Consumer Decision-Making Styles for Sport Apparel: Gender Comparisons between College Consumers

by Sungwon Bae and John Miller

Abstract
The purpose of this study was to identify the decision-making styles of college students for sports apparel. Modifying the Consumer Style Inventory (CSI) developed by Sproles and Kendall (1986), a quantitative research design was developed to analyze the effect of seven factors. Eight-hundred and twenty-two subjects composed of 376 male and 446 female college students enrolled at three public universities. The results indicated that male and female college-aged consumers had different decision-making styles in relation to fashion, impulse, and brand consciousness. There were, however, no statistically significant differences between college classifications or interactions between gender and college classifications.

Consumer Decision-Making Styles for Sport Apparel: Gender Comparisons between College Consumers
It has been proposed that consumers often display consistent decision-making styles to guide their decision making when purchasing items (Darden & Ashton, 1975; Darian, 1987; Durvasula, Lyonski, & Andrews, 1993; Korgaonkar, 1981; McDonald, 1993; Stone, 1954). Stone (1954) pioneered shopping orientations of consumers by employing a typology of shopping styles. The results of this study recognized the following separate shopping orientations: (1) the economic shopper, (2) the personalizing shopper, (3) the ethical shopper, and (4) the apathetic shopper. Although different products were used, other studies supported these orientations (Darden & Ashton, 1975; Moschis, 1981; Westbrook & Black, 1985). Campbell (1997) suggested that males have a different ideology from females regarding the perception of effective shopping behavior. Specifically, Campbell put forth that the perception stemmed from an “instrumental versus expressive dichotomy”. In this dichotomy, males view shopping as a needs driven and purchase motivated activity, whereas females perceive it as enjoyable relating to satisfying wants and desires.

Male and female consumers also manifest different information processing strategies by demonstrating different consumer behaviors relative to advertised products (Barbara, Laroche, Sadd, Cleveland, & Browne, 2000). Generally, female consumers make greater efforts in attempting to comprehensively analyze products and information, whereas male consumers do not undertake a comprehensive processing of information (Barbara, et al., 2000). Even though women and men tend to select the same products, they frequently spend different amounts of time actually shopping and actively searching for information because they hold different attitudes towards shopping (McDonald, 1993; Zeithaml, 1985). During shopping, female consumers are more dominant than males. Buttle (1992) emphasized that the majority of female consumers focus on family products, such as clothing and groceries. Male consumers, however, are considered “special” shoppers, involved in purchasing insurance, camping gear, and mechanical goods (Wilson, 1992). Additionally, while males tend to spend less time shopping than women, they have been shown to spend more money than females (Cody, Seiter, & Montagne-Miller, 1995; Fischer & Arnold, 1990). While, investigations into compulsive shopping tendencies have reported that females are more likely to exhibit that characteristic (Dittmar & Drury, 2000; Roberts, 1998), other studies have reported that women spend more time studying both general and specific informational searches but act more in the specific than the general manner (Fischer & Arnold, 1990). Finally, male consumers were also found to consider fewer sources of information in relation to shopping, tended to directly approach salesclerks for product information and believed that the brand name served as a replacement for detailed product information (Barbara, et al., 2000).

Purpose of the Study
Recent research has indicated that the sport business industry has been capable of generating more than $210 billion per year in the United States (Shank, 2009). In response to the tremendous growth, sport companies have been focusing on consumers’ patterns of sport apparel consumption (Sporting Goods Manufacturers Association, 2006). However, little attention has been given to as to whether decision-making styles are unique to each gender in purchasing sport apparel, even though this could be of great interest to marketers.

The purpose of this study was to apply the Consumer Styles Inventory developed by Sproles and Kendall (1986) to examine specific shopping styles involving athletic apparel and to analyze specific shopping pattern differences between male and female college consumers in the United States. As the previous evidence indicates there are differences between male and female shopping behavior. As a result, in order to develop specific target market segmentation in the sport market, specific shopping pattern differences of gender were the focus of this study. Specifically, the researchers posit the following three items:

There will be significant gender-specific shopping pattern differences for sports apparel shopping in brand, quality, recreation, confusion, fashion, impulse, and price consciousness.

