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2010 ICHRIE Conference

Jul 30th, 10:15 AM - 11:15 AM

An Analysis of the Performing Arts Consumer: Developing market segments by using CHAID

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Park, Sung Hee and Huh, Chang, "An Analysis of the Performing Arts Consumer: Developing market segments by using CHAID" (2010). *International CHRIE Conference-Refereed Track*. 2.
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ABSTRACT

This study explored how the interaction between performing arts consumers' characteristics and art-related experiences were associated with out-of-state and/or out-of-country performing arts attendance. A decision tree was developed using Exhaustive CHAID. Data were collected through an online survey of E-club members of the Wharton Center for Performing Arts at Michigan State University. This study focused on the heavy consumers, who represented approximately 30% of the performing arts market and accounted for over 50% of actual spending on tickets. The results identified important predictors and distinguished viable five segments. Chi-square tests and one-way ANOVAs were conducted to examine significant differences among segments. The identified target segments and their profiles will be essential in building effective communication and promotion strategies for various marketing purposes.

Keywords: Performing arts consumer, Exhaustive CHAID, Segmentation, Cultural tourist

INTRODUCTION

Cultural tourism is one of the most important and largest segments of contemporary tourism (Richards, 2002). According to the Travel Industry Association (TIA, 2003), three quarters of U.S. adult travelers in 2002 attended a cultural activity or event while on a trip. An estimated 109.8 million adults attended cultural events or festivals, and their households generated 97.7 million trips. The majority of cultural tourists attend performing arts events and visit art museums or antique establishments during their trips. According to the National Endowment for the Arts, people spent \$12.7 billion on arts performances in 2005. The average spending of non-local attendees was \$40.19 per person, compared to \$19.53 per local attendee in 2005 (Nichols, 2006). Due to increased tourism demand and to the growing supply of cultural art products, cultural tourism has been expanded widely.

Today's consumers have unlimited interests and partake of a variety of sectors of cultural life. It is hard for performing arts organizations to survive if their service offerings are based solely on the subjective motivations of loyal customers (Cuadrado & Molla, 2000). Generally, performing arts organizations use attendance levels, venue occupancy rates, subscription purchases and the number of members or friends as important performance measures (Rentschler et al., 2002). However, this information is not sufficient to attract and satisfy performing arts consumers and build customer-centered marketing management. Understanding the performing arts consumers is essential for performing arts organization marketers and operators. Performing arts organizations could make effective marketing decisions and develop efficient strategies to increase high levels of consumer satisfaction and retention (Clopton et al., 2006; Colbert, 2003). This study widens understanding of performing arts consumers using a relatively new method of market segmentation in hospitality and tourism literature.

The purpose of this study was to examine the performing arts market by identifying and profiling performing arts consumers. By categorizing these consumers into segments using Chi-squared Automatic Interaction Detection (CHAID) analysis (Kass, 1980), this study explores how the interactions between heavy consumers of performing arts' characteristics and art-related experiences are associated with attendance at live performances in a different state or county. Further analyses are conducted to profile each segment and identify significant differences among segments in their characteristics and spending toward the performing arts.

Performing Arts Consumer

Beginning with Baumol and Bowen's pioneering 1966 study of the composition of performing arts consumers, a number of studies have been conducted on the subject. Most empirical studies offer descriptions of participating behaviors in the arts and provide detailed explanations of socio-economic characteristics (Borgonovi, 2004). Market research has indicated that the typical performing art consumers are mature, female and well-educated, with high income, and white-collar occupations (Kastenholz et al., 2005; Colbert, 2003; McCarthy & Jinnett, 2001; Notzke, 1999; Bergonzi & Smith, 1996; Silberberg, 1995). People's attendance at arts performances is related to their childhood experiences with the arts. Moreover, people with occupations related to cultural industries and education tend to be higher consumers at performing arts (Borgonovi, 2004; Richards, 2005; Urry, 1990).

