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## Field Trip! Assessing Business Student Interest in Plant Tours and Their Product Categories

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# Field Trip! Assessing Business Student Interest in Plant Tours and Their Product Categories

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**Abstract** – Business educators are challenged daily to provide fresh ideas in the classroom and to use new methods to stimulate active learning. One option is to use manufacturing plant tours, company museums, and company visitor centers to supplement traditional classroom activities. This manuscript details this growing type of tourism (known as **Consumer Experience Tourism**) and identifies the product categories of greatest interest to today's students in Business and Economics. Business educators are encouraged to more fully embrace this under-utilized resource to promote active student learning and to select those destinations of greatest interest to their particular student audiences.

**Key Words** – Plant tours, company museums, consumer experience tourism

**Relevance to Marketing Educators, Researchers and/or Practitioners** – Marketing educators seek to provide value-added experiences for their students. One addition to a course can be field trips to witness manufacturing facilities. This study helps identify those products (and product categories) of greatest interest to today's business students.

## Introduction

Dorothy Sayers laments the “modern” techniques of educating in her powerful address at Oxford University in 1947 entitled “The Lost Tools of Learning”:

*“Is not the great defect of our education today. . . that although we often succeed in teaching our pupils ‘subjects,’ we fail lamentably on the whole in teaching them how to think: they learn everything, except the art of learning.”*

She continues her speech with the example of teaching a child to play a piano piece without ever teaching him/her to read music or to play scales. The student has memorized the selection and performed it perfectly to smiling parents at the Spring Recital; but, has not been given the tools to play a new musical piece on his own. Education’s most basic requirement should be to give students the tools of learning that may be transferred from one situation to the next. A failure to do this merely makes parrots of the students, where they simply play back to the teacher the information given them (Sayers, 1947).

Experiential learning goes beyond the process of students regurgitating information fed them by their instructors to “focus on learning through reflection on one’s personal experience” (McCarthy, 1987). “Through reflection, students link concrete experience to theoretical understanding. The process serves as a framework to guide future action and helps students advance from passive learners to active doers” (Goby and Lewis, 2000). Today, educators are enhancing their teaching techniques by supplementing passive learning (i.e. traditional lecture format) with active learning techniques. Active learning encourages students to become more involved in their subject matter by “applying theory to real-life situations” (Hamer, 2000). Finding creative teaching tools that relate to more students is a constant goal for the conscientious instructor.

It is suggested here that greater use of Consumer Experience Tourism (i.e., manufacturing plant tours, company visitor centers, and company museums) is one such instructional tool. The purpose of this manuscript is to discuss the growing use of Consumer Experience Tourism in the marketplace and to suggest how business educators may better utilize this phenomenon to supplement traditional classroom activities. Further, student interest in witnessing the production processes of a variety of products is assessed, along with an examination of the possible influence of demographic traits on response or student interest levels. Ultimately, instructors can improve student performance by selecting class projects, field trips, internship partners, and other experiential learning opportunities that best meet the interest of their particular student audiences.

# Literature Review

## Defining Consumer Experience Tourism

Manufacturing plant tours, company museums, and company visitor centers represent a segment of tourism known by different names: manufacturing tourism, industrial attractions, industrial tourism, and industrial heritage tourism. The common goal within each descriptive term is to provide the user (i.e., the consumer) with an experience regarding a product, its operation, production process, history, and historical significance.

*Consumer Experience Tourism* represents a unifying theme for this segment of the tourism industry. This term captures the consumer's ability to learn more about the products they (hopefully) consume while manufacturers can forge closer relationships with their consumers during the 30-120 minutes of time the consumer typically spends as a guest of their facility (Mitchell and Orwig, 2002). Mitchell and Mitchell (2001) have evaluated the content of such tourism sites. Further, these same authors have evaluated the phenomenon in the food and beverage industries (2000), the nonprofit sector (2002a), a defined geographic region (Mitchell and Mitchell 2002), and the overall economy (Mitchell, Mitchell, and Turner, 2001). Mitchell and Mitchell (2002c) have proposed a format for academics to evaluate local interest in such facilities in their local service areas.

*Consumer Experience Tourism* represents a diverse group of offerings. Axelrod and Brumberg (1997) profile 288 factories throughout the United States that welcome visitors. Similarly, Berger and Berger (1997) provide background information for about 1,000 free industrial tours (in more than 300 industries) that are open to the public. Product categories represented include: processed foods, distilled spirits, clothing, automobiles, television programming and movies, coins, paper products, electronics, furniture, motor homes, toys, sauces and spices, pottery and glassware, financial markets, tires and rubber, golf clubs, baseball bats, and teddy bears.