There will be significant college classification differences for sports apparel shopping in brand, quality, recreation, confusion, fashion, impulse, and price consciousness.

There will be significant interactions exist between gender, and college age/rank classification regarding sports apparel shopping.

Consumer Styles Inventory
Sproles and Kendall (1986) used the results from prior investigations (Lastovick, 1982; Maynes, 1976; Moschis, 1976; Westbrook & Black, 1985) to develop the Consumer Styles Inventory.
The CSI recognizes eight basic consumer decision-making characteristics, each of which autonomously signified an important approach to consumption. The eight characteristics were identified as: (1) value for money/price consciousness; (2) perfectionist/high-quality consciousness; (3) brand consciousness; (4) novelty/fashion consciousness; (5) habitual/brand-loyal orientation; (6) recreational shopping consciousness; (7) impulsiveness/carelessness; and (8) confusion from overchoice (see Table 1).

<table>
<thead>
<tr>
<th>Decision-Making Styles — Sproles &amp; Kendall (1986)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Brand consciousness</td>
<td>Consumers tend to relate price with quality as well as preferring well-known, advertised brands.</td>
</tr>
<tr>
<td>2. Quality/Perfectionism</td>
<td>Consumers do not compromise with being 'good enough'.</td>
</tr>
<tr>
<td>3. Recreational shopping consciousness</td>
<td>Consumers view shopping as enjoyable and stimulating.</td>
</tr>
<tr>
<td>4. Confused by overchoice</td>
<td>Consumers with this experience information overload as well as possessing a dearth of confidence and cannot manage the available choices.</td>
</tr>
<tr>
<td>5. Impulsive/careless</td>
<td>Consumers do not plan their shopping or amount they may spend after which regret may occur.</td>
</tr>
<tr>
<td>6. Price/Value consciousness</td>
<td>Consumers are aware of sale prices and attempt to get the best deal for the money.</td>
</tr>
<tr>
<td>7. Novelty/fashion consciousness</td>
<td>Consumers look for new, innovative, products and fashions.</td>
</tr>
<tr>
<td>8. Habitual/brand-loyal</td>
<td>Consumers tend to shop at the same store and purchase the same brands consistently.</td>
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</table>

The utilization of the CSI has been shown to be successful in other apparel buying studies (Hafstrom, Chae, & Chung, 1992; Mitchell & Bates, 1998; Fan & Xiao, 1998). Using the CSI, as developed by Sproles and Kendall (1986), Hafstrom, et al. (1992) confirmed seven of eight factors representing dimensions of consumer decision making. The only factor that was not confirmed was "novelty-fashion consciousness". To which the investigators credited this finding to a potential connection between brand and fashion consciousness among Korean consumers. However, Hiu, Siu, Wang, and Chang (2001) reported that brand conscious and novelty-fashion conscious were comparatively constant among Chinese shoppers.

Some previous studies have applied the CSI to investigate decision-making differences between genders. One investigation used the CSI to categorize Generation Y women into the following five discrete decision-making factions: recreational quality seekers, recreational discount seekers, trend setting loyal, shopping and fashion uninterested, and confused time/money conserving (Bakewell & Mitchell, 2003). In a subsequent study, Bakewell and Mitchell (2004) reported that although all of the CSI traits and four others were uncovered in male consumers, only three of the styles scored an alpha rating of .60 or greater. These styles were brand consciousness, novelty/fashion consciousness, and confused by overchoice. Moreover, because the male population also scored relatively low in recreation shopping consciousness and impulse, the investigators suggested that decision-making styles are different between men and women. Mitchell and Walsh (2004) used an exploratory principal components analysis employing a varimax rotation to classify items into a core set of male and female decision-making characteristics. Specifically, the authors reported that brand consciousness, confused by overchoice, impulsiveness, and perfectionism were general factors for both genders. However, the investigators reported that differences between the genders did exist. For example, males exhibited the traits of price consciousness and satisfying, enjoyment seeking while women were more novelty-fashion conscious and recreational shopping consciousness.

