easy to dispense container. Liz, aged 35-44, specified that "pumps would be nice on hotel lotions". Additionally, lotion users wanted a larger size of the easy-to-squeeze container. The current bottles (30ml or 1 oz.) were claimed as not sufficient for more than one person or more than one use. It was suggested that hotels could "provide larger hotel lotions if more than one person is staying in the room, or if the length of stay is longer than a day". According to

female guests "one 30ml bottle of hotel lotion can last maybe three nights". On the other hand, male participants indicated "a bottle of hotel lotion can last five nights". This is where bulk items would be preferred, but with the Coronavirus Pandemic, consumers were skeptical to use that type of dispense system. Larger bottles of toiletries would be preferred by this consumer group.

Aside from packaging type, brand, claims, and ingredients on the hotel lotion packaging were deemed important as well for economy hotel guests. For female economy hotel guests and lotion users' brand and the type of ingredients in their hotel lotions are of high importance. Women did not want to see a lot of chemicals, dyes, and un-natural ingredients on the ingredient statement. Though if there is no ingredient statement, they would be more likely to use it as they would not be aware of any added components. A 'natural' product appeals to females in the economy hotel guest and lotion group. A natural lotion can be seen as having an essential oil aroma or even having a brand name that the consumers trust. Furthermore, a 'natural' or 'organic' claim would increase their acceptance of hotel lotions. Certain claims such as energizing make it seem like the brand is adding extra chemicals or additives that will make you energized. This ultimately relates the product to be artificial. On the other hand, monochrome labeling, translucent packaging, and brand name were key characteristics that luxury lotions should have (Table 2.5). Brand names such as Aveda, St. Regis, Thann (Marriott), and Paul Mitchell were favored by luxury hotel guests and lotion consumers. The monochrome labeling and brand name features indicate a high-quality lotion. Chad, aged 34-45, claimed that "packaging does make a difference. It can be the difference between cheap and expensive hotels". The translucent packaging allows the consumer to be able to see how much product has been used. As long as hotel lotions catch luxury hotel guests and lotion users' eyes and are visually appealing, luxury hotel guests and lotion consumers will be impressed and proud to use that hotel lotion. Luxury

hotel guests and lotion users were not particular about claims or ingredient lists. They said it would be pleasant to see "organic" on the label, but it was not necessary. As for ingredients, they do not need to be labeled and listed on the packaging. The 'trust' this type of consumer has with their hotel reduces the amount of information that should be given on hotel toiletry packages.

Lastly, lotion users were asked if they would pay more for improved hotel toiletries. During this discussion, it was determined that yes, they would pay more for enriched toiletries, but only if the location wasn't their priority. If the location of the hotel was close to a venue they needed to attend, they would select that hotel even if their hotel toiletries were subpar. If the location was not a factor in their decision, then more payment would be acceptable for upgraded hotel toiletries.

<p align="center">**Comparison of Economy and Luxury Hotel Guests and Lotion Users**</p>

Luxury hotel guests and users of hotel lotions had somewhat dissimilar perspectives on hotel lotions when compared to economy hotel guests and lotion users but had very similar outlooks when in comparison to luxury hotel guests and users of hotel shampoos. Both groups of luxury hotel guests rely on hotel-provided toiletries, unlike economy hotel guests who will bring their own and then test the hotel products before using them. Additionally, for hotel shampoos texture was the most important modality, but aroma was the most important attribute of hotel lotions.

The economy hotel guests, and lotion users were concerned with brand names, ingredients, and claims while luxury hotel guests' users were not as concerned due to their 'trust' factor that their hotel would only give them the best hotel toiletries. In the study by Kim and Chung (2011), it was found that organic personal care products have a higher purchase intent. This trend follows through with the observations made during the focus groups. Economy hotel

guests and lotion users wanted claims to be included on their hotel lotions and luxury hotel guests indicated that an organic claim would be "nice to see" on their hotel lotions.

Furthermore, economy hotel guests and lotion users cared significantly more about the naturalness of the hotel lotion. Additionally, the texture, such as 'thickness', and aroma, such as 'gender neutral', of the product were the most important sensory characteristics. It was also shown that there are numerous attributes in the packaging modality that are highly desirable by economy hotel guests and lotion users even though the packaging was not the most important feature of hotel lotions. Luxury hotel guests and hotel lotion consumers were more concerned with the aroma of the hotel lotion products than economy hotel guests. Luxury hotel guests did not want aromatics to linger on their skin, but rather have the hotel lotion to be scentless. Specifically, for male luxury hotel guests, a non-scented or even light scent was preferred. Additionally, a quick absorption, a smooth feeling on the skin, moisturizing, and a non-greasy lotion are characteristics that a hotel lotion should have according to luxury hotel guests. These correlate with economy hotel guests' needs as well. These findings follow with the findings from Mintel on the body care market, saying "moisturizing is the most sought after" feature of lotions (Li, 2019). Both groups of hotel lotion users were equally passionate about the shape, size, and diverse features of the lotion packages. Like shampoo users, both hotel lotion focus groups believe that the bottle sizes are not large enough.

According to Yu & Timmerman (2014), half of the consumers would pay more for enhanced hotel toiletries. This was confirmed during these focus groups but in less capacity. Both luxury lotion and shampoo users would pay more for improved and more sustainable hotel toiletries. Unfortunately, it was determined that location is the priority versus hotel toiletries. If it was a hotel with a good location, but sub-par toiletries, they would still pick the hotel because of

the location. So, in the end, yes, they will pay for more sustainable hotel toiletries, but only if the location is not in consideration. This conclusion was also found by Mintel saying that environmental concerns are still of interest to consumers but are not a requirement and can help brands 'stand out' (Guinaugh, 2019).

From all focus groups, consumers were able to pinpoint various features that were preferred when using hotel shampoos and lotions. 49 unedited features were generated for hotel shampoos and hotel lotions. These features will be validated and compared to terms generated by trained panelists to determine any attributes missing from the list created during the online focus groups. The final list of features will then be used to determine which attributes are the most and least important to consumers regarding hotel shampoos and lotions.

Table 2.5. Hotel Lotion Attributes Generated during Focus Group Discussions

Aroma	Packaging	Appearance	Texture
Gender-Neutral Aroma**	Natural Product (no chemicals or dyes)	White Color**	Thick Lotion (cream)**
Clean Aroma	Brand Name**	Pale Color**	Fast Absorption**
No Perfume	Flip-Top Lid**	Clear Color*	Not Greasy**
Natural Scent	Soft Plastic		Moisturizing*
Unscented**	Larger Bottle**		Smooth Texture*
Eucalyptus*	Brown Colored Bottle		
Fresh Scent*	Unique Packaging**		
Light Scent*	Round Bottle		
	Ingredients Listed		
	See Through Bottle**		
	Color on Writing		
	Seal on Top of Packaging (Tube Shape) **		
	Easy to Squeeze		
	Larger Dispense Hole**		
	Monochrome Labeling*		
	Claims (organic, natural) **		
	White Colored Bottle		

* = Luxury **= Both Economy and Luxury

Limitations

There are some limitations to this research. First, due to the Coronavirus Pandemic that occurred during the time of this study, the focus groups were performed via an online video platform. Ideally, all consumers would be able to be in the same room together, but to prevent the spread of this virus, precautions were taken. Second, the number of participants was less than ideal. Due to cancelations during the week of the study, a lower number of panelists were included in the study. With this, there is a limitation of having a lower percentage of male participants. The importance and desires of hotel toiletries vary from person to person and a small group of consumers is not ideal to represent an entire consumer group. Additionally, there was only one focus group conducted on each topic and ideally three focus groups would be done on each topic (12 total). Thirdly, consumers were recruited by hotel type as the main differentiator other than that type of hotel toiletry they used. The 'economy' hotel guest group was expanded to midscale hotel guests as well, due to the difficulty in recruiting economy hotel guests (Table 2.1). Additionally, the 'luxury' hotel guests' group was expanded to 'upper upscale' hotel guests as there was a limited number of consumers recruited in the 'luxury' hotel type. Lastly, there was a time constraint on each focus group which could have limited the attitudes and outlooks collected from each focus group. To account for the limitations of this study, further in-person focus groups and online surveys should be conducted to validate the results in this study and to achieve a larger sample size that would better represent the standard population.

Conclusion

This study was used to gather consumer attributes that described both hotel toiletries while also comparing the differences between economy and luxury hotel guests. The outcome of this study resulted in various attributes to describe hotel shampoos and lotions, and also how the economy and luxury hotel guests use hotel toiletries.

Luxury and economy hotel guests have perceived differences of hotel shampoos and lotions. Luxury hotel guests believed brand name, ingredients, and claims were not necessary as they had a 'trust factor' in which no matter the toiletry product, their trust in the hotel was all powerful. Economy hotel guests on the other hand tested the hotel shampoos and lotions prior to use to verify it was to their standards.

There were also differences between hotel shampoo and hotel lotion perceptions. Over 80 combined features were created to describe hotel shampoos (49 features) and lotions (48 features). These key features can be used to describe the aroma, packaging, and texture of the products. For both hotel shampoos and lotions, the scent should be either a relaxing, spa-like scent or a gender-neutral aroma. The texture of hotel shampoos and lotions should be thick and moisturizing. Hotel shampoos should also have a high lather ability, while hotel lotions should be non-greasy. Additionally, both products should come in an easy to squeeze bottle so that all of the shampoo or lotion can be used and should have a flip-top cap for easy access to the shampoo or lotion.

The attributes will be used in further online research to explore the most and least important characteristics of hotel shampoos and lotions. From this study, hotel owners and managers can explore the various opinions and perceptions luxury and economy hotel guests have regarding hotel shampoos and lotions.

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Chapter 3 - Sensory Attribute Generation of Hotel Shampoos and Lotions

Abstract

Sorting tasks can be a quick alternative to descriptive sensory panels. Grouping is a process that can be used to describe products and find similarities (or differences) between samples. The objectives of this study were to a) develop a list of attributes to describe the sensory characteristics of hotel shampoos and lotions and b) to determine sensory similarities between hotel shampoos and lotions by conducting a sorting task. Ten subjects were recruited to conduct free sorting tasks and describe the key characteristics of hotel shampoos and lotions. 33 shampoos and 30 lotions were collected and used during the sorting task. Each individual completed a shampoo and lotion sorting task. Aroma and texture modalities were the main sensory differences among samples. Textures such as glycerin-like and watery (thin) described specific hotel shampoos while thick and greasy portrayed particular hotel lotions. The list of attributes generated during the focus group study was validated against attributes generated by this panel. Continued research will be conducted to determine which hotel shampoo and lotion features are the most ideal and which product (from the key characteristics and sorting task) are the most similar to the ideal.

Introduction

Investigative research such as descriptive analysis and free sorting tasks have been used to explore sensory characteristics of specific products or collections of products. Typically, research methods such as descriptive analysis use trained panelists to profile and quantify those characteristics.

Free Sorting, Napping, and Projective Mapping are examples of 'rapid' analytical sensory methods. These types of methods can be used when time and resources are limited. Sorting tasks can even be used before descriptive analysis methods to reduce the number of samples to a suitable size for descriptive panels. Descriptive analysis should only be conducted on a smaller number of products but sorting tasks can be done on a larger scale with different samples, making it an ideal first step before descriptive analysis. Faye et al. (2004) used free sorting as an alternative to descriptive analysis because the number of samples that are used in the free sorting task would be too large to be used in a standard descriptive panel. Their free sorting task required 159 naïve consumers to group 26 triangular plastic pieces into groups based on only their similarities unlike in Faye et al. (2013) where they are instructed to sort wine glasses based on both similarities and differences. They were also required to describe their groupings. The data obtained were then analyzed by Multidimensional scaling and compared to sensory profiling by a trained descriptive panel. From this study, it was determined that the verbiage used by consumers to describe their groupings and the descriptors used by trained panelists expressed the same meaning. This investigation confirmed their claims that the results from the free grouping could be used in place of sensory profiles created by trained panelists.

Though sorting tasks started in the field of psychology, it is used in sensory analysis because it is one of the most basic perceptive procedures. Sorting tasks are also thought to be less

extenuating than rankings or descriptive analysis for analyzing perceived differences and similarities in a group of products (Blanchard and Banerji, 2015). Though sorting tasks have many upsides, this type of analysis comes with decisions on several different factors. Blanchard and Banerji (2015) explored the effects of seven design factors by testing over 36 diverse sorting tasks. Each sorting task also corresponded to a decision that researchers could make when designing their sorting task: Having pre-task tutorials (or not), number of objects to include (20, 40, or 60), types of objects to be sorted (food objects, food pictures, or list of names), label description (labeling the groups that are created or not), instructions provided during the task (sorting via similarities or differences), type of sorting task (multiple or single sorting tasks), and required use of all cards (being required to group all products or not). This research concluded that having pre-task tutorials or not having pre-task tutorials did not affect the abilities to complete the sorting task. Additionally, the number of objects can have a negative effect on consumers as the number of products increases to 60. It was also determined that participants appreciated the sorting methodology more when fewer samples were used. The type of object affected participants when lists of objects were used versus pictures of the products. Lastly, there were no effects when participants were asked to describe their groups upon completion of the sorting task. From analyzing each factor, the outcomes of this study are to assist researchers in the best sorting task practices to produce the best results.

The objectives of this research were to develop a list of attributes to describe the sensory characteristics of hotel shampoos and lotions and determine similarities between hotel shampoos and lotions by conducting a minor sorting task.

Methodology

Samples

In total, thirty-three shampoos and thirty lotions (Table 3.1 and 3.2) were selected from various hotels in the United States of America and Europe. The products were collected from a range of hotels such as economy (Eco Lodge) and luxury (Ritz-Carlton) hotels. The shampoo and lotion samples were separated into two separate sorting tasks. During each task, the samples were presented simultaneously to the subjects in their original packaging labeled from 1-33 (1-30 for hotel lotions). The Committee on Research Involving Human Subjects / Institutional Review Board (IRB) for Kansas State University approved this research under proposal number of 10278.

Table 3.1. Hotel Shampoo Samples Used for Attribute Generation

Shampoo Number	Brand
1	AC Hotels Shampoo
2	ACCA KAPPA Green Mandarin Shampoo
3	Argan Source Shampoo Balm
4	Aromatherapy Associate
5	Beekman Fresh Air Shampoo
6	Body & Bath Works Coconut Lime Verbena Volumizing Shampoo
7	Body & Bath works Coconut Lime Verbena
8	Body & Bath Works Rain Kissed Leaves Volumizing Shampoo
9	Co Bigelow Bath & Foam Shampoo
10	Comfort Care Gentle Cleansing Shampoo
11	Crabtree & Evelyn Verbena and Lavender Shampoo
12	Eco Sciences Shampoo
13	Gerbera Childhood Shampoo Conditioner
14	Gilchrist & Soames Shampoo
15	Heavenly Spa White Tea Aloe Shampoo
16	Landmark Lancaster Shampoo
17	Marriot Vacation Club White Tea Shampoo
18	Matiz Shampoo
19	Matrix Total Results Shampoo
20	Molton Brown Indian Cress Purifying Shampoo
21	Neutrogena Shampoo
22	NH Collection Hotels Nourishing Vitamin Rich Shampoo
23	Pantene Daily Moisture Renewal Shampoo
24	Paul Mitchell Awapuhi Shampoo
25	Peter Thomas Roth Mega Rich Shampoo
26	Pharmacopia Verbena Shampoo
27	Raio Revitalizing Citrus Mint Shampoo
28	TAROCCO Moisturizing Shampoo
29	True Red Conditioning Shampoo
30	Temple Spa Good Hair Day Shampoo
31	THAAN Aromatherapy Shampoo
32	Windsor Barra Shampoo
33	Asprey London Purple Water Shampoo

Table 3.2. Hotel Lotion Samples Used for Attribute Generation

Lotion Number	Brand
1	Aqua Senses Body Lotion
2	Aroma Therapy Associates Body Lotion - Lavender Ylang Ylang
3	Neutrogena Body Lotion - Light Sesame
4	NH Collection Body Milk
5	Bath and Body Works Body Kituib - Coconut Lime Verbena
6	Crabtree & Evelyn Verbena Lavender Body Lotion
7	Windsor Barra
8	Beekman Fresh Air Lotion
9	Matrix Total Results Lotion
10	United Airlines Lotion
11	Marriott White Tea Body Lotion
12	NH Collection Hand Cream
13	Bliss Body Lotion
14	Peter Thomas Roth Mega Rich Lotion
15	Crabtree & Evelyn - Citron Honey & Coriander
16	Comfort Care Ultra Moisturizing Lotion
17	Oklahoma State University Atherton Hotel
18	Pecksniff's Mood Therapy - Calm
19	Fresh & Clean Soothing Body Lotion
20	Aroma Actives Essentials
21	Paul Mitchell Lemon Sage Energizing Body Lotion
22	Bath and Body Works White Citrus Lotion
23	Heavenly White Tea Aloe Body Lotion
24	Thann Aromatic Wood Body Lotion
25	Acca Kappa Green Mandarin
26	Alma Brasil
27	White Tea & Rose Aromatherapy
28	JR Watkins
29	Tokyo Milk Body Lotion Mimos Mandarin
30	Asprey London Purple Water

Subjects

Ten subjects, a mixture of graduate students from Kansas State University and product users, analyzed the key sensory characteristics of hotel shampoos and lotions. This research was deemed acceptable as a multitude of research was conducted on the replacement of trained panelists by using 'naïve' consumers and a sorting task (Cartier et al., 2006). All trained participants had taken prior courses on free sorting tasks (Table 3.3). The subjects were classified as 'trained' due to having significant education and background in sensory science and were no longer able to be considered naïve consumers. As well as the five trained participants, five naïve consumers were recruited to participate in the free sorting task as well. Most studies use 20-50 untrained panelists, but due to COVID-19 restrictions and sample limitations, only five panelists were recruited. All five participating individuals ranged in ages and type of hotels they typically stay to ensure a wide range of background (Table 3.3). These subjects were classified as 'naïve' consumers due to their lack of knowledge in the field of sensory science and sorting tasks.

Table 3.3. Sorting Task Participant Demographics

Number of Participants	Trained Panel (n=5)	Naïve Consumers (n=5)
Gender		
Male	1	2
Female	4	3
Age		
Below 25	2	1
25-34	3	1
35-44	0	1
45-50	0	2
Highest Education Level Achieved		
High School Diploma	0	2
Bachelor's Degree	3	3
Master's Degree	2	0

Sorting Procedure

Key Characteristics

The trained participants were instructed to use their sensory knowledge to develop the top three to five characteristics of each hotel shampoo and lotion before completing their sorting task. It was also stated to only analyze the sensory characteristics and not to evaluate the packaging and appearance attributes. Example attributes were given such as stickiness, smoothness, absorption ability, greasiness, and various aroma characteristics. All trained panelists were given one week to analyze all shampoos (33) and an additional week to analyze all lotions (30) before submitting their final data.

Free Sorting Task

Participants individually participated in a free sorting activity. For the trained participants, this activity required them to group the toiletries only by the sensory characteristics they determined from the previous trained panel activity. For the naïve consumers, they were instructed to group the toiletries based on similarities in the sensory properties of the shampoos and lotions such as texture and aroma. No other requirements were given other than at least two groups had to be created. Each participant completed two sorting tasks, one for shampoos and one for lotions. The product order and appearance were randomized for each person. Once their groups were created, they were instructed to describe each group's sensory characteristics by a verbalization task. No replication of the sorting tasks was completed.

Data Analysis

Key Characteristics

The key characteristic feedback was analyzed by collecting and consolidating all key attributes of each shampoo and lotion to determine the top three overall characteristics. Those attributes that were mentioned by at least three out of the five panelists were flagged as a top characteristic. From those characteristics that were flagged, a list was created for each hotel shampoo and lotion. Attributes that were mentioned by only one participant were discarded. Those shampoos and lotions that had varying opinions of key characteristics were reviewed by the researcher who made the final decision on the key texture and aroma characteristics.

Free Sorting Task

Free sorting data was collected from both the trained and naïve consumer groups and coded. Coding free sorting data was done by creating a similarity matrix (shampoo x shampoo or lotion x lotion) where the higher the number the more similar two samples are. A separate matrix was created for each product (shampoo and lotion) and each group (trained and naïve consumer). The trained and naïve consumer matrices were analyzed separately due to their education types. The resulting matrices were analyzed using Agglomerative Hierarchical Clustering (AHC). Additionally, all consumers were asked to complete a verbalization task to describe the groups. The descriptions of each group created by both the trained and naive consumers were collected, and similarities were noted. The definitive list of attributes was then compared to previous research and a finalized list of attributes was determined for the quantitative survey.

Results

Key Characteristics

Each panelist determined the top three-to-five sensory characteristics of each hotel lotion and hotel shampoo. After completion, all characteristics were reviewed, and the final characteristics for each hotel shampoo and lotion were determined (Table 3.4 and 3.5). Some hotel shampoos and lotions had three top characteristics and others had four or five. The characteristic descriptors belonged to only three modalities: aroma, texture, and absorption (lotions only). These findings were similar to Szakiel's (2012) research on body lotions who claimed that there were three groups of characteristics that were noticeable by all consumers. These groups were consistency (texture), absorption, and 'fragrance' (aroma) (Szakiel, 2012). Various aromas were discovered, but for hotel shampoos fruity (citrus, coconut, etc.) was the most popular aroma and for hotel lotions soapy/clean was the most popular aroma (Table 3.4). Scent strength was also discussed such as many of the hotel shampoos had low strength aromatics. For texture, it was found that the majority of the hotel shampoos and lotion fall into two categories, thick or thin. Additionally, a sticky, gel-like, stringy, watery (wet), and slick textures were also used to describe the hotel shampoos. Characteristics such as thick, thin (watery), and greasy were used to describe more than 75% of the shampoos. Many hotel shampoos had characteristics such as sticky and stringy which have been shown to be negative characteristics by many hotel consumers (Trip Advisor Reviews by Texas5r (2013) and WanderKatt (2017)). Gel or glycerin-like texture was also assigned to a variety of samples of shampoo by the panelist.

Similar to the hotel shampoos, the hotel lotions had various aromas, but it was more common that the lotion had a floral or a soapy/clean aroma rather than perfume or citrus scent

like the hotel shampoos (Table 3.5). Scent strength was not discussed as a major key

characteristic for most of the lotions, but some had a low strength aroma distinction. The texture

of the lotions ranged from thin to thick. For hotel lotions, a wet, creamy, greasy, waxy, oily, and

high coating textures can be used as descriptors. Many of the lotions expressed a creamy or

moisturizing texture as their main texture characteristic. Unfortunately, many of the lotions also

contained undesirable characteristics such as greasy and oily. The hotel lotions also had an

additional modality, absorption. The majority of the hotel lotions had a 'easy absorption'

distinction, but a few had the 'hard to absorb' label.