Market Segmentation

Market segmentation is an important strategic concept contributed by the marketing discipline to business firms and other types of organizations (Bowen, 1998). Market segmentation separates a market into mutually exclusive subgroups of people (Reid & Bojanic, 2005) who differ with regard to some criteria in order to achieve competitive advantage and superior financial performance (Hunt, 2002). Moreover, market segmentation is a powerful tool used by successful consumer product companies that can build and maintain profitable relationships with their target segments. The effectiveness of market segmentation strategies can be evaluated with four criteria: whether the segments are (1) large enough for attention (substantiability); (2) able to be measured (measurability); (3) accessible through a variety of marketing communication vehicles (accessibility); and (4) sharing certain characteristics and responding similarly to the marketing mix (actionability) (Bojanic, 2007; Kotler, 1972).

According to Wedel and Kamakura (2000), market segmentation methods can be largely classified based on two criteria for the four categories: a priori or post hoc, and descriptive or predictive statistical methods. The a priori approach is used when the type and number of segments are determined in advance by the researcher, while a *post hoc* approach is used when the type and number of segments are determined based on the results of data analyses. Descriptive methods are associated with a single set of segmentation bases that has no distinction between dependent and independent variables. Predictive methods are applied when one set consists of dependent variables to be explained or predicted by a set of independent variables.

CHAID

Chi-squared Automatic Interaction Detection (CHAID) analysis which was first proposed by Kass (1980) is one of post hoc predictive segmentation methods. The CHAID, using of decision tree algorithms, is an exploratory method for segmenting a population into two or more exclusive and exhaustive subgroups by maximizing the significance of the chi-square, based on categories of the best predictor of the dependent variable (Kass, 1980). Segments obtained from CHAID analysis are different from cluster type models because the CHAID method, which is derived to be predictive of a criterion variable, is defined by combinations of predictor variables (Magidson, 1994). CHAID technique depends on interactions among the independent variables, finding those that explain the greatest differences within the dependent variable. Thus, a CHAID decision tree demonstrates how the predictors are differently formed and predicts a dependent variable that shows nominal and continuous scaling. Marketers can identify the key influencers or significant drivers in certain markets using CHAID analysis, which results in a treelike diagram commonly called a decision tree. Decision trees have several advantages (Bakken, 2005). The type of representation makes the resulting classification model easy to use. Moreover, decision trees are suited for exploratory knowledge discovery because they are non-parametric and make no assumptions about the underlying probability distribution. Decision trees are also efficient to higher-order interactions. They are relatively quickly constructed for large datasets compared to other classification models (Magidson & Vermunt, 2005). Usefulness and effectiveness of the CHAID-tree method in marketing has been shown in the variety of market segmentation studies (Gan et al., 2008; Gomez & Benito, 2008; Rufin, 2007; Chen, 2003).

Study Instrument

The online questions were developed from a review of previous research, industrial reports and other literatures pertaining to consumers of performing and cultural arts, as well as from discussions with marketing staff in the Wharton Center for performing arts (Wharton Center). The number of questions that participants answered depended on their responses to various sub-questions throughout the survey. A series of performing arts consumer information was obtained. Attendance at live performances in a different state or country (1= yes and 2=no) was used as a dependent variable in the CHAID analysis. Socioeconomic characteristics (gender; age; education; employment; and annual income), household information (number of persons in household; marital status; and children's status), and arts-related experience variables (arts education during childhood; recent arts education; purchase of art products; membership status; volunteer status; and donation activity) were used as independent variables. Spending on tickets to live performances was classified according to average ticket price, highest ticket price, and total spending on live performances during the last 12 months. These were measured with continuous variables.

Data Collection and Selection

The web-based survey was created and conducted in partnership between the Wharton Center and the Recreational Industries Research Center at Michigan State University. Data were collected through an online survey of E-club members who had purchased a ticket at least once from the Wharton Center and were on its email list. The E-club newsletter announcing the survey and providing the link to the online survey, in which the purpose of the study, the incentive, and the confidentiality procedures were detailed. A total of 39,011 valid invitations were delivered to valid email addresses. Approximately 13,503 of the E-club members opened the electronic newsletter. A total of 4,744 members responded to the survey for a response rate of 35.1% during 12 days in January - February 2007. As an incentive, upon completion of the survey, the respondents had a chance to be entered in a drawing for a \$100 Wharton Center gift certificate and dinner for two at the Kellogg Center's State Room.

To address the purpose of this study, heavy consumers of the performing arts who purchased ten or more live performance tickets during the last 12 months were selected and used for the Exhaustive CHAID analysis. A sub-sample of 1,255 respondents who indicated their attendance at live performances in a different state or country during the last 12 months was selected from the total of 1,267 heavy consumers.

