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Spa Market Segmentation According to Customer Preference

Abstract

Purpose
With the considerable growth rate of the spa market, it is vital for spa professionals to understand spa-goers' preferences. However, academics and industry professionals have not devised a structured method by which to manage spa customers. This study aims to segment spa customers based on their preferences for a set of spa attributes.

Design/methodology/approach
A survey was conducted using a face-to-face survey with visitors to Hong Kong who had visited a spa. By applying conjoint and cluster analysis, customers could be categorized into distinct segments.

Findings
Four customer segments were identified: spa enthusiasts, high spenders, value seekers, and price-sensitive spa-goers. Spa enthusiasts were the largest segment among the four, followed by value seekers, price-sensitive spa-goers, and high spenders.

Research limitations/implications
Given the limited academic interest in the area, this study contributes to the literature by providing insights into spa-goers' preferences and how those preferences can be used to segment spa-goers.

Practical implications
Based on the different needs, preferences, and socio-demographic characteristics of the four segments—spa enthusiasts, high spenders, value seekers, and price-sensitive spa-goers—spa industry managers could customize their strategies and design different spa services and packages to meet the needs of the four segments.

Originality/value
The combined use of conjoint and cluster analysis provides a new method of market segmentation in the spa industry. This study could help spa professionals to design customized spa products for the distinct segments, and thus retain and attract more spa visitors.

Keywords: segmentation, spa industry, spa attributes, conjoint analysis, cluster analysis

Spa Market Segmentation According to Customer Preference

1. Introduction

The aim of this study is to provide a method for segmenting spa customers according to their preferences for selected spa attributes. The spa industry has come a long way since its inception many years ago (ISPA, 2013a). Around the world, there is growing interest in changing the way people take care of themselves. The spa lifestyle is becoming more and more popular, and visiting a spa is no longer considered a luxury but rather a necessary part of a healthy lifestyle. Spa visits in the United States alone reached more than 160 million per year in 2012 (ISPA, 2012). Although there is no clearly defined spa industry, there is an emerging sense that such an industry does exist and is growing rapidly. Spas are considered the fastest-growing sector in the tourism industry (Haden, 2007). Tabacchi (2010) believed that the definition of a spa is no longer relevant, as consumers are well aware that there are different types of spas for different purposes, such as destination spas, hotel spas, day spas, medical spas, and mineral springs spas.

Despite the considerable growth of the spa market, only a few studies have focused on spa segmentation to increase our understanding of this promising industry. But market segmentation is a technique used to help the organization to target particular market segments that are likely to purchase the organization's products (Reid and Bojanic, 2006). It is a cornerstone of marketing strategy and can result in a more effective use of marketing and promotional dollars (Kotler and McDougall, 1983 and Park and Yoon, 2009). For instance, the Hartman Group (2004) segmented spa customers on behavioral lines, defining three consumer market segments: peripheral, midlevel, and core spa customers. Peripheral customers are price-sensitive customers who are typically less focused on health and wellness and more focused on beauty and pampering. Midlevel spa consumers are those looking for a relaxation experience through traditional massages and treatment, and are also keen on selecting their own therapists. Core spa customers are experienced spa customers that are keen on the health and wellness lifestyle. Koh, Yoo and Biger (2010) identified escapists, neutralists, and hedonists as three customer segments in the spa industry. Other than the two abovementioned studies, no other studies known to the authors have attempted to segment spa customers. As a result of the shortfall of studies in this sector, there is call for research into the spa industry from both the industry and academics (Tabacchi, 2010). As Tabacchi (2010, p. 115) put it, “Spa research is just coming of age, and the U.S. National Institutes of Health is slowly but surely studying the efficacies of spa treatments and activities.”

A report from the Global Spa Summit (2008) identified Hong Kong as among the world's largest spa destinations. In addition, the growth of spas in China and Hong Kong has exceeded 500% since 2002, which is a tremendous development in this area (Intelligent Spas, 2008). In 2004, Hong Kong's Tourism Commission undertook a consultancy study on the development of spa and resort facilities to assess the potential of developing world-class spa and resort facilities in Hong Kong (Tourism Commission, 2006). In 2001, there are 41.92 million provisional visitor including 28.10 million Chinese visitors arrivals to Hong Kong (HKTB, 2012). According to the Hong Kong Visitor Profile Report, about 2% of overnight visitors to Hong Kong hotels used the spa or massage services in 2010 and the spa or health club revenue per available hotel room for all hotels reached HK$3,553 (HKTB, 2010b). 2013 has been an exceptionally interesting year, with many new spas and products entering the ninth AsiaSpa Awards (Lisa, 2013).

According to the report, the Hong Kong government is open-minded about the development of spa facilities, and market demand is driving this development. As evidence of the Tourism Commission's accurate forecast of Hong Kong's potential as a spa destination, in recent years Hong Kong has joined the ranks of the world's top revenue-earning spa destinations (Global Spa Summit, 2008). The current study is situated in the Hong Kong context and examines perceptions among spa customers of selected spa attributes. In a further step, this study also segments spa customers by their preferences for spa attributes using conjoint and cluster analysis.

