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Anthony G. Lee

Saint John Fisher University, anthonylee020@gmail.com

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Factors that Influence Sporting Equipment Purchases

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Factors that Influence Sporting Equipment Purchases

Anthony Lee

St. John Fisher College

Abstract

In order for companies to exercise growth, consumer research is conducted to better understand their target market. The company's primary objective is to categorize the value of their investment. The purpose of this research was to identify the influential factors in the purchasing decision of sporting equipment among college students attending a small, private, and Division III institution. 120 undergraduate students from St. John Fisher College were surveyed and varied in gender and athletic status. The participants in this study reported that while a small majority preferred shopping in-store, there was no significant difference in the shopping pattern within participant demographic groupings. Footwear was the largest category of want and need for participants in this study. Some differences in needed and wanted items for purchase were uncovered through statistical analysis. Headwear and gloves were significant differences observed by gender. Stakeholders will find value in this research as it can develop a segmented market targeting colleges within a particular geographic region.

Keywords: sporting equipment, college students, consumers

Factors that Influence Sporting Equipment Purchases

Colleges across the United States enroll students of many diverse backgrounds. Very noticeable characteristics of college campuses include differences in gender, age, athletic involvement and particularly true in smaller campuses, on vs. off campus living. Given the diversity of lifestyles on these campuses, this segment of consumers is a good representation of society as a whole.

The college student market is tapped into by many companies that can directly relate to the college student experience. Examples are Target and Walmart, as they target college students with back-to-school promotional events. What is missing is companies missing the opportunity to engage with college students during the school year. A unique scenario is present as specialty retail industry companies, such as Nike, Under Armour, Dick's Sporting Goods, and Academy Sports & Outdoors, have the ability of being involved constantly in the college student's career. Personal fitness and intercollegiate athletics are activities that remain continuous across all seasons during the school year. Instead of focusing on a specific season, the specialty retail industry has opportunities to grow and gain steady market share relative to the life of a fitness enthusiast college student and student-athletes.

Given the year-round presence with athletics and fitness, these companies should be encouraged to increase their involvement with college campuses. As the college student market is researched, focus is drawn towards overall consumption of technology and merchandise. Understanding the consumer in the market helps dictate how companies within the retail industry can negatively or positively impact the business. Most college campuses contain a National Collegiate Athletic Association (NCAA) division sport, club sports, or just general athletic recreational facilities. This gives athletic specific companies to become more prominent on

college campuses. In bigger, NCAA Division I institutions contains brands like Nike, Under Armour, and Adidas through contracts. On the other end, NCAA Division III institutions are not specialized in a particular brand but athletic teams purchase a particular brand through vendors. With much focus on academics in Division III institutions, athletics is just as important. In circumstances where companies will be looking to gain subtle market share, there is potential to expand and target college students at smaller, NCAA Division III institutions.

Companies will benefit from understanding the consumer by evaluating the sporting equipment that is being purchased, what kind of athlete is purchasing, what demographics do the students possess, while also examining their shopping experience. In the future, this information will be useful to coordinate opportunities in scholarship and licensing with the institution while also segmenting stores based on the consumer research of the area.

Literature Review

Consumer Behavior

The consumer purchasing decision builds a foundation to explore specific demographics and their differentiating behaviors. Carpenter and Fairhurst (2005) offer that consumer behavior is based off the shopping experience. In addition, the consumer behavior is closely linked to emotions. These emotions can be dictated based on the type of shopper the consumer is. Consumers' shopping benefits are either utilitarian or hedonic. Utilitarian shoppers need to find the right product at the right time and place whereas hedonic shoppers value excitement or entertainment (Carpenter & Fairhurst, 2005). Ainsworth and Foster (2016) explain that consumers feel an emotional reward when shopping in an environment that is comfortable. Familiarity is assigned to comfort through the retailers attempt to provide music, color, and layouts that consumers will gain positive attitudes from (Ainsworth & Foster, 2016). Depending

on the type of shopper, retailers should be on the hunt to understand their consumer and develop a balance to cater to both types of shoppers (Carpenter & Fairhurst, 2005). In the study conducted by Ainsworth and Foster (2016), they make a conclusion on familiarity by saying "... by decreasing anxiety and contributing to the consumer's sense of ease, familiar environments facilitates both functional and emotional benefits for shoppers" (32). To this point, the different shoppers have different needs.

Online vs brick and mortar.

Consumer behavior can also differ through the medium in which the consumer decides to purchase. The two separate mediums consumers have the option of purchasing through are online and brick-and-mortar. Schulz, Dority, & Schulz (2015) state that online shopping is an increasing trend in consumers. The shopping experience online influences the purchasing decision. Retailers merchandise their product in a similar manner to give the consumer an identical experience as they would in brick-and-mortar locations (Shulz, et al., 2015). Brown, Durrett, & Wetherbe (2004) conclude that for companies to sell products online they must provide an added value to the online purchase experience. Park and Lennon (2010) state that online purchases decline with exposure of unknown brands (Park & Lennon, 2010). Online retailers in this situation will need to create an image to compete in the existing marketplace against retailers with multiple channels of distribution (Park & Lennon, 2010). Another aspect that consumers value in online purchases is the ability to communicate with consumers that are making similar purchases and learning more about a produce prior to making the purchase (Browne, et al., 2004). Park and Lennon (2010) suggest through their study that the intention to purchase online is influenced by brand recognition.