The respondents were predominantly female (73%); and the majority ranged in age from 35 to 64 (72%); More than 90% of the respondents were straight/heterosexual (91%) and Caucasian or white (95%); In addition, a majority had a 4-year college degree or above (66%); full time employment (64%); and were married (72%). Annual income was reported as less than \$50,000 (22%), \$50,000-\$99,999 (43%), and \$100,000 or more (35%).

Data Analysis

The Exhaustive CHAID analysis segments heavy consumers of the performing arts based on the interactions of the predictors (socioeconomic and household information, and art-related experiences) with attendance at live performances in another different state or country. It begins with the entire data split into appropriate groups based on a most significant predictor. A cross-tabulation is associated with this part and related to the "Chi-squared" part of the name. Bonferroni adjustment is used in multiple comparison procedures to calculate an adjusted probability of comparison-wise type I error from the Chi-square distribution function. Predictors used Bonferroni adjusted p-value of less than .05 which was eligible to use for segmentation (Hoare, 2004). Moreover, given condition was that parent node and child node should contain at least 150 and 100 respondents respectively in either of the decision trees. The terminal nodes or final subgroups of each tree diagram were referred to as segments.

A series of Chi-square analysis and analysis of variance (ANOVA) was employed to identify significant differences across the market segments in the socioeconomics and characteristics of pleasure trips, with respect to overnight stays; out-of-state trips; and out-of-country trips. Turkey's Honestly Significant Difference (HSD) method of *post hoc* tests is further utilized. Answer Tree 3.1 and SPSS version 16.0 for Windows were used to analyze the data.

RESULTS

Exhaustive CHAD Segmentation

The decision tree resulting from the Exhaustive CHAD analysis grew to four levels and respondents were segmented into five terminal homogeneous subgroups. Significant predictors for attendance at live performances in a different state or country were membership status in arts organizations, education, purchase of art products and donation activity to arts organizations (Figure 1).