2. Literature Review

2.1 Understanding the customer in the spa industry

Kucukusta, Pang and Chui (2013) examined the selection criteria inbound travelers use to gain insight into how demographic factors and travel characteristics affect their spa-related decisions and reveal that relaxation, pampering, and beautification were the main reasons that people visited hotel spas. In their study, the three most important major selection dimensions were therapists, price, and product and treatment types. Kucukusta and Denizci Guillet (2014) adopt a conjoint approach to analyze the preferences of the spa-goers in Hong Kong while Tsai, Suh and Fong (2012) examine the male spa-goers (a growing customer segment) in Hong Kong hotel spas.

Most spa-related studies have focused on customer expectations of service quality and preferences (e.g., McNeil and Ragins, 2004; Gonzalez and Brea, 2005; Sherman *et al*., 2007) and customer motivations (e.g., Lo *et al*., 2013; Mak *et al*., 2009; Koh *et al*., 2010; Tsai *et al*., 2011; Kucukusta et al., 2013). For example, Lo *et al*. (2013) suggested that managers and customers differ in their understanding of the realm of tourism spa experiences and the factors that enhance the spa experience. Both industry managers and customers regarded a localized theme and environment, products and treatments, personalized and value added services, and professional skills and attitudes as critical factors influencing the customer's spa experience. Customers also considered the cleanliness of facilities, privacy, and service distance as important. Managers added that the interaction and communication with customers prior to their visit and the diversity of facilities are essential factors. Mak *et al*. (2009) examined the motivational factors among Hong Kong spa-goers and identified 21 motivators grouped into four important factors: relaxation and relief, escape, self-reward and indulgence, and health and beauty. Koh *et al*. (2010) analyzed the factors underlying the benefits sought by spa-goers in the U.S. Four major benefit dimensions were identified: social, relaxation, health, and rejuvenation. These benefits are sought by three spa customer segments: escapists, neutralists, and hedonists. Koh *et al.* (2010) confirmed that spa-goers are indeed seeking a variety of benefits from their spa visits. Tsai *et al.* (2011) found that the most frequently cited reason spa-goers patronized a hotel spa was relaxation, and the most popular service was body massage. Kucukusta *et al.* (2013) further analyzed Hong Kong's inbound travelers' reasons for and criteria used in selecting a hotel spa. They found that professional skills, product and service knowledge, a sense of privacy, the range of facilities, and product branding were the most important attributes.

Although studies have identified the critical factors or attributes influencing the spa experience, no studies have examined the relative importance of the various spa attributes and how these attributes are perceived by spa-goers. Hence, this study makes the first attempt to identify the preferred spa attributes as perceived by different types of spa customers and segments through conjoint and cluster analysis.

2.2 Market segmentation theory

Customers differ greatly in their preferences and may prefer different attributes from the same product, service, or market offering. Backman (1994) noted that segmenting heterogeneous customers into homogeneous sub-groups on the basis of similar characteristics enables marketers to identify the similarities and differences between the customer groups. Therefore, market segmentation could help marketing managers better understand the nature of the market and thus develop appropriate products for various distinct target segments.

Researchers distinguish between a priori and post hoc segmentation approaches when identifying distinct groups (Binge *et al*., 2008). The a priori segmentation method refers to the partition of customers based on researchers' prior knowledge of the segments. For instance, researchers divide customer segments by age, gender, occupation, and so on. However, with the post hoc approach, a classification scheme is devised based on multiple attributes to classify cases into groups. Post hoc segmentation studies primarily employ benefits, preferences, and motivations to group respondents (Binge *et al*., 2008).

This study adopts the post hoc approach to classifying spa-goers based on their preferences for various spa attributes.

Chen, Lin and Kuo (2013) used the market segmentation based on consumer motivation to research the bed and breakfast industry in Taiwan. Simpson and Bretherton (2011) made use of market segmentation by consumer lifestyle to explore in wine tourism setting. Voorhees, McCall and Calantone (2011) provided a new look at the benefits of improving segmentation in hotel industry. Cirer Costa (2013) investigated price formation and market segmentation in seaside accommodations. Despite the popularity of post hoc segmentation, only a few studies have been conducted in the hospitality industry to define market segments, develop customer typologies, and understand and explain customer behavior (e.g., Koh, Yoo and Biger, 2010; Tan and Lo, 2008; Victorino *et al*., 2009). More specifically, Koh *et al*. (2010) identified three distinct segments of spa-goers based on the benefits they sought: escapists, neutralists, and hedonists. Similarly, Tan and Lo (2008) identified market segments in Hong Kong specialty coffeehouses based on the benefit variables sought by customers. The four distinct customer segments identified were defined as service seekers, atmosphere seekers, quality coffee seekers, and marketing-oriented customers. Based on an abbreviated technology readiness index (TRI) of hotel customers, Victorino *et al*. (2009) performed a cluster analysis to classify respondents and identified three segments: innovators, paranoids, and laggards. Their findings provided direction for managers to tailor their technology offerings to the needs and preferences of different segments based on their level of comfort with technology.

Although a few studies have used the post hoc approach to classify customers, no studies have attempted to segment spa-goers according to their preferences for various spa attributes. Thus, the main purpose of this study is to fill this research gap. The findings could help spa operators better understand the preferences and expectations of different customer segments and thus allow them to design different spa services and packages that cater to the needs of each segment.