Method

Participants

The samples of this study were 900 undergraduate college students enrolled at three public universities in the southeastern region of the United States during a recent spring semester. At the end of the semester, the students were asked to voluntarily complete the questionnaire. They were instructed not to do so if they had completed the questionnaire in an earlier class in order to avoid redundancy of the results. Of the 900 college students, 822 completed the questionnaire for survey return rate of 91%. A breakdown of the population by gender consisted of 376 (47%) male and 446 (53%) female college students. Moreover, a breakdown by academic classification resulted in 136 freshmen (16.5%), 245 sophomores (29.8%), 228 juniors (27.7%), and 213 seniors (25.9%) taking part in the study.

Instrument

The investigators developed a 36 item questionnaire consisting of two sections. The first section included nine closed questions that provided data concerning the demographics of respondents. Specifically, the inquired demographics were gender, college classification, shopping frequency, shopping day, shopping hour, store preference, shopping preference, shopping companion, and brand preference.

The second section consisted of a modified 27 five-point Likert scale (1= Strongly Disagree; 2= Disagree; 3= Neutral; 4= Agree; 5= Strongly Agree) items relating to consumer decision-making styles from a previous study (Sproles & Kendall, 1986). For example, instead of stating "Well-known brands are best for me", the investigators re-phrased it as “I choose the well-known, national, or designer brands of sports apparel” or instead of “I buy as much as possible at sale prices” was re-phrased as “I buy as much sports apparel as possible at sale prices”. As such, the questionnaire modifications applied directly to sport apparel to measure different shopping orientations on seven factors: brand, quality, recreational, confusion, impulse, fashion, and price consciousness.

A Chronbach’s alpha for reliability was conducted for each factor in this study. The Cronbach’s alpha coefficients for factors 1 through 6 were between .66 and .91, indicating satisfactory levels of reliability (see Table 2). However, factor 7 showed low reliability with the alpha coefficient .45, indicating an unsatisfactory level.
of reliability on consumer shopping characteristics. Even though factor 7 resulted in low reliability, it was determined that the factor could be used in the test of the shopping characteristic because impulsive characteristics have marginal reliability. This reflects the psychological nature of impulsiveness and the relative youth of the subjects (Sproles & Kendall, 1986).

### Table 2. Factor Loadings and Reliability of Each Factor

<table>
<thead>
<tr>
<th>Factor Loadings and Reliability</th>
<th>Factor Loading</th>
<th>Reliability</th>
</tr>
</thead>
</table>

**Brand consciousness**
1. I choose the well-known, national, or designer brands of sport apparel  .83
2. I usually choose expensive brands of sport apparel  .83
3. I think that the higher price of the sport apparel product, the better the quality  .85
4. I prefer buying the best-selling sports apparel product  .84
5. Advertised athletic clothing displayed in window or catalog is usually a good choice  .85
6. I buy my favorite sports apparel brands over and over  .86 .87

**Quality consciousness**
1. When it comes to purchasing sports apparel, I try to get the highest quality  .90
2. I usually try to buy the best quality sports apparel  .91
3. I make a special effort to choose the best quality sports apparel  .90
4. My expectations for sports apparel I buy are very high  .93 .91

**Recreation consciousness**
1. I shop for sports apparel just for fun  .81
2. Going shopping for sports apparel is one of the fun activities in my life  .80
3. I do my sports apparel shopping quickly  .83
4. I don’t waste my time just shopping for sports apparel  .83
5. Shopping for sports apparel is not a pleasurable activity  .83 .85

**Confusion consciousness**
1. Sometimes, it’s hard to choose which store to shop for sports apparel  .62
2. All of the information I get on different sports apparel confuses me  .63
3. The more I learn about sports apparel, the harder it seems to choose the best  .76 .76