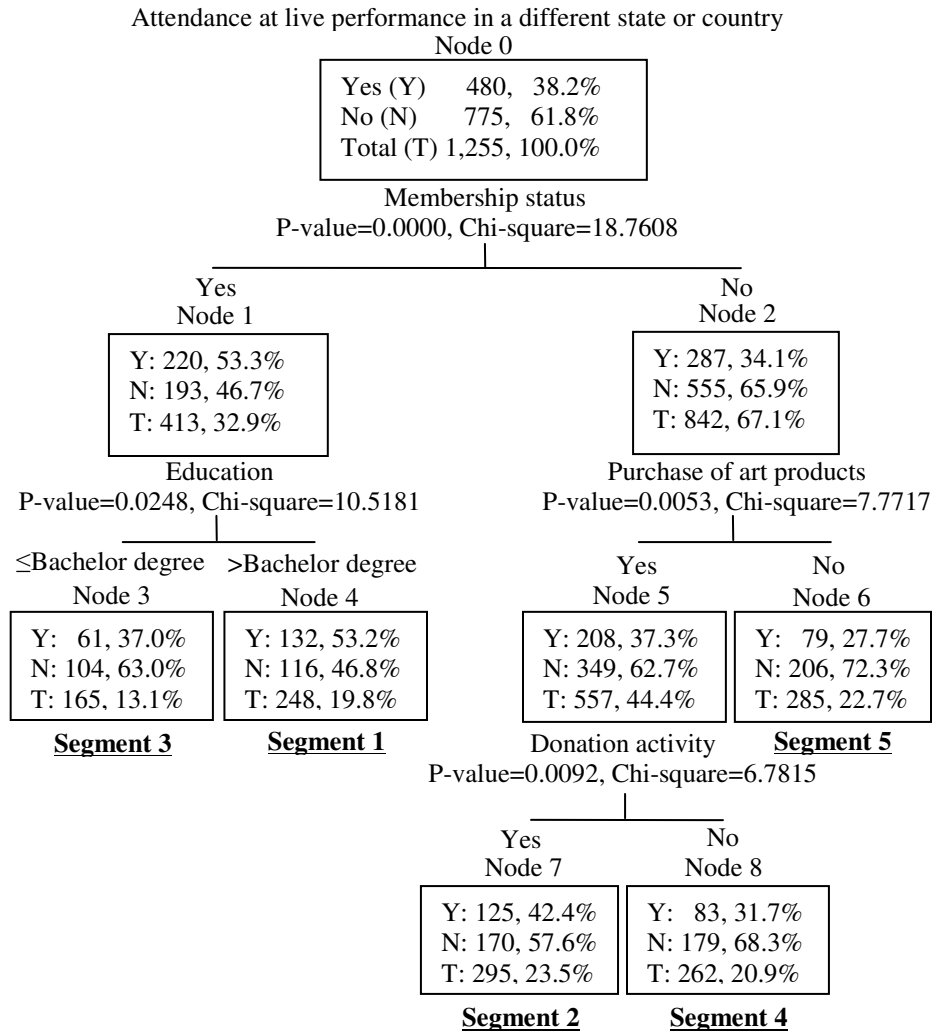


Figure 1
Market Segments Based on Attendance at Live Performances in a Different State or Country

The respondents were first divided into two categories based on membership status. People who had membership in arts organizations were more likely attend live performances in a different state or country. When members were further divided by education, people with a degree higher than a bachelor’s degree were more likely to be cultural tourists. These people in node 4 were the most likely to be cultural tourists in the decision tree, based on statistical distinction. The education category was re-categorized into two groups – bachelor’s degree or less, and higher than bachelor’s degree. On the other hand, respondents in node 6 were the least likely to be cultural tourists; they were not members of arts organizations and did not purchase art products during the last 12 months.

The resultant five segments were subsequently ranked according to their index scores. An index score of more than 100% shows that the corresponding node has a higher than expected proportion of people with a certain characteristic or behavior. The higher the index score, the more likely the respondents in the segment were to attend live performances in a different state or country. The five segments were summarized with respect to their size and propensity to attend live performances in a different state or country (Table 1).

Table 1
Gains Summary by Percentage Distribution of the CHAID Analysis

Node	Segment	No. of respondents (n)	% of all the respondents (%)	No. of cultural tourists (n)	% of cultural tourist sample ^a (%)	% of cultural tourist response rate in the node (%)	Index score ^b (%)
4	1	248	19.8	132	27.5	53.2	139.3 ^c
7	2	295	23.5	125	26.0	42.4	111.0
3	3	165	13.1	61	12.7	37.0	96.9
8	4	262	20.9	83	17.3	31.7	83.0
6	5	285	22.7	79	16.5	27.7	72.5

^aCultural tourists in a particular node to all of the cultural tourists in the heavy market.

^bProportion of cultural tourist rates in the node compared to the overall sample.

^c139.3% = 53.2% (cultural tourist rate in Node 6) / 38.2% (cultural tourist rate in the overall sample).

Socioeconomic Characteristics

A chi-square test was performed to determine whether statistically significant differences existed among the five segments in the respondents' characteristics, including: (1) gender; (2) age; (3) education; (4) annual household income; (5) employment; (6) number of people in household; and (7) household composition. Statistically significant differences among segments were found in gender, age, education, annual household income, number of people in household and household composition ($p < 0.001$), and in employment ($p < 0.01$). A summary of the socioeconomic characteristics of the propensity to travel out of state and/or out of country to attend live performances five segments is presented in Table 2.

Spending on Tickets to the Performing Arts

One-way ANOVA revealed statistically significant differences among the five sub-segments in the total spending on tickets ($p < 0.01$) and in an average ticket price and the highest ticket price ($p < 0.05$) (Table 3). Further analysis using Tukey's HSD *post hoc* test indicated significant mean differences: (1) in the total spending on tickets between segment 1 and segment 5; and between segment 2 and segment 5; (2) in the average ticket price between segment 2 and segment 3; (3) in the highest ticket price for tickets purchased between segment 2 and segment 5. The average ticket price for tickets and the highest price were the greatest for persons in segment 2 while the total spending on tickets was the greatest for those in segment 1. On the other hand, the average ticket price was the lowest in segment 3 while the average highest ticket price and the average total spending on tickets had the lowest values in segment 5.