3 Methodology

3.1. The conjoint analysis approach

Conjoint analysis is as a popular marketing method used to measure the importance of each product attribute individually and its joint influence with other attributes on a consumer's product choices (Lewis *et al.*, 1991). It is a market research tool for developing effective product design. Using conjoint analysis, the researcher can answer questions such as: What product attributes are important or unimportant to the consumer? What levels of product attributes are the most or least desirable in the consumer's mind? Besides conjoint analysis, the cluster analyse is also adopted in this research to identify customer segments and cluster membership. Cluster analysis divides data into meaningful or useful groups. In addition to a customer's most preferred attributes, conjoint analysis develops measures of utility that represent the importance of various levels of each attribute. Utility scores, also called part-worths, represent the preferences or utility associated with a specific level of an attribute. A positive utility value indicates a preference for the attribute level, and a negative value indicates no preference. The relative importance of an attribute can be calculated from the part-worths. The range of part-worths of an attribute gives an indication of the importance of the attribute: the higher the range, the more important the attribute for overall preference. This study aims to determine which attributes and attribute levels are important to different spa segments when they book a spa. To accomplish this, attributes had to be identified, and each attribute subdivided into a number of levels.

Five attributes were selected from a collection of studies (e.g., Heung and Chu, 2000; Heung *et al.*, 2001; Koh *et al.*, 2010; Mak et al., 2009; Ozdipciner, Li, & Uysal, 2010; Yavas and Babakus, 2005; Lo et al., 2013; Kucukusta et al., 2013). These five attributes were price, therapist qualification, level of privacy, range of spa facilities, and product branding. More specifically, as an indicator of ambiance, spa guests considered the level of privacy an important attribute to enhance their experience (Lo *et al.*, 2013; Kucukusta *et al.*, 2013). In a similar vein, price, product, and treatment types were adapted from Ozdipciner *et al.* (2010). The range of facilities and ambiance factors were derived from Mak *et al.* (2009) as these were found to be important motivating factors for spa-goers. Moreover, a recent study by Kucukusta *et al.* (2013) investigated hotel spa selection by inbound travelers and found that therapists, prices, and the range of spa facilities were among the important criteria in selecting a hotel spa. Lo *et al.* (2013) also suggested that the professional skills and attitudes of the therapists, cleanliness of facilities, products and treatments, and privacy were essential in enhancing the spa experience. Table 1 presents a description of the five attributes considered in this research, along with the levels of these attributes.

*** Please insert Table 1 here***

For the price attribute, it was difficult to determine an exact price range for different levels as the focus was not on specific types of spas and treatments. In addition, perceptions of price ranges differ from one person to another. Therefore, three price levels were identified—high, medium, and low.

Therapist qualification in spas was determined by whether the expert was certified and/or experienced. Therapist qualification is one of the problems in this industry (Terry, 2007; Travel Daily News, 2007). As there is no clear definition of a qualified therapist, this study selected experience level and the holding of a certificate as two important dimensions of therapist qualification, thereby producing three attribute levels.

Tranquility and escape from stress and the daily routine are among the motivations of spa-goers (i.e., Heung *et al*., 2001; Koh *et al*., 2010; Mak *et al*., 2009; Yavas and Babakus, 2005). Many guests seek privacy, particularly in treatment rooms and common areas such as the lobby, relaxing area, etc.

The range of spa facilities was the fourth attribute. Lo *et al*. (2013) suggested that managers considered the diversity of facilities as the selling point of an unusual spa experience. Therefore, rather than focusing on certain types of spa facilities, only two groups of spa facilities were determined. A full range of facilities included almost all types of commonly used facility such as treatment rooms, water therapy rooms, and pools. Basic facilities included only treatment rooms.

Products used in spas can be branded or generic. Luxury spas generally use branded products to differentiate their services and products from other spas. For clients, branded spa products ensure quality and minimize the risk of skin problems. Therefore, some spas choose reputable brands to increase the chance of purchases by customers.

The five attributes and their levels produce 108 potential alternative profiles ($3\times3\times3\times2\times2 = 108$). As it is clearly impossible for respondents to evaluate all profiles, it was decided to use a fractional factorial design to generate a smaller fraction of the possible alternatives by considering only the main effects and assuming the interactions to be negligible (Green, 1974; Hair *et al*., 2006). The fractional factorial design reduced the number of initial profiles to 16.

3.2. The questionnaire

A structured questionnaire with three parts was designed. First, background information (i.e., gender, nationality, age, education, and occupation) was collected. Second, the 16 profiles generated by SPSS 20.0 were presented to respondents who ranked them from 1 (most preferred) to 16 (least preferred). Respondents were also provided with the definition of the spa in the context of the study so that they have an uniform understanding of the spa concept. Please see Table 2 for the list of 16 profiles. Detailed instructions were provided for reference, including a thorough description of each attribute and its levels. Profiles were presented to the respondents on one page. First they take their time to read the attribute definitions and then review the profiles and rank them. It took the respondents around 10 minutes to read the attribute definitions and rank them. Finally, travel and spa experience variables (i.e., the purpose of the trip, frequency of visiting a spa within the previous 12 months, whether another consumer accompanied the primary consumer, and preferred type of spa) were also collected. The survey completion time was around 15-20 minutes on average per respondent. The questionnaire was first prepared in English and then translated into simplified Chinese. A back-to-back translation method was applied to ensure face and construct validity (Wilson, 2010).

