

## **ABSTRACT**

DUTTON, KATHRYN CHRISTINE. The Affect of Garment Attributes on the Purchase Intentions of Fifteen to Twenty-Five Year Old Females. (Under the direction of Dr. Cynthia Istook.)

The sheer size of the generation, in which 15- to 25-year-olds belong, will have effects on the present state of the retailing market, as well as the future state of the market as this large cohort continues to ages. Due to this potential, marketers are eager to understand this generation of consumers. They know the purchasing power of these consumers as a whole, but they do not necessarily understand the fashion groups within the large generation or what attributes each fashion group finds important when intending to purchase a garment. It is important to understand the different lifestyles within this age cohort because lifestyle marketing is becoming more accepted and the knowledge of subgroups will be important for successful marketing.

The purpose of the research has been to understand more about the lifestyle and consumer behavior of the 15- to 25-year-old United States female consumer, in terms of the affects garment attributes have on their intent to purchase apparel products. Ten garments were purchased and four garments were designed and produced for use in the questionnaire. Two pilot studies were conducted to collect information on the 15- to 25-year-olds' fashion styles, favorite stores shopped and favorite brands worn. The results from the pilot studies assisted in the selection of garments and the development of the online research questionnaire.

From the 250 usable responses, the results showed that the attributes styling, brand, price, place and fabrication and fiber content have a statistically significant (p-value less than

0.05) affect on the 15- to 25-year-old consumer's intent to purchase an apparel product.

Overall, there was a statistically significant difference (p-value less than 0.05) among the fashion groups' responses when brand, price and place where known attributes. However, there was an overall similarity when styling and fabrication were known. The favored style among all fashion groups was the top garment with the most embellishment and the bottom garment with the most embellishment. For top garments, the most favored fabrications were woven silk or silk blend fabrics, over synthetics and synthetic blends. The most favored fabrication for the bottom garments was a woven, 100% cotton fabric, over silk and synthetic blends. Fabrication and fiber content had a statistically significant (p-value less than 0.05) positive affect on the "nonwoven" polyester/nylon blend garments, but had a negative affect on the "engineered fabric" polyester/polyethylene blend garments.

**The Affect of Garment Attributes on the Purchase Intentions  
of Fifteen to Twenty-Five Year Old Females**

by  
**KATHRYN CHRISTINE DUTTON**

A thesis submitted to the Graduate Faculty of  
North Carolina State University  
in partial fulfillment of the  
requirements for the Degree of  
Master of Science

**Textile and Apparel, Technology and Management**

Raleigh

2006

**APPROVED BY:**

---

Dr. Behnam Pourdeyhimi  
Committee Member

---

Dr. Michelle Jones  
Committee Member

---

Dr. Cynthia Istook  
Chair of Advisory Committee

## DEDICATION

*In loving memory of my grandmother,*

*Mary Norvalle Stott.*



*To my wonderful family,*

*Mom, Dad and Rhoadie,*

*for all of their loving support and understanding.*

## **BIOGRAPHY**

Kathryn Christine Dutton was born on February 13, 1980 in Camp Lejeune, North Carolina. Her parents are Rhoades and Christine Dutton and she has a younger brother, Rhoades Dutton, Junior. Kathryn grew up in Phoenixville, Pennsylvania and later moved with her family to Wilmington, North Carolina, where she attended John T. Hoggard High School. Kathryn graduated from high school in 1998 and went on to study at the College of Textiles at North Carolina State University. She graduated from NC State with a Bachelor of Science degree in Textile and Apparel, Technology and Management with a concentration in Apparel Management in December 2002. A year and a half later, after working in retail and managing the Men's Department at a local department store, she returned to North Carolina State University to pursue a Master of Science degree in Textile and Apparel, Technology and Management. Upon receiving her Master's degree in this area in August 2006, Kathryn plans to continue her education in the College of Textiles at North Carolina State University by entering the Ph.D. program in Textile Technology Management.

## ACKNOWLEDGMENTS

I would like to take this time to thank the following people who have been influential to my academic and personal life:

**My Committee:** A sincere thank you to Dr. Michelle Jones and Dr. Behnam Pourdeyhimi. Your guidance, time and shared wisdom have been greatly appreciated.

**Dr. Cynthia Istook:** I can not say thank you enough for all you have done for me throughout my college career. Your patience and assistance have been greatly appreciated! I have learned much over the last two years, and I thank you for taking the time to share your knowledge and experience with me.

**Shawn Dunning:** Thank you for your patience and assistance in getting my survey up and running.

**Friends:** To Alissa, Erica, Jeanette and Katie. If it wasn't for you all, I don't think I would have made it. You were there when I needed stress relief and encouragement, but knew when to give me space to get this paper finished! Thank you all for your understanding and wonderful friendship throughout this journey.

**Ira:** To my wonderful boyfriend Ira, who met me towards the end of my research when I was at my most stressful and unpleasant demeanor. Thank you for being there when I needed you and relieving the stress when days got just a little too crazy to handle. Your continued support and encouragement were above and beyond, as well as highly appreciated!

**Rho:** who graciously accepted that brother/sister bonding time had to be put on hold, baking goods would be far and few between and conversations on AIM would be short and snippy. Thanks brother, for your understanding and patience as I finished my research!

**Mom & Dad:** ya, ya, ya... “Just get the paper done.” How many times did I hear that! But in all seriousness, thank you for your continued encouragement and support over the years. Your love and parental wisdom have given me the needed strength to get where I am today.

# TABLE OF CONTENTS

|   |           |
|---|-----------|
| <b>LIST OF FIGURES .....</b>                              | <b>x</b>  |
| <b>LIST OF TABLES .....</b>                               | <b>xi</b> |
| <b>CHAPTER I – INTRODUCTION .....</b>                     | <b>1</b>  |
| Purpose of this Study .....                               | 1         |
| Significance of this Study .....                          | 2         |
| Limitations of this Study.....                            | 3         |
| Definition of Terms .....                                 | 3         |
| <b>CHAPTER II – LITERATURE REVIEW.....</b>                | <b>5</b>  |
| The 15 to 25 Year Old Consumer.....                       | 5         |
| History of Adolescent Consumer Behavior Research .....    | 7         |
| Attributes Used for Product Evaluation.....               | 8         |
| Effect of Lifestyle on Consumers’ Purchase Decisions..... | 11        |
| Nonwovens and Apparel.....                                | 13        |
| Summary .....   | 17        |
| <b>CHAPTER III – METHODOLOGY .....</b>                    | <b>20</b> |
| Pilot Studies .....                                       | 21        |
| <i>College Students</i> .....                             | 21        |
| <i>Rising High School Seniors</i> .....                   | 21        |
| Garment Selection.....                                    | 23        |
| <i>Garment Purchases</i> .....                            | 23        |
| <i>Garment Design and Production</i> .....                | 25        |
| Questionnaire Development .....                           | 27        |
| <i>Demographic and Psychographic Variables</i> .....      | 27        |
| <i>Garment Images</i> .....                               | 27        |
| <i>Garment Questions</i> .....                            | 28        |
| Questionnaire Distribution.....                           | 29        |
| Data Analysis.....  | 31        |
| <i>Demographics</i> .....                                 | 31        |
| <i>Attributes</i> .....                                   | 31        |
| <b>CHAPTER IV – RESULTS .....</b>                         | <b>32</b> |
| Sample .....  | 32        |
| <i>Race</i> .....   | 32        |
| <i>City Size</i> .....                                    | 33        |
| <i>Education</i> .....                                    | 34        |
| <i>Employment</i> .....                                   | 35        |
| <i>Monthly Income</i> .....                               | 35        |
| Monthly Expenses.....                                     | 37        |
| <i>Monthly Expenses: Housing</i> .....                    | 37        |

|  |    |
|--|----|
| <i>Monthly Expenses: Food</i> .....  | 38 |
| <i>Monthly Expenses: Car Payments</i> .....                                  | 39 |
| <i>Monthly Expenses: Car Insurance</i> .....                                 | 40 |
| <i>Monthly Expenses: Gasoline</i> .....                                      | 41 |
| <i>Monthly Expenses: Medical</i> .....                                       | 42 |
| <i>Monthly Expenses: Health and Beauty</i> .....                             | 43 |
| <i>Monthly Expenses: Education/Home Office</i> .....                         | 44 |
| <i>Monthly Expenses: Clothing</i> .....                                      | 45 |
| <i>Monthly Expenses: Entertainment</i> .....                                 | 46 |
| Top Garment Selection Based on Attributes .....                              | 47 |
| <i>Top Garment Selection</i> .....   | 49 |
| <i>Top Garment Selection Based on Style</i> .....                            | 50 |
| <i>Top Garment Selection Based on Brand</i> .....                            | 51 |
| <i>Top Garment Selection Based on Price</i> .....                            | 52 |
| <i>Top Garment Selection Based on Place</i> .....                            | 53 |
| <i>Top Garment Selection Based on Fabrication and Fiber Content</i> .....    | 54 |
| Bottom Garment Selection Based on Attributes.....                            | 55 |
| <i>Bottom Garment Selection</i> .....  | 57 |
| <i>Bottom Garment Selection Based on Style</i> .....                         | 59 |
| <i>Bottom Garment Selection Based on Brand</i> .....                         | 60 |
| <i>Bottom Garment Selection Based on Price</i> .....                         | 61 |
| <i>Bottom Garment Selection Based on Place</i> .....                         | 62 |
| <i>Bottom Garment Selection Based on Fabrication and Fiber Content</i> ..... | 62 |
| Garment Selection by Fashion Group.....                                      | 64 |
| <i>Top Garment Selection by Fashion Group</i> .....                          | 65 |
| Fashion Group 1: Classic .....   | 65 |
| Fashion Group 2: Skater/Surfer .....   | 66 |
| Fashion Group 3: Punk .....  | 67 |
| Fashion Group 4: Eclectic.....   | 69 |
| Fashion Group 5: Unique.....   | 70 |
| Fashion Group 6: Urban.....  | 72 |
| Fashion Group 7: Trendy .....  | 73 |
| Summary of the Fashion Groups' Top Choices.....                              | 74 |
| <i>Bottom Garment Selection by Fashion Group</i> .....                       | 77 |
| Fashion Group 1: Classic .....   | 77 |
| Fashion Group 2: Skater/Surfer .....   | 78 |
| Fashion Group 3: Punk .....  | 79 |
| Fashion Group 4: Eclectic.....   | 80 |
| Fashion Group 5: Unique.....   | 82 |
| Fashion Group 6: Urban.....  | 84 |
| Fashion Group 7: Trendy .....  | 85 |
| Summary of the Fashion Groups' Bottom Choices .....                          | 86 |
| 15- to 25-Year-Olds Response to “Nonwoven” and “Engineered Fabric” .....     | 89 |
| <i>Top Garment Selection</i> .....   | 89 |

|   |            |
|---|------------|
| Nonwoven .....  | 89         |
| Engineered Fabric .....   | 90         |
| <i>Bottom Garment Selection</i> .....                                       | 91         |
| Nonwoven .....  | 91         |
| Engineered Fabric .....   | 91         |
| <b>CHAPTER V – Summary and Future Research .....</b>                        | <b>93</b>  |
| Summary .....   | 93         |
| <i>Purpose</i> .....  | 93         |
| <i>Methodology</i> .....  | 94         |
| Pilot Studies .....   | 94         |
| Purchased Garments.....   | 95         |
| Garment Design and Production .....   | 95         |
| Questionnaire Development.....  | 95         |
| Questionnaire Distribution.....   | 96         |
| Data Analysis .....   | 96         |
| <i>Results</i> .....  | 97         |
| Sample.....   | 97         |
| Monthly Expenses.....   | 98         |
| Research Question 1 .....   | 100        |
| 1a. Does the product styling affect the likelihood of purchase? .....       | 100        |
| 1b. Does brand affect the likelihood of purchase?.....                      | 101        |
| 1c. Does price affect the likelihood of purchase? .....                     | 102        |
| 1d. Does place affect the likelihood of purchase? .....                     | 103        |
| 1e. Does fabrication affect the likelihood of purchase?.....                | 103        |
| Research Question 2 .....   | 104        |
| Classic Fashion Group (1): Beachy, casual, classic, preppy and sporty ..... | 105        |
| Skater/Surfer Fashion Group (2): Skater and surfer .....                    | 106        |
| Punk Fashion Group (3): Gothic, grunge, punk, rocker .....                  | 107        |
| Eclectic Fashion Group (4): Artsy, boho, earth, eclectic, girly .....       | 108        |
| Unique Fashion Group (5): Unique .....                                      | 109        |
| Urban Fashion Group (6): Urban.....   | 109        |
| Trendy Fashion Group (7): Trendy.....                                       | 110        |
| Summary of the fashion groups’ choices.....                                 | 111        |
| Research Question 3 .....   | 111        |
| Future Research .....   | 114        |
| <b>REFERENCES.....</b>  | <b>116</b> |
| <b>APPENDICES.....</b>  | <b>119</b> |
| APPENDIX A.....   | 120        |
| <i>College Questionnaire Cover Letter</i> .....                             | 121        |
| <i>College Questionnaire</i> .....  | 122        |
| APPENDIX B.....   | 131        |
| <i>Rising High School Senior Questionnaire</i> .....                        | 132        |

|   |     |
|---|-----|
| APPENDIX C .....                                      | 133 |
| <i>Thesis Online Questionnaire Cover Letter</i> ..... | 134 |
| <i>Thesis Online Questionnaire</i> .....              | 135 |