Arany and Hobson (1998) provide information on smaller, lesser-known museums that are considered part of *Consumer Experience Tourism* given their focus on a product category or specific brand. For example, a reader can learn more about the Mustard Museum, Barbie Hall of Fame, Goodyear World of Rubber collections, Jukebox Museum, and the Liquid Paper Museum.

It must be noted that liability and security concerns have prompted some firms to re-evaluate their plant tours and to shift them to "more staid and manageable company museums" (Lukas, 1998). For example, Kellogg Company closed its cereal plants to visitors after discovering rivals photographing a public tour. They later replaced the popular tours with the visitor center/museum Kellogg's Cereal City USA in Battle Creek, MI. R.J. Reynolds discontinued popular tours of its cigarette manufacturing plants against the rising tide of anti-smoking sentiment. Steinway and Sons discontinued tours of their piano manufacturing facilities (Lukas, 1998)

ostensibly because of liability risks. Gerber discontinued their plant tours in 1990 citing a need for secrecy in the manufacturing process (Vlasic, 1990). Lukas (1998) echoes the fears that Treece (1995) ponders in a commentary piece for *Business Week* (now *Bloomberg Business*). The piece expressed the fear that more firms will replace such tours with "sanitized company museums", particularly in a post September 11, 2001 world.

## **Underlying Interest in Consumer Experience Tourism**

Many people think of *Consumer Experience Tourism* (e.g., manufacturing plant tours, company museums, and company visitor centers) as low-cost entertainment options for parents with children (such tours are typically free or require a nominal fee) (Lukas, 1998). While this is one key target market (and one key benefit the consumer may seek), it has been suggested the root cause of this interest, this fascination, runs much deeper. Harris (1989) and Prentice (1993) note that factories and mines historically employed a larger percentage of the workforce. The shift to a service economy takes people out of the factories. This removes people spatially and culturally from the manufacturing sector -- they have less contact or first-hand knowledge of industrial work. This creates a novel and nostalgic view of industrial work, which in turn feeds their interest as tourist destinations. They further note that many younger workers have never experienced factory work so they're curious about the work and production processes while older employees experience the pleasure of "returning to their roots."

Lukas (1998) notes "company museums create the specter of the Wizard of Oz, but factory tours provide a glimpse of the man behind the curtain." Rudd and Davis (1998) suggest that the Industrial Revolution was a defining event in American history. Companies providing plant tours are providing users a look at our collective past. Richards (1996) notes the industrial revolution created an era where the transition from modern to obsolete occurs more rapidly. As such, products of older technology are considered cultural and historical artifacts and produce sentimental feelings among society. A company's museum or visitor center showcasing the evolution of its product or technology can provide a nostalgic tourist experience.

## **Business Educators and Consumer Experience Tourism**

*Consumer Experience Tourism* provides an excellent opportunity for business educators to include active learning in their course offerings. In particular, college-sponsored field trips to manufacturing plant tours, company museums, or company visitor centers provide an effective hands-on learning experience that is embraced by the student and provides an effective learning experience for students of all learning styles. It provides experiential learning at its best. It is understood that students learn better and retain more when studying information that genuinely interests them.

To date, no research has been conducted specifically on college-aged Business student interest in Consumer Experience Tourism sites and product categories. Certainly, such field experiences are common among K-12 students. However, the

field trip for college students has received much less attention. For example, Coughlin (2010) and Behrendt and Franklin (2014) address the importance of partnerships among stakeholders when designing field trips for elementary and high school students. Business School educators can achieve such collaboration with tourism operators willing to welcome their students.

Fuller (2012) discusses the advantages of taking Geography students into the field that “will automatically be of cognitive advantage and intrinsically fosters deeper levels of learning.” It is suggested here that taking Business students into manufacturing tours, distribution centers, and company museums is akin to this experience. Additionally, Goh (2011) notes that the growing complexity of the Hospitality industry increases the importance of field trips to help keep students (and faculty) abreast of changes in the industry. The same can be said for Business School students.

Goh and Ritchie (2010) found that Hospitality students with more positive attitudes toward field trips tended to have more positive experience during such trips. These students noted that the desire to enhance their understanding of course materials as a key motivator. So, in addition to visiting locations, it is important to ensure a direct tie-in to course content. This is consistent with Coughlin’s (2010) recommendation of pre-, mid-, and post-trip activities during such field experiences. Further, Porth (1997) notes that such preparation, immersion, and reflection can be an effective professional development experience for faculty members.