*** Please insert Table 2 here***

3.3. The sample

The target sample of this study was leisure travelers to Hong Kong. A non-probability sampling method was applied in collecting survey responses. Respondents were conveniently chosen at Avenue of Stars, the most visited attraction in Hong Kong (HKTB, 2011). A direct face-to-face survey methodology was employed. The screening question: “Have you visited a spa in the past year?” was asked before conducting the survey. The survey continued only if the answer was “yes.” Then, the respondents were briefed about the general purpose of the research and the data collection procedure. In addition, incentives were offered to encourage completion of the survey. After removing incomplete and unusable responses, 360 questionnaires were used for the data analysis.

3.4. Data analysis

SPSS 20.0 was used to perform descriptive analysis, conjoint analysis, cluster analysis, ANOVA, and chi-square tests. The data analysis process included three steps. First, a conjoint analysis was performed to obtain the part-worth utilities for individual respondents. Second, using individual utility scores as a basis for segmentation, a hierarchical cluster analysis was applied to segment spa-goers into different groups. Third, a collection of conjoint analyses were again performed to identify the preferences of different customer segments.

For the cluster analysis, Ward’s hierarchical cluster analysis with the Euclidean distance was applied to classify the spa-goers into distinct and homogenous subgroups. Hierarchical rather than nonhierarchical cluster analysis was selected, as hierarchical cluster analysis could assist in determining the optimum number of clusters (Jurowski and Reich, 2000). In addition, ANOVA tests were used to identify whether any differences existed among the clusters with different solutions. Finally, the four-cluster solution was selected for further analysis, as it provided the greatest difference between clusters and yielded the most interpretable results (Madrigal and Kahle, 1994).

4. Findings

A cluster analysis of individual part-worth revealed four distinct segments: spa enthusiasts, high spenders, value seekers, and price-sensitive spa-goers. The ANOVA results showed that all four segments differed significantly ($p<0.05$) from one another in utility variables, as shown in Table 3. The attribute importance and utility estimates for each cluster are presented in Figure 1 and Table 3, respectively. There were also some similarities between the four clusters. As indicated in Figure 1, all four clusters attached more importance to price, therapist qualification, and level of privacy than to product branding and the range of spa facilities. This signifies that spa-goers regard price, therapist qualification, and level of privacy as more important than product branding and the range of spa facilities.

*** Please insert Table 3 here***

*** Please insert Figure 1 here***

4.1 Identifying customer segments and cluster membership

Cluster 1: Spa enthusiasts (34.2%)

This was the largest segment among the four clusters. It accounted for a little over one third of the entire sample (34.2%). This group attributed the most importance to therapist qualification (27.76%). They sought more privacy throughout the treatment, and ranked the importance of privacy at 26.32%, compared with high spenders (19.15%), value seekers (18.50%) and price-sensitive spa-goers (15.90%). This signifies that respondents in this segment really value their privacy and spa experience. Moreover, they paid less attention to price, which got an importance value of only 22.97%. Therefore, we designated this cluster as “spa enthusiasts.” Examining the utility scores of attribute levels, this cluster preferred medium spa pricing, certified and experienced therapists, a high level of privacy in treatment rooms and common areas, a full range of spa facilities, and branded products.

Cluster 2: High spenders (13.9%)

This cluster was the smallest and comprised only 13.9% of the respondents. It attached the highest importance value to price (39.56%), and is the most popular segment among spa professionals as they mostly preferred high prices. Therefore, we designated this cluster as “high spenders.” After price, this cluster considered therapist qualification as the second most important factor, with an importance value of 21.68%, followed by level of privacy (19.15%), product branding (10.65%), and range of spa facilities (8.96%). Although the respondents in this segment preferred high spa prices, they were not very strict about the other attributes. They were willing to accept uncertified but experienced therapists and low privacy in common areas but high in treatment rooms.

Cluster 3: Value seekers (30.0%)

This cluster comprised 30.0% of all respondents. They attributed the highest importance to therapist qualification (46.65%). Considering attribute levels, this type of customer gave positive utility scores only for certified and experienced therapists, high privacy in treatment room and common areas, the full range of range of spa facilities, and branded products. They attached negative importance values to all other attribute levels, signifying that they set a high standard for their spa experience. However, although they want higher therapist qualification and value privacy, they are only willing to pay a medium price. Therefore, we designated this cluster as "value seekers."

Cluster 4: Price-sensitive spa-goers (21.9%)

This cluster comprised 21.9% of the sample and emphasized price as the main choice criterion. The relative importance of price for this group reached almost one half (49.22%). The utility scores for price showed a negative relationship: as the price increased, utility scores decreased. They most preferred low prices. Thus, we designated this cluster as "price-sensitive spa-goers." After price, they considered therapist qualification the second most important attribute. In addition, compared with the other segments, this group placed the least importance on privacy, which attained an importance value of 15.899%.