## LIST OF FIGURES

|  |    |
|--|----|
| <i>Figure 1:</i> Example of a purchased camisole top. ....   | 24 |
| <i>Figure 2:</i> Example of a purchased peasant skirt.....   | 24 |
| <i>Figure 3:</i> Top 6, labeled as a “nonwoven.” .....   | 27 |
| <i>Figure 4:</i> Bottom 6, labeled as a “nonwoven.” .....  | 27 |
| <i>Figure 5:</i> Top 7, labeled as an “engineered fabric.” .....   | 27 |
| <i>Figure 6:</i> Bottom 7, labeled as an “engineered fabric.” .....  | 27 |
| <i>Figure 7:</i> Monthly housing expenses. ....  | 37 |
| <i>Figure 8:</i> Monthly food expenses.....  | 38 |
| <i>Figure 9:</i> Monthly car payment expenses. ....  | 39 |
| <i>Figure 10:</i> Monthly car insurance expenses.....  | 40 |
| <i>Figure 11:</i> Monthly gasoline expenses.....   | 41 |
| <i>Figure 12:</i> Monthly medical expenses. ....   | 42 |
| <i>Figure 13:</i> Monthly health and beauty expenses.....  | 43 |
| <i>Figure 14:</i> Monthly education/home office expenses.....  | 44 |
| <i>Figure 15:</i> Monthly clothing expenses. ....  | 45 |
| <i>Figure 16:</i> Monthly entertainment expenses. ....   | 46 |
| <i>Figure 17:</i> Respondents’ intent to purchase a top based on style.....                                    | 50 |
| <i>Figure 18:</i> Respondents’ intent to purchase a top based on brand. ....                                   | 51 |
| <i>Figure 19:</i> Respondents’ intent to purchase a top based on price. ....                                   | 52 |
| <i>Figure 20:</i> Respondents’ intent to purchase a top based on place.....                                    | 53 |
| <i>Figure 21:</i> Respondents’ intent to purchase a top based on fabrication and fiber content....             | 54 |
| <i>Figure 22:</i> Respondents’ intent to purchase a bottom garment based on style. ....                        | 59 |
| <i>Figure 23:</i> Respondents’ intent to purchase a bottom garment based on brand.....                         | 60 |
| <i>Figure 24:</i> Respondents’ intent to purchase a bottom garment based on price.....                         | 61 |
| <i>Figure 25:</i> Respondents’ intent to purchase a bottom garment based on place. ....                        | 62 |
| <i>Figure 26:</i> Respondents’ intent to purchase a bottom garment based on fabrication and fiber content..... | 63 |

## LIST OF TABLES

|  |    |
|--|----|
| Table 1 <i>Generation Names and Birth Years of the 15- to 25-Year-Old Consumer</i> .....                           | 6  |
| Table 2 <i>Attributes for Apparel Product Evaluation</i> .....   | 11 |
| Table 3 <i>Identified Fashion Styles from Rising High School Senior Questionnaire</i> .....                        | 22 |
| Table 4 <i>Pilot Survey Results of Popular Store and/or Brands among College and High School Respondents</i> ..... | 23 |
| Table 5 <i>List of Common Stores and/or Brands among College and High School Respondents</i> .....                 | 24 |
| Table 6 <i>List of Stores and Brands where Garments were Purchased</i> .....                                       | 25 |
| Table 7 <i>Original Groups who were E-Mailed the Thesis Online Questionnaire</i> .....                             | 30 |
| Table 8 <i>Race of the Sample</i> .....  | 32 |
| Table 9 <i>Sample’s Perception of City Size Resided in while Attending High School</i> .....                       | 33 |
| Table 10 <i>Highest Education Achieved by the Sample</i> .....   | 34 |
| Table 11 <i>Employment Status of the Sample</i> .....  | 35 |
| Table 12 <i>Monthly Income of the Sample</i> .....   | 36 |
| Table 13 <i>Sample’s Percentage of Income Received from Sources Other Than Employment</i>                          | 36 |
| Table 14 <i>Attributes of the Garment Tops in the Online Questionnaire</i> .....                                   | 48 |
| Table 15 <i>Chi-Squared Test of Independence Results for Top Garments</i> .....                                    | 49 |
| Table 16 <i>Importance of Attributes to the Sample’s Overall Top Garment Selections</i> .....                      | 49 |
| Table 17 <i>Attributes of the Garment Bottoms in the Online Questionnaire</i> .....                                | 56 |
| Table 18 <i>Chi-Squared Test of Independence Results for Bottom Garments</i> .....                                 | 57 |
| Table 19 <i>Importance of Attributes to the Sample’s Overall Bottom Garment Selections</i> .....                   | 58 |
| Table 20 <i>Fashion Groups</i> .....   | 64 |
| Table 21 <i>Chi-Squared Test of Independence Results for the Classic Fashion Group: Top Garments</i> .....         | 65 |
| Table 22 <i>Importance of Attributes to the Classic Fashion Group on Top Garment Selections</i> .....              | 66 |
| Table 23 <i>Chi-Squared Test of Independence Results for the Skater/Surfer Fashion Group: Top Garments</i> .....   | 66 |

|   |    |
|---|----|
| Table 24 <i>Importance of Attributes to the Skater/Surfer Fashion Group on Top Garment Selections</i> .....         | 67 |
| Table 25 <i>Chi-Squared Test of Independence Results for the Punk Fashion Group: Top Garments</i> .....             | 67 |
| Table 26 <i>Importance of Attribute to the Punk Fashion Group on Top Garment Selections</i> ..                      | 69 |
| Table 27 <i>Chi-Squared Test of Independence Results for Fashion Group Four Top Garments</i> .....                  | 69 |
| Table 28 <i>Importance of Attributes to the Eclectic Fashion Group on Top Garment Selections</i> .....              | 70 |
| Table 29 <i>Chi-Squared Test of Independence Results for Unique Fashion Group: Top Garments</i> .....               | 71 |
| Table 30 <i>Importance of Attributes to the Unique Fashion Group on Top Garment Selections</i> .....                | 71 |
| Table 31 <i>Chi-Squared Test of Independence Results for the Urban Fashion Group: Top Garments</i> .....            | 72 |
| Table 32 <i>Importance of Attributes to the Urban Fashion Group on Top Garment Selections</i> .....                 | 73 |
| Table 33 <i>Chi-Squared Test of Independence Results for the Trendy Fashion Group: Top Garments</i> .....           | 73 |
| Table 34 <i>Importance of Attributes to the Trendy Fashion Group on Top Garment Selections</i> .....                | 74 |
| Table 35 <i>First Choice Tops for Each Fashion Group</i> .....  | 76 |
| Table 36 <i>Chi-Squared Test of Independence Results for the Classic Fashion Group: Bottom Garments</i> .....       | 77 |
| Table 37 <i>Importance of Attributes to the Classic Fashion Group on Bottom Garment Selection</i> .....             | 78 |
| Table 38 <i>Chi-Squared Test of Independence Results for the Skater/Surfer Fashion Group: Bottom Garments</i> ..... | 78 |
| Table 39 <i>Importance of Attributes to the Skater/Surfer Fashion Group on Bottom Garment Selection</i> .....       | 79 |

|  |    |
|--|----|
| Table 40 <i>Chi-Squared Test of Independence Results for the Eclectic Fashion Group: Bottom Garments</i> ..... | 80 |
| Table 41 <i>Importance of Attribute to the Punk Fashion Group on Bottom Garment Selection</i> .....            | 80 |
| Table 42 <i>Chi-Squared Test of Independence Results for the Eclectic Fashion Group: Bottom Garments</i> ..... | 81 |
| Table 43 <i>Importance of Attributes to the Eclectic Fashion Group on Bottom Garment Selection</i> .....       | 82 |
| Table 44 <i>Chi-Squared Test of Independence Results for the Unique Fashion Group: Bottom Garments</i> .....   | 82 |
| Table 45 <i>Importance of Attributes to the Unique Fashion Group on Bottom Garment Selection</i> .....         | 83 |
| Table 46 <i>Chi-Squared Test of Independence Results for the Urban Fashion Group: Bottom Garments</i> .....    | 84 |
| Table 47 <i>Importance of Attributes to the Urban Fashion Group on Bottom Garment Selection</i> .....          | 85 |
| Table 48 <i>Chi-Squared Test of Independence Results for the Trendy Fashion Group: Bottom Garments</i> .....   | 85 |
| Table 49 <i>Importance of Attributes to the Trendy Fashion Group on Bottom Garment Selection</i> .....         | 86 |
| Table 50 <i>First Choice Bottoms for Each Fashion Group</i> .....  | 88 |
| Table 51 <i>Chi-Squared Test of Independence Results for Top Garments</i> .....                                | 89 |
| Table 52 <i>Importance of Attributes to the Sample's Overall Top Garment Selections</i> .....                  | 90 |
| Table 53 <i>Chi-Squared Test of Independence Results for Bottom Garments</i> .....                             | 91 |
| Table 54 <i>Importance of Attributes to Overall Bottom Garment Selections</i> .....                            | 92 |

## **CHAPTER I – INTRODUCTION**

“The youth market is vitally important simply because it is so large” (Bronson, 2000, p. 34). The sheer size of the generation, in which 15- to 25-year-olds belong, will have effects not only on the present state of the retailing market but the future of the market as this large cohort ages. Many different lifestyle groups exist within the cohort because of its sheer size. While the marketers know the purchasing power of these consumers as a whole, they do not necessarily understand their fashion groups, or fashion styles, and the psychographics of these separate groups. It is important to understand the different lifestyles within this age cohort because lifestyle marketing is becoming more and more accepted and the knowledge of the separate groups will be important for successful marketing. “Marketers are especially eager to understand this next generation of consumers” (Paul, 2001, p. 44).

### **Purpose of this Study**

The purpose of this study was to understand more about the lifestyle and consumer behavior of the 15- to 25-year-old United States female consumer, in terms of their intent to purchase apparel products. An online questionnaire was used to collect data on the age group and determine if known factors and attributes of a garment would influence the consumers’ intent to purchase a specific garment. Research questions that assisted in the structure of this study were as follows:

Research Question One:

What known attributes have an effect on the likelihood to purchase a garment?