A study evaluating student preferences in field trip choices can reveal valuable information for Business educators seeking to select the appropriate locations or destinations for his/her classes. This is the focus of the remainder of this manuscript.

## Method

### Questionnaire Development

Students enrolled in Consumer Behavior at a medium-sized state university in the southeast United States worked with their instructor to create the questionnaire used in this study. A review of existing tourism sites (i.e., plant tours) served as the starting point to identify product categories for evaluation. The completed questionnaire included the following directions:

*Thank you for agreeing to participate in this research study. The purpose of this study is to evaluate your level of interest in watching products being produced. Specifically, assuming you could take a tour and watch an item being produced, would you be interested in doing so? The results of your questionnaire will be kept confidential. Only overall research results will be evaluated and reported.*

*Below is a list of product categories. Please circle your level of interest in witnessing the item's production process a 5-point scale: 1 = "Not Interested" to 5 = "Very Interested."*

A total of forty-one product categories were evaluated in this study. Further, a series of demographic questions was included to profile respondents and to evaluate possible influences on response.

## Data Collection

Data was collected using an online survey administered at four different institutions: two public residential campuses and two private residential campuses, including one Historically Black College and University (or, HBCU). A total of 676 people participated in this study by completing an online survey emailed directly to students enrolled in a cross-section of Business and Economics courses. The electronic survey (URLs) was customized for each institution to include their school name and colors. A profile of respondents is provided in **Table 1**.

**Table 1: Sample Composition (n = 676)**

Trait	Respondent Profile
<b>Gender</b>	Male = 292 (43.2%) Female = 381 (56.4%) Missing = 3 (0.04%)
<b>Ethnicity</b>	Caucasian = 502 (74.3%) African American = 107 (15.8%) Asian American = 14 (2.1%) Latin American = 13 (1.9%) Native American = 4 (0.6%) Foreign National = 23 (3.4%) Other = 7 (1.0%)
<b>Age</b>	24 and Under = 626 (92.6%) 25-34 = 20 (3.0%) 35-44 = 12 (1.8%) 45-54 = 7 (1.0%) 55-64 = 4 (0.6%) 65 and over = 3 (0.5%) Missing 6 (0.9%)

# Results

## Description of Statistical Tests Used

As noted earlier, the respondents were asked to report their relative level of interest in witnessing the item's production process using a 5-point scale (1 = Not Interested to 5 = Very Interested). It is possible to evaluate the sample group's interest in the 41 product categories by computing a mean score for each variable. For each product category, the mean response and standard deviation are provided. A lower mean value indicates a lesser level of interest whereas a higher mean value indicates a greater level of interest. A higher standard deviation indicates less consistency among responses whereas a lower standard deviation value indicates a greater consistency of response.

Also, mean scores for particular groups can be computed and a means-comparison test conducted for each product category. A t-test is used to compare mean responses to each product category. The level of statistical significance (known as the p-value) is provided to interpret each means-comparison test. Differences are evaluated at a p-value of less than 0.05; or, there's a 95% probability that the differences are meaningful and not a random outcome.

## Data Presentation

The mean scores and standard deviations for all respondents are aggregated and presented in **Table 2**. The mean responses for all 41 product categories have been ranked in terms of level of interest across all respondents. The items of greatest interest to the sampling frame include (in order of relative interest): Automobile Tires; Entertainment Facilities (arenas, theatres, etc.); Food Products (baked goods, frozen foods, snacks, etc.); Communications Media (radio and television studios); Beverages (Alcoholic); Automobiles (cars, trucks, heavy trucks, etc.); Consumer Electronics (televisions, stereos, etc.); Photographic Equipment (cameras, film, etc.); Clothing / Garments; and Athletic Equipment (balls, racquets, clubs, etc.).

Business educators are encouraged to include trips (where possible) to facilities producing such items to support their classroom activities. The favorable interest in such facilities will encourage greater student participation in such extracurricular and co-curricular activities as well as enhancing student learning.