4.2. Socio-demographic profiles and spa experiences of four segments

The respondent groups were also analyzed and profiled in terms of background and spa experience, as depicted in Table 4.

In terms of demographic and spa experience characteristics, spa enthusiasts were characterized by a higher concentration of female respondents compared with other segments. Moreover, the spa enthusiast segment had the highest percentage of respondents in the age group 26-35 and the highest proportion who had jobs. Moreover, this segment was more likely to choose hotel and medical spas than were other segments.

For cluster 2, high spenders, more customers were from North America and Europe compared to the other segments, and the relative percentage of respondents in age groups 36-45 and 45 or above was the highest. Moreover, the high spenders were more likely to visit a spa with their spouse or partner.

Value seekers, cluster 3, had the highest proportion of respondents from mainland China (52.6%) compared with spa enthusiasts (50.9%), price-sensitive spa-goers (38.6%), and higher spenders (34.1%). Furthermore, this cluster was characterized by a higher proportion of the under-26 age group and the lowest proportion of respondents with jobs. Finally, compared with other segments, value seekers were more likely to visit a spa with friends, relatives, or colleagues.

It is interesting to note that the relative proportion of male respondents was higher in the price-sensitive segment. Compared with other segments, cluster 4 was characterized by a higher proportion of respondents with the purpose of meetings or business. In line with the characteristics of price-sensitive customers, the proportion of respondents who had visited spas only once in the past 12 months was highest in the price-sensitive segment.

*** Please insert Table 4 here***

5. Theoretical Implications

The purpose of this study was to segment spa-goers according to their preferences for various spa attributes. By combining conjoint and cluster analysis, four distinct segments were identified and defined as spa enthusiasts, high spenders, value seekers, and price-sensitive spa-goers. What should be highlighted is that the research using a fractional factorial design, which presents a suitable fraction of all possible combinations of the factor levels. The goal of using this method is to solve a problem that the total number of profiles resulting from all possible combinations of the levels becomes too great for respondents to rank or score in a meaningful way. Then the results show that the preferences of the four clusters differed in terms of the five spa attributes and attribute levels. The findings show spa operators a new way of segmenting their customers and help them to design appropriate spa services for each segment, thus retaining and attracting more spa visitors.

The findings of this study have implications for research on spa industry. Although a significant number of studies have been conducted in the spa industry, few have studied the spa market segmentation according to customer preferences. The study adds to very limited knowledge we have related to the spa industry in academia (Koh et al., 2010; Tabacchi, 2010). Most spa-related research focuses on customer expectations of service quality and motivation (e.g., Gonzalez and Brea, 2005; Mak et al., 2009); nevertheless, spa customers have been segmented at a very basic level. Given the limited academic interest in the area, this study contributes to the literature by providing insights into spa-goers' preferences and how those preferences can be used to segment spa-goers.

6. Practical Implications

The finding of this article also has significant implications for service providers. First, although spas have become increasingly popular with customers, there is no structured management of spa customers in the industry. Without a better understanding of spa-goers, spas may end up losing market share to competitors. Thus, more advanced customer segmentation can help the spa industry to understand spa-goers' behavior and preferences. Based on the different needs, preferences, and socio-demographic characteristics of the four segments—spa enthusiasts, high spenders, value seekers, and price-sensitive spa-goers—spa industry managers could customize their strategies and design different spa services and packages to meet the needs of the four segments.

Second, although some scholars have attempted to investigate the critical attributes influencing spa experiences, none have focused on the perceived relative importance of the various attributes, which this study explores. The current findings could provide guidelines showing spa professionals which of the attributes influence spa customer decisions more than others. As shown in Figure 2, the spa-goers attached more importance to price and therapist qualification when booking a spa. Thus, spas could attract more spa visitors by recruiting more trained and experienced therapists and providing more certification programs to train them. Moreover, spas could justify price levels by therapist qualification or by offering packages that are valuable to customers.

Most spa-goers rate privacy as the next most important factor, as indicated in Figure 2. Hence, spa staff need to guard guests' privacy during treatment and provide gender-specific or segregated changing areas where applicable (ISPA, 2013b). Figure 2 shows that the relative importance of price, therapist qualification, and level of privacy differs substantially among the four clusters whereas there is much less variance in perceived importance for the range of spa facilities and product branding. Although the majority of spa-goers preferred full range for spa facilities and branded treatment product for product branding, these two attributes account for only about 10% of the factors impacting on spa-goers' decisions. Furthermore, as a wide range of spa facilities requires a large capital investment, spa professionals should pay more attention to price, therapist qualification, and privacy to attract and retain visitors.

*** Please insert Figure 2 here***

Third, the results indicate that only the price-sensitive spa-goers preferred low prices, while the other three segments preferred either medium or high prices. Several studies have shown that price can be used as an indication of quality when consumers are uncertain about product quality (e.g., Monroe, 1973; Olson, 1977). One possible explanation for this finding may be that spa users consider the price–quality relationship in spa products and are prepared to pay a higher price for a better service. Spa operators could thus provide reasonable packages with different price levels for different market segments when designing spa packages. Differential pricing could be adopted for each segment, based on the price elasticity characteristics of the four segments.