1a. Does the product styling affect the likelihood of purchase?

1b. Does brand affect the likelihood of purchase?

1c. Does price affect the likelihood of purchase?

1d. Does retail outlet affect the likelihood of purchase?

1e. Does fabrication affect the likelihood of purchase?

Research Question Two:

What impact does a consumer's fashion style have on the intent to purchase a specific garment?

Research Question Three:

What impact does the term "nonwoven" or "engineered fabric" have on the 15 to 25 year old consumer's intent to purchase?

### **Significance of this Study**

The teenage and young adult markets include important, yet complicated, consumers. "Demographers, market analysts, and researchers realize this new group will dominate marketing in the twenty-first century" (Alch, 2000, p.43). These consumers are part of the largest generational cohort recorded and they spend approximately \$150 billion a year (Alch, 2000; Marlatt, 1999). It is an important group "...to understand now because it is so large and will, thus, have a powerful influence as its members grow through life stages" (Morton, 2002, p. 48).

Research to date does not discuss the differences in the lifestyles or fashion styles among 15- to 25-year-olds, nor how these fashion styles may affect the consumer purchase intentions. It is important to understand the lifestyle of each fashion group in order to effectively communicate, design and sell successful products. Furthermore, providing companies with information on this large, high spending cohort will help companies develop

effective marketing campaigns for this consumer group (Ward, 1974; Pennington-Gray, 2003). Additionally, “retailers need information about how consumers react to fashion products so that important attributes can be emphasized through visual displays, information dissemination, and the salesperson’s interaction with customers” (Forney, 2005, p. 164).

### **Limitations of this Study**

While the questionnaire had 250 respondents, it was a convenience sample that originated from central North Carolina and may not necessarily be a national representation of the 15- to 25-year-old United States female consumer. The survey was administered via electronic mail and, and therefore, would have left out respondents who do not have access to the Internet.

The garments in the survey were limited to camisole tops and peasant skirts. The number of garments and type of garments pictured in the survey were limited to the availability of the garments, fabrics, and designs on the market. To keep the survey at a tolerable length, only so many styles, brands and store locations could be included.

### **Definition of Terms**

**Age cohorts:** Age cohort is another term for a generational group.

**Birth cohorts:** Birth cohort is another term for generational group.

**Brand:** Brand usually refers to a products name, which is widely recognized by consumers (Johnson & Moore, 2001).

**Demographics:** Demographics is a measurable statistic of a population such as age, gender, race, income, geographical region, etc. (Johnson & Moore, 2001).

**Department Store:** A department store is a large retail outlet that typically carries soft goods (apparel and accessories) and hard goods (home furnishings) (Johnson & Moore, 2001).

**Discount Store:** A discount store is a large retail outlet that typically carries soft goods (apparel and accessories) and hard goods (appliances, hardware, etc.). Unlike a department store, a discount store does not offer added services (self-service) and has lower prices (Johnson & Moore, 2001).

**Fashion Group:** In this research, fashion group is term used to describe a group of different fashion styles that all dress in a similar manner.

**Fashion Style:** In this research, fashion style is a term used to describe the clothing style, or style of dress, with which a consumer perceives themselves to be associated.

**NCRC:** Nonwovens Corporate Research Center located in Raleigh, NC.

**Psychographics:** Psychographics define the characteristics of people, such as activities, opinions, interests and attitudes (Johnson & Moore, 2001). Another term for psychographics is lifestyle.

**Specialty Store:** A specialty store is a retail outlet that sells a narrower product assortment than department stores. Specialty stores typically cater to a narrow market, and the price point range is narrower as well (Johnson & Moore, 2001).

**STEP:** Summer Textile Exploration Program is an annual summer program at North Carolina State University's College of Textiles for rising high school seniors.

**Style:** In this research, style refers to the design and appearance of a garment.

**Tween:** The term tween refers to pre-pubescent children usually ranging in age from 7-11. The name tween is used because they are too old to be "kids" and too young to be teenagers.

## **CHAPTER II – LITERATURE REVIEW**

### **The 15 to 25 Year Old Consumer**

The 15 to 25 year old consumer, born between 1981 and 1991, is part of the largest generational cohort the United States has ever seen – larger than their parents’ generation, the baby boomers (Alch, 2000; Morton, 2002). This age group spans anywhere from 30 million to 80 million-plus within the United States. (Alch, 2000; Howe & Strauss, 2000; Marlatt, 1999; Paul, 2001). The exact numbers of this age group are hard to pin-point because researchers have defined this generation several different ways. This has caused a variety of different birth years to set the generation’s beginning and end, hence different numbers. The three popular names for this age group’s generation are Generation Y (Gen Y) (Marlett, 1999; Morton, 2002; Johnson & Moore, 2001; Paul, 2001), Echo-boomers (Alch, 2000), and Millennials, or the Millennium generation (Howe & Strauss, 2000). Marlatt stated Generation Y begins with birth years anywhere between 1975 and 1981 and the generation ends with birth years anywhere between 1989 and 1994. However, Morton and Paul defined Generation Y as birth years from 1977 to 1994 and containing approximately 71 million people. Yet, Johnson & Moore (2001) defined Generation Y as those born between 1977 and 1987. Another researcher defined Gen Y as those born between 1982 and 1998 (Howe & Strauss, 2000). Echo-boomers are defined as those born from 1977 to 1997 and containing approximately 80 million people (Alch, 2000). Millennials are defined as those born from 1982 and onward (because researchers feel the generation is still growing), containing 76 million people (Howe & Strauss, 2000). See Table 1 for a list of generation names and birth years.

Table 1

*Generation Names and Birth Years of the 15- to 25-Year-Old Consumer*

| Generation Name                        | Birth Years |           |
|--|-------------|-----------|
|  | Beginning   | Ending    |
| Generation Y (Gen Y)                   | 1975-1981   | 1089-1994 |
|  | 1977        | 1994      |
|  | 1977        | 1987      |
|  | 1982        | 1998      |
| Echo-Boomers                           | 1977        | 1997      |
| Millennials<br>(Millennium Generation) | 1982        | ?         |

With a generation spanning approximately 20 years, businesses are concerned about their ability to effectively communicate to everyone within this generation. Paul (2001) suggested breaking the generation up into three groups: adulthood - those born between 1977 and 1983 (18-24 years of age at time of publication), teens - those born between 1984 and 1989 (12-17 years of age at time of publication), and tweens - those born between 1990 and 1994 (7-11 years of age at time of publication).

This age group is not full of young adults and teens that are the "... revved up party-a-go-go ..." consumers that most would assume, instead they lead "... relatively quiet lives" (Shepherdson, 2000, p. 45). According to Shepherdson, their time is spent doing leisure activities like listening to music, hanging out with their friend, seeing movies, eating out or just watching TV. This cohort does not appear to be just an extension of past generations. They are larger, financially more secure, better educated and more ethnically diverse than generations before (Howe & Strauss, 2000).

This age group spends about \$150 billion a year and has influences over other people's purchases that reach approximately \$450 billion a year (Alch, 2000; Marlatt, 1999; Johnson & Moore, 2001; Paul, 2001). Of that amount, clothing is ranked number one at 34%,

ahead of entertainment - 22% and food - 16% (Alch, 2000). This female age group loves to shop and report making 40% more trips to the mall than other consumer groups (Johnson & Moore, 2001). The large cohort is attracting businesses because their large numbers mean big spending power.

“They’ve already driven pop culture icons like Nike and Levi’s to distraction with their fickle interest in alpha brands” (Shepherdson, 2000, p. 44). This generation is very unpredictable and they demand the latest trends to be available in record time (Morton, 2002). Word of mouth helps companies determine what the 15- to -25-year-olds will buy (Shepherdson, 2000), but determining how to be the brand these consumers’ talk about is challenging.

### **History of Adolescent Consumer Behavior Research**

Research of adolescent consumer behavior started in the 1970s. Until then, not much consideration had been given to the age group because they did not have a large disposable income (Ward, 1974). Researchers, though, have realized that adolescence is a time when the young begin to learn consumer behavior from family members.

“Research might help to increase the success-failure ratio among those interested in communicating with young people” (Ward, 1974, p. 1). Though, 30 years later companies are still having trouble communicating with the younger market. This is due to birth cohorts, or generations, having different personalities and beliefs from other generations (Pennington-Gray, 2003). Younger generations, therefore, will have different behaviors than older generations, such as their parents and grandparents. Continued research on generations, or

sections of generations, can “reveal attitudes towards products and provide opportunities for advertising which target specific age groups” (Pennington-Gray, 2003. p. 342).

### **Attributes Used for Product Evaluation**

Studies have examined how garment attributes are used by consumers to form opinions and make purchase decisions about apparel products. May-Plumlee (2006) found that there are thirteen universal evaluative criteria used when evaluating an apparel product. These criteria include brand/label, price, color/pattern, style/design/uniqueness, fabrication, fashionability, appearance/attractiveness, care, construction, durability, fit/sizing, quality, and comfort. Other researchers have categorized these attributes into two main categories; intrinsic and extrinsic (Forney, 2005). Product attributes that are inherent in the product, like fiber content, style, color and pattern are intrinsic attributes. Extrinsic attributes are attributes that “...do not form part of the physical product but are added by retailers and manufacturers...,” like brand, price, packaging, and store (Forney, 2005, p.158). Abraham-Murali and Littrell (1995) found that when given only a picture of the garment, customers used fabric and garment construction as a way of predicting the quality of the garment. Eckman, Damhorst, and Kadolph (1990) observed that one of the four many types of criteria was aesthetics, an intrinsic criteria. Respondents of this study used style, color and pattern, fabric and appearance as initial criteria to evaluate a garment. Research has shown that the intrinsic criteria are used more often in evaluating clothing than extrinsic criteria (Eckman et al., 1990). See Table 2 for a list of the intrinsic and extrinsic criteria. Eckman realized, however, that consumers are not consistent in their use of evaluative criteria from garment to garment. Davis (1987) research found that, when considering an apparel purchase, the two

most common attributes used for assessment were style and price. Fabric and store were also important to most subjects when evaluating a garment (Davis, 1987). Sproles (1979) found that styling and fit are the key characteristics that influence consumers' purchase decision. He also stated that other critical characteristics that impact the consumer's decision to accept or reject a product include price, fiber content, durability and ease of care.

Consumers' use of evaluative criteria, when considering the purchase of a product, changes with different circumstances. Obviously social class, gender and nationality/race may affect the evaluative criteria used, but studies show there is more that influences the criteria a consumer uses when considering the purchase of a product. One study stated that a customer does not make purchase decisions just because of their personality traits. Dickson (1982) stated that customers make purchase decisions based on situations (or event) for which the product will be used. For example, when a consumer is considering the purchase of sunscreen, different evaluation criteria will be used depending on the end use (e.g. boat, tanning bed, pool, skiing) and the end consumer (e.g. baby, child, teen, adult, male or female) (Dickson, 1982). Cassill and Drake (1987) also stated that consumers use different evaluative criteria based on the setting or situation, such as purchasing clothing for work versus a social event. Johnson (1988) found that when consumers are considering the purchase of dissimilar products, they would evaluate the products based on the same abstract criteria (e.g. fun, entertainment, enjoyment) when deciding which product to purchase. This is easier for the consumer than using concrete criteria (e.g. product features, color, price) to evaluate two different products. For example, when a consumer is considering the purchase of two noncomparable products, such as a stereo and a television, the only similar concrete attribute

is price (Johnson, 1988). The consumer can not compare the two products based on other concrete features because the television may be evaluated on color quality and the stereo may be evaluated on sound quality and whether it will play compact discs, records or cassettes. These concrete features are too different to compare and, therefore, consumers turn to the abstract features for product evaluation during purchase decisions. For example, when a consumer is faced with deciding whether to purchase a DVD player or a concert ticket, the consumer may evaluate the two products based on the level of fun he/she will receive from the product. Corfman (1991) expanded on Johnson's research to find that consumers use more abstract criteria than necessary when considering a purchase. Corfman also found that if the consumer's level of interest in the product was low, then the consumer used more abstract criteria to evaluate the products. Bettman and Sujan (1987) found that when consumers do not have concrete product attributes available, such as when comparing two noncomparable products, the consumers were forced to create their own criteria. The criteria they created to compare the noncomparable products was abstract in that consumers used words such as "need," "function," and "fun" to assess them in their decision making process. For example, when comparing cameras, each model has concrete attributes to compare, but when comparing a camera and a television, consumers turned to abstract criteria to assist them in their purchase decision.