Table 3.4. Hotel Shampoos Used for Attribute Generation with Key Sensory Characteristics

Shampoo Number	Shampoo Brand	Characteristic 1	Characteristic 2	Characteristic 3	Characteristic 4	Characteristic 5
1	AC Hotels Shampoo	Floral Aroma	Soapy Aroma	Perfume Aroma	Low Strength Aromatics	Thin Texture
2	ACCA KAPPA Green Mandarin Shampoo	Citrus Aroma	Orange Aroma	Sticky Feel		
3	Argan Source Shampoo Balm	Soapy Aroma	Perfume Aroma	Thick Texture		
4	Aromatherapy Associate	Perfume Aroma	Mint Aroma	Soapy Aroma	Sticky Feel	Thick Texture
5	Beekman Fresh Air Shampoo	Citrus Aroma	Thick Texture	Glycerin Feel		
6	Body & Bath Works Coconut Lime Verbena Volumizing Shampoo	Coconut Aroma	Sticky Feel	Thick Texture	Lime Aroma	Citrus Aroma
7	Body & Bath works Coconut Lime Verbena	Coconut Aroma	Sticky Feel	Thick Texture	Lime Aroma	Citrus Aroma
8	Body & Bath Works Rain kissed Leaves Volumizing Shampoo	Soapy Aroma	Thick Texture	Sticky Feel		
9	Co Bigelow Bath & Foam Shampoo	Citrus Aroma	Floral Aroma	Gel-like Texture	Thick Texture	
10	Comfort Care Gentle Cleansing Shampoo	Soapy Aroma	Powder Aroma	Sticky Feel		
11	Crabtree & Evelyn Verbena and Lavender Shampoo	Soapy Aroma	Floral Aroma	Citrus Aroma	Stringy Feel	Thick Texture
12	Eco Sciences Shampoo	Soapy Aroma	Low Strength Aromatics	Sticky Feel	Watery / Thin Texture	
13	Gerbera Childhood Shampoo Conditioner	Powdery Aroma	Soapy Aroma	Floral Aroma	Watery / Thin Texture	
14	Gilchrist & Soames Shampoo	Perfume Aroma	Powdery Aroma	Thin Texture		
15	Heavenly Spa White Tea Aloe Shampoo	Clean / Fresh Aroma	Floral Aroma	Gel / Glycerin-like Texture	Medium Thickness	

Shampoo Number	Shampoo Brand	Characteristic 1	Characteristic 2	Characteristic 3	Characteristic 4	Characteristic 5
16	Landmark Lancaster Shampoo	Powder Aroma	Stringy Feel	Slimy Texture		
17	Marriot Vacation Club White Tea Shampoo	Perfume Aroma	Thick Texture	Gel-like Texture		
18	Matiz Shampoo	Citrus Aroma	Cleaner Aroma	High Spread		
19	Matrix Total Results Shampoo	Fruity Aroma	Sweet Aroma	Thick Texture		
20	Molton Brown Indian Cress Purifying Shampoo	Perfume Aroma	Greasy Texture	Slick Texture		
21	Neutrogena Shampoo	Perfume Aroma	Ocean Aroma	Sticky Feel	Wet Feel	
22	NH Collection Hotels Nourishing Vitamin Rich Shampoo	Green Tea Aroma	Green Aroma	Thick Texture	Glycerin-like Texture	
23	Pantene Daily Moisture Renewal Shampoo	Fruity Aroma	Apple Aroma	Watery Texture	Sticky Feel	
24	Paul Mitchell Awapuhi Shampoo	Fresh Aroma	Cotton / Linen Aroma	Stringy Feel		
25	Peter Thomas Roth Mega Rich Shampoo	Eucalyptus Aroma	Green Tea Aroma	Stringy Feel		
26	Pharmacopia Verbena Shampoo	Aloe Aroma	Citrus Aroma	Stringy Feel	Wet Feel	
27	Raio Revitalizing Citrus Mint Shampoo	Mint Aroma	Citrus Aroma	Wet Feel		
28	TAROCCO Moisturizing Shampoo	Orange Aroma	Low Strength Aromatics	Glycerin-like Texture	Stringy	
29	True Red Conditioning Shampoo	Floral Aroma	Sticky Feel	Gel / Glycerin-like Texture		
30	Temple Spa Good Hair Day Shampoo	Eucalyptus Aroma	Tea Tree Aroma	High Strength Aromatics	Thin Texture	Stringy Feel
31	THAAN Aromatherapy Shampoo	Citrus Aroma	Thick Texture	Stringy Feel	Sticky Feel	
32	Windsor Barra Shampoo	Fruity Aroma	Thin Texture	Watery Feel		
33	Asprey London Purple Water	Floral Aroma	Wet Feel	Slick Texture		

Table 3.5. Hotel Lotions Used for Attribute Generation with Key Sensory Characteristics

Lotion Number	Lotion Brand	Characteristic 1	Characteristic 2	Characteristic 3	Characteristic 4	Characteristic 5
1	Aqua Senses Body Lotion	Perfume Aroma	Thin Texture	Wet Feel		
2	Aroma Therapy Associates Body Lotion - Lavender Ylang Ylang	Lavender Aroma	Floral Aroma	Creamy Texture		
3	Neutrogena Body Lotion - Light Sesame	Oxidized Aroma	Rancid Aroma	Wet Feel	Thin Texture	
4	NH Collection Body Milk	Perfume Aroma	Wet Feel	Thin Texture	Creamy Texture	
5	Bath and Body Works Body Kituib - Coconut Lime Verbena	Coconut Aroma	Lime Aroma	Creamy Texture		
6	Crabtree & Evelyn Verbena Lavender Body Lotion	Citrus Aroma	Thin Texture	Creamy Texture		
7	Windsor Barra	Floral Aroma	Perfume Aroma	Thin Texture	Wet Feel	
8	Beekman Fresh Air Lotion	Oxidized Aroma	Rancid Aroma	Creamy Texture	Waxy Feel	Easy Absorption
9	Matrix Total Results Lotion	Clean / Fresh Aroma	Oily Texture	Easy Absorption		
10	United Airlines Lotion	Soapy Aroma	Low Strength Aromatics	Thin Texture	Wet Feel	Easy Absorption
11	Marriott White Tea Body Lotion	Soapy Aroma	Perfume Aroma	Powdery Aroma	Oily Texture	Easy Absorption
12	NH Collection Hand Cream	Soapy Aroma	Perfume Aroma	Creamy Texture	Thick Texture	Easy Absorption
13	Bliss Body Lotion	Clean Aroma	Ocean / Seabreeze Aroma	Oily Texture	Easy Absorption	
14	Peter Thomas Roth Mega Rich Lotion	Floral Aroma	White Tea Aroma	Creamy Texture	Thin Texture	

Lotion Number	Lotion Brand	Characteristic 1	Characteristic 2	Characteristic 3	Characteristic 4	Characteristic 5
15	Crabtree & Evelyn - Citron Honey & Coriander	Citrus Aroma	Soapy Aroma	High Coating Feel	Easy Absorption	
16	Comfort Care Ultra Moisturizing Lotion	Soapy Aroma	Powdery Aroma	Thin Texture	Wet Feel	
17	OSU Atherton Hotel	Soapy Aroma	Low Strength Aromatics	Thin Texture		
18	Pecksniff's Mood Therapy - Calm	Soapy Aroma	Thin Texture	Easy Absorption		
19	Fresh & Clean Soothing Body Lotion	Clean Aroma	Thin Texture	Creamy Texture	Easy Absorption	
20	Aroma Actives Essentials	Floral Aroma	Herbal Aroma	Easy Absorption		
21	Paul Mitchell Lemon Sage Energizing Body Lotion	Citrus Aroma	Thick Texture	Creamy Texture	Easy Absorption	
22	Bath and Body Works White Citrus Lotion	Citrus Aroma	Tea Aroma	Moisturizing Texture		
23	Heavenly White Tea Aloe Body Lotion	White Tea / Tea Aroma	Soapy Aroma	Creamy Texture		
24	Thann Aromatic Wood Body Lotion	Floral Aroma	Woody Aroma	Greasy Feel		
25	Acca Kappa Green Mandarin	Citrus Aroma	Thin Texture	Oily Texture		
26	Alma Brasil	Soapy Aroma	Floral Aroma	Thin Texture		
27	White Tea & Rose Aromatherapy	Floral Aroma	Tea Aroma	Rose Aroma	Greasy Feel	Hard to Absorb
28	JR Watkins	Green Aroma	Thick Texture	Creamy Texture		
29	Tokyo Milk Body Lotion Mimos Mandarin	Musty Aroma	Oily Texture	Thin Texture	Greasy Feel	
30	Asprey London Purple Water	Clean Aroma	Wet Feel	Thin Texture		

Free Sorting Task

Shampoo Clustering

Participants grouped the hotel lotions and shampoos by their sensory characteristics, using aroma and texture modalities to group the shampoos. One set of five participants grouped the products into eight classes. Three shampoos were very different from the others in the clustering analysis. Samples 9, 18, and 16 were not grouped with any other shampoos due to their various aroma and texture characteristics. The clusters were also described by each participant and will be discussed later in this research chapter. They also only believed one sample was very different from the others. Sample 1 was the only sample in a cluster by itself. In the verbalization task, it was shown that this shampoo had a "rotten" aroma and that is why it was not in a group with other hotel shampoos (Table 3.7).

Lotion Clustering

The lotion clustering was the opposite of the shampoo clustering for both groups of consumers. The participants grouped the products into 10 different categories. One of those single clustered lotions was separated because of an unpleasant "rancid" aroma (Table 3.6). On the other hand, the second group of consumers showed that some hotel lotions had a "light floral" aroma and that is why they were not in a group with other hotel lotions (Table 3.6). Some of the hotel lotions that were different and grouped separately could have been grouped together, but "floral" could mean various floral notes such as rose, lavender, etc., and therefore is why they were grouped separately.

Verbalization Task

The verbalization task was used to determine the thought process behind grouping the hotel shampoos and lotions. By describing each grouping, it illustrates the similarities between

those products. For each participant, term suggestions were not given. Using their own words, they determined the descriptors for each group of hotel shampoos and lotions. Table 3.6 and 3.7 illustrates the groups of hotel shampoos and hotel lotions that were created by cluster analysis with their corresponding descriptions, brands, and also includes a photograph of the products as a visual.

The panelists sorted the hotel shampoos and lotions by both the aroma and the texture. Since this group of consumers was instructed to complete the sorting task while determining the key characteristics of the products, this could have swayed their groupings by including both aroma and texture attributes. In table 3.7, examples of grouping descriptions containing both aroma and texture attributes are apparent. Combinations of perfume and floral aromas can be paired with a thin and stringy shampoo. The most popular aroma found was a perfume-like aroma for hotel lotions. Additionally, for hotel lotions, the most common texture was a thin texture. An unusual rancid aroma was found similar to those noticed by naïve consumers (Table 3.6). A thick and creamy texture was also found in the lotion category. A main differentiator between the groups is the difference between a thin and thick texture.

Perfume-like aromatics were the most common aroma for hotel shampoos similar to the hotel lotions. Additionally, for both hotel shampoos and lotions, a 'light scent' strength was noted for the majority of the groupings. Hotel shampoos contained a grouping with a strongly scented aroma, unlike hotel lotions. Hotel shampoos had texture differences between a stick and stringy texture. Furthermore, most of the hotel shampoos fell into the thin texture category as no hotel shampoo groups had a thick distinction. From this verbalization task and the descriptors generated, similarities and differences were discovered between hotel shampoos and lotions.

Table 3.6. Hotel Lotion Groupings and Descriptions from Sorting and Verbalization Task

Lotion Cluster	Sample Number	Image	Descriptions (Occurrence)
1	1, 14, 16, 17		Oily Texture (3) Light aroma (3) Thin Texture (2)
2	2, 20, 23		Creamy Texture (2) Floral aroma (3) Thin Texture (2) Fruity aroma (2)
3	3		Rancid aroma (2)
4	4, 7, 10		Thin / Watery Texture (3) Light aroma (2) Perfume aroma (3)
5	5, 13, 19, 21, 22, 24, 25, 29		Oily Texture (2) Thick Texture (2) Creamy Texture (2) Citrus aroma (2) Fruity aroma (3)
6	6, 30		Thick Texture (2) Floral aroma (2)

Lotion Cluster	Sample Number	Image	Descriptions (Occurrence)
7	8, 15, 27		Oily Texture (2) Creamy Texture (2) Perfume aroma (2)
8	9, 11, 28		Greasy Texture (2) Creamy Texture (2) Perfume aroma (4) Fruity aroma (3)
9	12, 18		Creamy Texture (4) Perfume aroma (4) Thin Texture (2) Light aroma (2)
10	26		Soapy Aroma (2) Thin Texture (2)

Table 3.7. Hotel Shampoo Groupings and Descriptions from Sorting and Verbalization Task

Cluster	Sample Number	Image	Descriptions (Occurrence)
1	1, 2, 10, 14, 22, 27, 28		Low Scent (3) Thin Texture (3) Perfume aroma (4) Fruity aroma (3)
2	3, 8, 11, 20, 21, 24, 25, 29, 33		Low Scent (3) Stringy Texture (3) Thin Texture (3) Perfume aroma (4) Floral aroma (3)
3	4, 26, 30		Stringy Texture (2) Floral aroma (2)
4	5, 12, 13, 15, 31, 32		Watery / Thin Texture (3) Soapy aroma (3) Fruity aroma (3)
5	6, 7, 17, 19, 23		Stringy Texture (3) Perfume aroma (3) Fruity aroma (3)
6	9		Gel-Like Texture (1) Green aroma (1) Sticky Texture (1)
7	16		Perfume aroma (3)

8   18   Strongly Scented (2) Fruity aroma (2)

Discussion

Shampoo Sensory Attributes

In this research the panelists created a list of terms to describe each of the corresponding hotel shampoos and lotions. These terms were combined to create a consolidated list of all sensory attributes. A total of 33 terms were generated by the panelists (Table 3.8). The panelists determined a wider variety of aromas for hotel lotions and shampoos. The panelists found that a few of the hotel shampoos had a clean, cotton/linen, or even a fresh aroma which correlates to the claim by the focus group participants in chapter 2, that hotel shampoos with these aromas are pleasant and worth using. Eucalyptus, essential oil aromas (such as tea tree), 'aloe', 'ocean-like', and 'powdery' were also found during the panel. To limit the number of aromas (and attributes) used in further research, very specific scents were not added to the attribute list, but instead the gender-neutral and essential oil scents were kept. This panel also determined there were two strengths of aromatics, 'light' and 'strong' (or intense). The 'light' characteristic was added to the list of consumer terms to gain both sides of aroma intensity. Both 'strong' and 'light' attributes were included in the consumer-friendly list of hotel shampoo attributes (Table 3.10). Even though a strong scent was wanted, it was implied that a light scent was undesirable, but because it wasn't deliberately talked about, it was not added to the attribute list during the focus groups and was added during the key characteristics exercise.

As for texture characteristics, participants did not evaluate texture in the hair, but on their forearms. The panelists discussed a variety of texture attributes such as 'gel-like', 'sticky', 'watery', 'slick', 'greasy', and 'thin' as well. The majority of the texture attributes were negative attributes of hotel shampoos except for 'thin' texture. This attribute was the only attribute added to the list of consumer-friendly terms to have both extremes of shampoo thickness. The negative

attributes such as sticky, stringy, glycerin like, and gel-like were not included in the final list of attributes for the quantitative survey but were noted in the description of the respective product.

In total two attributes were added to the final list of attributes for the quantitative survey ('light scent' and 'thin texture'). Though a thick texture was wanted by focus group participants, if it isn't thick then it is thin. Additionally, the aromas were consolidated into two aromas: 'gender-neutral' scent and 'relaxing, spa-like' scent. These additions to the final list of attributes will allow all extremes to be explored. This final list was transformed into more consumer-friendly terminology to be used for the quantitative survey in hopes consumers will be able to understand the characteristics clearly.

Table 3.8. Hotel Shampoo Generated Sensory Attributes

Aroma	Texture	Aroma Strength
Aloe Aroma	Glycerin-like (gel) Texture	Low Strength Aromatics
Apple Aroma	High Spread Texture	High Strength Aromatics
Citrus Aroma	Greasy Texture	
Clean Aroma	Slip / Slick Texture	
Coconut Aroma	Thin Texture	
Cotton / Linen Aroma	Thick Texture	
Eucalyptus Aroma	Sticky Feel	
Floral Aroma	Stringy Feel	
Fresh Aroma	Watery (Wet)	
Fruity Aroma		
Green Aroma		
Lime Aroma		
Ocean-like Aroma		
Orange Aroma		
Perfume Aroma		
Powdery Aroma		
Soapy Aroma		
Sweet Aroma		
Tea Tree Aroma		

Lotion Sensory Attributes

A total of 28 terms were generated by the panelists (Table 3.9). Gender-neutral and clean aromas were the only two aromas used to describe both hotel lotions and hotel shampoos. . Aromas such as 'floral', 'rancid', 'woody', 'perfume-like', and 'powdery' were found by the panelists Additionally, an unscented was not mentioned by the trained panelists, but was ideal for the focus group participants as they did not want the scent to linger (Chapter 2). A 'scented' and 'unscented' option was included in the final list of attributes to determine if scented or unscented hotel lotions are the most ideal (Table 3.11). Furthermore, the panelists noted that, like the hotel shampoos, the hotel lotions also had a 'light' and 'strong' aroma strength. Both of these attributes were included in the final list of hotel lotion attributes to cross compare between hotel shampoos and lotions (Table 3.11).

For texture, thick, creamy, moisturizing, and smooth textures were all common attributes between hotel lotions. Many of the lotions expressed a creamy or moisturizing texture which was a desired characteristic from the online focus groups. The majority of the hotel lotions had a 'easy absorption' distinction, but a few had the 'hard to absorb' label. The panelists also discussed a variety of texture attributes such as 'high coating', 'oily', 'waxy', 'wet', and 'greasy'. Many of these features generated by trained participants were noted as "undesirable" by the focus group consumers (Chapter 2). These features were 'oily', 'waxy', and 'wet'. The greasy attribute was also noted as undesirable for focus group participants, but they created the 'non-greasy' characteristic to account for the possibility of greasiness in hotel lotion.

In total, four attributes were added to the final list of attributes for the quantitative survey ('scented', 'light scent', 'strong scent' and 'thin texture'). Additionally, the aromas were consolidated into two aromas: 'gender-neutral' scent and 'relaxing, spa-like' scent. Lastly, the

textures were transformed into easily understandable terms (Table 3.11). For example, a smooth texture is now 'smooth feel on skin' and fast absorption was changed to 'quick absorption. These additions to the final list of attributes will allow all extremes to be explored. After consolidation, editing verbiage, and removing redundant terms, a total of 34 lotion attributes were determined and a total of 30 shampoo attributes were identified. Both the hotel lotion and shampoo attribute lists were edited for a more 'consumer friendly' terminology (Table 3.10 and Table 3.11).

Table 3.9. Hotel Lotion Generated Sensory Attributes

Trained Panelists Terms

Aroma	Texture	Aroma Strength
Citrus Aroma	High Coating Feel	Low Strength Aromatics
Clean Aroma	Smooth / Moisturizing Texture	High Strength Aromatics
Coconut Aroma	Oily Texture	
Floral Aroma	Waxy Feel	
Green Aroma	Wet Feel	
Herbal Aroma	Thick Texture	
Lavender Aroma	Creamy Texture	
Lime Aroma	Thin Texture	
Musty Aroma	Hard to Absorb	
Ocean / Seabreeze Aroma	Easy Absorption	
Perfume Aroma	Greasy Feel	
Powdery Aroma		
Rancid Aroma		
Rose Aroma		
Soapy Aroma		

Table 3.10. Consumer-Friendly Hotel Shampoo Attributes (30 Attributes)

Aroma	Packaging	Appearance	Texture
Gender Neutral Scent	Brand Name visible on package	Clear (Transparent/Non-Colored) Shampoo	A Shampoo that Lathers
Relaxing, Spa-Like Scent	Listed Ingredients visible on package	Pale Colored Shampoo (e.g., blue, green, etc.)	Tingly sensation during a wash
Strong Scent	Larger Bottle (more than 30ml or 1 oz.)	White Colored Shampoo	Thick Texture/ Feel
Light Scent	Smaller Bottle (1 oz. or less)		Thin Texture/ Feel
	Claims visible on package (e.g., sulfate-free, cruelty-free)		Moisturizing
	See Through Packaging		
	Flip Top Lid		
	White Colored Packaging		
	Upside Down Tube-Shaped Bottle		
	Larger Lid Size, easier to open		
	Large Font Size on label		
	Easy to Squeeze Bottle		
	Easy-off Cap to allow for easy refill		
	Larger Dispense Hole on package		
	Black and White Design and Font Labeling		
	Twist Off Lid		
	Bottle with Tall Cylinder Shape		
	Wall-Mounted Shampoo Dispenser		

Table 3.11. Consumer-Friendly Hotel Lotion Attributes (34 Attributes)

Aroma	Packaging	Appearance	Texture
Gender-Neutral Scent	Brand Name visible on package	White Colored Lotion	Thick Texture/ Feel
Relaxing, Spa-Like Scent	Listed Ingredients visible on package	Pale Colored Lotion (e.g., blue, green, etc.)	Quick Absorbing
Non-Scented	Larger Bottle (more than 30ml or 1 oz.)		Non-Greasy
Scented	Smaller Bottle (1oz. or less)		Smooth feel on Skin
Light Scent	Claims Visible on package (e.g., cruelty-free, organic)		Moisturizing
Strong Scent	See Through Packaging		Thin Texture/ Feel
	Flip-Top Lid		Creamy Texture/ Feel
	White Colored Packaging		
	Upside-Down Tube-Shaped Bottle		
	Large Font Size on Label		
	Easy to Squeeze Bottle		
	Easy-off Cap to allow for easy refill		
	Larger Dispense Hole on package		
	Black and White Design and Font Labeling		
	Twist-Off Lid		
	Colored Design and Font on Labeling		
	Brown Colored Packaging		
	Round Shaped Bottle		
	Natural Product (e.g., no chemicals or dyes)		

Similarities and Differences Between Hotel Shampoos and Lotions

Shampoo Similarities and Differences

For the trained panelists, the strongest similarities between hotel shampoos were fruity and perfume aromas. Four groups contained fruity aromas and four contained perfume aromas (Table 3.9). Three groups had a 'stringy' texture, while only one group of hotel shampoos had a 'gel-like texture' and 'green' aromas. Only two groups of hotel shampoos had a 'lightly scented' distinction, while only one had a 'strongly scented' distinction.

Lotion Similarities and Differences

Trained panelists and naïve consumers both had more similarities for hotel lotions than differences. Trained panelists described most of the hotel lotions by a creamy texture and either a thick or thin texture. A thin texture described five of the nine groups, while thick described only two of the groups. Additionally, a perfume aroma was the aroma that was the most similar between hotel lotions. There was only one group that had a rancid aroma which was grouped alone as it was very different from the other hotel lotions. Furthermore, only two groups were described by having an oily texture or a floral aroma.

This sorting task assisted in gathering additional qualitative data on the sensory characteristics of each hotel shampoo and lotion. Even with this small sample size of trained and naïve consumers, it was also determined that there are similarities between shampoos and lotions. Not only were there similarities, but there are distinct differences as indicated by the analysis of the data. A larger sample size and further analysis should be used to validate this study. This research will allow general subjective comparisons between the "ideal" toiletries determined from the quantitative research and the limited samples that were used in this portion of the research.