7. Limitations and Future research

This study also has a number of limitations. First, the lack of a spa-related literature imposed difficulties on identifying attribute levels during the initial phase of the study. Second, to simplify the profiles, only five attributes were selected for the conjoint analysis. Third, the sample was selected by asking visitors a screening question, resulting in a relatively small sample size due to the difficulty in reaching spa users. Fourth, the 16 profiles were presented in the same order to each respondent. Since each profile is actually a question, presenting the 16 profiles in the same order to each respondent potentially introduces a question order bias (Bickart, 1992; Drury & Farhoomand, 1997).

Future studies should collect data from actual spa users. Future studies could include other types of attributes (e.g., localized theme and environment, personalized and value added services). Besides, future studies also could add more rate restrictions (e.g., price) to segment customers, because the results indicate that different types of spa-goers prefer different price levels. The combined use of conjoint and cluster analysis provides a new method for market segmentation, and future studies could extend this method to other industries (e.g., hotels and restaurants).

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Figure 1. Attribute importance by clusters (%)

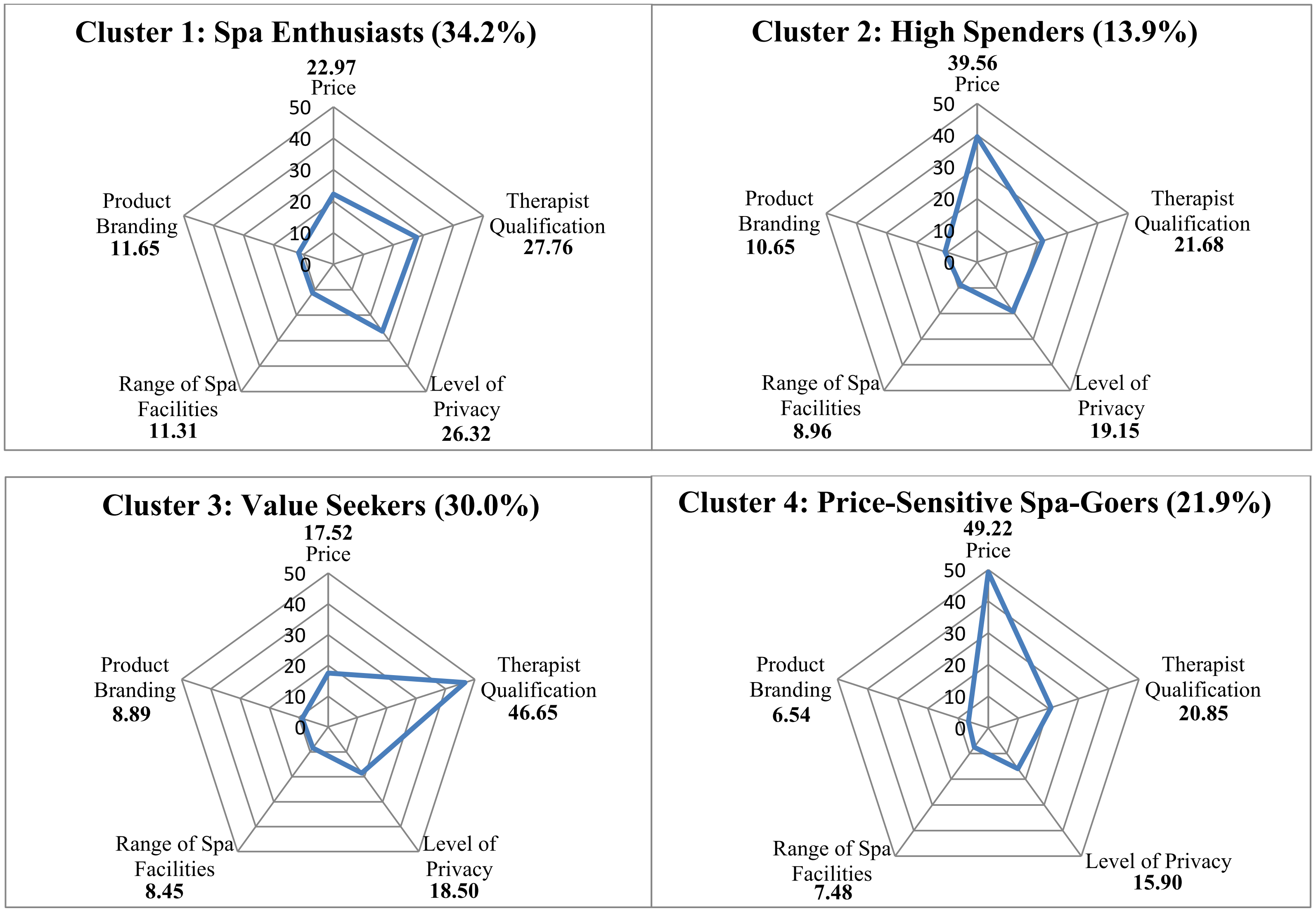

Figure 2. Attribute importance among the four segments

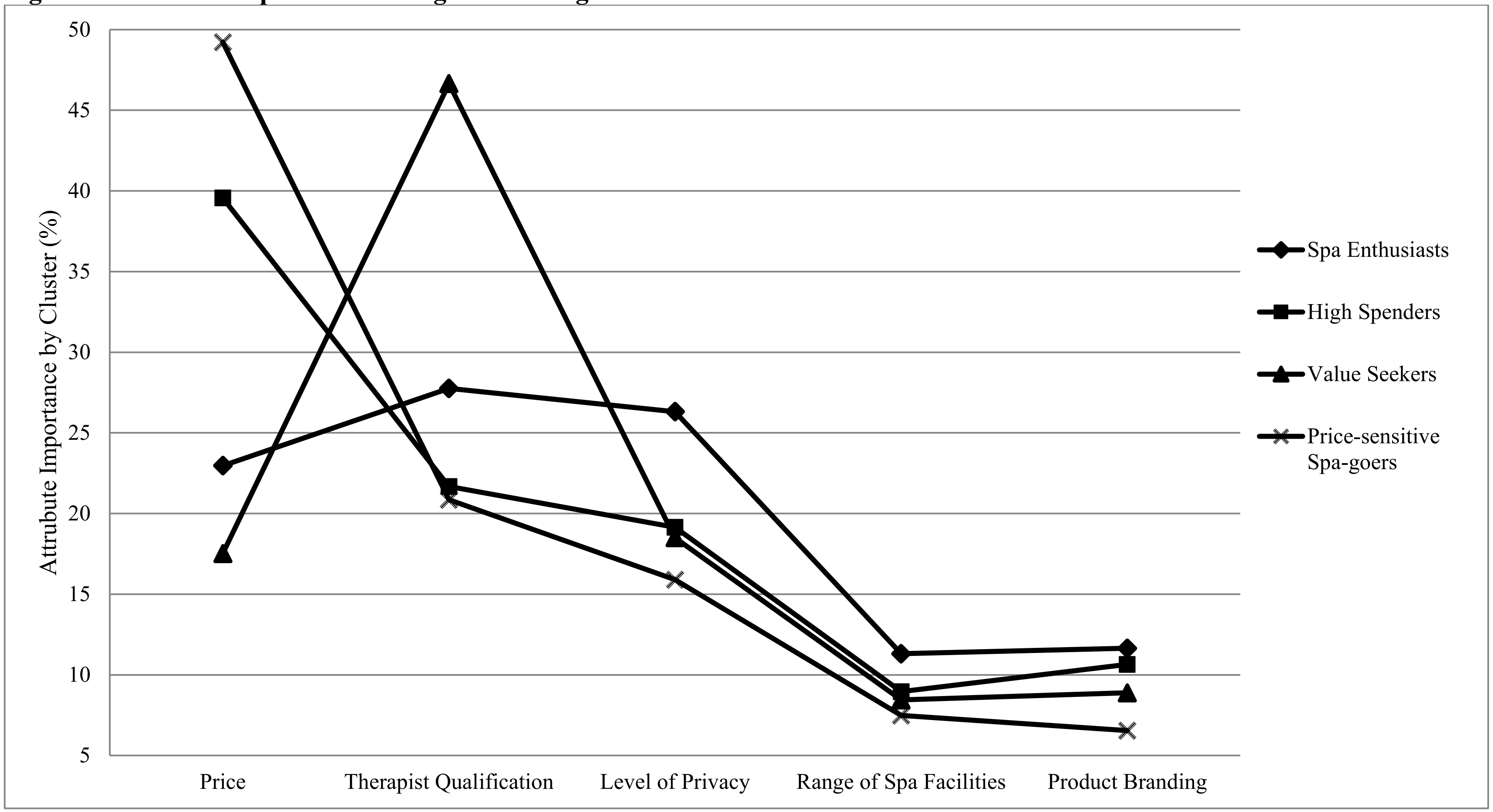

Table 1. Spa attributes and attribute levels

Attributes	Levels
Price	High
	Medium
	Low