Brand loyalty.

Trust in brand loyalty is established by the product's ability to perform to the expectations of the consumer (Noble, et al., 2009). Carpenter and Fairhurst (2005) put the responsibility onto the brand to meet the expectations of the consumer because it leads to customer satisfaction. With this, customers are therefore encouraged to engage more with the product or brand (Carpenter & Fairhurst, 2005). Park and Lennon (2010) explain that the brand is an integral part of the intention to purchase because of trust. Overall, the brand will need to carry a perception for the consumer that remains constant across all messages (Park & Lennon, 2010). Attitudinal loyalty connects the consumer to the brand based off their experience with the brand (Carpenter & Fairhurst, 2005). The product and brand's impact is observed through the consumer's shopping experience (Carpenter & Fairhurst, 2005). In the study by Park and Lennon (2010), consumers were found to use a perceived notion of the value of a brand or product in their purchase decision. Having this consistent message will allow for the consumers and even the marketplace to develop the mindset of brand familiarity (Park & Lennon, 2010).

Factors That Influence Consumption

Price.

In addition to the overall influences of a consumer's decision, price is a key factor that should also be evaluated. Companies have promotions to entice consumers to buy their brand, potentially building loyalty (Park & Lennon, 2010). Chandrashekar (2012) expressed that there is a difference between the level of the customer's involvement and the willingness to purchase price. High involvement categorizes the consumer as understanding the product information (Chandrashekar, 2012). Highly involved consumers will seek out information to help gauge the price to quality whereas the lower involved consumers will look to other prices to determine an estimated retail price (Chandrashekar, 2012). This can impact the consumers'

willingness to purchase because the difference in perspectives are influenced by high research versus low research. The higher the research the more likely the consumer can add credibility to the purchase whereas the lower research in a product makes observant comparisons to determine the willingness to purchase. The level of involvement can translate to college students by their efforts to examine the cost-benefit analysis, a “built-to-last”/investment, accomplishment, and connectedness (Noble, et al., 2009). These analyses help identify the reference price consumers utilizing during the purchasing decision. The main idea is finding the tradeoff given the price of the product relative to the quality of it (Noble, et al., 2009). Positive feedback is received from having a price promotion as it can influence an intention to purchase (Park & Lennon, 2010). As consumers consider the price point given the quality of the brand or product in their purchasing decision, it is common to experience differences based on gender.

Gender differences in purchasing.

Arnaudovska, Bankston, Simurkova, and Budden (2010) insist that men are different shoppers than women. Women view shopping as enjoyable and satisfying whereas men are categorized as the financial support in the shopping experience (Arnaudovska, et al, 2010). Comparing these shopping experiences, we also see a difference in shopping well-being associated with the activity. Hedhli, Zourring, and Chebat (2016) explain that female consumers are more likely to be involved with shopping for its pleasure and male consumers associate shopping with task. Within this difference, women have a pattern of shopping frequently with other people making it more entertaining as they would like (Arnaudovska, et al., 2010). Evaluating the pattern for men, it's observed that they are less frequent shoppers than women (Arnaudovska, et al., 2010). In reference to sporting apparel, women are more concerned in the areas of quality, recreation, impulse, and brand consciousness (Bae & Miller, 2009). This

supports the assumption that women spend more time considering the specific information about the product (Bae & Miller, 2009). Relating to the shopping difference, women support their brand and product consciousness by asking questions, and gathering as much information as possible prior to formally deciding to make a purchase (Bae & Miller, 2009). Although genders may react differently relative to their purchases, Bae and Miller (2009) mention that the male and female demographics react similar in being aware of the newest fashion styles and trends. Neither gender of consumers is sensitive to price but females consider quality more than males (Bae & Miller, 2009).

College Students' Purchasing Decisions

College students are a demographic that lies within the overall consumerism umbrella. The traditional consumer differs in purchasing behavior when compared to college students. Noble, Haytko, and Phillip (2009) use the Socialization Theory to help explain the way the younger generations consume. The Socialization Theory incorporates motivators to consume such as freedom, finding yourself, blending in/out, brand personality, fashion knowledge, value seeking, and comfort of brands. Freedom of the college student has an influence on their decision because they can make their own decisions regarding what they desire to purchase. This decision is contingent on not having the influence of their parents (Noble, et al., 2009). Per Noble, et al., freedom can describe the theme of finding yourself by saying, "...purchasing certain products or brands helps them find who they are without their parents' involvement..." (2009, p. 620). Given this ability, college student consumers are looking to build independence in discovery of who they are as a consumer (Noble, et al., 2009). Defining who you are also relates to how the brand correlates with your own self (Noble, et al., 2009). The products or brands carry a perception that consumers will choose based on its ability to fit with them (Noble, et al., 2009). As college

students begin the process of developing themselves and creating their own brand, the design and aesthetics of the product contribute to the students' identity and perceptions they wish to have. College students can also utilize their sporting equipment products merely due to the activity that the student is involved in. A practical example of equipment relative to the student's activity would be purchases of running shoes to successfully train for a marathon. In addition, college students begin to develop their own identity in college therefore challenging them to make the connection between their current life and life they wish to have. College students engage in specific brand consumption to bridge this gap (Noble, et al., 2009). Students who decide to purchase common brands may be doing so to fit in with a group or could be doing it because they truly prefer that brand or style. This independence of choice is challenged by pressure from social norms (Noble, et al., 2009).