**Impulse consciousness**
1. I am impulsive when I purchase sports apparel  .39
2. I take the time to shop carefully for sports apparel best buys  .28
3. I carefully look for damages on all sports apparel  .40 .45

**Price consciousness**
1. I buy as much sports apparel as possible at sale prices  .66
2. I save money as much as I can when shopping for sports apparel  .66 .66

**Fashion consciousness**
1. I usually keep my wardrobe up-to-date with the changing fashions of sports apparel  .69
2. Fashionable, attractive sports apparel is very important to me  .69
3. I usually have one or more outfits of the very latest sports apparel styles  .69
4. Nice department and specialty stores offer me the best sports apparel  .84 .79

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**Data Analysis**

A descriptive demographic analysis was needed to determine gender, academic classification, shopping frequency, shopping day, shopping hour, store preference, shopping information, shopping companion, and brand preference. To do so, the researchers employed a 2 (Gender) X 4 (Academic Classification) MANOVA to analyze if specific shopping pattern differences existed between male and female college-aged consumers. According to Thomas and Nelson (1996), the analysis of variance will maximally separate the levels of the independent variables when made in combination of seven dependent variables. Additionally, mean comparisons were performed to analyze which college classifications differed from the seven factors, depending on the significance of ANOVA results. Therefore, F ratio and p value were used in interpreting the statistically significant difference between male and female college students on each shopping factor. An alpha level of .05 was set to test the research questions.

**Results**

To analyze the results of each research question, multivariate and univariate tests were performed. The MANOVA results indicated that there was a statistically significant difference in gender (Wilk’s Lambda = .910, F (7, 820) = 11.394, p < .001). However, there was no statistically significant difference in college classifications (Wilk’s Lambda = .962, F (21, 2315) = 1.479, p = .074) and no interaction between gender and college classification (Wilk’s Lambda = .969, F (21, 2315) = 1.22, p = .223).

**Gender Differences of Sport Apparel Shopping Patterns**

To answer the first research question to identify male and female college-aged consumers’ different shopping patterns for sport apparel regarding brand, quality, recreation, confusion, fashion, impulse, and price consciousness, univariate ANOVA’s were conducted for each of the dependent variable. The results indicated that there were statistically significant differences between male and female college-aged consumers on quality ($F(1, 820) = 49.92, p < .05$), recreation ($F(1, 820) = 5.1, p < .05$), confusion ($F(1, 820) = 4.27, p < .05$), impulse ($F(1, 820) = 4.11, p < .05$), and brand consciousness ($F(1, 820) = 27.89, p < .05$) (see Table 3). However, there were no statistically significant differences relating to fashion and price consciousness.

**Comparison of Means between Gender**

### Table 3. Gender Differences of Sport Apparel Shopping Patterns

<table>
<thead>
<tr>
<th>Consciousness</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td>26.411</td>
<td>1</td>
<td>26.411</td>
<td>49.916***</td>
<td>.001</td>
</tr>
<tr>
<td>Recreation</td>
<td>1.146</td>
<td>1</td>
<td>1.146</td>
<td>5.097*</td>
<td>.024</td>
</tr>
<tr>
<td>Confusion</td>
<td>2.46</td>
<td>1</td>
<td>2.46</td>
<td>4.272*</td>
<td>.039</td>
</tr>
<tr>
<td>Fashion</td>
<td>1.836</td>
<td>1</td>
<td>1.836</td>
<td>1.921</td>
<td>.166</td>
</tr>
<tr>
<td>Impulse</td>
<td>1.397</td>
<td>1</td>
<td>1.397</td>
<td>4.113*</td>
<td>.043</td>
</tr>
<tr>
<td>Price</td>
<td>.153</td>
<td>1</td>
<td>.153</td>
<td>.247</td>
<td>.620</td>
</tr>
<tr>
<td>Brand</td>
<td>12.460</td>
<td>1</td>
<td>12.460</td>
<td>27.893***</td>
<td>.001</td>
</tr>
</tbody>
</table>