Therapist qualification	Holds certificate and experienced
	Holds no certificate but experienced
	Holds certificate but inexperienced
Level of privacy	High level of privacy in treatment rooms and common areas
	High level of privacy in treatment rooms but low level of privacy in common areas
	Low level of privacy in treatment rooms but high level of privacy in common areas
Range of spa facilities	Full range of facilities (treatment rooms, pools-jacuzzi, whirlpool, steam room, sauna, etc.)
	Basic facilities (treatment rooms)
Product branding	Branded spa products
	Generic spa products

Table 2. List of 16 profiles

	Rank ( )	Rank ( )	Rank ( )	Rank ( )
Price	High	High	High	Medium
Therapist qualification	Holds certificate and experienced	Holds no certificate, but experienced	Holds certificate, but not experienced	Holds certificate and experienced
Level of privacy	High in treatment rooms, but low in common areas	Low in treatment rooms, but high in common areas	High in treatment rooms and common areas	High in treatment rooms and common areas
Range of spa facilities	Basic	Full range	Full range	Basic
Product branding	Generic	Branded	Generic	Branded

	Rank ( )	Rank ( )	Rank ( )	Rank ( )
Price	Medium	High	Low	High
Therapist qualification	Holds certificate and experienced	Holds certificate and experienced	Holds no certificate, but experienced	Holds certificate, but not experienced
Level of privacy	High in treatment rooms, but low in common areas	High in treatment rooms and common areas	High in treatment rooms and common areas	High in treatment rooms and common areas
Range of spa facilities	Full range	Full range	Basic	Basic
Product branding	Generic	Branded	Generic	Generic