Another theme that emerges of college student consumers is their ability to recognize fashion (Noble, et al., 2009). Anderton and Workman (1994) examine the impact the marketing of a product has on the determination to incorporate fashion. The way a product is marketed influences the purchasing decision for college student which is achieved by capturing their attention (Anderton & Workman, 1994). Visual representation relating to fashion videos are used to provide an increased awareness regarding the product's quality (Anderton & Workman, 1994). The more specific information that can be obtained through marketing of the product, the more likely the student is to purchase (Anderton & Workman, 1994). The usefulness of the specifications contributes to college students' ability to gain a sense of fashion (Noble, et al., 2009).

Like overall consumers, college students have an opinion on where they prefer to purchase their products. Arnaudovska, Bankston, Simukova, and Budden (2010) conducted a

study that evaluated the difference between college consumers and their patterns between brick and mortar purchases and online purchases. College students live in an environment where technology is continuously growing and becoming a part of their lives (Arnaudovska, et al, 2010). With that being said, it is assumed that online shopping would be of no surprise. The study conducted by Arnaudovska, et al. (2010) supported the notion that online shopping is a preference of the college students but most of the shopping is done in brick and mortar stores. College students value the online shopping experience due to the convenience and price difference (Arnaudovska, et al., 2010). Norum (2008) mention that the relevant variables that impact the college students' decision to make online purchases are parent's income, age, gender, and security of site. The correlation that exists between online purchases is with age (Norum, 2008). Surprisingly, the older generations are more likely to be shopping online than the anticipated technologically advanced younger generation (Norum, 2008). Another positive correlation that exists with online purchasing of college students is with the security of the site (Norum, 2008). The security of the online site links to the purchasing decision based off Ainsworth and Foster (2016), who communicate the importance comfort and familiarity have on the decision to purchase for consumers. Norum (2008) tells us that college students are more likely to purchase online based off their ability to recognize a secure website.

The various factors that influence the purchasing decision relate to a college student. The area that needs further consideration is the consumption of sporting equipment. Sporting equipment is defined as sporting goods that are used for sport or exercise. The purpose of this research is to identify and rank the consumer purchasing factors that influence a small, private college student's purchase decision for sporting equipment. This research aims to answer the following: (a) how are college students purchasing sporting equipment, (b) what factors shape

those purchasing behaviors, (c) how do these purchasing patterns differ among participants' demographics, and (d) how do the factors of influence vary among the participant demographics. This information is necessary to understand because it will aid sporting goods retailers gain insight on the purchasing behavior of college students. Not only will the retailers have an idea of their customers but college campus bookstores can also evaluate the behaviors behind their main priority, the students. The next step sporting goods retailers can take having this knowledge would be building a brand on individual campuses. This will be a strategic initiative by the company to gain market share while appealing to the audiences that are seen to be most common in purchasing sporting equipment.

Method

The research conducted is described as quantitative research as Jones (2015) supports that variables were measured and compliments comparison by examining the relationship that exist between these variables. The college student market seemingly is an uncommon market to examine regarding sporting goods equipment and therefore understanding the diversity on college campuses is valuable information worth gathering. In this study, participants communicated their experience with shopping for sporting goods equipment with anticipations that we can develop a foundation of knowledge to understand the consumer market of college students. This approach coincides with post-positivism. Post-positivism research paradigm is "...not possible to gain a truly objective understanding through measurements..." (Jones, 2015). Utilizing this approach supports the learning process by eliminating a two-answer, correct or incorrect, response (Jones, 2015). During this study, the data analyzed supports the finding of additional information about the college student population. This research is descriptive research

as it identifies the factors and observes trends based on participant demographics rather than explaining additional information to the purchasing behavior.

Participants

This study examines the purchasing behavior of sporting equipment among college students. A sample size of 120 college students was acquired from the small, private, Division III institution, St. John Fisher College. The sample was then stratified into categories based on gender and athletic status on campus. Within the 120 students, 41% of respondents were males while 59% were females. In addition, 46% of the students surveyed identified as participating in Division III athletics or club sports on campus contrary to the 54% that did not participate in on-campus organized athletics. The importance of the demographic categories emerges as previous studies have shown a difference in consumer behaviors between males and females. Bae & Miller (2005) support the incorporation of demographic information as it can become a more impactful way to “identify and understand various consumer segments and target each segment with more focused marketing strategies” (44). While Bae & Miller examine the differences in gender for overall consumption of sporting apparel, research can further be conducted to discover differences between gender regarding sporting equipment. The other category that is overlooked in research is how student-athletes and students participating in club sports differ not only in sporting goods, but overall consumerism.

Variables

Independent variables in this study become the supporting factors that help explain the purchasing behaviors of college students in sporting goods equipment. The independent variables that are researched in this study work pattern, discretionary income, the involvement in final purchases, gender, athletic status on campus, and the sport that is played. First, the work pattern

examined to understand whether participants have worked or not and if they have worked, what best describes their working pattern (working only in the summer, working only during the school year, or working both in the summer and during the school year). Based off the work pattern, discretionary income was important as a factor in sporting good purchases as it helps describe the amount of income that may be available to put towards sporting goods equipment. Discretionary income ranged from under \$50, to incremental increases of \$50 to above \$150. To summarize understanding the income flow of the participant, the involvement in the final purchase helped conceptualize the purchasing decision of sporting equipment. The final purchase is either funded solely by the participant or the participant has assistance from others (including, friends, family, neighbors, etc.). Measured using nominal scales, each of these variables outlined a specific grouping that participants categorized themselves to best describe their unique situation.