Limitations

Though the objectives of this study were accomplished, there are limitations. First, the number of participants was limited. Analysis of the small sample size was restricted due to only having five trained panelists as well as limited volunteers for the naïve consumer panel. This small number of panelists is not ideal to realistically represent both consumer groups. Ideally, trained panelists would be used for an ultimate comparison to naïve consumers. Third, asking consumers to describe the groups made during a sorting task can alter how they sort the products. Instead of freely sorting the samples into groups, consumers may sort products into groups that are easily explained. Lastly, all panelists, trained and un-trained all completed the hotel shampoo sorting task before the hotel lotion sorting task. When all consumers complete one type of product sorting and evaluation first, it could skew or limit the results collected for the second. For example, panelists could become fatigued or quickly categorize to be finished with the task. To further validate this study, an additional study with larger numbers of consumers should be performed to determine if conclusions made in this study are representative of the entire population.

Conclusion

This study was conducted to develop a list of sensory characteristics of hotel shampoos and lotions with a trained set of panelists to compare with previously generated attributes from focus group participants. The second objective was to understand the similarities and differences between hotel shampoo and lotion characteristics, such as scent and consistency. A panel of panelists was assembled to describe the key characteristics of over 30 hotel shampoos and lotions. From this exercise, it was determined that six total attributes needed to be added to the final list of attributes to be used for the quantitative survey. For hotel shampoos two attributes were added including 'light scent' and 'thin texture'. For hotel lotions four attributes were added including 'scented', 'light scent', 'strong scent', and 'thin texture'. A finalized, consolidated, list was created using consumer friendly terms in which 30 total attributes were found for hotel shampoos and 34 were confirmed for hotel lotions. Secondly, a sorting and verbalization task employing the same trained panelists and five more panelists was conducted to explore similarities and differences between hotel shampoos and then repeat the process for hotel lotions. Hotel shampoos were grouped by differences in aroma strength as some groups utilized the term 'light' scent and others used 'strong' scent. For hotel lotions, the panelists had distinct differences uncovered when half the lotions had a 'thin' texture and the other half a 'thick' texture. Aroma strength was a similarity between hotel lotions, while it was a distinct difference for hotel shampoos. The majority of the hotel lotions had a 'light' scent.

Further research will be conducted to determine the features of hotel lotions and shampoos that are the most ideal and most important. This study will also allow comparison from future research to determine which product (from the current research) has those ideal features.

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Chapter 4 - Most and Least Important Features of Hotel Shampoos and Lotions

Abstract

Hotel toiletries are one of the first amenities explored by consumers upon stay at a hotel. Various features of these toiletries can influence a consumer's decision to use them during their stay. Hotel toiletries have rarely been evaluated by exploring consumers' perception of the features themselves. The objectives of this study were to a) identify key features of hotel toiletries that maximize consumer acceptance and b) determine the "ideal" model of hotel shampoos and lotions.

Two surveys were conducted with frequent hotel guests. The surveys were separated based on the type of hotel toiletry (i.e., shampoo or lotion) they used most often during their hotel stay. Additionally, consumers were segmented by gender, age, hotel type, and travel frequency. A list of 30 attributes for hotel shampoos and a list of 34 attributes for hotel lotions were used to determine the most and least important features. The shampoo survey was conducted with 159 consumers while the lotion survey was conducted with 153 consumers. Each participant was asked to choose their most important and least important hotel toiletry (i.e., shampoo or lotion) feature from a set of five attributes.

Key features were discovered for both hotel lotions and shampoos. For hotel lotions, texture was the most important modality, while for hotel shampoos, aroma was the most important modality. To maximize consumer acceptance and create the ideal hotel lotion, it should be non-greasy, moisturizing, and should have a smooth feel on the skin. Aroma was a polarizing attribute for lotions. If scent is present, it should have a lightly scented aroma. On the other hand, hotel shampoos should be moisturizing, have the ability to lather, and have a

relaxing, spa-like scent. Overall, this study provides important consumer perceptions of hotel shampoos and lotions which can be used to create the 'ideal' hotel shampoo and lotion.

Introduction

Quantitative surveys can be used to collect insights from consumers on a variety of topics. An example of this research is using the Maximum Difference (MaxDiff) or Best-Worst Scaling method. The MaxDiff survey was first proposed by Finn and Louviere (1992) when they employed a task that would ask an individual to choose the best and worst option in a given set of options. Since then, the MaxDiff technique has been used by many researchers (Cohen (2003), Chrzan (2005), Goodman et al., (2006), and Auger (2007)). This technique was utilized by Jaeger et al. (2008), in exploring the differences in cooking temperatures of pork patties. This research was conducted by applying the MaxDiff, or best / worst, methodology to determine "taste-based" preferences and to compare this methodology with the preference ranking approach (Jaeger et al.,2008). Results from the research demonstrated that the MaxDiff method allows for enhanced differential sorting between consumer preferences as compared to the preference ranking method. Additionally, this new method allows consumers to analyze various comparisons without being a problematic undertaking for consumers.

MaxDiff surveys are an alternative to ranking and other questioning methods that asks the consumers to determine the best item out of a list of attributes. The best-worst questioning (task, tool or instrument) asks consumers to indicate the best and the worst object in a given set of objects. This type of questioning instrument allows the researcher to use a longer list of attributes. Generally ranking longer lists of products can be fatiguing for consumers, producing skewed or inaccurate results. It also pushes participants to select a best and worst attribute, helping to determine the most and least important features in that given set.

The MaxDiff type of questioning is used in various industries. For example, it can be used by the medical industry for discovering the level of concern in adolescents for the consequences of smoking (Marti, 2012) or even the preferences in various healthcare plans (Mühlbacher et al., 2016). MaxDiff methodologies are also used in the food and beverage industry to explore consumer preferences for food and in obtaining traceability information demonstrating how foodborne illnesses are tracked (Liu et al., 2018).

This type of survey instrument was used to determine the most and least important amenities in the hotel industry (Kim et al., 2018). Application of the MaxDiff survey method allowed researchers to utilize all possible combinations of attributes, which cannot be done by simply ranking them (Kim et al., 2018). Consumers were grouped based on their income levels, gender, budget type (upscale or budget), and hotel use frequency. For this study (Kim et al., 2018), only 10 attributes were included due to previous research determining that restaurant/food quality, location, cleanliness, price, security, and room comfort / décor were the most important amenities in a hotel (Kim et al., 2018). A total of 10 questions were presented in which three attributes were shown in each question. To analyze the results of the survey, the number of times the attribute was selected the worst was subtracted from the number of times selected the best. The resulting numerical data was then analyzed. The data analysis of this study indicated that upscale and budget consumers prioritize hotel amenities differently except when it comes to cleanliness. For both groups of consumers, cleanliness was the most important amenity. After cleanliness, the two segments behaved differently. Upscale consumers prioritized overall room comfort, unlike budget consumers who prioritized security and the price of the hotel. Cleanliness was also the most important attribute for gender, income, and hotel use segments. Using the

MaxDiff scaling allowed researchers to determined that no matter the hotel or consumer segment cleanliness will always be the most important feature of hotels.

Another example of how MaxDiff scaling can be used in research is demonstrated by the University of South Australia. The University of South Australia explored the similarities and differences in wine preferences between Australian and Israeli consumers. (Goodman et al., 2005). The best-worst scaling approach was employed to prove the efficacy of the method within this context as no previous research had indicated the application of MaxDiff scaling. The study explored three different objectives, with each objective having a different questionnaire. For the first objective, drink preferences in Australia were explored. Participants were instructed to choose the most and least appealing beverages from a list of drinks (Goodman et al., 2005). From this first questionnaire, the second questionnaire was created. The objective of the second questionnaire was to determine the wine preferences in Australia (Goodman et al., 2005). Finally, the third questionnaire was generated. The third survey was used to explore the stimuli of wine purchasing in Israel. All three surveys had one objective in common, to determine what information this (best-worst-scaling) method can provide regarding the features that affect the purchase of wine (Goodman et al., 2005). From the overall objective, they found that wine preferences can be determined using the MaxDiff method. This method was also noted to be easily analyzed. This study proved that best-worst scaling can be used to help determine consumer preferences and various attributes that are important to consumers.

The research objectives for this study are to identify key features of hotel toiletries that maximize consumer acceptance and to determine the "ideal" model of hotel shampoos and lotions.

Methodology

Survey Participants

A total of 312 individuals were recruited for this study. Consumers were recruited through the Kansas State University Database at the Center for Sensory Analysis and Consumer Behavior (Olathe, KS, USA) using Compusense (Compusense Inc., Guelph, Ontario, Canada) software. The Committee on Research Involving Human Subjects / Institutional Review Board (IRB) for Kansas State University approved this research under proposal number of 10278. A total of 159 individuals completed the hotel shampoo survey, and 153 individuals completed the hotel lotion survey. The consumers ranged in age, gender, hotel type, and travel frequency (Table 4.1). Out of the participants, 58% were female and 42% were male for both surveys. Though the quota for males was 25%, this was used as a minimum and more males were welcome to complete the survey. The average age of the participants was within the 35-to- 44-year-old range. Both surveys had similar hotel type segments in which the midscale hotel type housed the most participants. After the midscale hotel type, the other chain scales fell from most individuals to least as follows: Upscale, Upper Upscale, Economy, and Luxury. For travel frequency, consumers were asked to indicate the amount of travel per year in which they had to stay at a hotel. This question was asked in a way that they were to indicate the amount of travel they would typically do before the pandemic. Almost half of the participants traveled at least once every 3 months before the Coronavirus Pandemic while others traveled even more frequently. The survey used the Sawtooth platform (Sawtooth Software, Provo, Utah, USA) which specializes in market research.

Table 4.1. Participant Demographics for Survey Research

Number of Participants	Shampoo Survey (N= 159)	Lotion Survey (N= 153)
Gender		
Female	58%	58%
Male	42%	42%
Age		
25-34	23%	23%
35-44	59%	50%
45-50	18%	27%
Type of Hotel		
Economy	1%	3%
Midscale	60%	55%
Upscale	34%	39%
Upper Upscale	4%	3%
Luxury	0%	1%
Pre- COVID-19 Travel Frequency		
5 or more times a month	1%	1%
2-4 times a month	9%	12%
Once a month	22%	18%
Once every 3 months	47%	42%
Once every 6 months	21%	27%

Survey Components

In this study, two surveys were created with a variety of attributes regarding hotel shampoos and lotions. These attributes were derived from focus group research presented earlier in this thesis (Table 2.9 and 2.10). The objectives of this study were to determine the most and least important features of hotel shampoos and lotions. Each consumer completed only one survey, either on hotel shampoos or lotions, depending on the hotel toiletry they used most often. Upon acceptance to complete the survey from the screener, participants were taken to the

Sawtooth platform (Sawtooth Software, Provo, Utah, USA) to complete the survey. Consumers were required to provide their consent before being directed to the beginning of the survey in which an introduction page gave further instructions. In the body of the survey there was a series of questions that asked the consumer to select the most important and least important features of hotel lotions or shampoos (Figure 4.1).

Figure 4.1. Example of a Hotel Shampoo Survey Question

When thinking about hotel toiletries, more specifically the individually packaged shampoo provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

(1 of 20)

Least Important		Most Important
○	Thick texture/feel	○
○	Larger Bottle (more than 30ml or 1 oz.)	○
○	Larger dispense hole on package	○
○	Upside-Down Tube-Shaped Bottle	○
○	Large Font Size on Label	○

Click the 'Next' button to continue...

Next

The participants were instructed to answer these questions according to the individually packaged hotel toiletries that they would normally receive during a hotel stay and that they could only select one most important feature and one least important feature for each question. There was a total of 20 choice sets for the shampoo survey and 22 choice sets for the lotion survey. Each question contained the prompt along with five attributes for them to select the most and

least important from (Figure 4.1). There was a total of 30 attribute choices for the hotel shampoo survey and 34 different attribute choices for the hotel lotion survey. Each attribute was repeated three times during the survey. The consumers were not allowed to select the same attribute as the most and least important at the same time. The attributes in each question were randomly selected from the total list of attributes, but there were prohibitions for attributes that could not be seen together. For example, 'twist-off lid' and 'flip-top lid' were prohibited from being in the same set of attributes.

Data Analysis

The data from hotel shampoo and lotion surveys were analyzed separately. The data and survey completions were cleaned to exclude multiple participation records or incomplete submissions. Once cleaned, raw survey data item scores were downloaded from the data analysis portion of the Sawtooth software. These raw scores show how appealing an attribute is to a participant. Meaning, the higher the score the more important the attribute, and the lower the score the less important. Additionally, positive as well as negative integers were present. A positive score indicates that the attribute was selected as most important more than it was selected as least important. A negative score indicates that the attribute was selected as least important more than it was selected as most important. For some attributes a score of zero was present. This indicates that the attribute was either never chosen, or it was chosen as the most and least important attribute the same number of times.

The scores were also uploaded into the Sawtooth software projects application. This application rescales the item scores from the raw data into easily explained probability scores. The probability scores are also called the 'probability of choice'. These percentages reflect the probability of a consumer selecting a specific item as the most important in each set of attributes.

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The Sawtooth application also includes the analysis tool, 'Share of Preference' reported in percentages. These percentages are the probability that the specific attribute would be preferred over the other attributes included in the study. Lastly, Total Unduplicated Reach and Frequency (TURF) analysis was conducted to determine the combination of hotel shampoo and lotion features that maximize the 'reach' or acceptance. TURF analysis helps determine the ideal features of hotel toiletries that appeal to the largest group of consumers.

Results and Discussion

Part 1- Hotel Shampoos

Raw Scores

From the raw scores, a total of 16 attributes had negative values meaning they were selected as least important more than they were selected most important (Figure 4.2). On the other hand, 13 features had a positive value (Figure 4.2). Those features were selected as most important more than they were selected least important. There was also one attribute with a score of zero. This attribute was either selected most and least important the same number of times or was never selected at all. Overall, fewer hotel shampoo attributes were scored most important to consumers. Of the characteristics that had positive values, four were aroma characteristics, three were texture characteristics, and six were packaging characteristics. Though the majority of the positive scores were packaging characteristics, aroma characteristics were deemed the most important. All aroma attributes were selected as most important more than least important. Only five texture attributes were included in the shampoo survey. Three of these had a positive value. The analysis of the survey indicates that aroma and texture have some level of importance to customers and that hotel managers should focus on these characteristics of their hotel shampoos. Analysis also indicates the brand and appearance of the product are not as highly rated by customers and should be an area of less emphasis.

Figure 4.2. Adjusted Raw Feature Scores of the MaxDiff Hotel Shampoo Survey
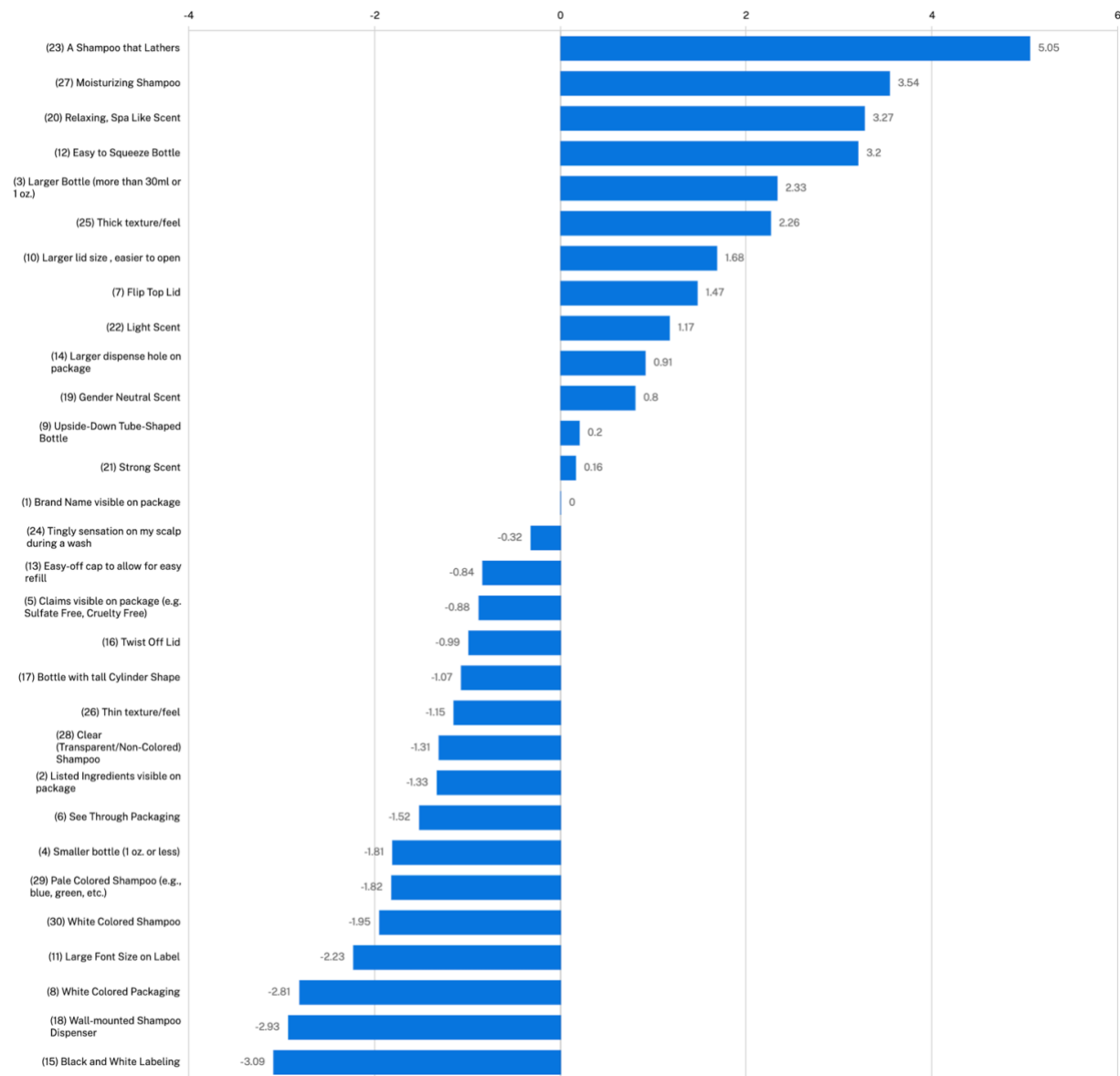
Probability of Choice

The probability of choice helped determine the probability of a consumer selecting an item from the entire set of attributes. When analyzing all consumer selections, the feature 'a shampoo that lathers' is the most important feature consumers look for in a hotel shampoo (Table 4.2). This attribute is predicted to be selected as the most important 93% of the time. This is followed by the 'easy to squeeze bottle' (81.25%), 'moisturizing shampoo' (80.44%), 'relaxing, spa-like scent' (76.54%), 'larger bottle' (63.18%), 'thick texture/feel' (62.79%), 'larger lid size, easier to open' (56.23%), and 'flip-top lid' (51.71%) features that all have over 50% chance of being selected as the most important attribute (Table 4.2). These eight features are considered the most important features of hotel shampoos by the entire group of consumers. On the other end of the spectrum, 'white colored packaging' (2.45%) and 'black and white labeling' (2.42%) were the least likely to be selected as the most important attribute of hotel shampoos. Packaging features such as these are the least important features of hotel shampoos.

The probability scores were also explored by segmenting consumers. The gender, age, hotel type, and travel frequency were explored to determine any differences in segments of consumers. When looking at gender, specifically males, the most important features stay in the same order of importance for the first nine attributes (Table 4.2). The 10th attribute, 'gender-neutral scent', is less important to males than a 'larger dispense hole' on the package. This is expected as it was found in previous research that the male gender concerns less about aroma than females (Chapter 2). Results show that females tend to have different priorities than males in their top 10 most important attributes (Table 4.2). Females prioritize 'moisturizing shampoo', 'thick texture/feel', and a 'gender-neutral scent' more than males. These attributes have a higher percentage of choice and are higher ranked in their top 10 attributes. A 'shampoo that lathers' is

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still the most important attribute for males and females separately. Though this is true, females have a higher probability to choose one of the top eight features more than males (Table 4.2). Meaning, females believe those attributes are more important than males. Additionally, 'white colored packaging' and 'black and white labeling' are still the least important attributes for both males and females.