Table 3
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Spending on Tickets by the Propensity to Travel Out of State and/or Out of Country to Attend Live Performances Five Segments

Ticket Price paid		Segment		1	2	3	4	5	F
				(19.8%)	(23.5%)	(13.1%)	(20.9%)	(22.7%)	
Average price for tickets	Mean ^a (\$) <u>48.00</u> ^b	47.00	50.00 ^c	46.00 ^d	49.00	48.00	2.462*		
	Range (\$)	10.00-100.00	8.00-125.00	8.00-111.00	10.00-100.00	5.00-100.00			
Highest price for a ticket	Mean (\$) <u>87.00</u>	91.00	92.00 ^c	87.00	83.00	81.00 ^d	2.461*		
	Range (\$)	20.00-500.00	25.00-750.00	26.00-350.00	10.00-300.00	10.00-1000.00			
Total spending on tickets	Mean (\$) <u>752.00</u>	792.00 ^c	772.00 ^c	749.00	733.00	712.00 ^{df}	3.994**		
	Range (\$)	150.00-1000.00	120.00-1000.00	90.00-1000.00	110.00-1000.00	100.00-1000.00			

* $p < 0.05$, ** $p < 0.01$

^aMean values rounded to the nearest dollar.

^bMean score for average price for tickets in the five segments.

^{c-f}Tukey's HSD test: Means in the same row followed by the same superscript were significantly different at $p < 0.05$

DISCUSSION AND CONCLUSIONS

This study investigated how heavy consumers of performing arts can be segmented by using the Exhaustive CHAID method based on a combination of three types of predictors – socioeconomics, household information and arts-related experiences. Most valuable consumers usually represent a large percentage of its revenue in a business (Jackson & Wang, 1994). Since the heavy consumers represented approximately 30% of the performing arts market and accounted for over 50% of actual spending on tickets, this study focused on them. A total of five segments emerged based on education level (socioeconomic variables) as well as membership status, purchase of art products and donation activity (arts-related experience variables).

The best segment of cultural tourists is segment 1, consisting of 19.8% of the heavy consumers, who had higher than a bachelor's degree and had membership to arts organizations. A majority were female, married/partnered and 45 years or older. More than half had two persons residing in their household. Segment 2, consisting of 23.5% of the heavy consumers, was more likely to be cultural tourists who purchased art products and donated money but did not have membership in arts organizations. These respondents were mainly female, married, between 35 and 64 years old, and had completed at least a bachelor's degree or higher. More than 30% had an annual household income of \$150,000 or higher. Segment 3, consisting of 13.1% of the heavy consumers, was less likely to be cultural tourists who had a bachelor's degree or less and had membership to arts organizations. They had the highest proportion of females and an annual household income of less than \$50,000. Segment 4, consisting of 20.9% of the heavy consumers, was also less likely to be cultural tourists who purchased art products but did not have membership and did not donate money to arts organizations. A majority were female, less than 65 years old, had an annual household income of between \$50,000 and \$149,999, and were employed full-time. More than one-fifth was single without children. Segment 5, consisting of 22.7% of the heavy consumers, was the least likely to be cultural tourists who did not have membership to arts organizations and did not purchase art products. A majority were female and less than 55 years old but this segment contained the highest proportion of males among the segments. More than 40% were married/partnered with children living at home.

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Those in segments 1 and 2 were more likely to attend live performances in a different state or country while respondents in segment 3, 4 and 5 were less likely to be cultural tourists. In addition, segments 2 paid the greatest average price for a ticket and the greatest average highest price for a ticket to a live performance; while segment 1 had the greatest average total spending on tickets during the last 12 months. Segments 2 included more respondents who had an annual household income of \$150,000 or higher than other segments, while segment 1 included more respondents with higher education. Therefore, amount of spending on tickets was considerably related to their income and education levels.

This study adds useful information about heavy consumers of the performing arts who are more likely to travel out-of-state and/or out-of-country to attend live performances and become cultural tourists. Previous tourism studies show that cultural tourists are significant segments which are repeated visitors, spend more money and stay longer than other tourists (Nichols, 2006; Dolnicar, 2002). In present study supports previous research that performing arts consumer segments who were more likely to be cultural tourists spend an average of highest price for a ticket and on higher total spending on tickets than those segments who were less likely to be cultural tourists. Consequently, cultural tourists are more profitable segments and worthy of focus. These accurate and applicable results can aid marketers and managers in identifying differences among performing arts consumers, and help them as their marketing strategies for their target segments and positioning new marketing programs and services.