Another independent variable that is measured using nominal scales is the demographics of the participants. Participants chose to identify their gender as male or female, and athletic status on campus as student-athlete on a varsity, Division III, athletic program/recognized club sport, or not. The demographics contributed to this research because studies relating to gender differences, expressed the difference in consumerism behavior, but do not specifically make the connection to sporting goods equipment. As participants identify as a student-athlete, the sport that is played had an impact on researching the impression the sport had on the purchasing behavior.

As the independent variables gave context to the behaviors that occur when purchasing sporting goods equipment, the dependent variables in this study are the sporting equipment need and wants of the participants. The dependent variables are measured by the nominal scales.

Sporting equipment outlined within the need-based and/or want-based variables are footwear, apparel/clothing, gloves, headwear/headgear, equipment, and medical support. These variables are dependent on other factors that guided the college student's purchasing decisions.

This research contained variables that are categorized as independent and dependent. The variables in this segment are brand preference, brand preference reasons, shopping location, and shopping pattern. Nominal scales are used in all variables while brand preference reasoning and shopping pattern provided qualitative data. Brand preference examined whether college students had a preference of a brand or not. Brand preferred students used brand's design, performance perception, teammate influence, visual aesthetics, and price to explain their reasoning to preferring a brand. Independently brand preference is researched to establish a connection with the sporting equipment need and/or want. Dependently, independent factors exist that college students may consider when making brand preferred sporting goods purchases. The shopping location, in-store vs. online, created a foundation to understand the means relatable to the participants and furthermore, uncover themes associated to the equipment want/need. On the other variable can be dependent on factors given the accessibility. The last variable to fit both independent and dependent is the shopping pattern. The shopping pattern aimed to reveal the process college students engage in while shopping. The process can differ from immediately tending to the product in mind to allowing time to check out newness within the store or online prior to locating the product in mind. This variable also categorizes independent due to the variety of product offerings but categorizes dependent due to accessibility.

Data Collection Instrument

Data in this study was collected through an online Qualtrics survey (Appendix A). The survey contained 13 potential total questions. Questions throughout the survey prompted

additional questions based on response of previous questions. The survey begins with a question to weed out respondents that would not be helpful in this research. This weeding question simply asked if the respondent purchased sporting equipment for their personal sport or activity.

Respondents that responded No were directed to the end of the survey. The survey is blocked based on the following themes: equipment, assessing the need/want of various sporting goods product types and brand preference/reasoning; financial, assessing the work pattern, discretionary income, and involvement in final transaction; shopping experience, assessing where the participants are shopping and what their pattern is while shopping; and demographic, assessing the gender and athletic status on campus.

The first section of questions grouped on equipment contains both pre-coded questions and list questions. The list questions consisted of the sporting goods equipment product types and the reasons why the respondents have a brand preference. The brand preference reasoning questions used open and list questions, giving respondent the ability to respond in an alternative manner including the pre-determined choices. The following three sections discovering financial, shopping experience, and demographic contained pre-code questions. The last section on participant demographics used an open, filter question to inquire further the sport that is played should the respondent participate in a varsity, Division III athletic program or club sport.

Data Collection Procedure

The research process began with the construction of the Qualtrics survey that was distributed to the St. John Fisher College undergraduate population. Prior to the survey's distribution, pilot testing took place, utilizing 5 individuals, students and faculty, to assess the clarity and relevance to the research questions. Upon conclusion of pilot testing and revisions, the Qualtrics survey was distributed to the undergraduate student body at St. John Fisher

College. Students received an email indicating the scope of the research and information providing them details of the Qualtrics survey's length (Appendix B). Participants in this research voluntarily completed the survey and were allotted 2 weeks to complete the survey. The beginning question of the survey assessed the respondent's involvement in sporting equipment purchases (Appendix A). From here the sample examined in this research contained participants that have experience purchasing sporting equipment.

After the survey had official closed, the numerical data was exported from Qualtrics to Microsoft Excel. In Microsoft Excel, additional data organization occurred, ranking sporting needs and wants, separating list questions into separate yes/no values, analyzing qualitative data to assess emerging themes, and verifying coding of numerical values. Once the raw data had been organized to properly analyze the relative data, the Microsoft Excel data was inputted into the computer software Statistical Package for the Social Sciences (SPSS) for Windows. SPSS allows for data sets to be inputted to conduct various statistical test (Jones, 2015). In SPSS, numerical values pre-determined codes were paired with their corresponding values. Finally, the data in SPSS was prepared to begin the data analysis process.

Data Analysis Plan

Data analysis of this quantitative research incorporated the independent variables and dependent variables to direct focus to understanding the college student consumer and what factors are influential in the purchasing decision. This research's data presented descriptive statistics which aided in comparison between the participant demographics across the independent variables. To analyze how college students are purchasing sporting equipment frequency analyses were conducted by the shopping experience. Cross tabulations were used to gain a more specific understanding of the shopping experience within the participant

demographics. To analyze the factors that shape the purchasing behaviors of college students the dependent variables, sporting equipment need/want, were analyzed using frequency analysis to observe trends between the sporting equipment product type. Other variables analyzed based on trending were brand preference and the reasoning for brand preference.