Table 4.2. The Probability of Choosing any Hotel Shampoo Feature

Shampoo Feature	Total (N=159)	Female (N=93)	Male (N=66)	Age 25-34 (N=37)	Age 35-44 (N=93)	Age 45-50 (N=29)	Economy/ Midscale (N=98)	Upscale/ Upper Upscale/ Luxury (N=61)	Once A Month or More (N=52)	Once Every 3-6 Months (N=107)
A Shampoo that Lathers	93.50%	94.77%	91.71%	92.20%	94.20%	92.91%	95.44%	90.39%	91.59%	94.43%
Easy to Squeeze Bottle	81.25%	84.13%	77.19%	79.03%	81.97%	81.77%	82.25%	79.64%	81.21%	81.27%
Moisturizing Shampoo	80.44%	80.43%	80.46%	77.87%	81.76%	79.51%	80.24%	80.77%	78.63%	81.33%
Relaxing, Spa Like Scent	76.54%	77.55%	75.13%	81.03%	74.95%	75.95%	74.63%	79.61%	72.80%	78.36%
Larger Bottle (more than 30ml or 1 oz.)	63.18%	66.68%	58.26%	56.96%	64.05%	68.33%	61.96%	65.15%	63.99%	62.79%
Thick texture/feel	62.79%	63.93%	61.20%	61.14%	64.78%	58.54%	65.59%	58.30%	58.27%	64.99%
Larger lid size, easier to open	56.23%	58.82%	52.58%	51.60%	57.42%	58.33%	57.35%	54.44%	55.98%	56.35%
Flip Top Lid	51.71%	54.47%	47.83%	51.36%	50.91%	54.72%	51.30%	52.37%	53.29%	50.94%
Light Scent	45.61%	44.32%	47.42%	43.87%	47.93%	40.38%	45.79%	45.31%	48.53%	44.18%
Gender Neutral Scent	42.77%	38.62%	48.62%	46.19%	44.96%	31.39%	42.68%	42.91%	50.29%	39.11%
Larger dispense hole on package	40.81%	44.20%	36.02%	41.76%	39.34%	44.29%	40.55%	41.21%	41.19%	40.62%
Brand Name visible on package	33.54%	35.24%	31.15%	22.38%	39.16%	29.77%	33.21%	34.08%	35.59%	32.55%
Strong Scent	32.68%	33.11%	32.07%	39.70%	29.45%	34.05%	34.99%	28.96%	26.52%	35.67%
Upside-Down Tube-Shaped Bottle	32.52%	32.00%	33.25%	33.63%	31.89%	33.12%	31.27%	34.51%	36.48%	30.59%
Tingly sensation on my scalp during a wash	27.80%	23.01%	34.56%	35.98%	24.31%	28.58%	26.56%	29.80%	24.82%	29.26%
Claims visible on package	23.37%	23.32%	23.45%	23.46%	22.16%	27.16%	23.65%	22.93%	25.55%	22.32%
Listed Ingredients visible on package	18.26%	17.99%	18.65%	13.43%	19.66%	19.95%	19.95%	15.55%	17.47%	18.65%
Easy-off cap to allow for easy refill	16.66%	18.93%	13.46%	13.76%	16.29%	21.52%	15.54%	18.45%	19.13%	15.46%
Twist Off Lid	13.27%	13.86%	12.45%	12.21%	13.81%	12.92%	13.32%	13.20%	14.77%	12.55%
Bottle with tall Cylinder Shape	13.20%	11.05%	16.22%	17.14%	11.87%	12.41%	13.31%	13.01%	12.50%	13.53%
Wall-mounted Shampoo Dispenser	12.83%	12.41%	13.42%	16.52%	11.64%	11.92%	13.55%	11.67%	9.34%	14.52%
Thin texture/feel	12.27%	12.74%	11.62%	15.63%	10.39%	14.04%	12.63%	11.70%	10.51%	13.13%
Clear (Transparent/Non-Colored) Shampoo	12.03%	12.11%	11.92%	11.41%	11.02%	16.07%	10.25%	14.89%	13.07%	11.53%

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See Through Packaging	11.20%	11.32%	11.02%	12.32%	10.04%	13.45%	10.40%	12.47%	9.42%	12.06%
Pale Colored Shampoo (e.g., blue, green, etc.)	7.11%	6.11%	8.52%	6.96%	6.89%	8.03%	6.61%	7.92%	7.99%	6.69%
Smaller bottle (1 oz. or less)	6.35%	6.00%	6.84%	8.13%	5.92%	5.44%	7.00%	5.30%	6.60%	6.23%
White Colored Shampoo	6.05%	5.72%	6.52%	5.04%	6.43%	6.13%	5.32%	7.23%	6.50%	5.83%
Large Font Size on Label	5.34%	4.67%	6.28%	4.73%	5.83%	4.53%	5.90%	4.43%	5.74%	5.14%
White Colored Packaging	2.45%	2.00%	3.09%	2.58%	2.30%	2.79%	2.05%	3.09%	2.83%	2.27%
Black and White Labeling	2.42%	1.83%	3.26%	2.14%	2.67%	2.00%	2.06%	3.00%	3.03%	2.13%

Age was the second consumer demographic investigated. The consumers were split into three segments. Section one is the youngest and ranging in age from 25 to 34 years old. The second section was ages 35 to 44 years old, and the third and last section ranged from 45 to 50 years old. When looking at the top 10 attributes most probable of being selected as the most important, all attributes are the same for all segments except for the older consumer group which has the 'strong scent' feature in their top 10 most important features in place of the 'gender-neutral scent' attribute (Table 4.2). Though the 'strong scent' attribute is the only difference amongst the three consumer groups, this shows that the all-consumer groups prioritize the aroma of the hotel shampoo. The youngest age group (25-34 years old) though, prioritizes the 'relaxing, spa-like scent' more than the two older consumer groups (Table 4.2). There were only four aroma attributes included in this survey and three of those four are found in the top 10 for all age segments. This difference is also observed with the texture of hotel shampoos. The younger two consumer groups prioritize a 'thick texture' when compared to the third (oldest) consumer group. Overall, minor differences were discovered between age groups and common themes of prioritizing aromatics and texture were apparent.

Due to the limited sample size, the hotel type was consolidated into two groups. The first segment contained economy and midscale consumers (n=98) and the second segment contained those who stayed in upscale, upper-upscale, and luxury hotels (n=61). For both groups, 'a shampoo that lathers' was still the utmost important feature of hotel shampoos (Table 4.2). When comparing these two segments the only difference in the top 10 attributes is that a thick texture/feel is more important to economy/midscale hotel consumers than the upper-scale consumers (Table 4.2). For the least important, it was found that the hotel type segments were similar to gender segments as 'white-colored packaging' and 'black and white labeling' were the

least important attributes for both hotel type segments. Though it was not in the top 10 attributes, characteristics to note were 'claims visible on the package' and 'listed ingredients visible on the package'. These attributes were ranked higher and more important for economy/midscale individuals than their upscale counterparts. This was also proven true during the previous focus group study in this research document. One attribute that was also discussed in detail through previous research was 'brand name visible on the package'. This attribute was more important to economy consumers during the focus group research but was found equally as important in the survey. This plays into the limitation of a restricted sample size for luxury focus group participants. Similar to gender and age, minute differences were found between hotel types regarding the probability of a consumer selecting an attribute most important.

The last segment that was analyzed was travel frequency. Travel frequency indicated the amount of travel and staying at a hotel per year for consumers. Similar to hotel type, this segment was consolidated into two sections. The first segment included those individuals who traveled once a month or more (travel more) and the second segment included those who traveled once every 3-6 months (travel less). The travel frequency segment group had similar conclusions to other segment groups, all top 10 attributes were the same for both groups, with one exception. For those individuals who traveled less a 'larger dispense hole on the package' was more important than a 'gender-neutral scent' (Table 4.2). Additionally, for those that travel more often, it was apparent that a 'gender-neutral scent' was more important than a 'light scent' (Table 4.2). Overall, both segment groups have similar attributes they deem most important for hotel shampoos.

The 10 most important attributes for hotel shampoos are 'a shampoo that lathers', 'easy to squeeze bottle', 'moisturizing shampoo', relaxing, spa-like scent', 'larger bottle (more than 30ml

or 1 oz.)', thick texture/feel', 'larger lid size, easier to open', 'flip-top lid', 'light scent', and 'gender-neutral scent' (Table 4.2). Because of this, these attributes can be considered the most important for all groups of consumers. Some groups of consumers may prioritize one or more of those 10 higher than another, but the same 10 were common across segments.

Share of Preference

Share of preference percentages determines the probability that a consumer would prefer a specific attribute over attributes included in the comparison. Share of preference was used to compare similar attributes and similar groups of attributes such as type of lid, packaging details, or aromas. These similar attributes were also analyzed by subgroups of consumers such as gender, age, hotel type, and travel frequency to determine any differences between consumer groups.

If a consumer was given the option between a 'relaxing, spa-like' scent and a 'gender-neutral' scent, in general, 73.3% would choose a 'relaxing, spa-like' scent and 26.7% would choose a 'gender-neutral' scent. For all subgroups a 'relaxing, spa-like' scent is preferred over a 'gender-neutral' scent and a 'light scented' shampoo is preferred (60.83%) over a 'strongly scented' hotel shampoo (26.7%).

Knowing that the 'a shampoo that lathers' feature is the most important attribute, this attribute was not compared to the other texture characteristics. The textures analyzed were 'a tingly sensation on the scalp during a wash', a 'thick texture/feel', a 'thin texture/feel', and a 'moisturizing shampoo'. Almost 60% of consumers would select a 'moisturizing shampoo' out of this group of characteristics. For all consumer segments, a 'thick' textured shampoo is preferred over its thin alternative. One attribute that had slight differences between consumer groups is a 'tingly sensation on the scalp during a wash'. Males cared less about a 'moisturizing shampoo'

(56.3% vs. 62.07%) than females but preferred this 'tingly sensation' more than females (13.23% vs. 7.19%).

A 'clear/transparent' shampoo is more likely to be selected when compared to the other two shampoo colors for all segments. A 'pale-colored shampoo' is second to be selected (30.31%) and 'white' is the least likely to be selected (25.1%) when compared to the other color attributes. The ideal hotel shampoo color is clear/transparent or non-colored.

Two bottle shapes were explored during this survey. The first being a 'tall cylinder-shaped bottle' and the second being an 'upside-down tube-shaped bottle'. From the survey, 71.1% of consumers would prefer an 'upside-down tube-shaped bottle' to its alternative (tall cylinder). This is agreed upon by all consumer segments. Now when an 'easy to squeeze bottle' attribute is introduced, 83.7% of consumers prefer that the bottle is easy to squeeze, no matter what the shape of the bottle is.

Bottle size was overwhelmingly one-sided. Approximately 90% of consumers would prefer a 'larger bottle size (more than 30ml or 1 oz.)', when compared to a 'smaller bottle (1 oz. or less)'. This was also the trend for all segments. Brands, claims, and ingredients were hotel shampoo features that many consumers indicated they looked for on their hotel toiletries. From the survey, it was determined that about 50.92% of consumers would prefer the 'brand name' to be visible on the hotel shampoo package, second would be 'claims visible on the package' (30.55%), and the least important of the three would be 'listed ingredients' (18.54%). All segments agreed with this trend except for the 25-34 age segment. This group of younger individuals preferred seeing 'claims visible on the package' rather than the brand or ingredients. Alternatively, this lower-scale group would prefer to see 'listed ingredients' on the packaging

more than upper-scale consumers. To maximize consumer acceptance, hotels who house a lower age group should include any relevant claims on their packaging such as sulfate or cruelty free.

The last of the packaging features were analyzed together. These were a' larger lid size, easier to open', 'larger dispense hole on packaging', 'wall mounted shampoo dispenser', 'easy-off cap to allow for easy refill', 'large font size on the label', and 'black and white labeling' (Figure 4.6). From this, how easy the product is to remove from the bottle is more important. The majority of consumers (combined 77.8%) would choose a 'larger lid size' or 'larger dispense hole' so that the product could be easily removed for use. Only 4.5% of consumers would select outside packaging details such as 'larger font size' and / or 'black and white labeling'. The 'larger lid size' or 'larger dispense hole' should be utilized to create an easier use of dispensing the product.

For cap type, this analyzed the preference for a 'flip-top lid 'and a 'twist off lid'. If no segments are taken into consideration, 73.4% would select 'flip-top lid' over the alternatives. For all segments 'flip-top lid' was also the most important and most preferred feature of hotel shampoo while 'twist-off lid' was the least important feature. Touryalai, (2014) also discussed during Marriott's research that a flip-top lid was a highly preferred attribute. It was found that a flip-top lid was easier for individuals to open the bottle during a shower (Touryalai, 2014).

The last packaging details that were included in this survey were the packaging colors. When it comes to packaging colors, consumers prefer 'see-though packaging' (70.3%) rather than 'white-colored packaging' (29.7%).

Total Unduplicated Reach and Frequency Analysis (TURF)

TURF analysis was conducted to determine the set of attributes that would create the ideal hotel shampoo. When all consumers were analyzed together the reach for the top group of attributes was 98.51% (Figure 4.3). This means that 98.51% of consumers would be reached by a product with these attributes. For this group of consumers, a 'larger bottle', 'easy to squeeze bottle', 'relaxing, spa-like scent', a 'shampoo that lathers', and a 'moisturizing shampoo' create the hotel shampoo with the most reach. There is not just one 'portfolio' that would be an 'ideal' hotel shampoo, there are multiple who have a large reach. All profiles have a 'relaxing, spa-like scent', a 'shampoo that lathers', and an 'easy to squeeze bottle'. This means if all consumers are analyzed together, these three attributes are the upmost important to include in a hotel shampoo. Another highly regarded feature is 'moisturizing shampoo'. A moisturizing shampoo is in the first four portfolios and then is replaced by an 'upside-down tube-shaped bottle' in the last profile. Additionally, a 'flip-top lid' is found in the second portfolio with a 98.46% reach (Figure 4.3).

Figure 4.3. Ideal Hotel Shampoos for all Segments of Consumers

Portfolio Reach

	0%	50%	100%

(3) Larger Bottle (>1 oz.)
(12) Easy to Squeeze Bottle
(20) Relaxing, Spa Like Scent
(23) A Shampoo that Lathers
(27) Moisturizing Shampoo
98.42%

(7) Flip Top Lid
(12) Easy to Squeeze Bottle
(20) Relaxing, Spa Like Scent
(23) A Shampoo that Lathers
(27) Moisturizing Shampoo
98.37%

(9) Upside-Down Tube-Shaped Bottle
(12) Easy to Squeeze Bottle
(20) Relaxing, Spa Like Scent
(23) A Shampoo that Lathers
(27) Moisturizing Shampoo
98.35%

(12) Easy to Squeeze Bottle
(19) Gender Neutral Scent
(20) Relaxing, Spa Like Scent
(23) A Shampoo that Lathers
(27) Moisturizing Shampoo
98.31%

(10) Larger lid size , easier to...
(12) Easy to Squeeze Bottle
(20) Relaxing, Spa Like Scent
(23) A Shampoo that Lathers
(27) Moisturizing Shampoo
98.31%

Females, a 'larger bottle', 'easy to squeeze bottle', 'relaxing, spa-like scent', and a 'shampoo that lathers' are the key features for an ideal hotel shampoo. The fifth and final attribute change between portfolios. This last attribute ranges from a 'moisturizing shampoo', 'flip-top lid', 'gender-neutral scent', 'light scent', and 'upside-down tube-shaped bottle'. The portfolio with the largest reach includes 'moisturizing shampoo' and reaches almost 99% of consumers. The only similarity between genders is that the 'easy to squeeze bottle', 'relaxing, spa-like scent', and a 'shampoo that lathers' are all consistent through the top five portfolios for both males and females. With those, men also have 'moisturizing shampoo' in all five. The differentiating

attributes range from a 'flip-top lid 'to an 'upside-down tube-shaped bottle'. For males, their 'ideal' hotel shampoo would need to include specific packaging features such as the 'flip-top lid' to meet maximum acceptance. To please both groups of consumers the following features should be included in a hotel shampoo: 'easy to squeeze bottle', 'relaxing, spa-like scent', a 'shampoo that lathers', 'flip-top lid ', 'upside-down tube-shaped bottle', 'moisturizing shampoo', and a 'larger bottle.

As for age, an 'easy to squeeze bottle', 'relaxing, spa-like scent', 'moisturizing shampoo', and a 'shampoo that lathers' are the common attributes that appear in the top five portfolios between all three consumer groups. For the younger consumer group, the fifth attribute is occupied by the 'upside-down tube-shaped bottle' and 'larger bottle' attribute. This set of attributes with an 'upside-down tube-shaped bottle' reaches 98.38% of consumers. For the middle age group, the last attribute changes between a 'larger bottle', 'flip-top lid', 'brand name', 'light scent', and 'gender-neutral scent'. The last attribute included that has the most reach (98.65%) is a 'larger bottle'. For the oldest age group, an 'upside-down tube-shaped bottle', a 'larger bottle', and a 'flip-top lid' are alternated between the top five portfolios. The portfolio with the largest reach (98.06%) contains the 'larger bottle' attribute. The youngest age group is most similar to the oldest age group with both including the 'upside-down tube-shaped bottle' feature in their 'ideal' hotel shampoo. The oldest age group also is similar to the middle age group, having both a 'flip-top lid' and a 'larger bottle' in common. The 'ideal' hotel shampoo is the most different between the different age groups. One 'ideal' hotel shampoo is not the same 'ideal' hotel shampoo for each the group. If your hotel attracts the younger generation (age 25-34 years old) or the oldest age group (45-50 years old) then a hotel shampoo with 'easy to squeeze bottle', 'relaxing, spa-like scent', 'moisturizing shampoo', 'shampoo that lathers', 'upside-down tube-shaped bottle', 'flip-top

lid', and 'larger bottle' features would be necessary. On the other hand, if your hotel attracts those in the 35–44-year-old age range, a hotel shampoo with the features preferred by the other age groups plus 'brand name', 'light scent', and 'gender-neutral scent' would create their 'ideal' hotel shampoo.

Like the gender and age segments, both groups of hotel types have 'easy to squeeze bottle', 'relaxing, spa-like scent', a 'shampoo that lathers', and a 'moisturizing shampoo' features in their top five portfolios. For economy/midscale consumers the last attribute falters between a 'larger bottle', a 'flip-top lid', 'brand name visible on the package', and an 'upside-down tube-shaped bottle'. 98.60% of consumers can be reached by using a 'larger bottle'. For upscale/upper upscale/luxury individuals, a similar conclusion can be made, the only difference is 'larger lid size, easier to open' and a 'gender-neutral scent' are included instead of 'brand name visible on the package' and an 'upside-down tube-shaped bottle'. 98.13% of consumers can be reached by using a 'larger bottle' only. This group of features (easy to squeeze bottle, relaxing, spa-like scent, a shampoo that lathers, a moisturizing shampoo, larger bottle, and flip-top lid) could be used in either economy / midscale hotels or even upscale / upper upscale / luxury hotels and both consumer groups would be pleased.

The last segment was travel frequency. This segment followed the trend of having 'easy to squeeze bottle', 'relaxing, spa-like scent', a 'shampoo that lathers', and a 'moisturizing shampoo' features in their top five portfolios. For consumers who traveled once a month or more, they also include 'brand name', 'larger bottle', 'flip-top lid', 'upside-down tube-shaped bottle', and 'larger lid size, easier to open'. 'Brand name visible on the package' is the attribute included in the portfolio with the most reach. This portfolio reaches fewer consumers than all of the other segments (97.67%). The more attributes included in the portfolio, the higher the reach. If seven

attributes are included, the reach can increase to 98.10%. As for those who travel less (once every 3-6 months), the only difference is 'brand name' is swapped for a 'gender-neutral scent'. The most reach for those who travel less is 98.79% with a 'larger bottle'. To maximize consumer acceptance for both travel frequency groups, a 'larger bottle size' feature should be included.

Each consumer group had a different set of features that created their 'ideal' hotel shampoo. Though this was the case, there was a set group of features that was consistent for all sub-groups. A hotel shampoo must have a relaxing, spa-like scent. It also must be moisturizing and have the ability to lather. Additionally, the hotel shampoo should come in an easy to squeeze bottle, preferably in an upside-down tube-shape. The bottle should be in a larger size or should be more than 30ml / 1 oz. Lastly, the container should have a flip-top lid and should be larger for the bottle to be easier to open. To fully maximize consumer acceptance of hotel shampoos, brand name shampoos should be used and should have a light and gender-neutral spa-like scent. This group of characteristics will appease the majority of travelers.

Part 2- Hotel Lotions

Raw Scores

From the raw scores, a total of 16 attributes had positive values meaning they were selected as most important more than they were selected least important (Figure 4.4). On the other hand, 18 features had a negative value (Figure 4.4). Those features were selected least important more than they were selected most important. Overall, fewer attributes were most important to consumers and more were of lesser importance. Of the positive values, seven were texture attributes, five were aroma, and four were packaging. All of the texture attributes were found in the positive attributes. This means that texture was the most important modality for hotel lotions. Similar to texture, five out of the six possible aromas were found in the positive attributes, this means aroma is the second most important feature. Due to this, hotels should focus their attention on the texture and aroma of their hotel lotions and less on the packaging features

Figure 4.4. Adjusted Raw Feature Scores of the MaxDiff Hotel Lotion Survey
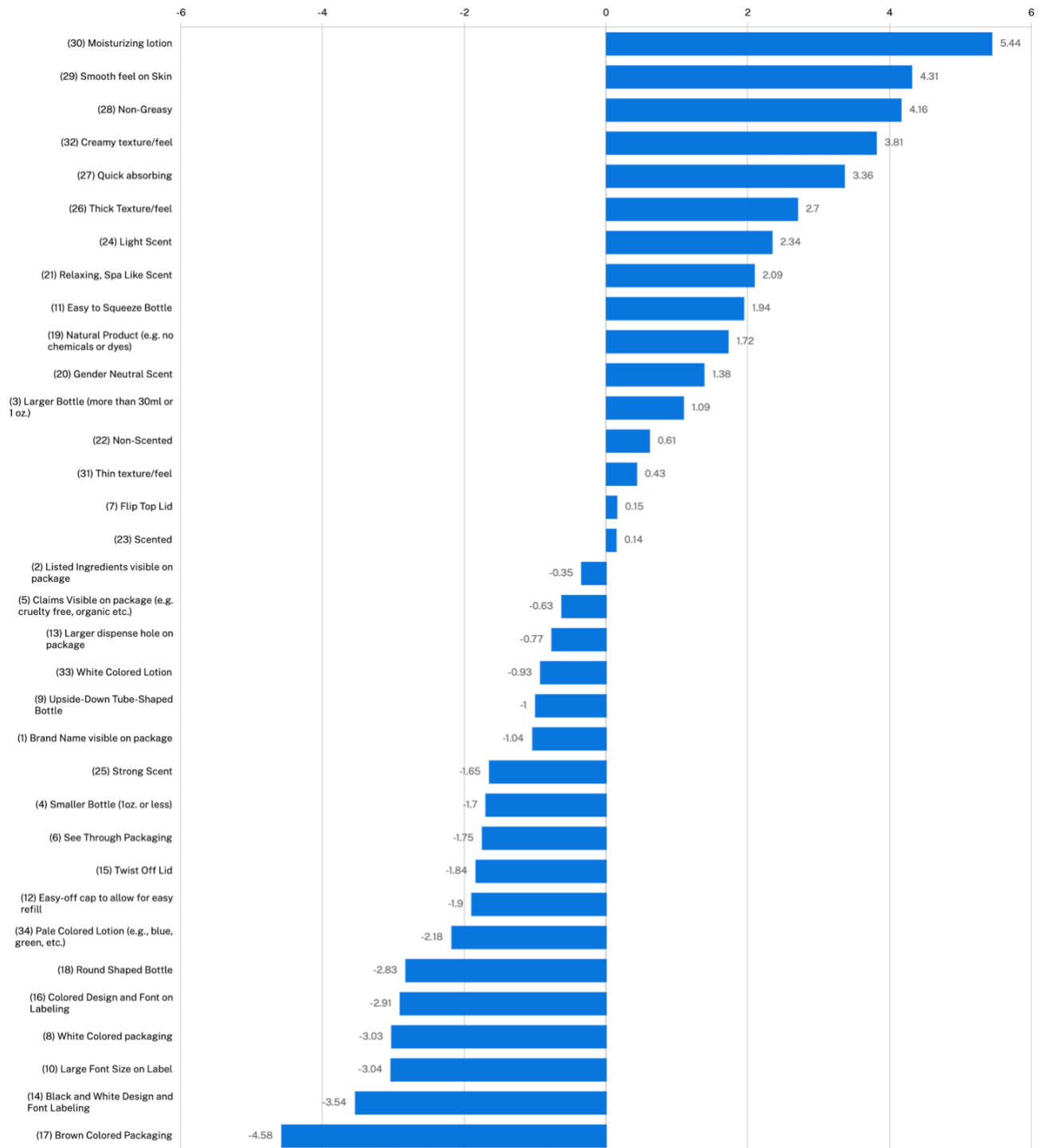
Probability of Choice

When analyzing all consumers as one group, a hotel lotion that is 'moisturizing' and 'smooth on the skin' are the most important features. These attributes are predicted to be selected at 94.67% and 91.74% respectively (Table 4.3). These are followed by eight other attributes that all have over a 50% chance of being selected as the most important feature. These features include 'non-greasy' (87.6%), 'creamy texture/feel' (84.28%), 'quick absorbing' (79.9%), 'thick texture/feel' (70.25%), 'light scent' (65.37%), 'relaxing, spa-like scent' (60.68%), 'easy to squeeze bottle' (60.18%), and a 'natural product' (52.87%). For the least important, 'brown colored packaging' (0.84%) and a 'black and white design and font labeling' (1.91%) were the least important attributes of hotel lotions. This is similar to hotel shampoos who also had packaging color and labeling characteristics as the least likely to be selected as the most important attributes.