Table 2

*Attributes for Apparel Product Evaluation*

| <b>Concrete Attributes</b><br>(product features)  |  | <b>Abstract Attributes</b><br>(attitude-based)        |
|---|--|---|
| <b>Intrinsic (hedonic)</b>  | <b>Extrinsic</b>   |   |
| Aesthetics<br>Style<br>Color<br>Pattern<br>Fabric/fiber<br>Appearance<br>Fashionability | Price<br>Brand<br>Country of origin<br>Store<br>Salesperson's evaluation<br>Approval of others<br>Coordination with wardrobe | Fun<br>Entertainment<br>Enjoyment<br>Need<br>Function |
| Utilitarian<br>Durability<br>Comfort<br>Quality<br>Fabric/fiber<br>Fit<br>Care          |  |   |

**Effect of Lifestyle on Consumers' Purchase Decisions**

“An important aspect of understanding consumer behavior is the study of the choice process” (Gensch & Javalgi, 1987, p.71). Consumers often choose products because of the lifestyle they lead (Forney, 2005; Sproles, 1979). Evaluation criteria used by a consumer reflects consumer values, lifestyle, attitudes, knowledge and experiences - all of which play an important role in the consumer's decision process (Forney, 2005). Research has also shown that a consumer's lifestyle and demographics influence their innovativeness and, therefore, the adoption of a new product (Ha, 2004). These studies suggest that the more innovative a consumer is the more likely they are to adopt a new product (Goldsmith et al., 1995; Ha, 2004). Understanding the lifestyle of a consumer is very important because their lifestyle will influence how they react to advertisements, why they purchase apparel and the evaluation criteria they use to purchase apparel. Cassill and Drake (1987) confirmed former

studies by Blackwell which link between lifestyle and evaluative criteria stating that “evaluative criteria reflect a person’s lifestyle” (p. 27).

In 1972, Gurel, Wilbur and Gurel (1972) researched 302 high school students in Washington, D.C. to identify relationships between personality and preferences of clothing style. Gurel et al. (1972) identified six clothing styles that correlate to a specific lifestyle:

1. “Dressy”: students who emphasize careful dressing with “conventional” clothing. Girls’ attire are “dressy dresses,” stockings, and shoes with heels.
2. “Straight” or “Collegiate”: school clothes of conventional styling. Girls’ attire includes dressy blouse-skirt combinations, shift dresses, or jumpers. Similar to the dressy group, but not as dressed up.
3. “Mod”: the most expensive clothing and the most recent fashions. Girls’ attire includes pants suits, wide-brimmed hats, and jewelry, boots and sandals.
4. “Grubby” or “Hippie”: old clothing, jeans, work shirts, and army uniforms with long hair, bead and “peace symbols.”
5. “Freaky” or “Poor Hippie”: clothing not purchased in conventional stores. Girls’ attire includes garments from “attics, rummage sales, or secondhand stores” or they have made their own. Clothing styles include long, old fashioned dresses, old uniforms, raccoon coats and ponchos.
6. “Greasers”: a very “uniform” group in terms of clothing dress. Girls’ attire includes standard brand-name dresses and styles similar to the guys; poplin windbreakers, black leather jackets, pullover shirts, slacks, loafers and tennis shoes. Girls also wear heavy makeup.

Sproles stated that while the fashions may go out of date, "...no way can [a person] better represent [their] chosen and idealized lifestyle than through fashions" (p. 52). There are no studies, however, that show how fashion styles (or clothing styles) effect a consumer's product evaluation and the importance put on certain garment attributes. Each fashion style is a lifestyle segment that will provide more insight into how that fashion style will evaluate and select apparel. It is important to understand this because the importance a consumer puts on certain attributes when considering an apparel purchase could influence the consumer's response to market stimuli (Forney, 2005). Furthermore, understanding the lifestyle of these fashion style groups will assist retailers and marketers in meeting the consumers' needs and effectively advertising to their target market (Cassill & Drake, 1987; Shim & Bickle, 1994).

### **Nonwovens and Apparel**

While nonwovens have been used in the protective and medical clothing arenas for quite a number of years, the market is reaching its saturation point. In North America, feminine care and baby care products each have a market penetration of approximately 90%, and medical fabrics are at approximately 80% penetration (Poudeyhimi, 2004). Nonwoven products for apparel end-use, however, are only at approximately 10% market penetration, making the apparel market a viable area for expansion of nonwoven fabrics.

In the past, nonwovens have been used in the fashion market mainly as insulation and interlining, but not as the dominant fabric. "The dream has always been that the process could be expanded to bring nonwovens into the apparel shell market" (Maycumber, 2000, p. 56). In recent years, advancing technologies have provided opportunities for significant progress in nonwoven fabrics, such as durability, hand, drape, texture, and stretch; therefore,

lending themselves to be more acceptable for apparel applications (Pourdeyhimi, 2004; Walzer, 2001). This move towards apparel, however, should not be seen as a threat to the traditional markets because nonwoven apparel is not expected to replace traditional garments, but instead to be an additional and alternative option within the marketplace (Pourdeyhimi, 2004). Still, nonwoven companies will have to increase consumers' perception of nonwovens' quality (Tilin, 2001; Jarvis, 1997). Some companies have looked at activewear and sportswear as markets for the newer nonwoven fabrics due to the fabrics characteristics, such as light weight, UV protection, moisture management, insulation, and windproof. However, what the industry really needs is garment development so that the manufacturers can work on the comfort features of the fabrics (Walzer, 2001).

Over 30 years ago, Bloomingdale's sold disposable nonwoven bathing suits, but, at the time, technologies were not there and the product failed (Maycumber, 2000). In the past six to seven years, there have been some key players in the development of nonwovens for the apparel market. These companies include DuPont, Freudenberg, and Polymer Group, Inc. (Maycumber, 2000).

DuPont is a strong leader because they are the source of their own raw materials and have a history of marketing to fashion (Maycumber, 2000). The company has developed a fabric called Nova which contains spandex and provides special characteristics: stretch and recovery (Maycumber, 2000). The fabric is made by a flashspun process and contains polyethylene fibers (Maycumber, 2000). Design Development Concepts (DDC) based in New York City has been producing garments with this fabric. The company earlier designed a line using DuPont's nonwoven fabric Tyvek, developed in 1955, but the designers

discovered that Tyvek had a low stress tolerance and did not stretch or breath (Harkin, 2002). After some research, Neotis, a start-up company within DuPont, modified the fabric to create a more breathable and pliable foundation for their fabrics (Tilin, 2001). Neotis stitched in Lycra or yarn which only improved the fabric for apparel applications (Tilin, 2001). At the time of publication, Neotis had 24 fabrics and customers that included Nike, Levi's, and Tommy Hilfiger (Tilin, 2001). So far, Neotis's struggle and goal has been to get the apparel industry past their perceived notion that nonwovens are nothing more than Handi Wipes and win them over, even though the fabric is \$13 per yard, which is expensive in the apparel industry (Tilin, 2001).

Another big player in the nonwoven industry is Freudenberg, which is the world's largest producer of nonwovens (Maycumber, 2000). They currently produce a fabric called Evolon. Evolon is a bicomponent fabric produced by spunbond and hydroentangling technologies. The fabric can be manufactured to have good drape and the microfibers give the fabric a soft hand, lending itself as an apparel fabric. Terry O'Regan of Freudenberg states that the goal is to "...produce a better fabric than now exists, not just a comparable [fabric] to wovens or knits" (Maycumber, 2000, p. 56). Butler (2004) stated that "Freudenberg's technology could capture the 'holy grail' of the nonwovens industry" (p. 48).

The third company mentioned as a big player in the nonwoven industry is Polymer Group, Inc., which has been in the nonwoven business for a while. The company has a nonwoven fabric called Miratec, and, at the time of publication, was the best known in the nonwoven apparel arena being shown as versions of denim and other twill fabrics (Maycumber, 2000). However, the fabric has not succeeded in the apparel market. Miratec is

produced using staple fibers and hydroentanglement then given a three-dimensional design using laserography technology (Maycumber, 2000).

In 2003, Australian Wool Innovation (AWI) and Macquarie Textiles had begun a project to develop nonwoven wool fabrics using the needlepunch process (Dockery, 2003). The products are of interest for the defense and protective clothing arenas. So far, a nonwoven, wool-lined vest by Driza-Bone (an Australian icon comparable to L.L. Bean) and a disposable blanket have been commercialized (Dockery, 2003). However, to this date, only one nonwoven has proven successful in the apparel market; Ultrasuede from Japan which was introduced to the market in the 1970s. The fabric to this day is still very expensive, which keeps the product in the high-end retail sector.

Deciding what to call nonwoven fabric has been a challenge. Marketers do not like what the term nonwoven implies and technically anything can be a nonwoven since anything not woven, even a brick, can be a nonwoven (Maycumber, 2000). Other names given to nonwoven fabrics have been “formed fabrics”, “fiber weaving”, (Maycumber, 2000) and “engineered fabrics”. Most likely, companies will brand the fabric. For example, DuPont has Nova, Freudenberg has Evolon, and Polymer Group, Inc. has Miratec. Maycumber feels that no matter what the fabric will be called, it will be seen in the apparel market by the end of the decade.

Harkin (2002) feels nonwovens are multifunctional because they required limited sewing and are quick and cheap to produce. According to Harkin, the nonwoven polyethylene polymers are the new black. What’s even better? The fabrics can be made at unheard of speeds compared to the traditional fabric industry. Spinnerets can create

nonwoven fabric hundreds of feet long in the same time that it takes an industrial loom to weave less than a yard of traditional fabric (Tilin, 2001). The question is, are consumers ready for nonwoven apparel? According to Meban, Vice President/General Manager of Unifi Technical Fabrics (at the time of publication), two things have to happen: “the technology has to happen, and the consumer has to be ready to accept it” (Maycumber, 2000, p. 56). Meban stated that the technology is about to be ready, but they will have to wait and see if the consumer will accept it.

### **Summary**

In summary, the 15 to 25 year old consumer is part of the largest generational cohort the United States has ever seen. Researchers have not come to a final conclusion on the birth years of this generation. This makes it difficult to pin-point the exact size of this group, but approximately 70 - 80 million people make up this generational cohort. The sheer size of this group will have an affect on the retailing market as they continue to age, but understanding how this group purchases and what makes products desirable have been a challenge for the retailers to understand. Companies want a piece of this market because the generation spends approximately \$150 billion a year. Of that amount, clothing is ranked number one at 34%, ahead of entertainment – 22% and food – 16% (Alch, 2000).

This generation is larger, financially more secure, better educated and more ethnically diverse than generations before. The key to successfully marketing to this group is to understand their lifestyle, which appears to be quite different than the lifestyle of those generations before. The lifestyle of this generation affects what advertisements companies

should use, the apparel this generation will purchase, the evaluation criteria they use to purchase apparel, and how likely they are to adopt a new product.