To analyze how the influential factors in the purchasing decision differentiate among participants' demographics, inferential statistics measurements was used. A test of difference examined the samples to determine if a difference within the sample demographics occurred by chance or because of an independent variable (Jones, 2015). The test of difference used in this study was chi-squared test due to the primarily nominal data that was examined during this research. The chi-square test that were conducted examined the differences between gender and athletic status, independent of each other. Chi-square testing assessed the significance of the difference in the sporting goods equipment needs and/or wants relative to gender and then athletic status. Identical test will be conducted to explore differences in brand preferences, work pattern, discretionary income, involvement in final transactions, and shopping experience. Conducting chi-square testing addressed purchasing behavior patterns and factors of influence differentiations.

Results

This study examined the purchasing behaviors of 120 undergraduate students from St. John Fisher College. This sample is representative in gender; male and female, and athletic status; varsity/club sports athlete and non-varsity/club sports athlete. Of the 55 varsity/club sports athletes, 64% were male while 36% were female. Compared to the varsity/club sport athletes, 21% and 79%, respectively indicated the male and female non-varsity/club sport athletes that participated in this study.

After understanding the demographics of the sample, the research conducted outlined key insight of participants' work patterns, shopping, and purchasing behaviors. Male varsity/club sport athletes reported to shop for sporting equipment more online and in-store than female varsity/club sport athletes (see Table 1). In conjunction, female non-varsity/club sport athletes shopped less frequent online and in-stores than their varsity/club sports counterparts (see Table 1). Fifty-four percent of the males that shop online indicated that their shopping pattern is to go directly to the product in which they are looking to purchase. Commonly, females reported 55% of the online shoppers go directly to the product in mind. In-store shoppers for males informed that 57% will go directly to the product while 57% of female in-store shoppers will look around prior to engaging with their product of choice. Varsity/club sport athletes differ from non-varsity/club sport students by the online shoppers shop for the exact product they are looking for and the in-store shoppers browsing the new product selections (see Table 2). On the other hand, non-varsity/club sport athletes remain consistent through online and in-store means by shopping around the product selection before going to the product in mind (see Table 2). Table 3 shows the similar consumption between male, varsity/club sport athletes and non-varsity/club sport athletes against the differing female, varsity/club sport athletes and non-varsity/club sport athletes. Overall, 55% of the male participants will shop for sporting equipment with the intention of finding their product immediately, whereas females fluctuate based on varsity/club sport athletic status.

Discovering deeper into the product selection behavior, this research examined the sporting equipment needs versus the wants, brand preferences, and the purchase involved with the transaction. Ninety-three percent of the participants expressed that footwear is the higher need when engaging in athletics/fitness. Headwear, 25% of participants indicated that is not

much of a necessity in relationship to the other product types of sporting equipment. This trend remains constant for sporting equipment wants. Headwear is a sporting equipment that only 16% of the St. John Fisher College students found as a want while footwear was comprised of 63% of the students. Of the 120 students, 93% of the participants expressed that they have a brand preference. Within this brand preference, majority of the participants related having a brand preference because of the design (n=75) and the aesthetics (n=83) that the brand offers. Concluding the shaping factors of the purchasing decision, 56% indicated that they purchase their own sporting equipment, while 44% suggest that they receive assistance from others when purchasing their sporting equipment.

To determine the impact work patterns have on the purchasing behavior, this research reported statistics that helped understand the participants' working patterns and income flow. Of the 120 college students, 53% indicated that they work during both the summer and the school year and 42% stated that they work only during the summer. More specifically, 22 male varsity/club sport athletes, work only during the summer while for female varsity/club sport athletes 11 work during both summer and the school year. Male and female non-varsity/club sport students reported majority working during both the summer and the school year. Given the work patterns, the study revealed the top two discretionary income ranges; between \$51-\$100 (30%) and more than \$150 (31%). Nineteen varsity/club sport athletes fall into having discretionary income of more than \$150, whereas 21 non-varsity/club sport athletes ranged between \$51-\$100.

Participants in this study were examined to the degree of their differences among the variables. When exploring differences in sporting equipment needs, the need for gloves was significant between genders ($\chi^2=11.875$, $p<.001$) and between those who were varsity/club sport

athletes and those that were not ($\chi^2=14.026$, $p<.001$). Additionally, the need for headwear identified significance between the varsity/club sport athletes and non-varsity/club sport students ($\chi^2=4.060$, $p<.05$). All other categories of sporting good needs didn't show significant differences between genders or athlete status (see Table 4, for sporting equipment need differences). Shifting to wants of sporting goods, only two categories of differences emerged for gender and none for athlete status. There was a significant difference in gender and the wanting of specific gloves ($\chi^2=15.696$, $p<.001$) and the want of headwear ($\chi^2=4.657$, $p<.05$; see Table 5). Involved in the purchasing behavior, there was a significant difference between the varsity/club sport athletes and those that were not relating to a brand preference ($\chi^2=4.435$, $p<.05$). Although a difference in the brand preference, neither group of participants, gender and athletic status, showed a significance in reasoning for brand preference (see Table 6).