**Table 2: Interest in Product Categories Mean Scores Ranked in Order of Interest for All Respondents (n = 676)**

<b>Product Category</b>	<b>Mean (Standard Deviation) 1 = Not Interested to 5 = Very Interested</b>
Automobile Tires	3.44 (1.13)
Entertainment Facilities (arenas, theatres, etc.)	3.27 (1.34)
Food Products (baked goods, frozen foods, snacks, etc.)	3.21 (1.39)
Communications Media (radio and television studios)	3.13 (1.38)
Beverages (Alcoholic)	3.10 (1.28)
Automobiles (cars, trucks, heavy trucks, etc.)	3.07 (1.34)
Consumer Electronics (televisions, stereos, etc.)	2.97 (1.38)
Photographic Equipment (cameras, film, etc.)	2.94 (1.39)
Clothing / Garments	2.93 (1.41)
Athletic Equipment (balls, racquets, clubs, etc.)	2.89 (1.42)
Pharmaceuticals (ointments, pills, etc.)	2.73 (1.33)
Recreational Vehicles (boats, campers, etc.)	2.71 (1.37)
Computer Hardware	2.63 (1.36)
Printing Process (books, magazines, newspapers, etc.)	2.61 (1.36)
Steel and Aluminum Production	2.61 (1.37)
Aircraft Production and Maintenance	2.56 (1.40)
Glass and Glass Products (crafts, jars, etc.)	2.51 (1.31)
Pottery and China	2.49 (1.36)
Automobile Parts (brakes, engines, seats, etc.)	2.42 (1.35)
Personal/Household Products (cleaners, cosmetics, etc.)	2.40 (1.33)
Eyewear (glasses, contact lens, etc.)	2.38 (1.30)
Candles	2.38 (1.32)
Toys	2.34 (1.38)
Furniture	2.32 (1.22)
Power Generating Equipment (turbines, relays, etc.)	2.27 (1.35)
Building Supplies (wood, concrete, etc.)	2.16 (1.24)
Plastics / Plastic Molded Products	2.15 (1.19)
Paper and Paper Products	2.14 (1.20)
Cloth Weaving	2.14 (1.27)
Beverages (Non-Alcoholic)	2.13 (1.34)
Home Furnishing (comforters, drapes, linens, etc.)	2.12 (1.20)
Mobile or Modular Homes	2.12 (1.24)
Household Appliances (washers, dryers, ranges, etc.)	2.11 (1.19)
Home Fixtures (lighting, plumbing, etc.)	2.07 (1.20)
Hand Tools (drills, sanders, etc.)	2.05 (1.20)
Metal Crafts (iron, pewter, etc.)	2.04 (1.21)
Mining (rock, gravel, etc.)	2.01 (1.20)
Carpeting and Rugs	1.97 (1.12)
Warehousing (storage and movement of goods)	1.97 (1.21)
Machining (bearings, coils, plating, etc.)	1.90 (1.13)
Agricultural / Lawn and Garden Equipment	1.83 (1.12)

**Table 3a: Interest by Gender ( $\alpha = 0.05$  Level)**

<b>Product Category</b>	<b>Males Mean (Std. Dev.) n = 292</b>	<b>Females Mean (Std. Dev.) n = 381</b>	<b>Significance</b>
Agriculture	2.14 (1.19)	1.60 (1.01)	.000*
Aircraft	3.02 (1.34)	2.20 (1.34)	.000*
Athletic Equipment	3.17 (1.41)	2.68 (1.39)	.000*
Automobiles	3.43 (1.25)	2.79 (1.34)	.000*
Auto parts	2.82 (1.31)	2.10 (1.29)	.000*
Tires	2.42 (1.22)	1.90 (1.20)	.000*
Beverages	3.00 (1.23)	3.18 (1.31)	.081
Alcohol	3.51 (1.38)	3.38 (1.35)	.187
Building Supplies	2.51 (1.27)	1.91 (1.15)	.000*
Candles	2.01 (1.13)	2.67 (1.38)	.000*
Carpet	1.92 (1.08)	2.00 (1.16)	.440
Cloth Weaving	1.98 (1.19)	2.27 (1.32)	.004*
Clothing/Garments	2.45 (1.27)	3.30 (1.40)	.000*
Communications	3.15 (1.23)	3.12 (1.50)	.788
Computers	3.02 (1.30)	2.33 (1.33)	.000*
Electronics	3.33 (1.23)	2.69 (1.43)	.000*
Entertainment	3.54 (1.25)	3.06 (1.37)	.000*
Eyewear	2.57 (1.29)	2.42 (1.30)	.113
Food	2.95 (1.37)	3.42 (1.38)	.000*
Furniture	2.30 (1.14)	2.33 (1.28)	.844
Glass	2.47 (1.25)	2.54 (1.36)	.597
Tools	2.45 (1.27)	1.74 (1.05)	.000*
Home Fixtures	2.34 (1.21)	1.86 (1.14)	.000*
Home Furnishing	2.10 (1.14)	2.13 (1.25)	.916
Appliances	2.33 (1.20)	1.94 (1.15)	.000*
Machining	2.28 (1.21)	1.60 (0.98)	.000*
Metal Crafts	2.37 (1.23)	1.80 (1.13)	.000*
Mining	2.34 (1.27)	1.76 (1.09)	.000*
Modular Homes	2.30 (1.25)	1.99 (1.22)	.001*
Paper	2.08 (1.10)	2.18 (1.27)	.359
Personal Products	2.11 (1.16)	2.62 (1.40)	.000*
Pharmaceuticals	2.62 (1.29)	2.80 (1.36)	.091
Photography	2.78 (1.31)	3.07 (1.43)	.009*
Plastic	2.29 (1.18)	2.04 (1.19)	.004*
Pottery	2.18 (1.19)	2.73 (1.43)	.000*
Power Generation	2.77 (1.36)	1.89 (1.21)	.000*
Printing	2.61 (1.30)	2.62 (1.41)	.979
Recreational Vehicles	3.08 (1.35)	2.42 (1.32)	.000*
Steel	2.80 (1.35)	2.46 (1.37)	.001*
Toys	2.61 (1.38)	2.13 (1.35)	.000*
Warehousing	2.31 (1.25)	1.71 (1.11)	.000*