The probability scores were also explored by segmenting consumers. The gender, age, hotel type, and travel frequency were explored to determine any differences in segments of consumers. When looking at the female gender, the only difference is that a 'creamy' hotel lotion is a higher priority than the overall consumer. Additionally, the 'scented' attribute is a higher priority for females than for their male counterparts, meaning females prefer a scented lotion to non-scented. For males, a 'non-greasy' lotion is of higher priority in comparison to a 'creamy' lotion (Table 4.3). Males have over a 90% chance of selecting one of their top three attributes ('Moisturizing lotion', 'smooth feel on skin', or 'non-greasy'). These attributes are of utmost importance to the male gender. Additionally, the 'natural product' attribute fell out of the top 10 attributes for males (Table 4.3). With this, the claims and listed ingredients were of less importance to male individuals..

Table 4.3. The Probability of Choosing any Hotel Lotion Feature

Lotion Feature	Total (N=153)	Female (N=89)	Male (N=64)	Age 25-34 (N=35)	Age 35-44 (N=76)	Age 45-50 (N=42)	Economy/ Midscale (N=88)	Upscale/Upper Upscale/Luxury (N=65)	Once A Month or More (N=48)	Once Every 3-6 Months (N=105)
Moisturizing lotion	94.67%	95.39%	93.68%	96.52%	95.75%	91.18%	96.06%	92.81%	94.41%	94.79%
Smooth feel on Skin	91.74%	92.53%	90.64%	92.09%	92.39%	90.28%	92.96%	90.08%	89.41%	92.81%
Non-Greasy	87.60%	85.20%	90.92%	85.27%	89.86%	85.43%	88.32%	86.62%	89.66%	86.65%
Creamy texture/feel	84.28%	88.64%	78.22%	89.97%	83.91%	80.19%	85.85%	82.16%	82.38%	85.14%
Quick absorbing	79.90%	78.34%	82.06%	78.16%	81.97%	77.59%	83.26%	75.35%	78.70%	80.44%
Thick Texture/feel	70.25%	77.19%	60.60%	74.74%	70.59%	65.89%	74.05%	65.10%	66.55%	71.94%
Light Scent	65.37%	64.32%	66.81%	56.45%	67.76%	68.47%	66.26%	64.16%	60.90%	67.41%
Relaxing, Spa Like Scent	60.68%	63.66%	56.54%	71.07%	56.59%	59.43%	60.10%	61.47%	55.03%	63.27%
Easy to Squeeze Bottle	60.18%	58.93%	61.91%	59.10%	58.95%	63.30%	60.68%	59.50%	58.92%	60.75%
Natural Product (e.g., no chemicals or dyes)	52.87%	58.88%	44.51%	66.03%	52.50%	42.57%	51.43%	54.81%	51.95%	53.29%
Gender Neutral Scent	49.52%	44.60%	56.36%	39.69%	51.57%	54.00%	50.34%	48.40%	40.93%	53.44%
Larger Bottle (more than 30ml or 1 oz.)	44.24%	43.95%	44.64%	45.01%	43.39%	45.12%	43.74%	44.91%	45.10%	43.84%
Non-Scented	36.57%	32.24%	42.58%	22.54%	43.75%	35.26%	36.28%	36.96%	37.30%	36.24%
Thin texture/feel	35.70%	32.26%	40.48%	33.82%	37.10%	34.72%	34.57%	37.23%	40.30%	33.59%
Scented	32.72%	33.90%	31.08%	38.67%	29.33%	33.88%	34.08%	30.87%	28.96%	34.43%
Flip Top Lid	32.41%	31.00%	34.37%	25.41%	32.45%	38.18%	32.81%	31.88%	30.18%	33.44%
Listed Ingredients visible on package	27.98%	32.10%	22.26%	34.22%	26.16%	26.07%	27.73%	28.33%	29.17%	27.44%
Claims Visible on package (e.g., cruelty free)	25.70%	30.60%	18.90%	34.03%	23.62%	22.54%	24.68%	27.10%	28.38%	24.48%
White Colored Lotion	18.43%	15.99%	21.81%	17.37%	18.62%	18.95%	18.70%	18.05%	19.78%	17.81%
Brand Name visible on package	16.07%	17.47%	14.11%	18.95%	13.51%	18.29%	13.97%	18.91%	11.84%	18.00%
Strong Scent	15.77%	15.03%	16.81%	17.98%	13.41%	18.21%	17.38%	13.59%	17.08%	15.17%
Upside-Down Tube-Shaped Bottle	15.54%	14.65%	16.77%	13.46%	14.52%	19.10%	15.15%	16.06%	18.02%	14.40%
Larger dispense hole on package	14.99%	14.07%	16.27%	14.33%	14.90%	15.70%	15.83%	13.85%	19.37%	12.98%

See Through Packaging	10.03%	9.66%	10.53%	9.18%	10.42%	10.03%	8.93%	11.51%	9.68%	10.19%
Pale Colored Lotion (e.g., blue, green, etc.)	6.93%	7.62%	5.97%	7.54%	5.15%	9.64%	6.07%	8.09%	6.68%	7.04%
Smaller Bottle (1oz. or less)	6.69%	4.83%	9.29%	5.54%	6.24%	8.47%	7.22%	5.98%	7.62%	6.27%
Easy-off cap to allow for easy refill	5.94%	6.14%	5.68%	5.79%	5.13%	7.54%	5.66%	6.33%	4.75%	6.49%
Twist Off Lid	5.75%	5.59%	5.98%	4.72%	6.10%	5.98%	5.96%	5.46%	6.45%	5.43%
Colored Design and Font on Labeling	3.14%	2.94%	3.43%	2.36%	2.81%	4.39%	2.81%	3.59%	2.55%	3.41%
White Colored packaging	2.95%	2.03%	4.23%	2.43%	2.76%	3.73%	2.99%	2.90%	3.40%	2.75%
Round Shaped Bottle	2.79%	2.25%	3.55%	2.43%	2.56%	3.52%	2.52%	3.16%	3.68%	2.39%
Large Font Size on Label	2.07%	1.89%	2.32%	1.84%	1.75%	2.82%	2.04%	2.10%	2.54%	1.85%
Black and White Design and Font Labeling	1.91%	1.62%	2.31%	1.89%	1.70%	2.28%	1.64%	2.27%	2.08%	1.83%
Brown Colored Packaging	0.84%	0.73%	1.00%	0.93%	0.73%	0.96%	0.76%	0.94%	1.18%	0.68%

The second segment reviewed was age. The youngest subgroup (ages 25-34) prioritized information on their hotel lotions. Information such as 'listed ingredients', 'claim statements', 'brand names', and 'natural products'. Additionally, a 'scented' hotel lotion was of higher priority for the younger segment while 'non-scented' hotel lotions were of higher priority for the two older age groups (Table 4.3). Though the group of younger individuals has a higher probability to choose a 'natural product', the middle age group has this attribute in their top 10 most important attributes due to their higher likelihood (per 80%) to choose one of their first five attributes (Table 4.3). The oldest age segment had three aroma attributes in their top 10 most probable to be selected. Though this age group has a higher wish for the hotel lotions to be scent-less, if there is an aroma, they are more particular about the type of aroma than the other age groups. Overall, the texture attributes are very similar across all age segments. If a scent is to be present in a hotel lotion, this lotion should be lightly scented and have a relaxing, spa-like scent to satisfy all age groups.

The hotel type was consolidated into two groups. The first segment contained economy and midscale consumers (n=88). The second segment contained those who stayed in upscale, upper upscale, and luxury hotels (n=65). There were only slight differences between the two hotel types. In their top 10 hotel lotion attributes, the economy/midscale consumers were more prone to select an 'easy to squeeze bottle' over a 'relaxing, spa-like scent' when compared to upscale/luxury consumers' (Table 4.3). From the shampoo survey, it was found that economy/midscale prioritized claims, ingredients, and brand name attributes. The alternative was found for hotel lotions. Upscale/upper upscale/luxury consumers were slightly more probable to select 'natural products', 'claims', 'listed ingredients', and 'brand name' as the most important attribute for hotel lotions (Table 4.3). Furthermore, economy/midscale consumers are more likely

to select a 'scented' hotel lotion, unlike their upper-scale counterparts. Two different segments are found in hotel type. Those who stay at 'lower-scale' hotels need scented and less information on their hotel lotions. Those who stay at 'upper-scale' hotels need validation by brands, claims etc. and do not like scents in their hotel lotions.

The last segment investigated was travel frequency. Travel frequency was the average amount of time consumers spent traveling and staying in a hotel during a calendar year (before COVID-19). This segment was also split into two groups. The first group was those who traveled once a month or more (traveled more) and the second were those who traveled once every 3-6 months (traveled less). Those in the second group had similar probabilities to those in the entire sample scope. The only difference is that 'gender-neutral scent' is in place of 'natural products' in their top 10 attributes (Table 4.3). Furthermore, those that travel less prioritize brands as they want to use a 'trusted' hotel lotion. This consumer group also prioritize 'scented' lotion higher than those who travel more (Table 4.3). Those who travel more ranked 'non-scented' hotel lotions higher as they do not want a lingering scent. Additionally, this consumer group cares more about 'non-greasy' and an 'easy to squeeze bottle' than those who travel less. Lastly, both consumer groups agree with the other consumer groups that 'black and white design and font labeling' and 'brown colored packaging' features are the least important for hotel lotions. Overall, both segment groups have similar priorities for important hotel lotion features except for the 'scented' feature.

In each segment, there are similar features that were most probable to be selected. The 10 most important attributes for hotel lotions are a 'moisturizing lotion', 'smooth feel on skin', 'non-greasy', 'creamy texture/feel', 'quick absorbing', thick texture/feel', 'light scent', 'relaxing, spa-like scent', 'easy to squeeze bottle', and 'natural product (e.g., no chemicals or dyes)' (Table 4.3).

These attributes can be considered the most important for all groups of consumers. It also can be said that texture is the most important modality for hotel shampoos when compared to the aroma and packaging modalities, as all except one texture attribute is included within this group of hotel lotion characteristics.

Share of Preference

Knowing that a 'moisturizing lotion' is the most important attribute to all consumers, this texture attribute was removed from the comparison between texture attributes. When the 'moisturizing lotion' attribute is included about 42% of individuals prefer this feature. The textures analyzed other than a 'moisturizing lotion' were 'smooth feel on skin', 'creamy texture/feel', 'quick absorbing', 'thick texture/feel', 'thin texture/feel', and 'non-greasy'. From these, three features are equally as preferred, these are 'non-greasy', 'smooth feel on skin', and a 'creamy texture/feel'. If these three attributes were compared directly, 38.64% of consumers would choose 'non-greasy', 35% of consumers would select a 'smooth feel on skin', and 26.33% of consumers would choose a 'creamy texture/feel' as their most important feature of hotel lotions. For gender, males prefer a 'non-greasy' lotion to a 'smooth feel' or 'thick texture', while females prefer that 'smooth feel on skin'. The youngest consumer group is similar to the female segment and also prefers that 'smooth feel on skin', while the other two groups prefer a 'non-greasy' lotion. Those who travel more often are more likely to choose a 'non-greasy' feature rather than the 'smooth feel' or 'thick texture', while those that travel less would prefer a 'smooth feel on their skin' to a 'non-greasy' lotion.

A total of six aroma attributes were used during this survey. Two of those were scents, two were the strength of aromatics, and the final two were the presence or absence of smell. When comparing the two scents, 58.7% of people would prefer a 'relaxing, spa-like scent' versus

a 'gender-neutral scent' (41.3%). This is the case for all the sub-segments except for the male population. For the male segment, almost 50% of males would prefer a relaxing, spa-like scent or a gender-neutral scent. When it comes to aroma strength, 87.14% of consumers prefer a 'lightly scented' hotel lotion to a 'strongly scented' lotion (12.86%) and none of the sub-segments disagreed with this trend. As for the comparison between the presence or absence of aroma, approximately 50% of consumers prefer 'scented' and 50% prefer 'non-scented'. If this is split into segments, females prefer a 'scented' lotion while males prefer a 'non-scented' hotel lotion. This was also the case during the focus groups earlier in this research. When age is taken into consideration, the youngest age group (25-34 years old) prefers to have a 'scented' hotel lotion, while the middle age group (35-44) prefers to have a 'non-scented' hotel lotion. Additionally, the oldest age group prefers both 'scented' and 'non-scented' as about 50% of this age group would select either category. Both hotel-type segments prefer having a 'scented' hotel lotion in which economy consumers prefer this slightly over upscale consumers. This was also the case for both segments of travel frequency. Those who traveled less slightly preferred 'scented' over its 'non-scented' counterpart, while those who traveled more slightly preferred the 'non-scented' option. For aromas, the hotel lotions can either be scented or non-scented. If an aroma is present in the hotel lotion, it should be a lightly scented, relaxing, spa-like scent.

The 'brand name', 'listed ingredients', 'claim statements', and 'natural product' were all attributes created by those in the previous chapter of this research document. About 64% of consumers would prefer to see a 'natural product' over the 'brand name' (16.54%), 'listed ingredients' (10.94%), or even 'claim statements' (8.56%). Consumers in the hotel type and travel frequency segments agreed. Females preferred to see a 'natural product' slightly more than males (65.18% vs. 62.27%), but males believed 'brand name visible on the package' was more

important than females (14.74% vs. 19.03%). As for age, all segments preferred to see a 'natural product', but the older consumer group (45-50 years old), believed that 'brand name' was more important when compared to the other two groups. About 12-17% more of the 45–50-year-old group would select 'brand name' as the most important versus the other two age segments. From this, a hotel lotion should be a 'natural product' and 'brand name'.

Two attributes for color were used in the hotel lotion survey, these were a 'white' or 'pale-colored lotion'. About 70% of consumers would select a 'white colored lotion' over a 'pale-colored lotion'. This was also the case for all consumer segments. So, to create the ideal hotel lotion, a white color should be present.

Similar to the shampoo survey, the packaging attribute conclusions were the same. An 'upside-down tube-shaped bottle' was most important to almost 80% of consumers, but when the 'easy to squeeze bottle' attribute is compared to these two shapes, consumers would prefer the bottle to be easy to squeeze the product out, no matter the shape of the container. For container size, a 'larger bottle' was preferred by approximately 85% of consumers. For lid type, the 'flip top' is preferred by 77.9% of consumers while 22.14% preferred a 'twist-off cap'.

Three colors of hotel lotion packaging, 'see-through packaging', 'white colored packaging', and 'brown colored packaging', were explored during this survey. About 66% of consumers would prefer to have a 'see-through package', but if a color needed to be used, white would be preferred by 78% of individuals versus a brown colored package (22%).

Other packaging features were reviewed that did not have an equal counterpart. These attributes were: 'large font size on the label', 'easy-off cap to allow for easy refill', 'larger dispense hole on the package', 'black and white design and font labeling', and 'colored design and font on the labeling'. In total, the majority of consumers (76%) prefer packaging details that would allow

for easier access to the product (in or out). Only about 24% of consumers would prefer and say the outside packaging details such as design and font are more important. Overall, out of these additional packaging features, a larger dispense hole on the package is the most important feature for all consumer groups.

Total Unduplicated Reach and Frequency Analysis (TURF)

TURF analysis was conducted to determine the set of attributes that would create the ideal hotel lotion. Each segment was analyzed to determine the group of attributes and the differences in ideal hotel lotions between segments. There was no one set of hotel lotion features that created the ideal, but many sets of features. When all consumers were analyzed together the reach for the top group of attributes was 98.86%. This means that 98.86% of consumers would be reached by a product that contained the following features: 'natural product', 'gender neutral scent', 'non-greasy', 'smooth feel on skin', and 'moisturizing lotion' (Figure 4.5). The difference between this group of features and others is typically the exchange of one or two attributes. When looking at all consumers, the top five portfolios all contain the 'non-greasy', 'smooth feel on skin', 'natural product', and 'moisturizing lotion' features. The 'gender-neutral scent' was included in two out of the five top portfolios but then was replaced with a 'relaxing, spa-like scent', 'light scent', or 'non-scented' features. These features that replace the 'gender-neutral scent' are due to the various consumer groups that have strong opinions on the aroma of hotel lotions. As discovered previously, if the hotel lotion is required to be scented, a light scent is preferred. Overall, this group of features would please the majority of consumers.

Figure 4.5. Ideal Hotel Lotions for all Segments of Consumers

Portfolio Reach

	0%	50%	100%

(19) Natural Product
(21) Relaxing, Spa Like Scent
(28) Non-Greasy
(29) Smooth feel on Skin
(30) Moisturizing lotion — 98.89%

(19) Natural Product
(24) Light Scent
(28) Non-Greasy
(29) Smooth feel on Skin
(30) Moisturizing lotion — 98.88%

(19) Natural Product
(20) Gender Neutral Scent
(28) Non-Greasy
(29) Smooth feel on Skin
(30) Moisturizing lotion — 98.87%

(19) Natural Product
(28) Non-Greasy
(29) Smooth feel on Skin
(30) Moisturizing lotion
(32) Creamy texture/feel — 98.85%

(19) Natural Product
(20) Gender Neutral Scent
(21) Relaxing, Spa Like Scent
(28) Non-Greasy
(30) Moisturizing lotion — 98.84%

Females had over 99% reach with five attributes. The hotel lotion features that created this high reach were 'natural product', 'relaxing, spa-like scent', 'non greasy', 'smooth feel on skin', and 'moisturizing lotion'. 'Relaxing, spa-like scent' and 'smooth feel on skin' features were the only two features not consistent with the top five ideal hotel lotions. These features were replaced with 'light scent' and 'creamy texture' There were no packaging features included in any of the portfolios for female or male individuals. For men, 'moisturizing lotion', 'smooth feel on skin', and 'non-greasy' features were consistently included in their ideal hotel lotion. The features of 'gender-neutral scent', 'non-scented', 'relaxing, spa-like scent', and 'creamy texture/feel' were alternated between the ideal hotel lotions. It was identified earlier that men prefer a non-scented lotion, but also cared more about the aroma that was present if a scent was

necessary, explaining why the aroma attributes replace one another. In all, 98.64% of consumers can be reached with 'gender-neutral scent', non-greasy', 'smooth feel on skin', 'moisturizing lotion', and 'creamy texture/feel' features.

All age groups contained similar features in their ideal hotel lotions. The 'moisturizing lotion' and 'non-greasy' features appear in all portfolios for all age groups. In the 25–34-year-old age group, the reach extends to 99.39% of consumers. The 'natural product' and 'creamy texture/feel' attributes also show up in all their top five ideal hotel lotions. The 34-44- and 45–50-year-old individuals both have various aroma attributes in their ideal hotel lotion. The fifth attribute in most portfolios can alternate between various attributes. For these two groups, these attributes are the majority aroma, ranging from 'non-scented' or 'light scent', to 'gender-neutral' and 'relaxing, spa-like scent'. This is due to the observation that these age groups prefer 'non-scented' hotel lotions, but if aroma must be present, they are particular on the type of aroma they choose. The only age group with any packaging features included in their ideal hotel lotion is the middle (34–44-year-old) age group in which they find a 'flip-top lid' essential in their hotel lotions. To please all age groups, the following group of features should be included: 'moisturizing lotion', 'non-greasy', 'natural product', 'creamy texture/feel', 'non-scented' or 'light scent' with 'gender-neutral' or a 'relaxing, spa-like scent'.

Both hotel types had very similar ideal toiletries. 'Non-greasy', 'natural product', 'moisturizing lotion', 'creamy texture/feel', and 'smooth feel on skin' were attributes in both hotel types' of ideal hotel lotion. Neither group had any packaging features in their portfolios. Some differences were found. For economy/midscale users, one feature fluctuated between the various aroma features such as 'non-scented' and 'gender-neutral scent'. On the other hand, upscale/luxury users alternated between 'scented', and 'relaxing, spa-like scent' features. This

means hotel lotions that are found at midscale/economy hotels should either be non-scented or have a gender-neutral scent, while those at upper-scale hotels should be scented with a relaxing, spa-like aroma.

There were two ideal hotel lotions for those who traveled once every 3-6 months. Both of their ideal hotel lotions contained the 'non-greasy', 'smooth feel on skin', 'moisturizing lotion', and 'natural product' attributes and had over a 99% reach to this consumer group. The only difference between these two hotel lotions was the scent. One contained a 'light scent' and the other a 'relaxing, spa-like scent'. For those who traveled once a month or more, 98.73% of this consumer group can be reached if 'creamy texture/feel',' moisturizing lotion', 'non-greasy', 'gender-neutral scent', and 'natural product' features are present. The 'natural product' feature can be exchanged for 'smooth feel on skin' for a similar reach of 98.72%. Overall, both travel frequency groups have similar ideal of an ideal hotel lotion.

Each consumer segment had a different group of features that created their 'ideal' hotel lotion. There was a set group of features that was consistent for all sub-groups. A hotel lotion must be non-greasy and moisturizing. It also must feel smooth on the skin. Additionally, the hotel lotion should either be non-scented or have a lightly scented aroma. This aroma can either be agender-neutral scent or a relaxing, spa-like scent. Lastly, the hotel lotion should be a natural product. To fully maximize consumer acceptance of hotel lotions, a creamy texture should be created. This group of characteristics will satisfy the bulk of tourists.

Discussion

Ideal Hotel Shampoo

For hotel shampoos, the most important features were 'a shampoo that lathers', an 'easy to squeeze bottle', 'moisturizing shampoo', 'relaxing, spa-like scent', 'larger bottle', 'thick texture/feel', 'larger lid size, easier to open', and 'flip-top lid'. Out of the aroma attributes, it was determined that for all consumers, they would prefer to see a 'relaxing, spa-like scent' over a 'gender-neutral scent'. The 'light scent' was also preferred. From this, the ideal scent for hotel shampoos would be a shampoo that is lightly scented with a 'relaxing, spa-like aroma'. Texture features were also compared. The ideal textures were consistent with claims made by focus group participants. The ideal texture of a hotel shampoo should be moisturizing meaning the "shampoo should not make my hair feel dry, but instead make it feel hydrated and smooth" (Chapter 2). Additionally, the texture should be thick "almost like a conditioner" (Chapter 2).

Two bottle shapes were explored (upside-down tube-shaped and tall cylinder shaped) and a 'easy to squeeze' bottle was included in the attribute list. An upside-down tube-shaped bottle was the ideal bottle shape, but when an 'easy to squeeze' bottle was included, this superseded the two bottle shapes. Additionally, the bottle sizes were analyzed. A 'larger bottle' size was most important to consumers.

During the focus group sessions in chapter two, the type of lid was important as many consumers felt that a twist off lid would be "hard to take off in the shower and I can easily drop the lid" (Chapter 2). These claims were proven true when a flip-top lid was directly compared with a twist-off lid. Other important characteristics that were discussed during the focus group sessions were the brand name, claim statements, and ingredients that were listed on the hotel shampoo bottle. Overall, 'brand name' was the most important feature, while 'listed ingredients'

was the least. The only deviation from this observation was in the 25–34-year-old subgroup. This subgroup declared that claim statements like sulfate or cruelty free were more important than brand names.