Consumers use intrinsic criteria (style, color, pattern, fiber/fabric, fit) more often when evaluating a garment for purchase than extrinsic criteria (price, brand, store).

Consumers tend to make their initial purchase decision based on intrinsic criteria, but the extrinsic criteria will heavily influence the consumer's final decision to reject or accept the product. Garments may be evaluated differently, however, depending on the social setting in which the garment will be used. For example, consumers have different evaluative criteria, or put different importance on evaluative criteria, when purchasing clothing for the office setting versus for the weekend setting.

Nonwoven fabrics are reaching the saturation point in markets such as medical and industrial textiles. However, the apparel end-use market has only reached approximately 10% market penetration, making the apparel market a viable area for expansion of nonwoven fabrics. Advancing technologies have provided opportunities for significant progress in nonwoven fabrics, such as durability, hand, drape, texture and stretch; therefore, lending themselves to be more acceptable for apparel applications. While the fabric technology may be ready for the apparel market, one asks if the consumers are ready for the new material.

Marketers are concerned that consumers have a negative perception of nonwoven fabrics. For one, these consumers are used to seeing nonwoven fabrics in wipes and other disposable markets, which lead the consumer to believe the product is not durable enough for clothing. Second, the name itself, "nonwoven," implies a negative connotation. Marketers have considered the several different names for nonwoven fabrics, but studies will have to be

conducted to see what name for the fabric will be accepted when selling to end-use apparel consumers.

## CHAPTER III – METHODOLOGY

The purpose of this research was to develop an online questionnaire in order to study the 15 to 25 year old United States female so the following research questions could be answered:

1. What known attributes have an effect on the likelihood to purchase a garment?
  - 1a. Does the product styling affect the likelihood of purchase?
  - 1b. Does brand affect the likelihood of purchase?
  - 1c. Does price affect the likelihood of purchase?
  - 1d. Does retail outlet affect the likelihood of purchase?
  - 1e. Does fabrication affect the likelihood of purchase?
2. What impact does a consumer's fashion style have on the intent to purchase a specific garment?
3. What impact does the term "nonwoven" or "engineered fabric" have on the 15 to 25 year old consumer's intent to purchase?

A female sample was used because females tend to be more interested in fashion than the male consumer. Garment images and attributes were included in the online questionnaire to provide data in order to answer the research questions. Furthermore, to answer research question three, four garments were designed and produced with nonwoven and engineered fabrics. The process for the selection of the garments is included in the sections below. The methodology used to collect these findings is addressed in five sections. Section one discusses the pilot studies used to collect basic information on the 15 to 25 year old group in preparation for the development of the online questionnaire. Section two discusses the

garment selection process. Sections three and four discuss the questionnaire development and distribution. Finally, section five discusses the methods used to analyze the data.

### **Pilot Studies**

#### **College Students**

An online pilot survey was conducted with college-age respondents to assist in determining questions and layout style for the final online questionnaire. The pilot study helped determine respondents' typical activities, as well as stores shopped and brands worn. Respondents were allowed to identify more than one activity, store, or brand, and therefore, percentages will not total 100%. There were a total of 21 respondents: 16 females and 5 males. Of the respondents, 18 were Caucasian, 2 were African-American and 1 was Asian. A variety of ages, from 17 to 25, responded. Of this group, approximately 28% said that Express and GAP were their favorite brands and/or stores. Approximately 23% of the respondents favored Banana Republic. Limited was the third favored store of approximately 19% of the respondents and Abercrombie and Finch, Old Navy, and Polo were favored fourth by approximately 14% of the respondents. Less than 10% of the respondents mentioned Aeropostale, American Eagle, J. Crew, LaCoste, New York & Co, Seven and Tommy Hilfiger, which put these stores, brands or both in fifth place. See Table 4 for a list of the stores, brands or both's ranking. See Appendix A for College Questionnaire.

#### **Rising High School Seniors**

During a summer research program, a pilot survey was conducted with rising high school seniors to determine their favorite stores, brands or both. The purpose of this survey was to help determine what brands should be focused on for the final online questionnaire.

There were a total of 29 respondents: 28 females and 1 male. All respondents were 16 or 17 years old. Approximately 41% of the respondents favored American Eagle. The second most favored stores, brands or both were Express and GAP, with responses from 31% of respondents. Over 27% of respondents chose Old Navy, making it the third most favored store, brand or both. Banana Republic, Forever 21, TJ Maxx, and Wetseal were favored fourth, with interest from 20% of the respondents, and number five was Belk, Kohl's, Limited, Marshall's, Polo, and Target with interest from approximately 17% of the respondents. See Table 4 for a list of the stores, brands or both's ranking. See Appendix B for the Rising High School Senior Questionnaire. The survey was also used to determine the fashion styles with which these consumers associate themselves. The rising seniors were asked to not only define what fashion style with which they associated, but other fashion styles that were seen at their high school. A total of 19 fashion styles were defined (see Table 3). These fashion styles were included in the final online survey to assist in answering Research Question Two.

Table 3

*Identified Fashion Styles from Rising High School Senior Questionnaire*

| <b>Fashion Styles</b> |          |        |        |
|-----------------------|----------|--------|--------|
| Artsy                 | Earth    | Preppy | Surfer |
| Beachy                | Eclectic | Punk   | Trendy |
| Boho                  | Girly    | Rocker | Unique |
| Casual                | Gothic   | Skater | Urban  |
| Classic               | Grunge   | Sporty |        |

Table 4

*Pilot Survey Results of Popular Store, Brands or both among College and High School Respondents*

| Ranking | Selected Brands and/or Stores  |                   |   |                   |
|---------|--|-------------------|---|-------------------|
|         | Selection of College Respondents   | Percentage (n=21) | Selection of High School Respondents                      | Percentage (n=29) |
| 1       | Express<br>GAP   | 28%               | American Eagle  | 41%               |
| 2       | Banana Republic  | 23%               | Express<br>GAP  | 31%               |
| 3       | Limited  | 19%               | Old Navy  | 27.5%             |
| 4       | Abercrombie and Finch<br>Old Navy<br>Polo  | 14%               | Banana Republic<br>Forever 21<br>TJ Maxx<br>Wetseal       | 20%               |
| 5       | Aeropostale<br>American Eagle<br>J. Crew<br>LaCoste<br>New York & Co.<br>Seven<br>Tommy Hilfiger | 9.5%              | Belk<br>Kohl's<br>Limited<br>Marshall's<br>Polo<br>Target | 17%               |

Note: Columns may not total 100% (1) because respondents were allowed to identify more than one brand and/or store and (2) because the table only includes the top five most identified brands and/or stores.

**Garment Selection**

**Garment Purchases**

Both the college-age pilot survey and the high school pilot survey responses were looked at to rank the top five most identified stores and/or brands. The stores and/or brands were then looked at to find stores and/or brands that were mentioned by both age groups. A list of common stores and/or brands, as seen in Table 5, was created so the stores could be visited.

Table 5

*List of Common Stores and/or Brands among College and High School Respondents*

| Stores                  |
|-------------------------|
| Express                 |
| Gap                     |
| Banana Republic Limited |
| American Eagle          |
| Old Navy                |

The top stores and/or brands, found in both age groups, were visited to determine if similar styled garments could be found in all stores. Similar styled garments are used to control for the least amount of bias. Furthermore, a top and bottom garment was used so data could be collected on more than one type of garment. Therefore, future research could determine if respondents had placed a different importance on attributes when purchasing a top versus a bottom. The similar style that appeared most often in top garments was camisoles (see Figure 1) and the similar style that appeared most often in bottom garments was peasant skirts (see Figure 2).



*Figure 1:* Example of a purchased camisole top.



*Figure 2:* Example of a purchased peasant skirt.

From the list of visited stores (see Table 5), the selection was narrowed down to five stores (a manageable number for the survey) in which one camisole and one peasant skirt

was purchased in each store. Stores were chosen to include three specialty stores, one department store, and one discount store to provide a variety of different retail outlets and price points. The final five stores included American Eagle, Banana Republic, Express, Dillard's – Karen Kane camisole and BCBG Maxazria peasant skirt, and Target – Xhilaration camisole and peasant skirt (see Table 6). GAP was not included in the final list of stores because the store did not carry similar styled garments. Both Express and Limited were not included because they are owned by the same company. Therefore, Express was chosen over Limited because Express had been identified by more respondents in the pilot surveys. For the same reason, both Banana Republic and Old Navy were not included in the survey. Banana Republic was chosen because more respondents identified Banana Republic on the pilot surveys. Furthermore, Banana Republic provided a different price point, where Old Navy's price point would have been too similar to the chosen discount store price point.

Table 6

*List of Stores and Brands where Garments were Purchased*

| <b>Retail Outlet</b> | <b>Brand and/or Store</b>                                 |
|----------------------|---|
| Specialty            | American Eagle<br>Banana Republic<br>Express              |
| Department           | Dillard's<br>Camisole: Karen Kane<br>Skirt: BCBG Maxazria |
| Discount             | Target<br>Camisole: Xhilaration<br>Skirt: Xhilaration     |

**Garment Design and Production**

In order to provide assistance in answering Research Question Three, two camisoles and two peasant skirts were made out of three different nonwoven fabrics. These garments

were designed to have a similar style to the store purchased garments. The first nonwoven top and bottom garments were made from an older generation of nonwoven fabrics provided by Freudenberg Nonwovens. Top 6 (see Figure 3) was made with a polyester and nylon blend nonwoven fabric. Bottom 6 (see Figure 4) was made with a stretch, polyester and nylon blend nonwoven fabric. The second set of nonwoven garments, Top 7 and Bottom 7 (see Figures 5 and 6), was made from a new fabric developed by Nonwovens Corporate Research Center (NCRC), located in Raleigh, North Carolina. The garments were developed with a spunlaced hydroentangled nonwoven fabric consisting of a polyester and polyethylene blend. The first set of nonwoven garments was labeled as a “nonwoven” fabrication and the second set was labeled as an “engineered fabric”. This was done to see if respondents would respond differently to the terms “nonwoven” versus “engineered fabrics”. The other attributes of these garments had to be determined (see Tables 14 and 17). Brand was decided by giving the “nonwoven” garments an imaginary brand, labeled “New World,” and the “engineered fabric” was labeled as a generic “store brand.” The “nonwoven” garments were given a price of \$12.00 each in order to make the garments the least expensive garments overall. The “engineered fabric” garments were given a price that was competitive with the majority of the garments sold at specialty stores since the garments were labeled as a generic “store brand.” The place was determined to include different retail outlets than the places in which the other garments were purchased in order to create a variety of retail outlets. The “nonwoven” garments were labeled as sold in catalogs and the “engineered fabric” garments were labeled as sold on the Internet.



*Figure 3: Top 6, labeled as a “nonwoven.”*



*Figure 4: Bottom 6, labeled as a “nonwoven.”*



*Figure 5: Top 7, labeled as an “engineered fabric.”*



*Figure 6: Bottom 7, labeled as an “engineered fabric.”*

## **Questionnaire Development**

### **Demographic and Psychographic Variables**

After evaluation of the pilot surveys, an online questionnaire was developed in order to provide answers to the three research questions. First, the college student online pilot survey was reevaluated. Changes were made to provide better consistency throughout the survey. Furthermore, some questions were removed due to irrelevance and other questions were reworded for clarity. (See Appendix A for the College Questionnaire).

The demographic section included questions regarding age, gender, race, education, city size, employment, income and expenses. The psychographic section contained questions about their weekend entertainment, favorite bands/singers, movies, TV shows, sports interests, shopping interests, and perceived fashion styles. (See Appendix C for the Thesis Online Questionnaire).