## Possible Influence of Gender on Response

Respondents were asked to self-report their gender, which allows for analysis of group differences between males and females. A t-test is used to compare male/female mean responses for each product category. The level of statistical significance is provided to interpret each means comparison. Differences are evaluated at a p-value of less than 0.05. Mean responses for males and females are presented in **Table 3a**. The data presentation is simplified in **Table 3b**.

**Table 3b: Simplified Presentation of Interest by Gender**

Greater Interest among Males	Greater Interest among Females
<ul style="list-style-type: none"> <li>• Agriculture</li> <li>• Aircraft</li> <li>• Athletic Equipment</li> <li>• Automobiles</li> <li>• Auto parts</li> <li>• Tires</li> <li>• Building Supplies</li> <li>• Computers</li> <li>• Electronics</li> <li>• Entertainment Venues</li> <li>• Tools</li> <li>• Appliances</li> <li>• Machining</li> <li>• Metal Crafts</li> <li>• Mining</li> <li>• Modular Homes</li> <li>• Plastics</li> <li>• Power Generation</li> <li>• Recreational Vehicles</li> <li>• Steel</li> <li>• Toys</li> <li>• Warehousing</li> </ul>	<ul style="list-style-type: none"> <li>• Candles</li> <li>• Cloth Weaving</li> <li>• Clothing/Garments</li> <li>• Food</li> <li>• Personal Products</li> <li>• Photography</li> <li>• Pottery</li> </ul>

As illustrated in Table 3b, statistically significant differences were found in 29 product categories (or, 70% of those categories studied). Breaking down this list, male respondents indicated greater interest in 22 of these 29 product categories (or, 76% of categories where differences were identified).

The majority of the sample consists of young adults who one would expect to have broken away from the societal stereotypes of previous generations. Retailers continue to remove gender stereotypes as consumers ‘have little time to waste on gender stereotypes’ (Levy, Weitz, Grewal, 2014, p. 111). However, upon investigation, the result of this research shows that stereotypical patterns are quite strong. Seventy-six percent (76%) of the product categories indicated statistically significant differences based on gender. These results appear to be inconsistent with recent sex

role research. Matlin (1996) finds that as increased numbers of women and men blend traditional female role elements (such as child rearing) with traditional male role elements (such as wage earner) ... gender differences in behavior and conscious experience continue to decrease.

A revealing test for the reader would be to consider each variable and predict, based upon personal experience, whether there is a significant difference of interest in that variable and the direction of the difference. A panel of marketing researchers (i.e., faculty members) was convened to conduct a post hoc analysis and predicted over 90% of the variables correctly based on Male significantly more interested, Female significantly more interested, or neither being significantly more interested.