From the packaging colors, a see-through package was the most important as consumers "want to see how much shampoo is left in the bottle" (Chapter 2). Because consumers preferred a see-through container, the color of the shampoo should be clear as well. During focus group sessions, consumers claimed that they "prefer a clear color shampoo if it is a brand, I do not know" and that "colored shampoos indicated added dyes and is off putting" (Chapter 2).

Overall, 15 total features were deemed very important to hotel guests and shampoo users (Table 4.4). From those fourteen, two were aroma characteristics, three were texture attributes, and ten were packaging features.

Table 4.4. Ideal Characteristics for Hotel Shampoos

Aroma	Packaging	Appearance	Texture
Relaxing, Spa-like Scent	Easy to Squeeze Bottle	Clear (Transparent/Non-Colored) Shampoo	A Shampoo that Lathers
Light Scent	Upside-down Tube-shaped Bottle		Moisturizing Shampoo
	Flip-top Lid		Thick Texture
	Brand Name		Tingly Sensation (with appropriate aroma)
	Claim Statements (e.g., Sulfate Free, Cruelty Free)		
	See Through Package		
	Larger Lid Size, Easier to Open		
	Larger Dispense Hole		

Ideal Hotel Lotion

For hotel lotions, the most important features were 'moisturizing', 'smooth on skin', 'non-greasy', 'creamy texture/feel', 'quick absorbing', 'thick texture/feel', 'light scent', 'relaxing, spa-like scent', 'easy to squeeze bottle', and 'natural product'. Seven texture attributes were included in the hotel lotion survey, but a 'moisturizing' lotion was the most important attribute. The other texture attributes were compared in which a 'non-greasy' hotel lotion was most preferred with a 'smooth feel on skin' and a creamy texture/feel. The 25–34-year-old age group preferred a creamy texture/feel over both the 'non-greasy' and 'smooth feel on skin' attributes.

For the strength of the aroma, all consumer groups agreed that a lightly scented hotel lotion is more important and more preferred than a strongly scented hotel lotion. These findings correlate with the discussion during focus group session as consumers believe that if hotel lotions are "highly fragrant, they don't work and tend to dry out your skin" (Chapter 2). Between a 'gender-neutral scent' and 'relaxing, spa-like scent', a 'relaxing, spa-like scent' was more important. This was the case for all consumer groups, but for the male gender, they were split between both scents, meaning either scent is acceptable. A scented lotion was preferred by the female gender and the 25–34-year-old age group. On the other hand, a non-scented lotion was preferred by the male gender and the 35–44-year-old age group. During the focus group sessions, it was found that males prefer a non-or-lightly scented hotel lotion because they "do not want the scent to linger out of the room" (Chapter 2).

The 'brand name', 'listed ingredients', 'claim statements', and 'natural product' features were very significant to some individuals who participated in focus group sessions. From this comparison, the 'natural product' feature was deemed the most important. Though this

conclusion was consistent across all consumer groups, the male gender and the 45-50 years old age group believed that the 'brand name' was more important than their other subgroups. Both of these features should be included to maximize consumer acceptance of hotel lotions.

The packaging features for hotel lotions are the same for those packaging features of hotel shampoos. An 'upside-down tube-shaped bottle', 'easy to squeeze bottle', 'larger bottle size', 'flip-top cap', 'see-through packaging', and 'easier to remove from bottle features such as 'larger dispense hole'. Three colors of hotel lotions were compared as well, and a white hotel lotion was the most important. Overall, 16 total features were deemed very important to hotel guests and lotion users (Table 4.5). From those features, four were texture characteristics, three were aroma attributes, and nine were packaging features.

Table 4.5. Ideal Characteristics for Hotel Lotions

Aroma	Packaging	Appearance	Texture
Relaxing, Spa-like Scent	Brand Name	White Colored Lotion	Moisturizing
Light Scent	Natural Product		Non-greasy
Scented	Easy to Squeeze Bottle		Smooth Feel on Skin
	Upside-down Tube-shaped Bottle		Creamy Texture/Feel
	Flip-top Lid		
	See Through Package		
	Easy Off Cap, to allow for Easy Refill		
	Larger Dispense Hole		

Limitations

This study was used to determine the most and least important features of hotel shampoos and lotions. Though abundant conclusions were achieved, there are some limitations to this research. First, the sample size for certain subgroups were less than ideal. Hotel type and travel frequency groups had to be combined to increase sample sizes for an accurate data interpretation. (Most consumers that qualified for this study stayed at midscale hotels or traveled once every three months per year). Second, the Coronavirus Pandemic that occurred during the time of this study could have influenced features that were important to consumers. This virus can be spread through respiratory transmission and contact with surfaces in which wall mounted dispensers could be subject to bias. Third, though Maximum Difference surveys allows researchers to avoid problems with rating questions, it has its own limitations. Maximum Difference surveys are known to be lengthy and create fatigue. Though this survey was only 20-22 questions in length, consumers saw the same questions with various attributes 20-22 times. Fatigue could have occurred, and data could have been impacted. Lastly, there were only four segments analyzed (age, gender, hotel type, and travel frequency). The differences in business and leisure hotels were not explored as well as possible differences between long-term and short-term stay properties. Furthermore, there were a lower percentage of male participants in the survey. To account for the limitations of this study, a larger sample size should be used, and this survey should be conducted in various parts of the United States to better represent those segments that were underrepresented as well as analyzing additional consumer segments.

Hotel Recommendations

This research provides the foundation for further research to be conducted on the hotel toiletry category. As indicated in the focus groups during chapter two, location is the most important feature when looking for a hotel, but if consumers are not taking your hotel toiletries, then there are changes that can be made. From this research, features of hotel shampoos and lotions are determined to help the hotel industry gain a better understanding on the features of hotel toiletries they should provide to maximize hotel guest's satisfaction. From this, there are a handful of attributes that are highly recommended to be present in a hotel shampoo or lotion.

For hotel shampoos, there are four must have features. These are: 'moisturizing shampoo', 'a shampoo that lathers', 'relaxing, spa-like scent', and an 'easy to squeeze bottle'. If these features are not included in the hotel shampoo product, it will reach (or satisfy) 6% less individuals and only reach 94.82% which is a low percentage of reach in TURF analysis. Additionally, if you include features such as a 'thin texture' and 'smaller bottle size (1 oz. or less)', then your acceptance from consumers will decrease rapidly.

For hotel lotions, there are four must have features as well. These are: 'moisturizing', 'non-greasy', 'natural product', and 'smooth feel on skin'. If these features are not present, then the consumer acceptance drops only 0.89%. This is because aroma of the hotel lotions is the polarizing feature. If 'non-scented' or a 'relaxing, spa-like scent' is removed, the acceptance or 'reach' drops down 6%. (total 7% from original). Additionally, if features such as 'strong scent' or 'twist-off lid' are used, the reach drops further.

In all, using these key features are going to maximize consumer acceptance for a hotel guest. The aroma and texture features are most important, so focus should remain on those modalities.

Conclusion

In the present study, two online surveys were conducted to determine the most and least important features of hotel shampoos and lotions, as well as identifying the 'ideal' model of hotel shampoos and lotions. For hotel shampoos, the most important features were, 'a shampoo that lathers', 'easy to squeeze bottle', 'moisturizing', 'relaxing, spa-like scent', 'larger bottle', thick texture/feel, 'larger lid size, easier to open', and 'flip-top lid. For hotel lotions, the most important features were, 'moisturizing', 'smooth on the skin', 'non-greasy', 'creamy texture/feel', 'quick absorbing', 'thick texture/feel', 'light scent', 'relaxing, spa-like scent', 'easy to squeeze bottle', and a 'natural product'. Many of these features are used to create consumers 'ideal' hotel shampoo or lotion.

Total Unduplicated Reach and Frequency (TURF) analysis was conducted to determine the group of features that would have the most reach or would appease the largest group of individuals. This analysis determined that hotel shampoos should have a relaxing, spa-like scent. It also should have a moisturizing affect in the hair as well as the ability to lather. This toiletry should come in an upside-down tube-shaped, easy to squeeze bottle with a flip-top lid. Likewise, hotel shampoos should have a brand name to maximize consumer acceptance.

Analysis suggested that hotel lotions should be moisturizing and non-greasy while also having a smooth feel on the skin. For hotel lotions, the aroma is polarizing. Consumers either preferred non-scented lotion or a lotion with a light aroma. Packaging was not a large concern for hotel lotions, but they should be a natural product and should have no added chemicals or dyes. From this study, hotels will have a better understanding on the features of hotel toiletries they should provide to maximize hotel guest's satisfaction.

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Appendix A - Focus Group Supplemental Documents

Focus Group Screener

QUOTAS:
25-50-year-old segment
Male and Female 25/75 split
N=8 individuals/focus group, 4 total focus groups
Mix of hotel usage (travel/ leisure and business)
Hotel price point luxury and upper upscale vs economy 50/50 split
Must use toiletries in the hotel rooms during stay
Mix of travel amount pre-COVID-19
Mix of incomes
Standard Household employment screen

Q1) Are you male or female?
   a) **Male**
   b) **Female**

25% Male
75% Female

Q2) Which of the following categories best describes your age?
   a) Under 25
   b) **25-34**
   c) **35-44**
   d) **44-50**
   e) 51 or above

RESPONDENT MUST ANSWER b, c, or d, TO CONTINUE; OTHERWISE TERMINATE (a or e) Mix of ages

Q3) Do you, or does any member of your immediate family, work for any of the following types of companies? (check all that apply)
RANDOMIZE ORDER SHOWN
   a) Advertising or public relations
   b) Market research
   c) Broadcast or print media
   d) Personal care manufacturer
   e) Drug store
   f) Retailer (clothes, beauty, etc.)
   g) **None of the above**

RESPONDENT MUST ANSWER g TO CONTINUE; OTHERWISE TERMINATE (a, b, c, d, e, f)

Q4) Which number range best describes your total annual household income before taxes?
   a) Under $20,000
   b) $20,000-34,999
   c) **$35,000-49,999**
   d) **$50,000-59,999**
   e) **$60,000-74,999**
   f) **$75,000-99,999**
   g) **$100,000-149,999**

RESPONDENT MUST ANSWER c, d, e, f, g, h TO CONTINUE; OTHERWISE

h) **$150,000 Or More**

Q5) Have you participated in any type of market research study in the past 3 months?
a) YES
b) **NO**

RESPONDENT MUST ANSWER
NO (b) TO CONTINUE;

Q6) How often did you travel AND stay   **at a hotel Pre-COVID-19?**
a) **5 or more times a month**
b) **2-4 times a month**
c) **Once a month**
d) **Once every 6 months**
e) Once a year
f) Less than once a year
g) Never

RESPONDENT MUST ANSWER
a-d TO CONTINUE; OTHERWISE

Q7) Do you travel MOST OFTEN for business or leisure?
a) **Business**
b) **Leisure**

Mix of business and leisure travelers

Q8) Which of the following transportation methods do you use MOST often when you are traveling to your destination?
a) **Fly**
b) **Drive**
c) **Train**

Mix of those who fly and drive.

Q8.1) Think about the times you fly while traveling: Do you typically check your bags when you fly?
a) **Yes**
b) **No**

Q9) Prior to the COVID-19 Pandemic, approximately how many times PER YEAR did you stay at a hotel? (1 time = 1 night)
a) 1-5 times a year
b) **6-10 times a year**
c) **11-15 times a year**
d) **16-20 times a year**
e) **20 or more times a year**

RESPONDENT ANSWER MUST
ANSWER b-e TO CONTINUE;
OTHERWISE TERMINATE (recruit a
mix of travel frequency)

Q10) During the COVID-19 Pandemic, approximately how many times since MARCH (2020) have you stayed at a hotel? (1 time = 1 night)
a) **1-5 times since March**
b) **6-10 times since March**
c) **11-15 times since March**
d) **16-20 times since March**
e) **20 or more times since March**

Q11) Which of the following categories of hotels do you stay MOST OFTEN? (select all that apply)
   a) **Economy (such as Ecolodge, Super 8, Fairfield Inn)**
   b) Midscale (such as Hampton Inn, Courtyard, Holiday Inn, Drury Inn)
   c) Upscale (such as Marriott, Hilton, Hyatt, Sheraton)
   d) **Upper Upscale (such as JW Marriott, W, Westin)**
   e) **Luxury (such as Ritz Carlton, Waldorf Astoria, St. Regis)**
   f) None of the above

> RESPONDENT ANSWER MUST INLUDE a or e TO CONTINUE; OTHERWISE TERMINATE (50/50 split of those who stay at economy and

Q12) When staying at a hotel, do you use any of the toiletries provided in hotel rooms (shampoo, conditioner, lotion etc.)?
   a) **Yes**
   b) No

> RESPONDENT MUST ANSWER YES (a) TO CONTINUE;

Q13) Which hotel provided toiletries do you specifically use? (select all that apply)
RANDOMIZE ORDER SHOWN
   a) **Shampoo**
   b) Conditioner
   c) Soap
   d) **Body Lotion**
   e) Shower cap
   f) Makeup wipes
   g) Bath gel
   h) Other

> RESPONDENT ANSWER MUST INLUDE a or d TO CONTINUE;

Q14) Please answer the following question about yourself. Describe your favorite hotel toiletry including why you've chosen it.
   TERMINATE - INARTICULATE RESPONSE: "Shampoo – because it smelled good"

   INVITE - ARTICULATE RESPONSE: "Shampoo from the Marriott hotel because it smells like lemons and oranges and always makes my hair smell good and look nice. I love using their products."

Q15). Are you willing to talk in a group setting?
   a. **Yes**
   b. **No**

> RESPONDENT MUST ANSWER YES (a) TO CONTINUE; OTHERWISE TERMINATE (b)

Q16). Due to COVID-19, this research will be conducted virtually. Do you have access to a laptop or computer with a <u>reliable internet connection, webcam, and microphone</u> that you could use for this interview?
   a. **Yes**
   b. **No**

> RESPONDENT MUST ANSWER YES (a) TO CONTINUE;

Q17). <u>IF</u> you are selected for this study, which of the following dates would you be available? (please select all dates you are available) NOTE: *This does not guarantee a position in this study*

a. October 28th, 2020
b. October 29th, 2020
c. October 30th, 2020
d. November 4th, 2020
e. November 5th, 2020
f. November 6th, 2020

Q18). Below are the requirements for participation in this study

- You must use a computer or large tablet for the session so that you are able to see the other participants in the focus group as well as the moderator.

- Your video must be on and working in order for you to participate. Please be sure to check your camera and sound 10 minutes before starting the group.

- Please make sure your internet and web camera are working properly prior to the study start time

- The focus group will be conducted using a computer. Make sure your glasses are nearby if you need them to read

Do you agree to adhere to these requirements?

a. **Yes**
b. No

RESPONDENT MUST ANSWER
YES (a) TO CONTINUE;

Q19). You are <u>BEING CONSIDERED</u> for an online video focus group over hotel toiletries. The focus groups will be conducted October 28th to November 6th and will take approximately 90 minutes. You will be compensated with a $75 Amazon gift card for participating. IF YOU QUALIFY based on your answers to this survey, are you willing to participate?

If you are willing to participate, <u>please enter your CELL phone number</u> in the box below (with area code).

a. My Cell Phone Number:

b. I am not willing to participate

Thank you! If chosen to participate, you will be contacted to schedule a time.

Focus Group Moderator Guide

Part 1 – Introduction [5 minutes]
　　1.　INTRODUCTION

Hello! My name is Jessie Payne, and this is Grace the Moderator for today's 90-minute discussion. Our purpose today is to talk about hotel toiletries specifically shampoos (or lotions).

We are both from Kansas State University and this focus group is a part of my thesis research, so I want to thank you all for making time for today's session. I am excited to talk to you today so please share freely and remember there are no wrong answers. From here on out (moderator name) will be taking you through this discussion. This allows me to listen and take notes. Additionally, my advisor may listen in on the conversation as well.

　　2.　DISCLOSURE

Just so you are aware, you may see the "rec" tab on the screen. We're **recording the session** because we don't want to miss any of your comments. People often say very helpful things in these discussions, and we can't write fast enough to get them all down. We will be on a first name basis tonight, and we won't use any names in our reports. Your participation today is confidential.

　　3.　ZOOM GUIDELINES

I have a few guidelines I would like you to follow for a more productive research session

- I.　**Please only talk one at a time.** Remember that this session is being recorded.
- II.　**When you want to speak**, please use the 'raise your hand' tool on the bottom of your screen under the chat box. Please make sure your participant tab is open, so you are able to view the 'raise your hand button'
- III.　**Also, if you agree** with something a participant is talking about, please use the 'thumbs up' reaction under the reactions tab on the bottom of your screen. *****Please show me that you can find this tool by showing me a thumbs up.**
- IV.　**Talk as loudly as the moderator** does so that everybody, including people listening to the recording, can hear. All comments are important for the research, so if you have something to say, please share it with the group.
- V.　**Please mute your mic** when you are not talking to avoid interruption from the background noises.
- VI.　Work for **equal "airtime."** I want everybody to have the same opportunity to talk and share opinions.
- VII.　Again, I encourage discussion and want to hear your **different points of view,** there are NO WRONG ANSWERS.
- VIII.　**Say what you believe,** that is why you are here, even if no one agrees with you, it is fine to disagree. Your honest opinion matters.
- IX.　Please turn-off or **silence your cell phone.**
- X.　 Please let me know if you need me to repeat anything.

4. SELF INTRODUCTIONS

Since we will be talking about you today, I would like to get to know you a little

better so please tell me:

- *Your preferred name*
- *A place you loved to travel to pre-COVID-19*

Transition: Thank you for introducing yourselves. It was nice to learn a little more about each of you. Now we are going to switch gears and talk a little bit about the homework assignment you were given before coming to the focus group today.

Part 2 – Homework Assignment [20 minutes] 2-4 min per person
"Create a collage that reflects your favorite and least favorite types of hotel toiletries (such as shampoo, lotion, soap) you've used, and the reasons for them being your most or least favorite. Feel free to use cutout photos from magazines, or digital photos online, or your own photos to complete the collage. It can either be on paper or in a digital format."

1. Let us start by discussing the homework that was assigned prior to this focus group. You were told to make a collage of hotel toiletries. This could have included anything from your favorite toiletries you've used, your least favorite toiletries you've used, or what you want and expect from hotel toiletries

2. Please describe to me what your collage entails
   a. PROBE: Why did you choose those images for your collage?
      i. PROBE: Are there any stories behind these toiletries?

3. What are 3 main characteristics that you like about the toiletries in your collage?

4. What are 3 main characteristics that you dislike about the toiletries in your collage?

Part 3 – Topic A: Hotel Toiletry Usage [20 minutes]
a. Think pre-COVID19: Did you typically use the toiletries in hotels? Which toiletries do you typically use?
    i. PROBE: Why do you use these specific toiletries?
    ii. PROBE: How are they dispensed/packaged? Does that make a difference – why or why not?
        1. PROBE: What kind of toiletries typically? Dispensed? Individually packaged?
    iii. PROBE: Which toiletries specifically?
        1. PROBE: Why did you use those instead of others? Do you always use these toiletries when you go to a hotel? If not – what is your reason/rationale for using vs not using?
    iv. PROBE: Do you take them home with you? Why or why not?

b. For those who have been to a hotel since March, Has COVID affected your usage of these products when you have visited a hotel?
    i. For those who have not. Will your usage differ when you do travel again?
    ii. PROBE: Do not want to use communal products anymore?
    iii. PROBE: Less traveling?
    iv. PROBE: Bringing your own?
    v. PROBE: What would make it okay to use these products still?

c. For those who have not. Will your usage differ when you do travel again?

Part 4 – Topic B: Consumer Attributes and Likes/ Dislikes [40 minutes]

1. Now switching gears to a new activity, you will be thinking about your favorite hotel toiletries you've used. Either a shampoo or lotion. Tell me about the hotel toiletry you are thinking about
   a. PROBE: What type of toiletry is this?
   b. PROBE: Why is it your favorite? (look for sensory attributes or packaging details)
   c. PROBE: What was the aroma of these products?
   d. PROBE: What did the packaging look like on these products?

2. (SHAMPOO GROUP ONLY) Now I am going to show an example of a hotel shampoo on the screen. What is your first impression of this product?
   a. PROBE: Can you tell me what you like about this product?
   b. PROBE: Can you tell me what you dislike about the product?
   c. PROBE: What do you think it smells like?
   d. PROBE: What other characteristics do you think this product has?

3. (LOTION GROUP ONLY) Now I am going to show an example of a hotel lotion on the screen. What is your first impression of this product?
   a. PROBE: Can you tell me what you like about this product?
   b. PROBE: Can you tell me what you dislike about the product?
   c. PROBE: What do you think it smells like?
   d. PROBE: What other characteristics do you think this product has?

4. So now we have talked a little bit about first impressions. When you first walk into the hotel bathroom for the first time when you arrive at the hotel you immediately form a first impression of the toiletries. When you see there are individually packaged toiletries, what are some of those first impressions?
   a. PROBE: What attributes of the toiletries gives you those impressions?

5. Now think about those individually packaged toiletries. Are there reasons you would not use a shampoo or lotion in an individually packaged container, by just looking at them?
   a. PROBE: What about after you smell them? Do you ever open them and then consider using or not? What factors are you studying to make your decision?

6. What are some characteristics you like about hotel shampoo and lotions?
   a. PROBE: What characteristics about packaging?
   b. PROBE: What characteristics about feeling/the texture?
   c. PROBE: What characteristics about aroma?
   d. PROBE: What characteristics about appearance?

7. What kind of aroma do you like the hotel toiletries to have?
   a. PROBE: Which aroma would be your top or favorite?

8. What types of packaging do you like the hotel toiletries to have?
   a. PROBE: What type of lid? (screw, flip top)
      i. PROBE: Why?
   b. PROBE: What shape of the bottle? (tall cylinder? Etc.)
      i. PROBE: Why? Easier to hold? Easier to get product out of? Able to refill later at home?
   c. PROBE: What Size/volume of bottle?
   d. PROBE: Does Brand of toiletry mater?
      i. PROBE: If so, how important is It and why?
   e. PROBE: Are Ingredient statement or claims important?
      i. PROBE: if so, what type of ingredient statements or claims?

9. Please get out the pencil and paper we requested you to bring to this session. We want to create an equation to create your ideal hotel toiletry. If you had to put together the characteristics that equal your ideal hotel shampoo and lotion. What would it entail?
   a. For example: A bright red bottle because I like the chiefs + with yellow writing + in the shape of a football + that smells like Patrick Mahomes Deodorant. Or A fruity aroma + twist top + clear in color. There can be any number of characteristics.
   b. I am going to give you about 2 minutes to come up with this equation and when time is up, I want you to hold it up to your camera.

Part 5 – Closure [5 minutes]

1. CLOSING QUESTION
    1. We've been talking about hotel toiletries during our time together. Before we wrap up, I want you to tell me three key features that would make you want to use hotel toiletries.
    2. Anything else to share or something that I forgot?