The researched conducted also explores additional variables that have an influence on the purchasing decision. The college students in this study reported that regarding work pattern there was a significant difference between males and females ($\chi^2(3)=9.443$, $p<.05$) and varsity/club sport athletes and non-varsity/club students ($\chi^2(3)=9.909$, $p<.05$; see Table 7). Although the working pattern difference existed, there was no significant difference between gender or athletic status in relation to discretionary income (see Table 8). Furthermore, this study examined the impact and difference of who is involved in the purchasing process. There was a significant difference between athletic gender ($\chi^2=4.435$, $p<.05$; see Table 9) while there is no significant difference between gender. Lastly, the participants expressed a significant difference in their shopping location to purchase between varsity/club sport athletes and non-varsity/club sport athletes ($\chi^2=8.347$, $p<.01$; see Table 10). Overall shopping experiences between the

demographic groupings did not show significant differences (see Table 11, for differences within shopping pattern).

Discussion

The focus of this research aimed to identify and evaluate the factors that influence college students in the purchasing decision of sporting equipment. Concluding this study, college students have varied in similarities and differences against the average consumer. One area this study accomplished the focus was understanding how college students are purchasing their sporting equipment. College students indicated that they are purchasing their sporting equipment more in brick-and-mortar locations than online. The participants in this sample supported Arnaudovska, et al., (2010) as their research concludes that college students prefer to shop online but ultimately end up doing most of their purchasing in brick-and-mortar locations. With the assumption that increased technology will lead to more online purchase of college students, we and infer that sporting equipment may be a specific purchase that consumers and/or college students would prefer to purchase inside of a store rather online. Participants that purchased sporting equipment online may have a comfort level with the product in which they are purchasing and continue to find the convenience of online shopping to play an influence in their purchasing decision. Alongside convenience of online shopping, brick-and-mortar locations can serve as more convenient given the time frame that is allowed. Should a student have an immediate need, the faster route would be to purchase in-store whereas a consumer with more time may be able to take the online route. Surprising though, with the way companies are becoming more competitive in the e-commerce field, this sample of students would recommend that companies invest in brick-and-mortar opposed to e-commerce. Once college students have found their way of purchasing sporting equipment, this study continued to understand how

college students are purchasing by examining their shopping pattern. Depending on the shopping location, college students had a different reaction to their shopping experience. Online shoppers are viewed to be more utilitarian shoppers as going immediately to the product is the intentions. The difference we see in the shopping experience is between males and females during the in-store experience. Males continue to be just as utilitarian in store as they were online, while females categorize as hedonic shoppers, enjoying the experiences and looking around prior to landing on their product of choice. Overall, male consumers and specifically male sporting equipment consumers, have similar shopping patterns – utilitarian. Along with the shopping experience, this study confirmed that college students pay attention to brands and have a brand preference when purchasing their sporting equipment. An assumption is made that the brand preference is an influence based on the sport or activity. Some brands are only for specific sports and/or activities, and therefore these college students would have a brand preference given their sport. In addition, Noble, et. al. (2009) stated that brand loyalty is developed by past performance of the brand to the expectations of the consumer. The brand preference factors into the influence when purchasing sporting equipment because the college students may very well have found the brands that meet (or exceeds) the quality and performance expectations, leading to having that brand as a preferred brand when purchasing. Brand preference/recognition is important for companies because it allows them to become aware how they sit in their consumers' minds.

The participants in this study continued to explain their purchasing decision by informing of the factors that shaped the way they purchased. The college students acknowledged that footwear is among the highest need and want in sporting equipment purchases. The need-based suggest that college students need footwear to successfully participate in their sport and/or activity whereas the want in footwear suggest that college students purchase footwear to elevate

their performance in their sport and/or activity. Understandably, the assumption can be made that college students would like to try on their footwear prior to making the final purchase which shopping in brick-and-mortar locations is a convenience factor in the purchasing decision. Few sports require additional headwear as this sample supports that headwear is not as important to purchase. With college students that participate in varsity sports, headwear is most likely provide to them and sports that may fall into the category of different would be tennis and golf. Outside of these sports, headwear is not the strongest sporting goods equipment. Other factors that shape the purchasing decisions were the working patterns of the college students. Majority of college students are working during both the summer and the school year. This is important to understand because sporting equipment has a range of pricing and obtaining income is crucial to the students to give the ability of purchasing the equipment. The discovery of work pattern helps explain the amount of discretionary income that college students have. Majority of the college students in this study had discretionary income between \$51-\$100 and then over \$150. Both ranges are rather significant in relationship to this research because it shows that the financial aspect of sporting equipment may not be a huge factor although pricing is always a challenging component to the overall consumer.

While the study examined the different factors to understand the college student consumer and the factors that shaped the consumer behavior, those factors were also compared to the demographic groupings, gender and athletic status. Understanding the pattern differences among consumers, male varsity/club sport athletes tended to shop more online than the female varsity/club sport athlete. This is best described as the male utilitarian shopper taking advantage of the convenience of online shopping. Depending on the sport/activity, there may be a greater demand on the sport and/or activity which would limit the student from finding the opportunity

to purchase in other locations. On the other hand, males and females perform differently when making purchases in-store. Males continue to pursue the utilitarian shopping approach as females when shopping in-store will pursue the hedonic approach. The differences in these approaches are supported by existing literature where the male consumer knows what he wants and will get that product whereas the female consumer would like to shop around prior to finding the product she came looking for.