	Rank ( )	Rank ( )	Rank ( )	Rank ( )
Price	High	Low	Medium	Low
Therapist qualification	Holds no certificate, but experienced	Holds certificate and experienced	Holds no certificate, but experienced	Holds certificate and experienced
Level of privacy	High in treatment rooms, but low in common areas	High in treatment rooms and common areas	High in treatment rooms and common areas	Low in treatment rooms, but high in common areas
Range of spa facilities	Basic	Full range	Full range	Basic
Product branding	Branded	Branded	Generic	Generic

	Rank ( )	Rank ( )	Rank ( )	Rank ( )
Price	Low	Medium	High	High
Therapist qualification	Holds certificate, but not experienced	Holds certificate, but not experienced	Holds certificate and experienced	Holds certificate and experienced
Level of privacy	High in treatment rooms, but low in common areas	Low in treatment rooms, but high in common areas	High in treatment rooms and common areas	Low in treatment rooms, but high in common areas

Range of spa facilities	Full range	Basic	Basic	Full range
Product branding	Branded	Branded	Branded	Generic

Table 3. Average part-worths by clusters

Attribute	Attribute Level	Spa enthusiasts **(34.2%)**	High spenders **(13.9%)**	Value seekers **(30.0%)**	Price-sensitive spa-goers **(21.9%)**	ANOVA P-value
Price	High	-0.50	**2.40**	-0.12	-4.03	0.00
	Medium	**0.85**	0.21	**0.21**	1.79	0.00
	Low	-0.35	-2.61	-0.09	**2.24**	0.00
Therapist qualification	Holds certificate and experienced	**1.68**	-0.13	**3.78**	**1.61**	0.00
	Holds no certificate, but experienced	0.23	**0.85**	-2.72	-0.79	0.00
	Holds certificate but not experienced	-0.92	-0.72	-1.06	-0.82	0.00
Level of privacy	High in treatment rooms and common areas	**1.55**	0.27	**0.84**	**0.53**	0.00
	High in treatment rooms but low in common areas	0.30	**0.64**	-0.27	0.17	0.00
	Low in treatment rooms but high in common areas	-1.85	-0.92	-0.57	-0.71	0.00
Range of spa facilities	Full range	**0.52**	**0.37**	**0.27**	**0.43**	0.01
	Basic	-0.52	-0.37	-0.27	-0.43	0.01
Product branding	Branded	**0.71**	-0.09	**0.33**	**0.30**	0.00
	Generic	-0.71	**0.09**	-0.33	-0.30	0.00

Table 4. Socio-demographic profiles and spa experiences of cluster membership (%)

	Sample	Spa enthusiasts (34.2%)	High spenders (13.9%)	Value seekers (30.0%)	Price-sensitive spa-goers (21.9%)
Gender					
Male	42.9	33.3	49.0	44.4	51.9
Female	57.1	66.7	51.0	55.6	48.1
Country/territory of residence					
Mainland China	46.6	50.9	34.1	52.6	38.6
Asia Pacific	15.2	17.5	12.2	14.4	14.3
Europe	28.9	21.1	39.0	29.9	34.3
North America	9.3	10.5	14.6	3.1	12.9
Age					
Below 26	40.0	30.1	36.0	49.1	45.6
26-35	42.2	49.6	34.0	38.9	40.5
36-45	10.0	12.2	16.0	7.4	6.3
46 or above	7.8	8.1	14.0	4.6	7.6
Education level					
Secondary/high school or below	11.1	7.3	16.3	12.0	12.7
College/university	65.5	74.8	55.1	60.2	64.6
Graduate level or higher	23.4	17.9	28.6	27.8	22.8
Occupation					
Working	65.6	77.2	60.0	56.5	63.3
Non-working*	34.4	22.8	40.0	43.5	36.7
Main purpose of trip					
Vacation	63.2	67.2	62.0	65.7	54.4
Visiting friends/relatives	19.2	14.8	22.0	18.5	17.7
Business/meeting	17.5	18.0	16.0	15.7	27.8
Frequency of spa visits in a year					
1 time	35.8	29.3	36.0	39.8	40.5
2-3 times	55.0	63.4	54	50	49.2

4 times or more	9.2	7.3	10.0	10.2	10.1
When you visit a spa, do you typically visit					
Alone	17.2	19.8	17.8	12.6	19.7
With your spouse/partner	27.3	20.7	40.0	23.3	35.5
With a friend, relative, or colleague	31.7	34.7	26.7	35.9	23.7
With a group of friends, relatives, or colleagues	23.8	24.8	15.6	28.2	21.1
Preferred type of spa					
Hotel spa	30.8	34.2	25.0	27.2	33.8
Day spa	51.5	44.2	61.4	58.3	48.1
Medical spa	17.7	21.7	13.6	14.6	18.2

Note:

1. Non-working refers to student, retired, and housewife respondents.
2. The difference was significant between the four clusters in terms of occupation at the 0.05 level.
3. The difference was significant between the four clusters in terms of gender and country at the 0.1 level.