### **Garment Images**

Once the garments were purchased, high resolution pictures were taken of each of the fourteen garments. A black backdrop was chosen for the top garments because black

provided a good contrast to the colors of the tops. A grey backdrop was used for the bottom garments because the grey created a better contrast with the color of the skirts. Each image was cropped to a four inch by six inch (1200 pixels by 1800 pixels) picture at 300 pixels per inch using Adobe Photoshop software. A web development technician assisted in preparing the pictures for incursion into the online edition of the questionnaire. The technician used Macromedia Fireworks to reduce the image size of each picture from 1200 pixels horizontally by 1800 pixels vertically to 100 pixels horizontally by 150 pixels vertically. For each question that included the use of an image, the respondent had an option to click on the image to create a pop-up window that would show the image at a larger size. For the popup windows, each image size was 480 pixels horizontally by 720 pixels vertically.

### **Garment Questions**

A web development technician assisted with the online edition of the questionnaire by creating the coding in order for the questions and answer boxes to appear properly on the questionnaire website. The technician also assisted with the presentation of the garment images. In the garment section of the questionnaire, respondents were shown images of seven tops and seven skirts and were asked which of the tops and which of the skirts they might be interesting in purchasing. The garment images and attribute information about the garments appeared in random order for each respondent so as to limit the amount of bias. To do so, the technician coded the questions so that each time a respondent opened the questionnaire the order in which the pictures would appear in the row would change. The order of the images would then remain in the same order throughout the rest of the questionnaire. Also, the questionnaire was coded so that the order in which each respondent saw the garment

attributes would change. For example, one respondent may see the attributes in the following order: style, brand, price, place, and fabrication. But the next respondent would see the attributes in a different order. For example, the new order for the next respondent could be: style, fabrication, place, price, and brand. Note that every respondent always received the same question first which was to choose a garment they would most likely purchase based only on the style of the garment. Therefore, the images of each garment were presented but no attribute information was given at that time. After this initial style question was asked, the following four questions would be asked but in random order from respondent to respondent:

1. Now that you know the brand, which garment would you most likely purchase?
2. Now that you know the price, which garment would you most likely purchase?
3. Now that you know the place, which garment would you most likely purchase?
4. Now that you know the fabrication, which garment would you most likely purchase?

Each question was seen on the screen one at a time. Under each of the questions above were the images in a row of the seven garments and below each image was the correlating attribute. So, for the question relating to brand, all seven images of the tops would be shown and below each image of the top, appeared the brand of that top. This process was then repeated for the seven skirts.

### **Questionnaire Distribution**

The survey went online January 24, 2006, and was distributed through a convenience sampling method. A cover letter with a link to the questionnaire's website was emailed to 64 friends, family, and acquaintances with the assumption that the recipients would forward the

link to others in the 15 to 25 year old age range, as the cover letter asked them to do and essentially create a “snowball” effect. The cover letter was also included in three of the researcher’s college’s weekly email to students which included approximately 750 students, as well as the university’s Woman’s Lacrosse Club which included 79 females and a list of emails from the college’s summer research program (STEP) which include 105 high school seniors. (See Table 7). Even though the questionnaire was for 15 to 25 year old United States females, the email was sent to all ages, males and females alike, with the intent that these people may know United States females in the 15 to 25 year old age range in which to forward the questionnaire link. There is not a total count of the number of people the questionnaire researched because of this forward system. The questionnaire was taken offline, five weeks later on March 1, 2006. (See Appendix C for Thesis Online Questionnaire Cover Letter).

Table 7

*Original Groups who were E-Mailed the Thesis Online Questionnaire*

| <b>Group</b>                         | <b># of People in Group</b> | <b>Date Emailed</b> |
|--------------------------------------|-----------------------------|---------------------|
| Family                               | 7                           | 1.24.06             |
| Friends                              | 41                          | 1.24.06             |
| NC State's Woman's Lacrosse Club     | 79                          | 1.24.06             |
| STEP (group 1)                       | 17                          | 1.24.06             |
| Nonwoven Group                       | 16                          | 1.25.06             |
| STEP (group 2)                       | 88                          | 1.25.06             |
| COT weekly emails                    | 750                         | 1.25.06             |
|                                      |                             | 1.29.06             |
|                                      |                             | 2.5.06              |
| <b>E-Mails Sent</b>                  | <b>998</b>                  |                     |
| <b>Total Returned E-Mails</b>        | 10                          |                     |
| <b>Total E-Mails Originally Sent</b> | <b>988</b>                  |                     |

## **Data Analysis**

Before any data analysis could be done the information had to be retrieved from the online questionnaire. The technician who assisted with the online edition of the questionnaire exported the data from the database to a Microsoft Excel file so data could be analyzed. The data was then cleaned and prepared for statistical analysis. Any male subjects who responded to the questionnaire were removed from the data before analysis. Data was coded so that words were replaced with numbers for easier analysis. Respondents were allowed to choose more than one answer for certain questions. In this case the responses were all in one cell. Responses were separated into different columns for analysis.

## **Demographics**

The first section of the online questionnaire asked respondents to provide demographic information. Microsoft Excel was used to show the distribution of the sample.

## **Attributes**

Stat Crunch was used to analyze the data required to answer the three research questions. The chi-squared test of independence will also test if a significant relationship exists between two or more categorical variables and if the differences in categorical data are significantly different. Note, this test does not indicate the strength of the relationship.

## CHAPTER IV – RESULTS

### Sample

The sample included 250 United States females ranging in age from 15 to 25. The sample was broken up into three subsamples: high school age (15 to 18 years old), college age (19 to 22 years old) and post-college age (23 to 25 years old). The subsamples included 57 (22.8%) 15- to 18-year-olds, 123 (49.2%) 19- to 22-year-olds, and 70 (28.0%) 23- to 25-year-olds. Breaking up the large group is one way to assist in understanding the group better because each group is going to have a different lifestyle which will effect how one communicates to these age groups (Paul, 2001).

### Race

As seen in Table 8, the majority of the respondents were Caucasian in each age group and overall. The most African-American respondents were between 15 and 18 years old, the only Hispanics to respond were between 19 and 22 years old, and only one “other” responded who was between 19 and 22 years old. Therefore, the most diverse group of respondents was the 19- to 22-year-olds.

Table 8

#### *Race of the Sample*

| <b>Race</b>      | 15-18 (n=57) |                | 19-22 (n=123) |                | 23-25 (n=70) |                | Total (n=250) |                |
|------------------|--------------|----------------|---------------|----------------|--------------|----------------|---------------|----------------|
|                  | Total        | Percentage     | Total         | Percentage     | Total        | Percentage     | Total         | Percentage     |
| African-American | 10           | 17.54%         | 6             | 4.88%          | 3            | 4.29%          | 19            | 7.60%          |
| Asian            | 3            | 5.26%          | 3             | 2.44%          | 3            | 4.29%          | 9             | 3.60%          |
| Caucasian        | 44           | 77.19%         | 110           | 89.43%         | 64           | 91.43%         | 218           | 87.20%         |
| Hispanic         | 0            | 0.00%          | 3             | 2.44%          | 0            | 0.00%          | 3             | 1.20%          |
| Native American  | 0            | 0.00%          | 0             | 0.00%          | 0            | 0.00%          | 0             | 0.00%          |
| Other            | 0            | 0.00%          | 1             | 0.81%          | 0            | 0.00%          | 1             | 0.40%          |
| <b>Total</b>     | <b>57</b>    | <b>100.00%</b> | <b>123</b>    | <b>100.00%</b> | <b>70</b>    | <b>100.00%</b> | <b>250</b>    | <b>100.00%</b> |

### City Size

Respondents were asked what size city they resided in while attending high school. The city size was based off of their perception. As seen in Table 9, most of respondents perceived they lived in a medium size city. An equal amount of 15- to 18-year-olds perceived they lived in a medium or rural size town. Over 35% of the 19- to 22-year-olds perceived they lived in a medium or rural size town. Over 35% of the 19- to 22-year-olds perceived they lived in a medium size city. Of the 23- to 25-year-olds, 34.29% perceived they lived in medium size city and 32.86% say they lived in a small size city.

Table 9

#### *Sample's Perception of City Size Resided in while Attending High School*

| City Size    | 15-18 (n=57) |            | 19-22 (n=123) |            | 23-25 (n=70) |            | Total (n=250) |            |
|--------------|--------------|------------|---------------|------------|--------------|------------|---------------|------------|
|              | Total        | Percentage | Total         | Percentage | Total        | Percentage | Total         | Percentage |
| Metropolitan | 2            | 3.51%      | 15            | 12.20%     | 3            | 4.29%      | 20            | 8.00%      |
| Large        | 8            | 14.04%     | 25            | 20.33%     | 13           | 18.57%     | 46            | 18.40%     |
| Medium       | 19           | 33.33%     | 44            | 35.77%     | 24           | 34.29%     | 87            | 34.80%     |
| Small        | 9            | 15.79%     | 24            | 19.51%     | 23           | 32.86%     | 56            | 22.40%     |
| Rural        | 19           | 33.33%     | 15            | 12.20%     | 7            | 10.00%     | 41            | 16.40%     |
| Total        | 57           | 100.00%    | 123           | 100.00%    | 70           | 100.00%    | 250           | 100.00%    |

## Education

As seen in Table 10, the highest degree achieved by most of the sample was a high school degree, or equivalent. The 15- to 18-year-olds either have achieved the equivalent of a high school degree or have not yet received a degree. Of the 19- to 22-year-olds, 67.48% received the equivalent of a high school degree and 29.27% achieved a bachelor's degree. Over 78% of 23- to 25-year-olds have achieved a bachelor's degree.

Table 10

### *Highest Education Achieved by the Sample*

| <b>Education</b>      | 15-18 (n=57) |                | 19-22 (n=123) |                | 23-25 (n=70) |                | Total (n=250) |                |
|-----------------------|--------------|----------------|---------------|----------------|--------------|----------------|---------------|----------------|
|                       | Total        | Percentage     | Total         | Percentage     | Total        | Percentage     | Total         | Percentage     |
| High School or Equiv. | 21           | 36.84%         | 83            | 67.48%         | 3            | 4.29%          | 107           | 42.80%         |
| Associate             | 0            | 0.00%          | 2             | 1.63%          | 2            | 2.86%          | 4             | 1.60%          |
| Bachelor              | 0            | 0.00%          | 36            | 29.27%         | 55           | 78.57%         | 91            | 36.40%         |
| Master                | 0            | 0.00%          | 1             | 0.81%          | 10           | 14.29%         | 11            | 4.40%          |
| Doctorate             | 0            | 0.00%          | 1             | 0.81%          | 0            | 0.00%          | 1             | 0.40%          |
| None                  | 36           | 63.16%         | 0             | 0.00%          | 0            | 0.00%          | 36            | 14.40%         |
| <b>Total</b>          | <b>57</b>    | <b>100.00%</b> | <b>123</b>    | <b>100.00%</b> | <b>70</b>    | <b>100.00%</b> | <b>250</b>    | <b>100.00%</b> |

## Employment

As see in Table 11, 41.2% of the respondents held a part-time job. Over 56% of the 15- to 18-year-olds are not employed and 43.86% had a part-time. Of the 19- to 22-year-olds, 51.22% held a part-time job. This is also the only group where individuals held more than one job. Over 68% of the 23- to 25-year-olds held a full-time position.