2. WRAP-UP

    Thank you all for your participation today. I learned some things and got a great deal of good information for my research. For your payment, we will be sending a $75 Amazon gift card via email.

Examples of the Focus Group Homework

Economy Shampoo Homework Example

Luxury Shampoo Homework Example

These are only on the Cruiseline. But the Shampoo feel great. It "tingles" when you use it and it smells fantastic. They are similar to the hotel versions on the right.

These were the best. They are not available anymore in the rooms, they were replaced by the non take away containers below.

Bar soap is nice at hotels. These smell great but I prefer the ones with ridges similar to the photo on the bottom

I do not get to use bar soap at home. So I love it in hotels. I do not know which hotel use this. But I like the bar sops with the bumps. Again, it is something that is unique to the hotel, and your only there a few time a year so it is fun to have something different.

I miss the small glass bottles. I have not seen these anywhere in a long while. But although the product was the same, they felt like a better quality in the small matching glass bottles

Not a toiletry, but I love taking all these (coffees) with me when I leave. I hide them each day in my bag so they get replenished. Take a large amount home each trip.

These are the same soap as above. But have replaced the disposable travel containers above. Although they are the same product, they do not feel right since whomever was there before you was using from the same bottle. Also, this takes away the fun of taking the disposable ones home with you. Although you can nrink and empty container in and fill it up when you leave. Just takes work pumping.

Economy Lotion Homework Example
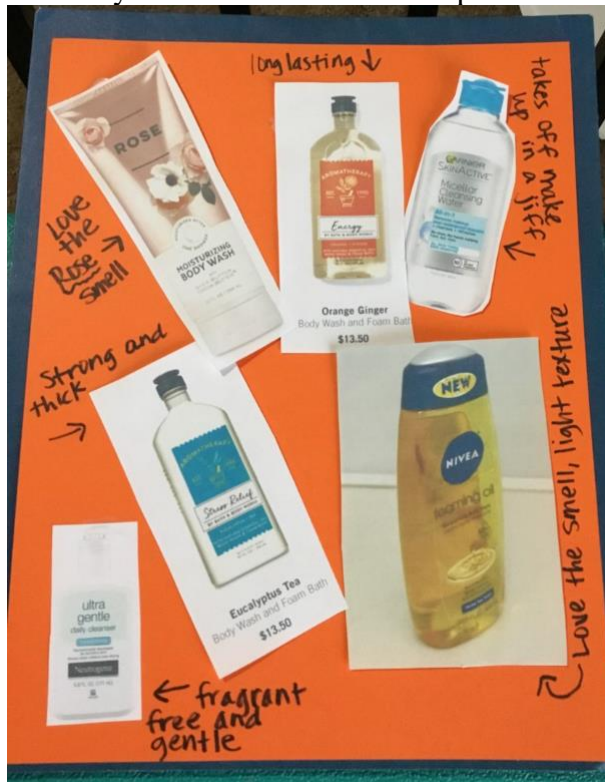
Luxury Lotion Example

Favorites

1. Makeup Wipes – I don't like traveling with my entire face washing regimen
2. Shampoo – I never travel with this
3. Conditioner – I never travel with this
4. Shower gel/body wash - I never travel with this
5. Body Lotion – so I don't have to bring my own
6. Essential Oils – creative

Least Favorite

1. Bars of soap – I don't use bar soap
2. Shampoo/Conditioner combo – I don't use combo.

Appendix B - MaxDiff Survey Supplemental Documents

MaxDiff Survey Screener

Q1) Are you male or female?
    a. Male
    b. Female

25% Male (AT LEAST)
75% Female

Q2) Which of the following categories best describes your age?
    a. Under 25
    b. 25-34
    c. 35-44
    d. **44-50**
    e. 51 or above

RESPONDENT MUST ANSWER b, c, or d, TO CONTINUE; OTHERWISE TERMINATE (a or e) Mix of ages

Q3) Do you, or does any member of your immediate family, work for any of the following types of companies? (check all that apply)
RANDOMIZE ORDER SHOWN
    a. Advertising or public relations
    b. Market research
    c. Broadcast or print media
    d. Personal care manufacturer
    e. Drug store
    f. Retailer (clothes, beauty, etc.)
    g. None of the above

RESPONDENT MUST ANSWER g TO CONTINUE; OTHERWISE TERMINATE (a, b, c, d, e, f)

Q4) Which number range best describes your total annual household income before taxes?
    a. Under $20,000
    b. $20,000-34,999
    c. $35,000-49,999
    d. $50,000-59,999
    e. $60,000-74,999
    f. $75,000-99,999
    g. $100,000-149,999
    h. $150,000 Or More

Q5) Have you participated in any type of market research study in the past 3 months?
    a. YES
    b. NO

RESPONDENT MUST ANSWER NO (b) TO CONTINUE;

Q6) How often did you travel AND stay at a hotel Pre-COVID-19?
    a. 5 or more times a month
    b. 2-4 times a month
    c. Once a month

RESPONDENT MUST ANSWER a-d TO CONTINUE; OTHERWISE

    d. Once every 6 months
    e. Once a year
    f. Less than once a year
    g. Never

Q7) Do you travel MOST OFTEN for business or leisure?
    a. Business
    b. Leisure

> Mix of business and leisure travelers

Q8) Which of the following transportation methods do you use MOST often when you are traveling to your destination?
    a. Fly
    b. Drive
    c. Train

Q8.1) Think about the times you fly while traveling: Do you typically check your bags when you fly?
    a. Yes
    b. No

Q9) Prior to the COVID-19 Pandemic, approximately how many times PER YEAR did you stay at a hotel? (1 time = 1 night)
    a. 1-5 times a year
    b. 6-10 times a year
    c. 11-15 times a year
    d. 16-20 times a year
    e. 20 or more times a year

> RESPONDENT ANSWER MUST ANSWER b-e TO CONTINUE; OTHERWISE TERMINATE (recruit a mix of travel frequency)

Q10) During the COVID-19 Pandemic, approximately how many times since MARCH (2020) have you stayed at a hotel? (1 time = 1 night)
    a. 1-5 times since March
    b. 6-10 times since March
    c. 11-15 times since March
    d. 16-20 times since March
    e. 20 or more times since March

Q11) Which of the following categories of hotels do you stay MOST OFTEN? (select all that apply)
    a. Economy (such as Ecolodge, Super 8, Fairfield Inn)
    b. Midscale (such as Hampton Inn, Courtyard, Holiday Inn, Drury Inn)
    c. Upscale (such as Marriott, Hilton, Hyatt, Sheraton)
    d. Upper Upscale (such as JW Marriott, W, Westin)
    e. Luxury (such as Ritz Carlton, Waldorf Astoria, St. Regis)
    f. None of the above

Q12) When staying at a hotel, do you use any of the toiletries provided in hotel rooms (shampoo, conditioner, lotion etc.)?
  a. **Yes**
  b. No

RESPONDENT MUST ANSWER
YES (a) TO CONTINUE;

Q13) Which hotel provided toiletries do you specifically use? (select all that apply)
RANDOMIZE ORDER SHOWN
  a. **Shampoo**
  b. Conditioner
  c. Soap
  d. **Body Lotion**
  e. Shower cap
  f. Makeup wipes
  g. Bath gel
  h. Other

RESPONDENT ANSWER MUST
INLUDE a or d TO CONTINUE;

Q14). Which of the following hotel provided toiletries do you use MOST OFTEN?
  a. **Shampoo**
  b. **Lotion**
  c. **Neither**

RESPONDENT MUST ANSWER YES (a or b);
OTHERWISE TERMINATE (c).

Q15). Congratulations!... You have qualified for the online study of project Roycroft.
Before continuing, please enter your **Email Address** below. Then, click next to continue to the survey.

Q16). This survey should be completed ASAP. Once you have completed the survey, you will received $10 as an incentive for your time. You will see more information about the incentive once you complete the survey.
Click the link below to access the survey.
Please email jessie14@ksu.edu if you cannot access the survey

MaxDiff Lotion Survey Questionnaire

Thank you for participating in this survey! Today we want to learn your opinions about the lotions that you would normally use during a hotel stay. Please type 'ksu' in the username field below and then click the "Next" button to continue…

Username: ☐

Next

Consent Form

1. I agree to participate as a panelist in research conducted by the Sensory &Consumer Research Center.

2. I understand that the purpose of this project is to participate in a survey to understand features of hotel toiletries.

3. I understand my performance as an individual will be treated as research data and will in no way be associated with me for anything other than identification purposes, thereby assuring confidentiality of performance and responses.

4. I understand that I do not have to participate in this research and may choose not to participate without penalty.

5. I understand that I may withdraw at any time.

6. If I have any questions concerning this study, I understand that I may contact Marianne Swaney-Stueve at 913-307-7354 at the KSU Olathe Campus Room 162.

7. If I have any questions about my rights as a consumer or about the manner in which this research was conducted, I may contact Dr. Rick Scheidt, Chair, Committee on Research Involving Human Subjects, 1 Fairchild Hall (532-2334), Manhattan, KS, 66506.

By typing my name (first and last) in the space below, I am providing my electronic signature and acknowledging that I understand the above statements.

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Hello! We would like to gather your insights about individually packaged lotions provided to you during hotel stays. This survey will ask questions about the most and least important features of hotel lotions according to you. We will ask which feature (among each set of five) is the most important and which is the least important in regard to hotel lotions.

Please answer according to the individually packaged lotions you would normally receive during a hotel stay.

Remember, you can only select one most important and one least important feature out of the five options you are provided.

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0% 100%

When thinking about hotel toiletries, more specifically the individually packaged lotion provided to you, which of the following features are the Most Important and Least Important?

Least Important		Most Important
LotionMXD_1_w=6 ○	See Through Packaging	LotionMXD_1_b=6 ○
LotionMXD_1_w=1 ○	Brand Name visible on package	LotionMXD_1_b=1 ○
LotionMXD_1_w=31 ○	Thin texture/feel	LotionMXD_1_b=31 ○
LotionMXD_1_w=13 ○	Larger dispense hole on package	LotionMXD_1_b=13 ○
LotionMXD_1_w=34 ○	Pale Colored Lotion (e.g., blue, green, etc.)	LotionMXD_1_b=34 ○

Click the 'Next' button to continue...

When thinking about hotel toiletries, more specifically the individually packaged lotion provided to you, which of the following features are the Most Important and Least Important?

Least Important		Most Important
LotionMXD_2_w=32 ○	Creamy texture/feel	LotionMXD_2_b=32 ○
LotionMXD_2_w=23 ○	Scented	LotionMXD_2_b=23 ○
LotionMXD_2_w=19 ○	Natural Product (e.g. no chemicals or dyes)	LotionMXD_2_b=19 ○
LotionMXD_2_w=2 ○	Listed Ingredients visible on package	LotionMXD_2_b=2 ○
LotionMXD_2_w=18 ○	Round Shaped Bottle	LotionMXD_2_b=18 ○

Click the 'Next' button to continue…

When thinking about hotel toiletries, more specifically the individually packaged lotion provided to you, which of the following features are the Most Important and Least Important?

Least Important		Most Important
LotionMXD_3_w=33 ◯	White Colored Lotion	LotionMXD_3_b=33 ◯
LotionMXD_3_w=30 ◯	Moisturizing lotion	LotionMXD_3_b=30 ◯
LotionMXD_3_w=12 ◯	Easy-off cap to allow for easy refill	LotionMXD_3_b=12 ◯
LotionMXD_3_w=14 ◯	Black and White Design and Font Labeling	LotionMXD_3_b=14 ◯
LotionMXD_3_w=5 ◯	Claims Visible on package (e.g. cruelty free, organic etc.)	LotionMXD_3_b=5 ◯

Click the 'Next' button to continue...

When thinking about hotel toiletries, more specifically the individually packaged lotion provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
LotionMXD_4_w=21 ○	Relaxing, Spa Like Scent	LotionMXD_4_b=21 ○
LotionMXD_4_w=10 ○	Large Font Size on Label	LotionMXD_4_b=10 ○
LotionMXD_4_w=9 ○	Upside-Down Tube-Shaped Bottle	LotionMXD_4_b=9 ○
LotionMXD_4_w=34 ○	Pale Colored Lotion (e.g., blue, green, etc.)	LotionMXD_4_b=34 ○
LotionMXD_4_w=4 ○	Smaller Bottle (1oz. or less)	LotionMXD_4_b=4 ○

Click the 'Next' button to continue...

When thinking about hotel toiletries, more specifically the individually packaged lotion provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
LotionMXD_5_w=26 ◯	Thick Texture/feel	LotionMXD_5_b=26 ◯
LotionMXD_5_w=7 ◯	Flip Top Lid	LotionMXD_5_b=7 ◯
LotionMXD_5_w=6 ◯	See Through Packaging	LotionMXD_5_b=6 ◯
LotionMXD_5_w=8 ◯	White Colored packaging	LotionMXD_5_b=8 ◯
LotionMXD_5_w=29 ◯	Smooth feel on Skin	LotionMXD_5_b=29 ◯

Click the 'Next' button to continue...

When thinking about hotel toiletries, more specifically the individually packaged lotion provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
LotionMXD_6_w=13 ○	Larger dispense hole on package	LotionMXD_6_b=13 ○
LotionMXD_6_w=25 ○	Strong Scent	LotionMXD_6_b=25 ○
LotionMXD_6_w=27 ○	Quick absorbing	LotionMXD_6_b=27 ○
LotionMXD_6_w=3 ○	Larger Bottle (more than 30ml or 1 oz.)	LotionMXD_6_b=3 ○
LotionMXD_6_w=15 ○	Twist Off Lid	LotionMXD_6_b=15 ○

Click the 'Next' button to continue...

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When thinking about hotel toiletries, more specifically the individually packaged lotion provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
LotionMXD_7_w=1 ⃝	Brand Name visible on package	LotionMXD_7_b=1 ⃝
LotionMXD_7_w=19 ⃝	Natural Product (e.g. no chemicals or dyes)	LotionMXD_7_b=19 ⃝
LotionMXD_7_w=24 ⃝	Light Scent	LotionMXD_7_b=24 ⃝
LotionMXD_7_w=10 ⃝	Large Font Size on Label	LotionMXD_7_b=10 ⃝
LotionMXD_7_w=16 ⃝	Colored Design and Font on Labeling	LotionMXD_7_b=16 ⃝

Click the 'Next' button to continue...

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When thinking about hotel toiletries, more specifically the individually packaged lotion provided to you, which of the following features are the Most Important and Least Important?

Least Important		Most Important
LotionMXD_8_w=14 ○	Black and White Design and Font Labeling	LotionMXD_8_b=14 ○
LotionMXD_8_w=8 ○	White Colored packaging	LotionMXD_8_b=8 ○
LotionMXD_8_w=34 ○	Pale Colored Lotion (e.g., blue, green, etc.)	LotionMXD_8_b=34 ○
LotionMXD_8_w=23 ○	Scented	LotionMXD_8_b=23 ○
LotionMXD_8_w=11 ○	Easy to Squeeze Bottle	LotionMXD_8_b=11 ○

Click the 'Next' button to continue...

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When thinking about hotel toiletries, more specifically the individually packaged lotion provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
LotionMXD_9_w=3 ○	Larger Bottle (more than 30ml or 1 oz.)	LotionMXD_9_b=3 ○
LotionMXD_9_w=22 ○	Non-Scented	LotionMXD_9_b=22 ○
LotionMXD_9_w=28 ○	Non-Greasy	LotionMXD_9_b=28 ○
LotionMXD_9_w=29 ○	Smooth feel on Skin	LotionMXD_9_b=29 ○
LotionMXD_9_w=9 ○	Upside-Down Tube-Shaped Bottle	LotionMXD_9_b=9 ○

Click the 'Next' button to continue...

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When thinking about hotel toiletries, more specifically the individually packaged lotion provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
LotionMXD_10_w=16 ○	Colored Design and Font on Labeling	LotionMXD_10_b=16 ○
LotionMXD_10_w=12 ○	Easy-off cap to allow for easy refill	LotionMXD_10_b=12 ○
LotionMXD_10_w=21 ○	Relaxing, Spa Like Scent	LotionMXD_10_b=21 ○
LotionMXD_10_w=18 ○	Round Shaped Bottle	LotionMXD_10_b=18 ○
LotionMXD_10_w=31 ○	Thin texture/feel	LotionMXD_10_b=31 ○

Click the 'Next' button to continue...

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When thinking about hotel toiletries, more specifically the individually packaged lotion provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
LotionMXD_11_w=4 ○	Smaller Bottle (1oz. or less)	LotionMXD_11_b=4 ○
LotionMXD_11_w=6 ○	See Through Packaging	LotionMXD_11_b=6 ○
LotionMXD_11_w=17 ○	Brown Colored Packaging	LotionMXD_11_b=17 ○
LotionMXD_11_w=5 ○	Claims Visible on package (e.g. cruelty free, organic etc.)	LotionMXD_11_b=5 ○
LotionMXD_11_w=24 ○	Light Scent	LotionMXD_11_b=24 ○

Click the 'Next' button to continue...

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When thinking about hotel toiletries, more specifically the individually packaged lotion provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
LotionMXD_12_w=15 ○	Twist Off Lid	LotionMXD_12_b=15 ○
LotionMXD_12_w=26 ○	Thick Texture/feel	LotionMXD_12_b=26 ○
LotionMXD_12_w=2 ○	Listed Ingredients visible on package	LotionMXD_12_b=2 ○
LotionMXD_12_w=20 ○	Gender Neutral Scent	LotionMXD_12_b=20 ○
LotionMXD_12_w=33 ○	White Colored Lotion	LotionMXD_12_b=33 ○

Click the 'Next' button to continue...

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When thinking about hotel toiletries, more specifically the individually packaged lotion provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
LotionMXD_13_w=22 ⃝	Non-Scented	LotionMXD_13_b=22 ⃝
LotionMXD_13_w=27 ⃝	Quick absorbing	LotionMXD_13_b=27 ⃝
LotionMXD_13_w=1 ⃝	Brand Name visible on package	LotionMXD_13_b=1 ⃝
LotionMXD_13_w=7 ⃝	Flip Top Lid	LotionMXD_13_b=7 ⃝
LotionMXD_13_w=30 ⃝	Moisturizing lotion	LotionMXD_13_b=30 ⃝

Click the 'Next' button to continue...

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When thinking about hotel toiletries, more specifically the individually packaged lotion provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
LotionMXD_14_w=25 ○	Strong Scent	LotionMXD_14_b=25 ○
LotionMXD_14_w=13 ○	Larger dispense hole on package	LotionMXD_14_b=13 ○
LotionMXD_14_w=16 ○	Colored Design and Font on Labeling	LotionMXD_14_b=16 ○
LotionMXD_14_w=32 ○	Creamy texture/feel	LotionMXD_14_b=32 ○
LotionMXD_14_w=4 ○	Smaller Bottle (1oz. or less)	LotionMXD_14_b=4 ○

Click the 'Next' button to continue...

Back   Next

When thinking about hotel toiletries, more specifically the individually packaged lotion provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
LotionMXD_15_w=28 ◯	Non-Greasy	LotionMXD_15_b=28 ◯
LotionMXD_15_w=31 ◯	Thin texture/feel	LotionMXD_15_b=31 ◯
LotionMXD_15_w=11 ◯	Easy to Squeeze Bottle	LotionMXD_15_b=11 ◯
LotionMXD_15_w=17 ◯	Brown Colored Packaging	LotionMXD_15_b=17 ◯
LotionMXD_15_w=20 ◯	Gender Neutral Scent	LotionMXD_15_b=20 ◯

Click the 'Next' button to continue...

Back   Next

When thinking about hotel toiletries, more specifically the individually packaged lotion provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
LotionMXD_16_w=27 ○	Quick absorbing	LotionMXD_16_b=27 ○
LotionMXD_16_w=24 ○	Light Scent	LotionMXD_16_b=24 ○
LotionMXD_16_w=29 ○	Smooth feel on Skin	LotionMXD_16_b=29 ○
LotionMXD_16_w=18 ○	Round Shaped Bottle	LotionMXD_16_b=18 ○
LotionMXD_16_w=14 ○	Black and White Design and Font Labeling	LotionMXD_16_b=14 ○

Click the 'Next' button to continue...

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When thinking about hotel toiletries, more specifically the individually packaged lotion provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
LotionMXD_17_w=10 ○	Large Font Size on Label	LotionMXD_17_b=10 ○
LotionMXD_17_w=2 ○	Listed Ingredients visible on package	LotionMXD_17_b=2 ○
LotionMXD_17_w=30 ○	Moisturizing lotion	LotionMXD_17_b=30 ○
LotionMXD_17_w=25 ○	Strong Scent	LotionMXD_17_b=25 ○
LotionMXD_17_w=8 ○	White Colored packaging	LotionMXD_17_b=8 ○

Click the 'Next' button to continue...

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When thinking about hotel toiletries, more specifically the individually packaged lotion provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
LotionMXD_18_w=7 ○	Flip Top Lid	LotionMXD_18_b=7 ○
LotionMXD_18_w=21 ○	Relaxing, Spa Like Scent	LotionMXD_18_b=21 ○
LotionMXD_18_w=32 ○	Creamy texture/feel	LotionMXD_18_b=32 ○
LotionMXD_18_w=33 ○	White Colored Lotion	LotionMXD_18_b=33 ○
LotionMXD_18_w=28 ○	Non-Greasy	LotionMXD_18_b=28 ○

Click the 'Next' button to continue...

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When thinking about hotel toiletries, more specifically the individually packaged lotion provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
LotionMXD_19_w=19 ○	Natural Product (e.g. no chemicals or dyes)	LotionMXD_19_b=19 ○
LotionMXD_19_w=17 ○	Brown Colored Packaging	LotionMXD_19_b=17 ○
LotionMXD_19_w=26 ○	Thick Texture/feel	LotionMXD_19_b=26 ○
LotionMXD_19_w=12 ○	Easy-off cap to allow for easy refill	LotionMXD_19_b=12 ○
LotionMXD_19_w=22 ○	Non-Scented	LotionMXD_19_b=22 ○

Click the 'Next' button to continue...

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When thinking about hotel toiletries, more specifically the individually packaged lotion provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
LotionMXD_20_w=23 ◯	Scented	LotionMXD_20_b=23 ◯
LotionMXD_20_w=11 ◯	Easy to Squeeze Bottle	LotionMXD_20_b=11 ◯
LotionMXD_20_w=5 ◯	Claims Visible on package (e.g. cruelty free, organic etc.)	LotionMXD_20_b=5 ◯
LotionMXD_20_w=15 ◯	Twist Off Lid	LotionMXD_20_b=15 ◯
LotionMXD_20_w=3 ◯	Larger Bottle (more than 30ml or 1 oz.)	LotionMXD_20_b=3 ◯

Click the 'Next' button to continue...