### **Possible Influence of Ethnicity on Response**

Respondents were asked to self-report their ethnicity, which allows analysis of group differences between ethnic groups. Caucasian and African American are the two largest ethnic groups in the sample. A t-test is used to compare Caucasian / African-American mean responses for each product category. The level of statistical significance (known as the p-value) is provided to interpret each mean's comparison. Differences are evaluated at a p-value of less than 0.05. Mean responses for Caucasians and African-Americans are presented in **Table 4a**. The data presentation is simplified in **Table 4b**.

**Table 4a: Interest by Ethnicity ( $\alpha = 0.05$  Level)**

Product Category	Caucasians Mean (Std. Dev.) n = 502	African-Amer. Mean (Std. Dev.) n = 107	Significance
Agriculture	1.87 (1.13)	1.66 (1.09)	.081
Aircraft	2.63 (1.39)	2.28 (1.40)	.019*
Athletic Equipment	2.94 (1.43)	2.67 (1.41)	.072
Automobiles	3.03 (1.34)	3.17 (1.34)	.330
Auto parts	2.37 (1.33)	2.52 (1.42)	.328
Tires	2.04 (1.19)	2.41 (1.36)	.010*
Beverages	3.03 (1.26)	3.56 (1.28)	.000*
Alcohol	3.48 (1.31)	3.55 (1.36)	.667
Building Supplies	2.15 (1.21)	2.04 (1.28)	.392
Candles	2.31 (1.26)	2.78 (1.53)	.003*
Carpet	1.91 (1.08)	2.08 (1.18)	.156
Cloth Weaving	2.06 (1.22)	2.35 (1.43)	.052
Clothing/Garments	2.81 (1.39)	3.40 (1.45)	.000*
Communications	3.02 (1.36)	3.55 (1.46)	.001*
Computers	2.51 (1.31)	2.81 (1.44)	.055
Electronics	2.87 (1.36)	3.26 (1.49)	.013*
Entertainment	3.23 (1.33)	3.45 (1.41)	.150
Eyewear	2.37 (1.22)	2.91 (1.48)	.000*
Food	3.13 (1.37)	3.70 (1.51)	.000*
Furniture	2.24 (1.18)	2.41 (1.34)	.226
Glass	2.53 (1.30)	2.29 (1.37)	.093
Tools	2.02 (1.16)	2.03 (1.30)	.978
Home Fixtures	1.99 (1.15)	2.22 (1.33)	.099
Home Furnishing	2.02 (1.14)	2.41 (1.33)	.006*
Appliances	2.01 (1.12)	2.26 (1.34)	.076
Machining	1.84 (1.11)	1.89 (1.13)	.708
Metal Crafts	2.03 (1.19)	1.91 (1.20)	.356
Mining	2.03 (1.20)	1.82 (1.21)	.116
Modular Homes	2.05 (1.19)	2.16 (1.36)	.457
Paper	2.05 (1.12)	2.41 (1.43)	.015*
Personal Products	2.31 (1.26)	2.74 (1.53)	.007*
Pharmaceuticals	2.68 (1.30)	2.86 (1.48)	.235
Photography	2.89 (1.35)	3.01 (1.58)	.475
Plastic	2.10 (1.14)	2.14 (1.32)	.785
Pottery	2.49 (1.31)	2.57 (1.57)	.608
Power Generation	2.32 (1.36)	1.98 (1.25)	.013*
Printing	2.53 (1.34)	2.89 (1.46)	.019*
Recreational Vehicles	2.74 (1.38)	2.50 (1.34)	.092
Steel	2.73 (1.37)	2.07 (1.27)	.000*
Toys	2.21 (1.32)	2.50 (1.57)	.000*
Warehousing	1.93 (1.18)	1.94 (1.26)	.908

**Table 4b: Simplified Presentation of Interest by Ethnicity**

Greater Interest among Caucasians	Greater Interest among African-Americans
<ul style="list-style-type: none"> <li>• Aircraft</li> <li>• Power Generation</li> <li>• Steel</li> </ul>	<ul style="list-style-type: none"> <li>• Tires</li> <li>• Beverages</li> <li>• Candles</li> <li>• Clothing/Garments</li> <li>• Communications</li> <li>• Electronics</li> <li>• Eyewear</li> <li>• Food</li> <li>• Home Furnishings</li> <li>• Paper</li> <li>• Personal Products</li> <li>• Printing</li> <li>• Toys</li> </ul>

As illustrated in Table 4b, statistically significant differences were found in 16 product categories (or, 39% of those categories studied). Breaking down this list, African Americans indicated greater interest in 13 of these 16 product categories (or, 81% of categories where differences were identified).