Table 11

### *Employment Status of the Sample*

| <b>Employment</b> | 15-18 (n=57) |            | 19-22 (n=123) |            | 23-25 (n=70) |            | Total (n=250) |            |
|-------------------|--------------|------------|---------------|------------|--------------|------------|---------------|------------|
|                   | Total        | Percentage | Total         | Percentage | Total        | Percentage | Total         | Percentage |
| Not Employed      | 32           | 56.14%     | 39            | 31.71%     | 7            | 10.00%     | 78            | 31.20%     |
| Part-Time         | 25           | 43.86%     | 63            | 51.22%     | 15           | 21.43%     | 103           | 41.20%     |
| Full-Time         | 0            | 0.00%      | 19            | 15.45%     | 48           | 68.57%     | 67            | 26.80%     |
| More than 1 Job   | 0            | 0.00%      | 2             | 1.63%      | 0            | 0.00%      | 2             | 0.80%      |
| Total             | 57           | 100.00%    | 123           | 100.00%    | 70           | 100.00%    | 250           | 100.00%    |

## Monthly Income

The respondents were asked to report their monthly income, after taxes, from all sources; including employment, parents, significant others, gifts, etc. As seen in Table 12, 50.80% of the sample received a monthly income that is less than \$833 and 82.46% of the 15- to 18-year-olds make less than \$833 a month. The most diverse salary levels were seen in the 23- to 25-year-olds age group. Overall, the majority of respondents reported a monthly income in the lower level of the income brackets, less than \$2499 a month, but salary levels increased with age. Respondents were also asked to report what percentage of income was received from sources other than employment, such as parents, grandparents, friends, significant others, gifts, etc. As seen in Table 13, almost half, 49.20%, of the respondents received less than 25% of their income from other sources. Of the 15- to 18-year-olds, 45.61% received more than 75% of their income from sources other than employment, but

there were 33.33% that received less than 25%. Over 43% of the 19- to 22-year-olds received less than 25%, but 32.52% received greater than 75% of the income from other sources.

However, over 70% of the 23- to 25-year-olds received less than 25% of their monthly income from other sources. Overall, the percent of respondents who received 25% or less of their income from other sources increased as respondents aged.

Table 12

*Monthly Income of the Sample*

| Monthly Income  | 15-18 (n=57) |            | 19-22 (n=123) |            | 23-25 (n=70) |            | Total (n=250) |            |
|-----------------|--------------|------------|---------------|------------|--------------|------------|---------------|------------|
|                 | Total        | Percentage | Total         | Percentage | Total        | Percentage | Total         | Percentage |
| < \$833         | 47           | 82.46%     | 73            | 59.35%     | 7            | 10.00%     | 127           | 50.80%     |
| \$833 - \$1249  | 7            | 12.28%     | 20            | 16.26%     | 11           | 15.71%     | 38            | 15.20%     |
| \$1250 - \$1665 | 0            | 0.00%      | 9             | 7.32%      | 12           | 17.14%     | 21            | 8.40%      |
| \$1666 - \$2082 | 0            | 0.00%      | 8             | 6.50%      | 14           | 20.00%     | 22            | 8.80%      |
| \$2083 - \$2499 | 0            | 0.00%      | 10            | 8.13%      | 10           | 14.29%     | 20            | 8.00%      |
| \$2500 - \$2915 | 1            | 1.75%      | 1             | 0.81%      | 6            | 8.57%      | 8             | 3.20%      |
| \$2916 - \$3332 | 0            | 0.00%      | 1             | 0.81%      | 3            | 4.29%      | 4             | 1.60%      |
| \$3333 - \$3749 | 0            | 0.00%      | 0             | 0.00%      | 4            | 5.71%      | 4             | 1.60%      |
| \$3750 - \$4166 | 0            | 0.00%      | 1             | 0.81%      | 1            | 1.43%      | 2             | 0.80%      |
| > \$4166        | 2            | 3.51%      | 0             | 0.00%      | 2            | 2.86%      | 4             | 1.60%      |
| Total           | 57           | 100.00%    | 123           | 100.00%    | 70           | 100.00%    | 250           | 100.00%    |

Table 13

*Sample's Percentage of Income Received from Sources Other Than Employment*

| Other Income | 15-18 (n=57) |            | 19-22 (n=123) |            | 23-25 (n=70) |            | Total (n=250) |            |
|--------------|--------------|------------|---------------|------------|--------------|------------|---------------|------------|
|              | Total        | Percentage | Total         | Percentage | Total        | Percentage | Total         | Percentage |
| 0% - 25%     | 19           | 33.33%     | 54            | 43.90%     | 50           | 71.43%     | 123           | 49.20%     |
| 26% - 50%    | 9            | 15.79%     | 15            | 12.20%     | 11           | 15.71%     | 35            | 14.00%     |
| 51% - 75%    | 3            | 5.26%      | 14            | 11.38%     | 5            | 7.14%      | 22            | 8.80%      |
| 76% - 100%   | 26           | 45.61%     | 40            | 32.52%     | 4            | 5.71%      | 70            | 28.00%     |
| Total        | 57           | 100.00%    | 123           | 100.00%    | 70           | 100.00%    | 250           | 100.00%    |

## Monthly Expenses

Respondents were asked how much money they spend monthly on the following categories: housing, food, car payments, car insurance, gasoline, medical needs, health and beauty, education/home office, clothing, and entertainment.

### Monthly Expenses: Housing

As seen in Figure 7, over 30% of the sample spent only \$0-\$50 monthly on housing. Of the 15- to 18-year-olds, almost 90% spent less than \$50 a month on housing. Approximately 75% of the 19- to 22-year-olds spent in the middle brackets of the expense range, and 82.85% of the 23- to 25-year-olds spent more than \$300 per month on housing expenses. Overall, housing expenses increased as age increased.

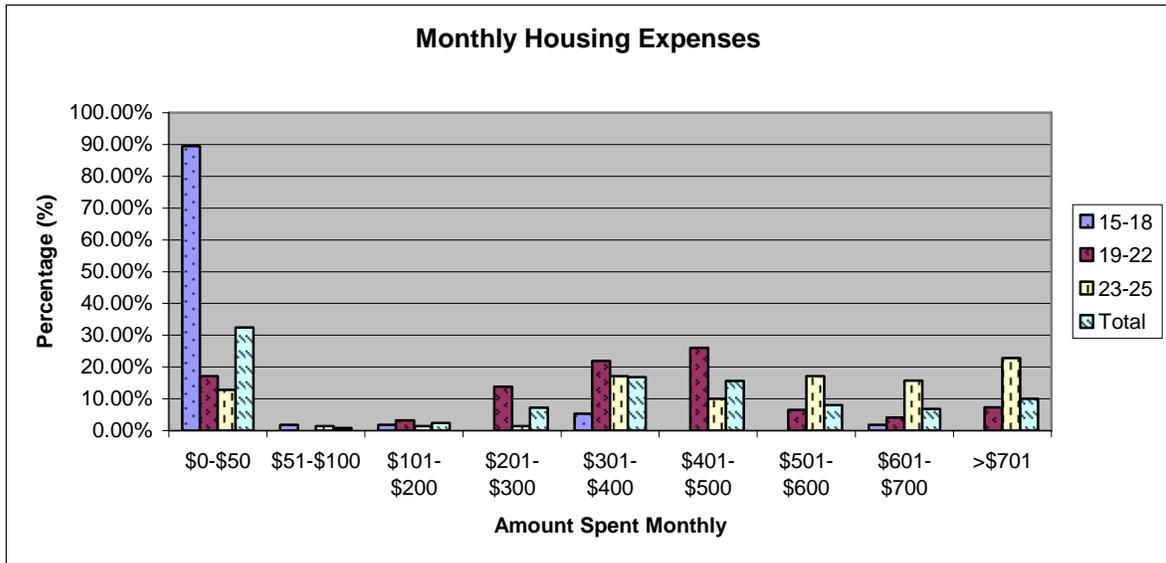


Figure 7: Monthly housing expenses.

### Monthly Expenses: Food

Respondent were asked how much they spend monthly on food, such as groceries not restaurant food; eating out was considered entertainment and included later in the survey. As seen in Figure 8, 35.2% of the sample spent \$101-\$200 per month on food. Seventy percent of the 15- to 18-year-olds spent \$50 or less on food. Over 96% of the 19- to 22-year-olds spent \$300 or less. Over 95% of the 23- to 25-year-olds spent between \$51 and \$400 on food per month.

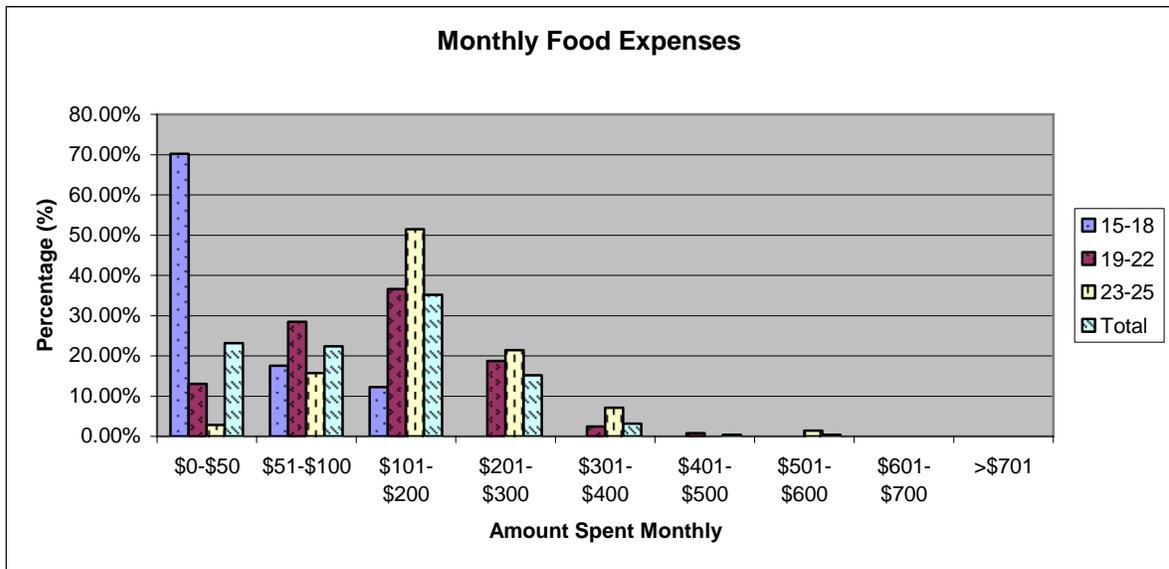


Figure 8: Monthly food expenses.

### Monthly Expenses: Car Payments

When asked how much they spend on car payments per month approximately 80% of the total sample spent \$50 or less on their monthly car payments, as seen in Figure 9. The 23- to 25-year-olds are the only group that spent more per month on car payments; 32.86% spent between \$100 and \$500.

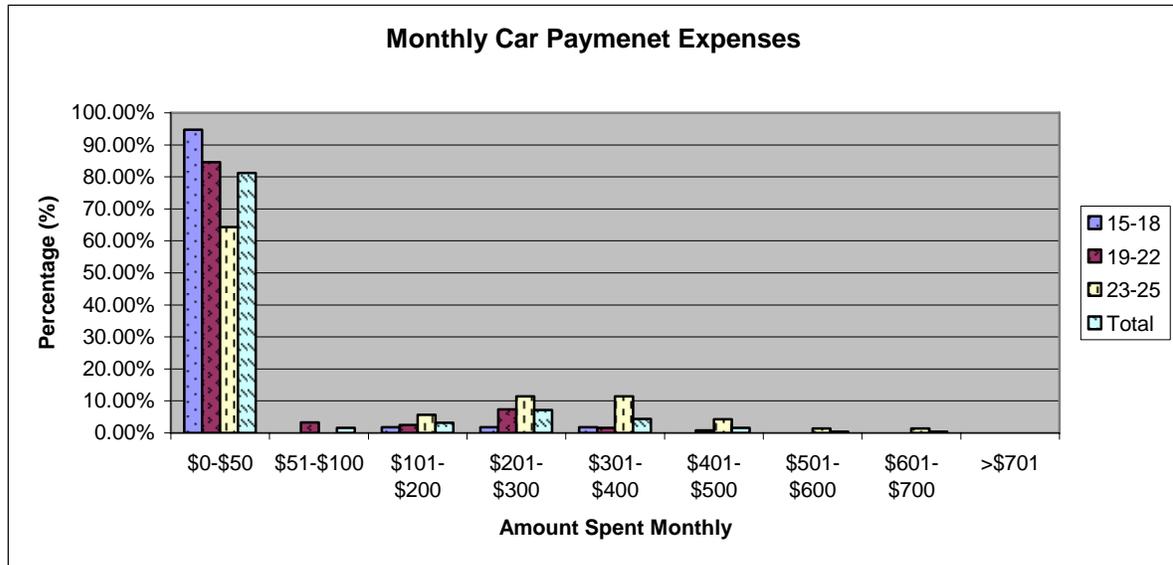


Figure 9: Monthly car payment expenses.