Table 2
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Summary of the Socioeconomic Characteristics of the Propensity to Travel Out of State or/and Out of Country to Attend Live Performances Five Segments

Segment	% of respondents	% of cultural tourists	% of market share of cultural tourists ^a	Definition of predictors	Characteristics
1	19.8	27.5	5.4	<ul style="list-style-type: none"> - Membership in arts organizations - Higher than 4-year college degree 	<ul style="list-style-type: none"> - Female (65.7%) - 45 years or older (87.0%). - Completed some graduate courses or higher degree (100.0%). - Annual household income of \$100,000 or higher (60.0%). - Two persons residing in household (54.7%). - Married/partnered with children living at home or with children no longer living at home (65.7%).
2	23.5	26.0	6.1	<ul style="list-style-type: none"> - No membership in arts organizations - Purchased art products - Donations to arts organizations 	<ul style="list-style-type: none"> - Female (68.5%). - 35-64 years or older (85.0%). - 4-year college degree or high (78.2%). - Annual household income of \$100,000 or higher (58.6%). - Two persons residing in the household (47.1%). - Married/partnered with children living at home or with children no longer living at home (68.3%).
3	13.1	12.7	1.7	<ul style="list-style-type: none"> - Membership in arts organizations - 4-year college degree or less 	<ul style="list-style-type: none"> - Female (80.9%) - 45 years or older (70.8%). - 4-year college degree or less (100%). - Annual household income of \$50,000 - \$149,999 (57.5%). - Two persons or more residing in the household (87.0%). - Married/partnered with children living at home or with children no longer living at home (64.0%).

^aPercentage of respondents × Percentage of cultural tourists.

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Table 2
(Continued)

Segment	% of respondents	% of cultural tourists	% of market share of cultural tourists ^a	Definition of predictors	Characteristics
4	20.9	17.3	3.6	<ul style="list-style-type: none"> - No membership in arts organizations - Purchased art products - Donations to arts organizations 	<ul style="list-style-type: none"> - Female (76.2%). - Less than 35 years old (21.0%) - 4-year college degree or high (69.4%). - Annual household income of \$50,000 - \$149,999 (65.3%). - Two persons residing in the household (43.9%). - Single without children (21.1%) and married/partnered with children living at home (33.2%).
5	22.7	16.5	3.7	<ul style="list-style-type: none"> - No membership in arts organizations - No purchased art products 	<ul style="list-style-type: none"> - Female (61.9%). - 35-64 years or older (76.3%). - 4-year college degree or less (61.4%). - Annual household income of \$50,000 - \$149,999 (73.3%). - Two persons or more residing in the household (86.4%). - Single without children (17.1%) and married/partnered with children living at home (41.0%).

^a Percentage of respondents × Percentage of cultural tourist

REFERENCES

International CHRIE Conference-Refereed Track, Event 2 [2010]