The college students experienced differences in the influences among their purchases. For sporting equipment needs, the males and females differed in their need-based for gloves. This difference correlates to the equipment that is provided to the participant. An obvious observation with this result is that there are several sports and/or activities for males that require the use of gloves more than females. The same statistic is relevant between the athletic status demographic group. Students that participate in varsity/club sports may find themselves needing the equipment more than those that do not participate in the varsity/club sport. Conversely, sporting equipment wants show the differences in headwear and gloves between gender. Although, literature does not support the consumption behavior between athletic status, it is important to see the equipment that is needed and wanted and how they differ because of athletic status, which can be explained by the severity of the participation. Students that fall under the varsity/club sport demographic differed in their brand preference from their counterparts. This difference assumes to relate to the sport-specific brands. The participants in this study showed a difference between gender and athletic status regarding work pattern. Males focused most of their working time during the summer, while females worked both during the summer and school year. This difference can be explained by the demand that is placed on the sport/activity and the lifestyle of the student within and outside of school/athletics. Varsity/club sport athletes are

primarily working during the summer while non-varsity/club sport students are working both in the summer and during the school year. The amount of free time that is available to students and student-athletes strongly has an impact on these behaviors of work pattern. The overall purchasing behavior of sporting equipment among college students show differences between various variables of influence. The surprising assumption in this sample state that brick-and-mortar locations are of importance to college students but still have the potential to make purchasing decisions online. Other variables such as sporting equipment needs/wants, brand preferences, work pattern, and discretionary income help gather an understanding of the consumer and use their background to explain their sporting equipment purchase patterns.

Implications

The college student market is an important generation that often can be overlooked. Companies wishing to pursue growth and expansion can take advantage of this market, even to develop connection and gain market share. The impact of this study faced implications as the timeline established did not allow for adequate time to pursue deeper research. This research began with anticipations to uncover themes and understand the consumer through focus groups. Given the inability to perform satisfactory focus groups, a Qualtrics survey was administered in its place. As much focus was given to creating focus groups, once the Qualtrics survey had been released to the undergraduate students, there may have been a lack of interest in participating due to a similar project put using a different data collection method. With this, the sample size came to be smaller than the 10% response rate that was received during the focus group preliminary questionnaire. An increased sample size would allow for more variation in gender and athletic status which would help become more representative of the St. John Fisher College campus and thus become representative of small, private, Division III institutions.

Consumer research can be easily coordinated and understood through a survey, but establishing focus groups alongside would be beneficial for this study. As the study examined the decisions that influenced the ultimate purchase behavior, being able to explore the consumers will assist unravel themes that may otherwise differ from the common knowledge patterns. Focus group has a data collection mechanism is valuable in interpreting the nonverbal communications of participants, while also evaluating the emotions that come given the influences of purchasing sporting equipment. Additionally, further research can be executed by examining the role that mobile devices play in the influence. Although, online shopping can be done on mobile and desktop, branching off into mobile device can establish a connection between online purchase through a mobile device. Lastly, this research can be enhanced by expanding the demographics to include age, or a range, to also make the comparisons across traditional and non-traditional students.

Conclusion

Companies evaluating this sample to make informed decisions would see value in having a balance to cater hedonic and utilitarian shoppers while also capitalizing on both brick-and-mortar and e-commerce. This sample showed that college students go in both directions and there are reasons specific to those fluctuations. For companies to have the greater impact on a college student market, they would need to evaluate the sporting equipment needs/wants and increase inventory in those areas specific to the sports played in the area. College students will find this incorporation to be of value as they will be able to more consumed in the products given the push to be targeted towards. This does not just stop with individual companies, but also expands to college campus bookstores and athletic departments to evaluate what are the necessities and how are their students purchasing sporting equipment. The feedback from this

study will provide the institution the key information to expand or narrow in on offerings that resonates with their target market, the student body.

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Appendix A

Qualtrics Survey

1. Do you purchase sporting equipment (shoes, gloves, gear, etc.) for use during your personal sport or activity participation?
 - a. Yes
 - b. No

2. What types of sport equipment *do you need* to buy to play your sport or activity that are not already provided to you? Please check all that apply.
 - a. Footwear
 - b. Apparel/Clothing
 - c. Gloves
 - d. Headwear/head gear
 - e. Equipment (bats, balls, sticks, tees, etc.)
 - f. Medical supports (braces, pads, wraps, etc.)

3. What types of sporting equipment *do you choose* to buy because you feel that they enhance your sport or activity performance? Please check all that apply.
 - a. Footwear
 - b. Apparel/Clothing
 - c. Gloves
 - d. Headwear/head gear
 - e. Equipment (bats, balls, sticks, tees, etc.)
 - f. Medical supports (braces, pads, wraps, etc.)