*Wilks’ Lambda=0.91; F=11.39, p=.000
*p<.05, **p<.01, ***p<.001
After finding significant differences in gender comparisons, all mean comparisons were performed. The results showed that female college-aged consumers manifested a greater tendency toward quality \((M=2.69, M=2.32)\), recreation \((M=3.04, M=2.97)\), confusion \((M=3.47, M=3.35)\), impulse \((M=2.81, M=2.72)\) and brand \((M=2.91, M=2.65)\) consciousnesses than male college-aged consumers (see Table 4).

<table>
<thead>
<tr>
<th>Consciousness</th>
<th>N</th>
<th>Mean</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td>Male</td>
<td>376</td>
<td>2.321*</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>446</td>
<td>2.691*</td>
</tr>
<tr>
<td>Recreation</td>
<td>Male</td>
<td>376</td>
<td>2.965*</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>446</td>
<td>3.042*</td>
</tr>
<tr>
<td>Confusion</td>
<td>Male</td>
<td>376</td>
<td>3.354*</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>446</td>
<td>3.467*</td>
</tr>
<tr>
<td>Fashion</td>
<td>Male</td>
<td>376</td>
<td>2.767</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>446</td>
<td>2.670</td>
</tr>
<tr>
<td>Impulse</td>
<td>Male</td>
<td>376</td>
<td>2.720*</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>446</td>
<td>2.805*</td>
</tr>
<tr>
<td>Price</td>
<td>Male</td>
<td>376</td>
<td>2.138</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>446</td>
<td>2.110</td>
</tr>
<tr>
<td>Brand</td>
<td>Male</td>
<td>376</td>
<td>2.653*</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>446</td>
<td>2.908*</td>
</tr>
</tbody>
</table>

*p<.05

**Discussion**

The premise of this study was to identify if gender-specific sport apparel shopping pattern differences existed between male and female college-aged consumers. The results revealed statistical differences between female college students who demonstrated a higher preponderance in the areas of quality, recreation, confusion, impulse, and brand consciousness than males. While consumers enjoy shopping as a leisure-time activity (Sproles & Kendall, 1986), female consumers may spend more time to be involved in information gathering and participate in a greater amount of impulsive purchasing (Fischer & Arnold, 1990). Female consumers have also been shown to desire high-priced brand because they tend to believe price and brand the major indicators of quality (Stijn, Osselaer, & Alba, 2000). Although female consumers are willing to spend more money to shop at the stores, they may need assistance with product purchases because they may spend a lot of time finding specific items as a previous study indicated that different brands, size, and colors make female consumers feel confused (Foxman, Muehling, & Berger, 1990).

In regards to fashion and price consciousness, no statistically significant differences were found between male and female college consumers. This result supports a prior investigation that revealed both men and women may pursue an awareness of new styles, and changing fashions, and attractive styling as well as desire to buy something exciting and trendy (Sproles & Kendall, 1986). Additionally, different shopping patterns have been shown to exist between genders were affected by culture, sex roles, economic situations, and environments (Best & Williams, 1997; Darley & Smith, 1995; Fan & Xiao, 1998; Walsh et al., 2001). Therefore, sport apparel companies should more carefully study cultural backgrounds, gender characteristics, and environmental differences before developing marketing strategies.

**Research Limitations**

As in any research study limitations exist. First, the responses could reflect a measure of bias on behalf of the student. Further it can only be assumed that the individuals studied responded in a truthful and honest fashion. Additionally, due to the voluntary nature of the investigation some students that did not participate in the study may have in fact possessed perceptions of multi-student projects but simply chose not to disclose it. Lastly, because this study used a random sample rather than a random sample, these findings may not be generalized to a greater population.