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When thinking about hotel toiletries, more specifically the individually packaged lotion provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
LotionMXD_21_w=9 ○	Upside-Down Tube-Shaped Bottle	LotionMXD_21_b=9 ○
LotionMXD_21_w=32 ○	Creamy texture/feel	LotionMXD_21_b=32 ○
LotionMXD_21_w=20 ○	Gender Neutral Scent	LotionMXD_21_b=20 ○
LotionMXD_21_w=6 ○	See Through Packaging	LotionMXD_21_b=6 ○
LotionMXD_21_w=30 ○	Moisturizing lotion	LotionMXD_21_b=30 ○

Click the 'Next' button to continue...

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Survey completed from Friday Jan 29 – Thurs Feb 4 at 11:00pm: incentive received Friday Feb 5
Survey completed from Friday Feb 5 – Thurs Feb 11 at 11:00pm: incentive received Friday Feb 12

If you have any questions, please email jessie14@ksu.edu.

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MaxDiff Shampoo Survey Questionnaire

Start

Thank you for participating in this survey! Today we want to learn your opinions about the shampoos that you would normally use during a hotel stay. Please type 'ksu' in the username field below and then click the "Next" button to continue…

Username: [   ]

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Consent Form

1. I agree to participate as a panelist in research conducted by the Sensory &Consumer Research Center.

2. I understand that the purpose of this project is to participate in a survey to understand features of hotel toiletries.

3. I understand my performance as an individual will be treated as research data and will in no way be associated with me for anything other than identification purposes, thereby assuring confidentiality of performance and responses.

4. I understand that I do not have to participate in this research and may choose not to participate without penalty.

5. I understand that I may withdraw at any time.

6. If I have any questions concerning this study, I understand that I may contact Marianne Swaney-Stueve at 913-307-7354 at the KSU Olathe Campus Room 162.

7. If I have any questions about my rights as a consumer or about the manner in which this research was conducted, I may contact Dr. Rick Scheidt, Chair, Committee on Research Involving Human Subjects, 1 Fairchild Hall (532-2334), Manhattan, KS, 66506.

By typing my name (first and last) in the space below, I am providing my electronic signature and acknowledging that I understand the above statements.

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Hello! We would like to gather your insights about individually packaged shampoos provided to you during hotel stays. This survey will ask questions about the most and least important features of hotel shampoos according to you. We will ask which feature (among each set of five) is the most important and which is the least important in regard to hotel shampoos.

Please answer according to the individually packaged shampoos you would normally receive during a hotel stay.

Remember, you can only select one <u>most important</u> and one <u>least important </u>feature out of the five options you are provided.

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When thinking about hotel toiletries, more specifically the individually packaged shampoo provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
ShampooMXD_1_w=25 ○	Thick texture/feel	ShampooMXD_1_b=25 ○
ShampooMXD_1_w=3 ○	Larger Bottle (more than 30ml or 1 oz.)	ShampooMXD_1_b=3 ○
ShampooMXD_1_w=14 ○	Larger dispense hole on package	ShampooMXD_1_b=14 ○
ShampooMXD_1_w=9 ○	Upside-Down Tube-Shaped Bottle	ShampooMXD_1_b=9 ○
ShampooMXD_1_w=11 ○	Large Font Size on Label	ShampooMXD_1_b=11 ○

Click the 'Next' button to continue...

When thinking about hotel toiletries, more specifically the individually packaged shampoo provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
ShampooMXD_2_w=13 ○	Easy-off cap to allow for easy refill	ShampooMXD_2_b=13 ○
ShampooMXD_2_w=6 ○	See Through Packaging	ShampooMXD_2_b=6 ○
ShampooMXD_2_w=17 ○	Bottle with tall Cylinder Shape	ShampooMXD_2_b=17 ○
ShampooMXD_2_w=2 ○	Listed Ingredients visible on package	ShampooMXD_2_b=2 ○
ShampooMXD_2_w=28 ○	Clear (Transparent/Non-Colored) Shampoo	ShampooMXD_2_b=28 ○

Click the 'Next' button to continue…

When thinking about hotel toiletries, more specifically the individually packaged shampoo provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
ShampooMXD_3_w=26 ○	Thin texture/feel	ShampooMXD_3_b=26 ○
ShampooMXD_3_w=15 ○	Black and White Labeling	ShampooMXD_3_b=15 ○
ShampooMXD_3_w=16 ○	Twist Off Lid	ShampooMXD_3_b=16 ○
ShampooMXD_3_w=23 ○	A Shampoo that Lathers	ShampooMXD_3_b=23 ○
ShampooMXD_3_w=20 ○	Relaxing, Spa Like Scent	ShampooMXD_3_b=20 ○

Click the 'Next' button to continue...

When thinking about hotel toiletries, more specifically the individually packaged shampoo provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
ShampooMXD_4_w=4 ◯	Smaller bottle (1 oz. or less)	ShampooMXD_4_b=4 ◯
ShampooMXD_4_w=10 ◯	Larger lid size , easier to open	ShampooMXD_4_b=10 ◯
ShampooMXD_4_w=30 ◯	White Colored Shampoo	ShampooMXD_4_b=30 ◯
ShampooMXD_4_w=12 ◯	Easy to Squeeze Bottle	ShampooMXD_4_b=12 ◯
ShampooMXD_4_w=1 ◯	Brand Name visible on package	ShampooMXD_4_b=1 ◯

Click the 'Next' button to continue…

When thinking about hotel toiletries, more specifically the individually packaged shampoo provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
ShampooMXD_5_w=21 ○	Strong Scent	ShampooMXD_5_b=21 ○
ShampooMXD_5_w=7 ○	Flip Top Lid	ShampooMXD_5_b=7 ○
ShampooMXD_5_w=29 ○	Pale Colored Shampoo (e.g., blue, green, etc.)	ShampooMXD_5_b=29 ○
ShampooMXD_5_w=18 ○	Wall-mounted Shampoo Dispenser	ShampooMXD_5_b=18 ○
ShampooMXD_5_w=5 ○	Claims visible on package (e.g. Sulfate Free, Cruelty Free)	ShampooMXD_5_b=5 ○

Click the 'Next' button to continue...

When thinking about hotel toiletries, more specifically the individually packaged shampoo provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
ShampooMXD_6_w=8 ◯	White Colored Packaging	ShampooMXD_6_b=8 ◯
ShampooMXD_6_w=11 ◯	Large Font Size on Label	ShampooMXD_6_b=11 ◯
ShampooMXD_6_w=24 ◯	Tingly sensation on my scalp during a wash	ShampooMXD_6_b=24 ◯
ShampooMXD_6_w=22 ◯	Light Scent	ShampooMXD_6_b=22 ◯
ShampooMXD_6_w=27 ◯	Moisturizing Shampoo	ShampooMXD_6_b=27 ◯

Click the 'Next' button to continue...

When thinking about hotel toiletries, more specifically the individually packaged shampoo provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
ShampooMXD_7_w=10 ⭘	Larger lid size , easier to open	ShampooMXD_7_b=10 ⭘
ShampooMXD_7_w=25 ⭘	Thick texture/feel	ShampooMXD_7_b=25 ⭘
ShampooMXD_7_w=15 ⭘	Black and White Labeling	ShampooMXD_7_b=15 ⭘
ShampooMXD_7_w=6 ⭘	See Through Packaging	ShampooMXD_7_b=6 ⭘
ShampooMXD_7_w=19 ⭘	Gender Neutral Scent	ShampooMXD_7_b=19 ⭘

Click the 'Next' button to continue...

When thinking about hotel toiletries, more specifically the individually packaged shampoo provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
ShampooMXD_8_w=1 ○	Brand Name visible on package	ShampooMXD_8_b=1 ○
ShampooMXD_8_w=9 ○	Upside-Down Tube-Shaped Bottle	ShampooMXD_8_b=9 ○
ShampooMXD_8_w=28 ○	Clear (Transparent/Non-Colored) Shampoo	ShampooMXD_8_b=28 ○
ShampooMXD_8_w=16 ○	Twist Off Lid	ShampooMXD_8_b=16 ○
ShampooMXD_8_w=21 ○	Strong Scent	ShampooMXD_8_b=21 ○

Click the 'Next' button to continue...

When thinking about hotel toiletries, more specifically the individually packaged shampoo provided to you, which of the following features are the Most Important and Least Important?

Least Important		Most Important
ShampooMXD_9_w=12 ◯	Easy to Squeeze Bottle	ShampooMXD_9_b=12 ◯
ShampooMXD_9_w=2 ◯	Listed Ingredients visible on package	ShampooMXD_9_b=2 ◯
ShampooMXD_9_w=7 ◯	Flip Top Lid	ShampooMXD_9_b=7 ◯
ShampooMXD_9_w=23 ◯	A Shampoo that Lathers	ShampooMXD_9_b=23 ◯
ShampooMXD_9_w=8 ◯	White Colored Packaging	ShampooMXD_9_b=8 ◯

Click the 'Next' button to continue...

When thinking about hotel toiletries, more specifically the individually packaged shampoo provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
ShampooMXD_10_w=18 ⬭	Wall-mounted Shampoo Dispenser	ShampooMXD_10_b=18 ⬭
ShampooMXD_10_w=20 ⬭	Relaxing, Spa Like Scent	ShampooMXD_10_b=20 ⬭
ShampooMXD_10_w=4 ⬭	Smaller bottle (1 oz. or less)	ShampooMXD_10_b=4 ⬭
ShampooMXD_10_w=27 ⬭	Moisturizing Shampoo	ShampooMXD_10_b=27 ⬭
ShampooMXD_10_w=29 ⬭	Pale Colored Shampoo (e.g., blue, green, etc.)	ShampooMXD_10_b=29 ⬭

Click the 'Next' button to continue...

When thinking about hotel toiletries, more specifically the individually packaged shampoo provided to you, which of the following features are the Most Important and Least Important?

Least Important		Most Important
ShampooMXD_11_w=22 ○	Light Scent	ShampooMXD_11_b=22 ○
ShampooMXD_11_w=17 ○	Bottle with tall Cylinder Shape	ShampooMXD_11_b=17 ○
ShampooMXD_11_w=3 ○	Larger Bottle (more than 30ml or 1 oz.)	ShampooMXD_11_b=3 ○
ShampooMXD_11_w=26 ○	Thin texture/feel	ShampooMXD_11_b=26 ○
ShampooMXD_11_w=5 ○	Claims visible on package (e.g. Sulfate Free, Cruelty Free)	ShampooMXD_11_b=5 ○

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When thinking about hotel toiletries, more specifically the individually packaged shampoo provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
ShampooMXD_12_w=30 ○	White Colored Shampoo	ShampooMXD_12_b=30 ○
ShampooMXD_12_w=14 ○	Larger dispense hole on package	ShampooMXD_12_b=14 ○
ShampooMXD_12_w=13 ○	Easy-off cap to allow for easy refill	ShampooMXD_12_b=13 ○
ShampooMXD_12_w=19 ○	Gender Neutral Scent	ShampooMXD_12_b=19 ○
ShampooMXD_12_w=24 ○	Tingly sensation on my scalp during a wash	ShampooMXD_12_b=24 ○

Click the 'Next' button to continue...

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When thinking about hotel toiletries, more specifically the individually packaged shampoo provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

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Least Important		Most Important
ShampooMXD_13_w=23 ◯	A Shampoo that Lathers	ShampooMXD_13_b=23 ◯
ShampooMXD_13_w=29 ◯	Pale Colored Shampoo (e.g., blue, green, etc.)	ShampooMXD_13_b=29 ◯
ShampooMXD_13_w=6 ◯	See Through Packaging	ShampooMXD_13_b=6 ◯
ShampooMXD_13_w=22 ◯	Light Scent	ShampooMXD_13_b=22 ◯
ShampooMXD_13_w=9 ◯	Upside-Down Tube-Shaped Bottle	ShampooMXD_13_b=9 ◯

Click the 'Next' button to continue…

Next

When thinking about hotel toiletries, more specifically the individually packaged shampoo provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
ShampooMXD_14_w=5 ◯	Claims visible on package (e.g. Sulfate Free, Cruelty Free)	ShampooMXD_14_b=5 ◯
ShampooMXD_14_w=16 ◯	Twist Off Lid	ShampooMXD_14_b=16 ◯
ShampooMXD_14_w=11 ◯	Large Font Size on Label	ShampooMXD_14_b=11 ◯
ShampooMXD_14_w=4 ◯	Smaller bottle (1 oz. or less)	ShampooMXD_14_b=4 ◯
ShampooMXD_14_w=2 ◯	Listed Ingredients visible on package	ShampooMXD_14_b=2 ◯

Click the 'Next' button to continue...

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When thinking about hotel toiletries, more specifically the individually packaged shampoo provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important   Most Important

ShampooMXD_15_w=14	Larger dispense hole on package	ShampooMXD_15_b=14
◯		◯
ShampooMXD_15_w=28	Clear (Transparent/Non-Colored) Shampoo	ShampooMXD_15_b=28
◯		◯
ShampooMXD_15_w=27	Moisturizing Shampoo	ShampooMXD_15_b=27
◯		◯
ShampooMXD_15_w=15	Black and White Labeling	ShampooMXD_15_b=15
◯		◯
ShampooMXD_15_w=7	Flip Top Lid	ShampooMXD_15_b=7
◯		◯

Click the 'Next' button to continue...

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When thinking about hotel toiletries, more specifically the individually packaged shampoo provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
ShampooMXD_16_w=20 ⭕	Relaxing, Spa Like Scent	ShampooMXD_16_b=20 ⭕
ShampooMXD_16_w=26 ⭕	Thin texture/feel	ShampooMXD_16_b=26 ⭕
ShampooMXD_16_w=8 ⭕	White Colored Packaging	ShampooMXD_16_b=8 ⭕
ShampooMXD_16_w=10 ⭕	Larger lid size , easier to open	ShampooMXD_16_b=10 ⭕
ShampooMXD_16_w=30 ⭕	White Colored Shampoo	ShampooMXD_16_b=30 ⭕

Click the 'Next' button to continue...

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When thinking about hotel toiletries, more specifically the individually packaged shampoo provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
ShampooMXD_17_w=19 ○	Gender Neutral Scent	ShampooMXD_17_b=19 ○
ShampooMXD_17_w=24 ○	Tingly sensation on my scalp during a wash	ShampooMXD_17_b=24 ○
ShampooMXD_17_w=25 ○	Thick texture/feel	ShampooMXD_17_b=25 ○
ShampooMXD_17_w=17 ○	Bottle with tall Cylinder Shape	ShampooMXD_17_b=17 ○
ShampooMXD_17_w=1 ○	Brand Name visible on package	ShampooMXD_17_b=1 ○

Click the 'Next' button to continue...

Next

When thinking about hotel toiletries, more specifically the individually packaged shampoo provided to you, which of the following features are the Most Important and Least Important?

Least Important		Most Important
ShampooMXD_18_w=3 ○	Larger Bottle (more than 30ml or 1 oz.)	ShampooMXD_18_b=3 ○
ShampooMXD_18_w=13 ○	Easy-off cap to allow for easy refill	ShampooMXD_18_b=13 ○
ShampooMXD_18_w=12 ○	Easy to Squeeze Bottle	ShampooMXD_18_b=12 ○
ShampooMXD_18_w=21 ○	Strong Scent	ShampooMXD_18_b=21 ○
ShampooMXD_18_w=18 ○	Wall-mounted Shampoo Dispenser	ShampooMXD_18_b=18 ○

Click the 'Next' button to continue...

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When thinking about hotel toiletries, more specifically the individually packaged shampoo provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
ShampooMXD_19_w=7 ○	Flip Top Lid	ShampooMXD_19_b=7 ○
ShampooMXD_19_w=30 ○	White Colored Shampoo	ShampooMXD_19_b=30 ○
ShampooMXD_19_w=2 ○	Listed Ingredients visible on package	ShampooMXD_19_b=2 ○
ShampooMXD_19_w=25 ○	Thick texture/feel	ShampooMXD_19_b=25 ○
ShampooMXD_19_w=22 ○	Light Scent	ShampooMXD_19_b=22 ○

Click the 'Next' button to continue...

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When thinking about hotel toiletries, more specifically the individually packaged shampoo provided to you, which of the following features are the <u>Most Important</u> and <u>Least Important</u>?

Least Important		Most Important
ShampooMXD_20_w=28 ○	Clear (Transparent/Non-Colored) Shampoo	ShampooMXD_20_b=28 ○
ShampooMXD_20_w=4 ○	Smaller bottle (1 oz. or less)	ShampooMXD_20_b=4 ○
ShampooMXD_20_w=26 ○	Thin texture/feel	ShampooMXD_20_b=26 ○
ShampooMXD_20_w=19 ○	Gender Neutral Scent	ShampooMXD_20_b=19 ○
ShampooMXD_20_w=23 ○	A Shampoo that Lathers	ShampooMXD_20_b=23 ○

Click the 'Next' button to continue...

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If you have any questions, please email jessie14@ksu.edu.

Next

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MaxDiff Shampoo and Lotion Share of Preference Graphs

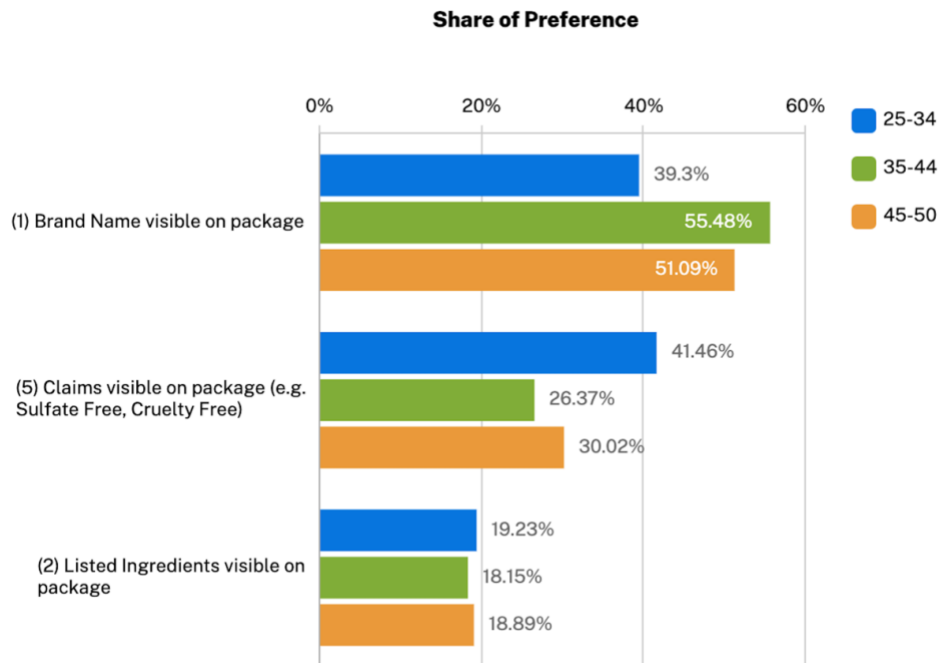**Figure 1.** Age Comparison for Brands, Claims, and Ingredients on Hotel Shampoo

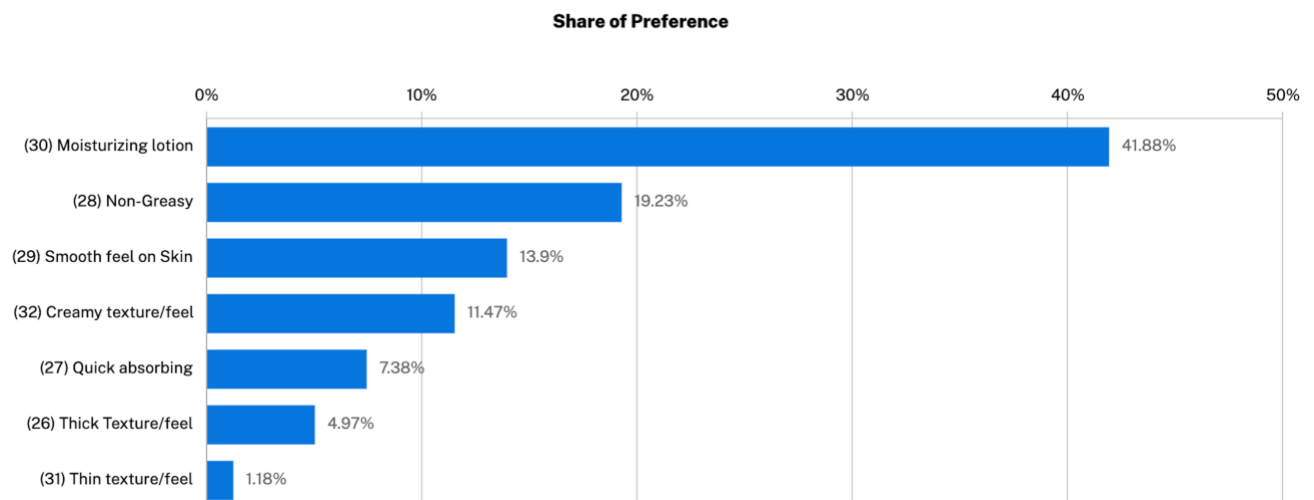**Figure 2.** Consumer Preferences Between Hotel Lotion Textures

Figure 3. Gender Preferences Amid Non-greasy, Smooth, and Creamy Lotion Textures
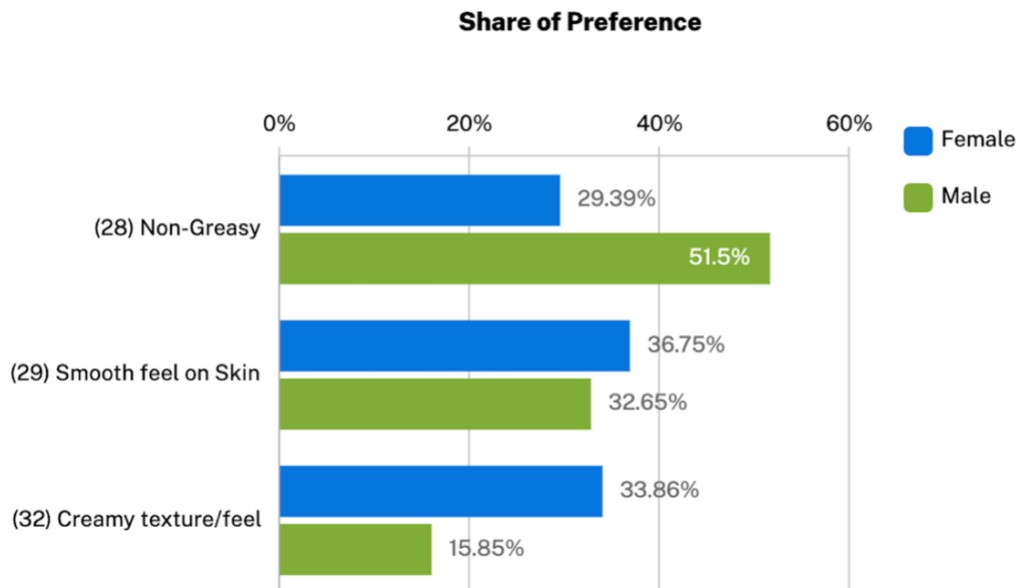

Figure 4. Age Preferences Amid Non-greasy, Smooth feel on skin, and Creamy Textures