Previous research in the late 1990s suggested that African Americans spend more than their Caucasian counterparts on clothing, TVs, appliances, and personal appearance products (Levy and Weitz, 1998, p. 105). However, this relationship may not hold some 15+ years later. Additionally, content analysis of advertisements has found that African American male models are used with greater frequency in advertisements for clothing, shoes, and personal accessories (Bailey, 2006). Taken together, this may help explain greater interest in some of them items among African American respondents. Further, the average of mean score across all 41 product categories is 2.45 for Caucasians and 2.56 for African-Americans. This suggests African Americans may be more receptive to type of learning experience.

### **Possible Influence of Age on Response**

Respondents were asked to self-report their age, which allows analysis of group differences between age groups. Age categories were collapsed into two groups: (1) 24 years and younger; and (2) 25 years and older. A t-test is used to compare mean responses for each product category for these two age groups. Differences are evaluated at a p-value of less than 0.05. Mean responses for these two age groups are presented in **Table 5a**. The data presentation is simplified in **Table 5b**.

Table 5a: Interest by Age ( $\alpha = 0.05$  Level)

Product Category	24 and younger Mean (Std. Dev.) n = 626	25 and older Mean (Std. Dev.) n = 46	Significance
Agriculture	1.80 (1.09)	2.33 (1.35)	.012*
Aircraft	2.52 (1.39)	3.02 (1.44)	.030*
Athletic Equipment	2.87 (1.42)	3.28 (1.28)	.034*
Automobiles	3.01 (1.34)	3.50 (1.28)	.023*
Auto parts	2.37 (1.34)	2.78 (1.31)	.053
Tires	2.05 (1.21)	2.72 (1.29)	.002*
Beverages	3.11 (1.27)	2.83 (1.20)	.150
Alcohol	3.47 (1.32)	2.83 (1.45)	.007*
Building Supplies	2.11 (1.21)	2.91 (1.36)	.000*
Candles	2.37 (1.32)	2.48 (1.34)	.617
Carpet	1.93 (1.11)	2.40 (1.23)	.016*
Cloth Weaving	2.13 (1.27)	2.46 (1.31)	.100
Clothing/Garments	2.92 (1.42)	2.83 (1.34)	.566
Communications	3.07 (1.39)	3.13 (1.31)	.991
Computers	2.58 (1.37)	3.09 (1.23)	.013*
Electronics	2.92 (1.40)	3.24 (1.18)	.111
Entertainment	3.24 (1.35)	3.24 (1.21)	.879
Eyewear	2.46 (1.30)	2.56 (1.27)	.696
Food	3.19 (1.39)	3.14 (1.42)	.710
Furniture	2.30 (1.21)	2.71 (1.27)	.035*
Glass	2.53 (1.32)	2.71 (1.24)	.265
Tools	2.02 (1.18)	2.57 (1.38)	.010*
Home Fixtures	2.00 (1.17)	2.70 (1.41)	.003*
Home Furnishing	2.09 (1.20)	2.48 (1.22)	.042*
Appliances	2.06 (1.18)	2.73 (1.17)	.001*
Machining	1.87 (1.13)	2.24 (1.18)	.042*
Metal Crafts	2.03 (1.19)	2.46 (1.30)	.027*
Mining	1.99 (1.18)	2.56 (1.41)	.009*
Modular Homes	2.08 (1.22)	2.62 (1.39)	.014*
Paper	2.09 (1.20)	2.41 (1.22)	.118
Personal Products	2.39 (1.34)	2.35 (1.22)	.781
Pharmaceuticals	2.69 (1.33)	3.09 (1.36)	.071
Photography	2.92 (1.39)	3.02 (1.36)	.664
Plastic	2.13 (1.18)	2.49 (1.27)	.064
Pottery	2.49 (1.35)	2.61 (1.41)	.547
Power Generation	2.25 (1.33)	2.80 (1.46)	.013*
Printing	2.57 (1.37)	2.70 (1.28)	.637
Recreational Vehicles	2.67 (1.37)	3.02 (1.32)	.100
Steel	2.66 (1.38)	2.57 (1.27)	.848
Toys	2.25 (1.37)	2.89 (1.40)	.007*
Warehousing	1.93 (1.18)	2.59 (1.39)	.002*