**Recommendations for Future Study**

Based on the results of this study, the following recommendations are offered primarily to sport apparel marketers and retailers. First, if sport apparel marketers and retailers use the results of this study in a “real world” setting, subtle differences may exist. It is, therefore, recommended that randomly selected diverse and geographical samples should be used to find specific shopping patterns relating to each sport product. Second, this study used a revised instrument. A more powerful questionnaire, with a greater number of shopping-consciousness factors relating to specific sport apparel types, should be developed. Third, this study compared male and female college-aged consumers in relation to shopping consciousness for sports apparel. As shown in the findings, different male and female consumers had different shopping characteristics for sport apparel. As sports continue to expand, many consumers need, and in some cases simply want, to purchase international sport apparel brands. It is, therefore, recommended that more cross-cultural studies, addressing shopping-pattern differences among countries, should be conducted. Fourth, this study focused on shopping characteristics for sport apparel. There are many kinds of items under the heading of sport apparel; therefore, it is recommended that questions be developed in relation to shopping characteristics associated with specific sport apparel types, such as shoes or golf clubs. Fifth, the choice of population is very important when sport apparel marketers attempt to sell products, because different populations exhibit different shopping styles. It is, therefore, recommended that studies examining various characteristics, such as religion, race, job status, and income level, be conducted in relation to specific target markets. Lastly, the number of Internet users interested in sport products has grown rapidly. Finding an Internet shopper’s characteristics is very important when developing marketing strategies and marketing products, considering the growth of e-commerce. It is, therefore, recommended that a study of Internet consumers’ shopping characteristics be conducted in the near future.

**Conclusion**

The findings of this study have implications for developing consumer education in the United States. The shopping consciousnesses are important concepts in consumer decision-making styles; therefore, this study may be used to develop better consumer deci-
ision-making style guidelines in consumer education. The study may also be used as a conceptual background for future studies relating to the shopping behaviors of athletic apparel consumers as well as a source for more detailed information when educating sport management students about consumer shopping behaviors, especially in relation to athletic apparel. According to the results of this study, similarities and differences between college-aged consumers exist. This information may be used to assist students, in consumer economics or marketing classes, to better understand the commonalities and differences of consumer behavior emerging between the sexes.

A study of consumer decision-making styles is also important area in developing sport marketing strategy since it appears that interest in sports products will continue its’ tremendously rapid growth. Because of this unrelenting escalation, information about consumers’ decision-making styles can be useful for corporations when targeting college-aged consumers. This should be of particular interest to sport marketing firms as college-aged consumers are emerging as knowledgeable trendsetters that have an annual estimated spending power of $250 billion (Mader, 2002).

Profiling college consumers by combining their decision-making styles and demographic information can provide more meaningful ways to identify and understand various consumer segments and to target each segment with more focused marketing strategies. According to this study, female college-aged consumers were more affected by recreation, confusion, and impulse consciousnesses than male college-aged consumers. Due to the diversity of brands displayed in sport apparel stores, on television and in print magazines, most consumers may tend to be confused by overchoice. Moreover, due to the complexities of store arrangement and obscure pricing practices, consumers may be confused when selecting sport products. Sport marketers and retailers should, therefore, be mindful of creating unique shopping environments and more user-friendly customer services so that college-aged consumers can achieve a level of shopping comfort that assures a return to the store.

Female consumers were also found to be more concerned with brand and quality. Due to this sensitivity to brand, sport apparel marketers need to develop diverse and reasonable price ranges, with high quality products, to better match the expectations of female consumers. In targeting these consumers, sport apparel marketers should focus on strongly fashionable and functional styles, especially using sport magazines and television advertising, to better appeal to this demographic.

Sport apparel marketers can position their brands as high-quality and reputable through the use of word of mouth, fashion magazines, advertisement on television, and special weekend promotions, to encourage college-aged consumers to purchase more sport apparel. Moreover, they can develop joint ventures with local companies so that they can emphasize more promotional programs. However, sport apparel companies must, therefore, learn more about the distinctive characteristics of consumers, especially the college-aged consumers.

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References