4. When shopping for sporting equipment, do you have brands that you prefer?
 - a. Yes
 - b. No
5. Why do you have a brand preference? Check all that apply.
 - a. Because I prefer the brand's design
 - b. Because I feel that brand increases my performance the most
 - c. Because my teammates all use that same brand
 - d. Because I like the look (visual aesthetics) of that brand
 - e. Because that brand is offered at a price I can afford
 - f. Other
6. Which of the following best describes your work pattern during college?
 - a. Never worked
 - b. Worked only in summer
 - c. Worked during the school year
 - d. Worked during the school year and during summer
7. Which of the following best describes the amount of available discretionary income you have to spend during an average month? Please include only the amount that you would have after paying all of your essential bills.
 - a. Less than \$50
 - b. Between \$51-\$100
 - c. Between \$101-\$150
 - d. More than \$150
8. When making a sporting purchase, who are the people usually involved?

- a. I pay for things by myself
 - b. I have assistance from others
9. Where do you shop most often?
- a. Online
 - b. In-store
10. Which of the following best represents your pattern of shopping?
- a. I get to the store/site, and go immediately to the product I am looking for
 - b. I get to the store/site, and see what is new before going to the product I am looking for
 - c. Other, please describe
11. Gender
- a. Male
 - b. Female
12. Do you currently play varsity or club sports at SJFC?
- a. Yes
 - b. No
13. What sport do you play?

Appendix B

Cover Email

Dear Participant:

My name is Anthony Lee and I am an undergraduate student at St. John Fisher College. For my senior research project in the sport management program, I am examining the sporting equipment purchasing decisions of college students. Due to the timing and not being able to schedule focus groups, I am inviting you to take this survey to further understand the research being conducted.

The survey will require approximately 5 minutes to complete and will be used towards understanding those purchasing behaviors of college students relative to sporting equipment.

There is no compensation for responding nor is there any known risk. Participation is strictly voluntary and you may refuse to participate at any time.

<<Link>>

Thank you for taking the time to assist me in my educational endeavors. Your personal information will remain confidential however copies of the project will be provided to my senior thesis instructor, Dr. Emily Dane-Staples.

If you require additional information or have questions, please contact me or my supervising professor using the information listed below.

Sincerely,

Anthony

Anthony Lee

agl06036@sjfc.edu; (412) 320-3030

Dr. Emily Dane-Staples

edane-staples@sjfc.edu; (585) 899-3803

Table 1

Shopping Method based on Gender and Athletic Status

	Male	Female
Varsity/Club		
Online	23	11
In-Store	12	9
Non-Varsity/Club		
Online	5	18
In-Store	9	33

Note. n=120; male (n=49), female (n=71)

Table 2

Shopping Pattern based on Athletic Status

	Varsity/Club	Non-Varsity/Club
Online		
Immediately to product	21	10
Check out newness first	12	11
Other	1	2
In-Store		
Immediately to product	10	20
Check out newness first	11	22

Note. n=120; varsity/club sport athlete (n=55), non-varsity/club sport student (n=65)

Table 3

Shopping Pattern based on Gender and Athletic Status

	Male	Female
Varsity/Club		
Immediately to product	20	11
Shop around first	14	9
Other	1	0
Non-Varsity/Club		
Immediately to product	7	23
Shop around first	6	27
Other	1	1

Note. Numbers in the table indicate the frequency of responses for each category. N=120; male (n=49), female (n=71)

Table 4

Differences in Sporting Equipment Needs

	X^2_{Gender}	$X^2_{\text{Athletic Status}}$
Footwear	.227	.612
Apparel/Clothing	.048	1.644
Gloves	11.875***	14.026***
Headwear	1.877	4.060*
Equipment	1.661	.000
Medical	.431	2.031

Note. Table values indicate chi-square values. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 5

Differences in Sporting Equipment Wants

	X^2_{Gender}	$X^2_{\text{Athletic Status}}$
Footwear	2.337	.004
Apparel/Clothing	.701	.004
Gloves	15.696***	1.392
Headwear	4.657*	2.729
Equipment	3.148	1.631
Medical	.431	.420

Note. Table values indicate chi-square values. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 6

Brand Preferences Differences

	X^2_{Gender}	$X^2_{\text{Athletic Status}}$
Brand Preference	2.848	3.836*
Design	1.676	.271
Performance	.324	.562
Teammates	2.606	.001
Look	.199	.656
Price	.402	1.392
Other	1.816	.129

Note. Table values indicate chi-square values. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 7

Differences between Work Patterns

	$X^2(3)_{\text{Gender}}$	$X^2(3)_{\text{Athletic Status}}$
Work Pattern	9.443*	9.909*

Note. Table values indicate chi-square values. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 8

Differences in Discretionary Income

	$X^2(3)_{\text{Gender}}$	$X^2(3)_{\text{Athletic Status}}$
Discretionary Income	2.892	7.468

Note. Table values indicate chi-square values. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 9

Purchase Involvement Differences

	X^2_{Gender}	$X^2_{\text{Athletic Status}}$
Purchase Involvement	.976	4.435*

Note. Table values indicate chi-square values. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 10

Differences in Shopping Method

	X^2_{Gender}	$X^2_{\text{Athletic Status}}$
Shopping Method	3.088	8.347**

Note. Table values indicate chi-square values. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 11

Differences in Shopping Pattern

	$X^2(2)_{\text{Gender}}$	$X^2(2)_{\text{Athletic Status}}$
Shopping Pattern	1.733	1.311

Note. Table values indicate chi-square values. * $p < .05$, ** $p < .01$, *** $p < .001$