- Bakken, S. K. (2005). *Use of chi-squared automatic interaction detector in the prediction of vocational rehabilitation outcomes among veterans with substance use disorders*. Unpublished doctoral dissertation, University of Wisconsin-Madison.
- Baumol, W. J., & Bowen, W. G. (1966). *Performing arts: The economic dilemma, a study of problems common to theatre, opera, music and dance*. New York: The Twentieth Century Fund.
- Bergonzi, L., & Smith, J. (1996). *Effects of art education on participation in the arts*. NEA Research Report #36. Santa Ana: Seven Locks Press.
- Bojanic, D. C. (2007). Customer profile of the “carryout” segment for restaurants. *International Journal of Contemporary Hospitality Management*, 19(1), 21-31.
- Borgonovi, F. (2004). Performing arts attendance: An economic approach. *Applied Economics*, 36(17), 1871-1886.
- Bowen, J. T. (1998). Marketing segmentation in hospitality research: No longer a sequential process. *International Journal of Contemporary Hospitality Management*, 10(7), 289-296.
- Chen, J. S. (2003). Market segmentation by tourists’ sentiments. *Annals of Tourism Research*, 30(1), 178-193.
- Clopton, S. W., Stoddard, J. E., & Dave, D. (2006). Event preferences among arts patrons: implications for market segmentation and arts management. *International Journal of Arts Management*, 9(1), 48-77.
- Colbert, F. (2003). Entrepreneurship and leadership in marketing the arts. *International Journal of Arts Management*, 6(1), 30-39.
- Cuadrado, M. & Molla, A. (2000). Grouping performing arts consumers according to attendance goals. *International Journal of Arts Management*, 2(3), 54-60.
- Dolnicar, S. (2002). A review of data-driven market segmentation in tourism. *Journal of Travel & Tourism Marketing*, 12(1), 1-22
- Gan, L. L., Maysami, R. C., & Koh, H. C. (2008). Singapore credit cardholders: Ownership, usage patterns, and perceptions. *Journal of Services Marketing*, 22(4), 267-279.
- Gomez, M., & Benito, N. R. (2008). Manufacturer’s characteristics that determine the choice of producing store brands. *European Journal of Marketing*, 42(1), 154-177.
- Hoare, R. (2004). *Using CHAID for classification problems*. The New Zealand Statistical Association Conference, Wellington, New Zealand.
- Hunt, S.D. (2002). *Foundations of marketing theory: toward a general theory of marketing*, M.E. Sharpe, Armonk, NY.
- Jackson, R., & Wang, P. (1994). *Strategic database marketing*, NTC Books, Lincolnwood, IL.
- Kass, G. V. (1980). An exploratory technique for investigating large quantities of categorical data. *Journal of the Royal Statistical Society*.29(2), 119-127.
- Kastenholz, E., Carneiro, M. J., & Eusebio, C. (2005). The impact of socio-demographics on tourist behavior analyzing segments of cultural tourists visiting Coimbra. *International Conference Theoretical Advances in Tourism Economics*, Evora.
- Kotler, P. (1972). A generic concept of marketing. *The Journal of Marketing*, 46-54.
- Magidson, J. (1994). The CHAID approach to segmentation modeling: Chi-squared automatic interaction detection. In R. P. Bagozzi (Ed.), *In advanced methods of marketing research* (pp. 118-159). Cambridge, MA: Blackwell.
- Magidson, J., & Vermunt, J. K. (2005). *An extension of the CHAID tree-based segmentation algorithm to multiple dependent variables*. In Weihs C, Gaul W (eds), *Classification: The Ubiquitous Challenge*. Springer: Heidelberg.
- McCarthy, K. F., & Jinnett, K. (2001). *A new framework for building participation in the arts*: Rand Corp.
- Nichols, B. (2006). *Consumer spending on performing arts: outlays flat for 2005; Non-spectator categories show growth*. Research Note #91, National Endowment for the Arts, Washington DC.
- Notzke. (1999). Indigenous tourism development in the Arctic. *Annals of Tourism Research*, 26(1), 55-76.
- Reid, R. D., & Bojanic, D. C. (2005). *Hospitality marketing management* (4th ed.). Hoboken, New Jersey: Wiley & Sons.
- Rentschler, R., Radbourne, J., Carr, R., & Rickard, J. (2002). Relationship marketing, audience retention and performing arts organizations viability. *International Journal of Nonprofit and Voluntary Sector Marketing*, 7(2), 118-130.
- Richards, G. (2002). Tourism attraction systems; exploring cultural behaviour. *Annals of Tourism Research*, 29(4), 1048-1064.

- Richards, G. (2005). *Cultural tourism in Europe*. Re-issued in 2005 in electronic format by the Association for Tourism and Leisure Education (ATLAS). www.atlas-euro.org. Originally published by CAB international, Wallingford, UK, 1996.
- Rufin, R. (2007). Sales growth of spanish tourist firms: Some implications of Gibrat's Law on marketing management. *Tourism Management*, 28(3), 788-805.
- Silberberg, T. (1995). Cultural tourism and business opportunities for museums and heritage sites. *Tourism Management*, 16(5), 361-365.
- Travel Industry Association (TIA). (2003). *The Historic/Cultural Traveler*, 2003 edition. http://www.tia.org/pressmedia/domestic_a_to_z.html. [Accessed the 23rd of July 2008, 4:42]
- Urry, J. (1990). *The tourist gaze: Leisure and travel in contemporary societies*. CA: Sage Publications.
- Wedel, M., & Kamakura, W. A. (2000). *Market segmentation: conceptual and methodological foundations*. Boston: Kluwer Academic.