**Table 5b: Simplified Presentation of Interest by Age**

<p style="text-align: center;"><b>Greater Interest Younger Respondents Ages 24 and Younger</b></p>	<p style="text-align: center;"><b>Greater Interest among Older Respondents Ages 25 and Older</b></p>
<ul style="list-style-type: none"> <li>• Alcohol</li> </ul>	<ul style="list-style-type: none"> <li>• Agriculture</li> <li>• Aircraft</li> <li>• Athletic Equipment</li> <li>• Automobiles</li> <li>• Tires</li> <li>• Building Supplies</li> <li>• Carpet</li> <li>• Computers</li> <li>• Furniture</li> <li>• Tools</li> <li>• Home Fixtures</li> <li>• Home Furnishings</li> <li>• Appliances</li> <li>• Machining</li> <li>• Metal Crafts</li> <li>• Mining</li> <li>• Modular Homes</li> <li>• Power Generation</li> <li>• Toys</li> <li>• Warehousing</li> </ul>

As illustrated in Table 5b, statistically significant differences were found in 21 product categories (or, 51% of those categories studied). Interestingly, 20 of the same 21 variables (or, 95% of categories where differences were identified) showing significant differences reveal larger average values for the older age group. (The variable of greater interest to younger respondents ... Alcohol). This implies that, in general, older respondents are more likely interested in this form of tourism as an educational tool than their younger counterparts. However, caution must be used given the small number of respondents in the cells analyzed.

The bulk of these results can be interpreted in light of the family life-cycle concept, which predicts changes in product consumption at various stages in one's family and family lifestyle. For example, individuals in the young adult stage would not have a demand for baby furniture. However, those in the parents of younger children stage of the family life-cycle would have a demand for baby furniture. We can assume that the older respondents in the sample are more likely than their younger counterparts to be married, have children, and own their homes. As such, their demand for (and subsequent interest in) products should reflect these differences. Most of the significant differences between the two groups support this conclusion. For example, the older group was more interested in home fixtures, home furnishings, household appliances, lawn and garden equipment, building supplies, carpets and rugs, hand tools, metal crafts, and pottery and china.



## Discussion

### Conclusions

Varying levels of interest in witnessing the production processes of the 41 product categories evaluated in this study are apparent. While a number of intriguing relationships are exposed in this study, the stereotypical findings based on gender were the most unexpected. While one may postulate that sex roles have become more unisex in recent years, these results indicate some stereotypical sex roles continue to exist to some degree. Twenty-nine of the 41 variables had statistically significant differences based on gender. However, we do see evidence of disappearing sex roles when we examine the variables that were not statistically different. For example, there were no differences between males and females regarding some stereotypical male products such as alcoholic beverages or communications media. Likewise, these differences were not manifested in some stereotypical female products such as carpet, furniture, and home furnishings.

Another notable finding refers to the apparent support for the family life-cycle concept. A consumer's demand for (and interest in) products changes as their family circumstances change. Therefore, the older respondents illustrated more interest in products associated with the latter stages of the life-cycle than their younger counterparts. Additionally, the older group showed stronger interest towards the majority of the tested variables. This indicates that older students are more likely to receive greater benefits from this teaching tool. The information by race was mixed with most of the differences explained by consumer purchasing patterns. Additionally, African Americans showed greater interest in variables examined indicating a generally more positive feeling towards Consumer Experience Tourism and the potential usefulness of this teaching tool for that group.

### Limitations

The focus of this work is to identify interest levels in product categories found in *Consumer Experience Tourism* sites among current students in Business and Economics. The results of this study may not be applicable to other segments of the population. Differences in interest levels were identified in this study. These differences may or may not hold true for all market segments. Further, it is recognized that instructors may have to satisfice when selecting locations for plant tours simply by looking at the availability of such production facilities in their marketplace. So, for example, students may want to see computer production but there's a concentration of carpet and textile manufacturing in their region. This research does give instructors guidance when choosing among the options in their particular service area or community.

## Implications

It is understood that students learn better and retain more when studying information that genuinely interests them. This study evaluates student interest in witnessing the production process of a variety of products. Business educators are encouraged to use these results as they plan college-sponsored field trips to supplement their classroom activities. For instance, those with a higher number of female students should consider those products of greatest interest to their audience. Or, those at historically black colleges or serving a large number of non-traditional students should similarly select destinations most relevant to their audience.

Business educators are challenged daily to provide fresh ideas in the classroom and to use new methods to stimulate learning. A greater use of Consumer Experience Tourism by business educators provides one such opportunity to do so. It is hoped the results presented here spur Business educators to more fully embrace this under-utilized resource to promote active student learning.

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