### Monthly Expenses: Car Insurance

As seen in Figure 10, over 60% of sample spent \$50 or less a month on car insurance. Over 85% of 15- to 18-year-olds and 70% of 19- to 22-year-olds spent \$50 or less on car insurance per month. Unlike the young age groups, the 23- to 25-year-olds monthly spending increased on car insurance from \$50 to \$51-\$100 a month.

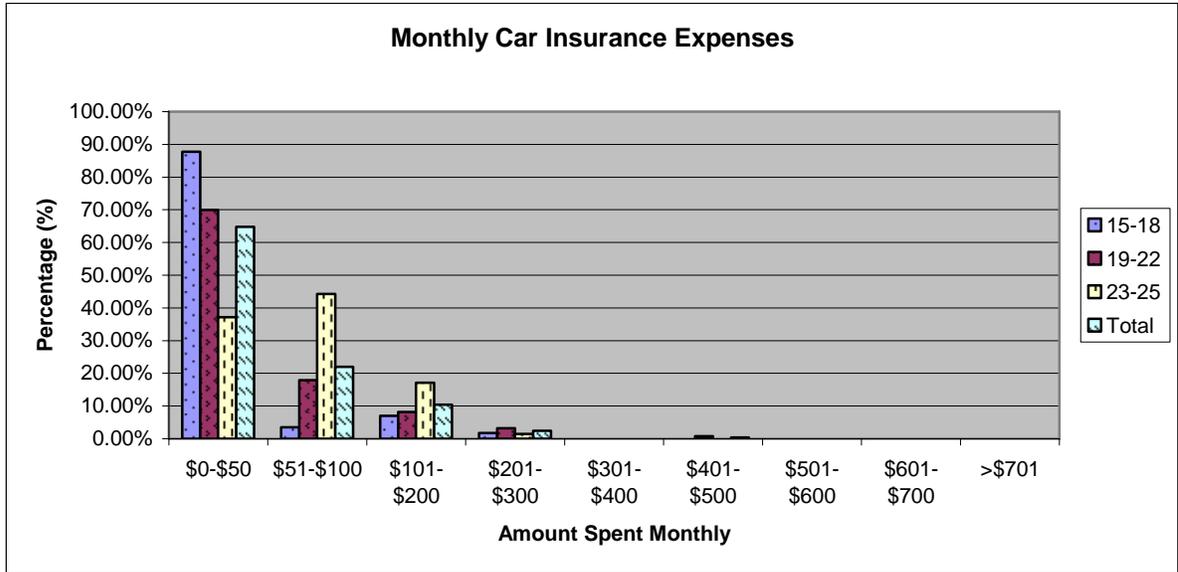


Figure 10: Monthly car insurance expenses.

### Monthly Expenses: Gasoline

As seen in Figure 11, 97.2% of the sample spent \$200 or less on gasoline monthly with the majority spending between \$51 and \$100. The 15- to 18-year-olds spent the least with 63% spending \$50 or less and 54.29% of the 23- to 25-year-olds spent between \$51 and \$100 on gasoline a month.

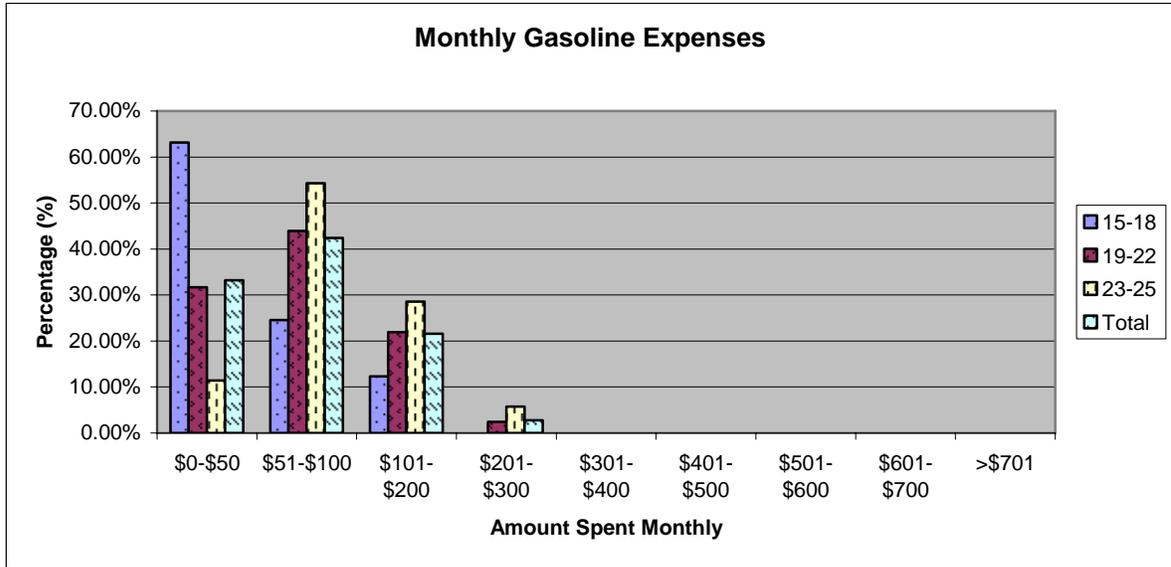


Figure 11: Monthly gasoline expenses.

### Monthly Expenses: Medical

Respondents were asked how much they spend monthly on medical expenses, for example, medical insurance, prescriptions, doctor visits, etc. As seen in Figure 12, 71% of the total sample spent \$50 or less on medical expenses a month. This information is representative of the individual age groups as well. However, there is an increase in spending of the 23- to 25-year-olds on medical expenses in comparison of the other two age groups.

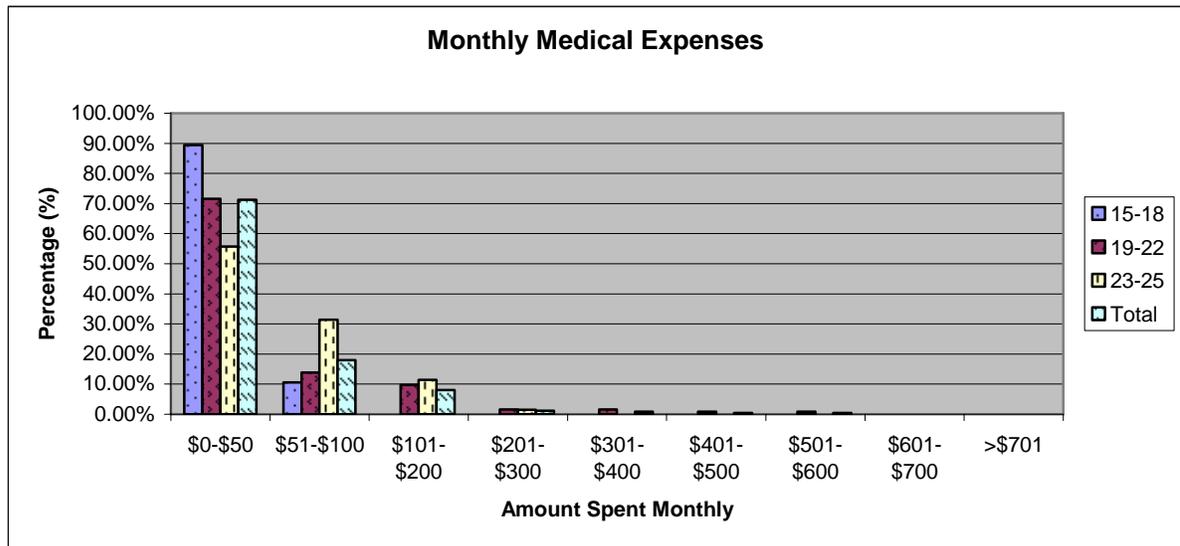


Figure 12: Monthly medical expenses.

### Monthly Expenses: Health and Beauty

Respondents were asked how much they spend monthly on health and beauty supplies, such as gym memberships, cosmetics, salons, etc. As seen in Figure 13, 66% of the total sample spent \$50 or less on health and beauty supplies per month. This percentage is consistent for each of the age groups.

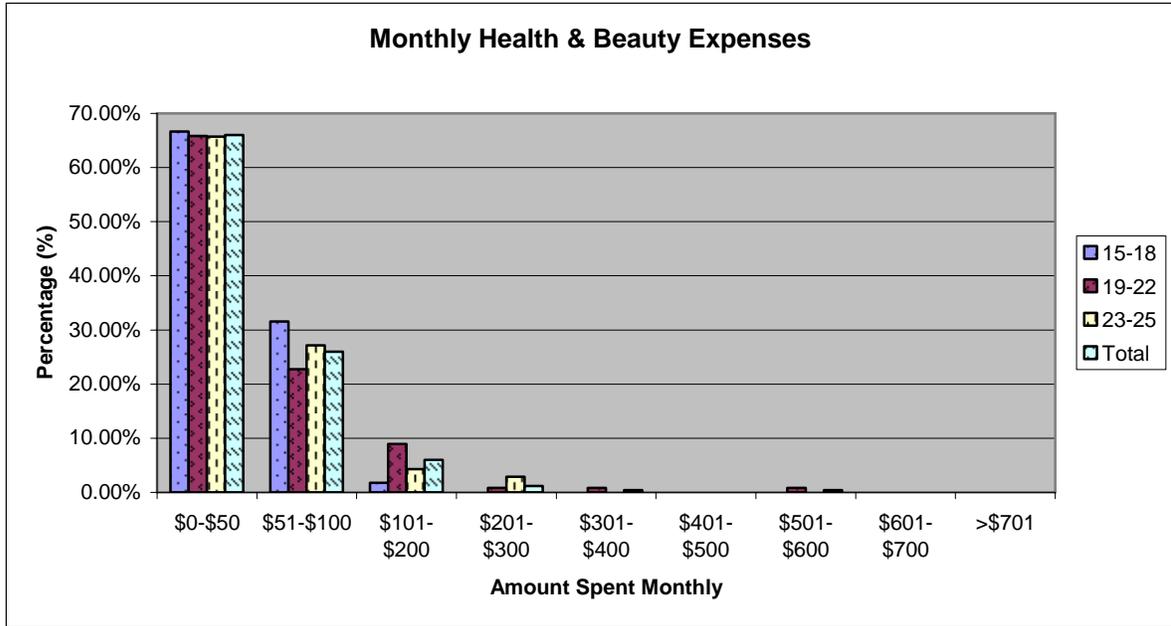


Figure 13: Monthly health and beauty expenses.

### Monthly Expenses: Education/Home Office

The respondents were also asked how much they spend monthly on education and/or home office supplies, such as school supplies, tuition, fees, parking, computer ink, paper, etc. As seen in Figure 14, over 60% of the total sample spent \$50 or less on supplies. Of the 15- to 18-year-olds, 80% spent \$50 or less on supplies monthly. Of the 19- to 22-year-olds, 90.25% spent \$400 or less on education, home office supplies, or both monthly. Over 97% of the 23- to 25-year-olds spent \$300 or less on supplies. Note that a small percentage of the respondents spent more than \$701 a month on education, home office supplies, or both.

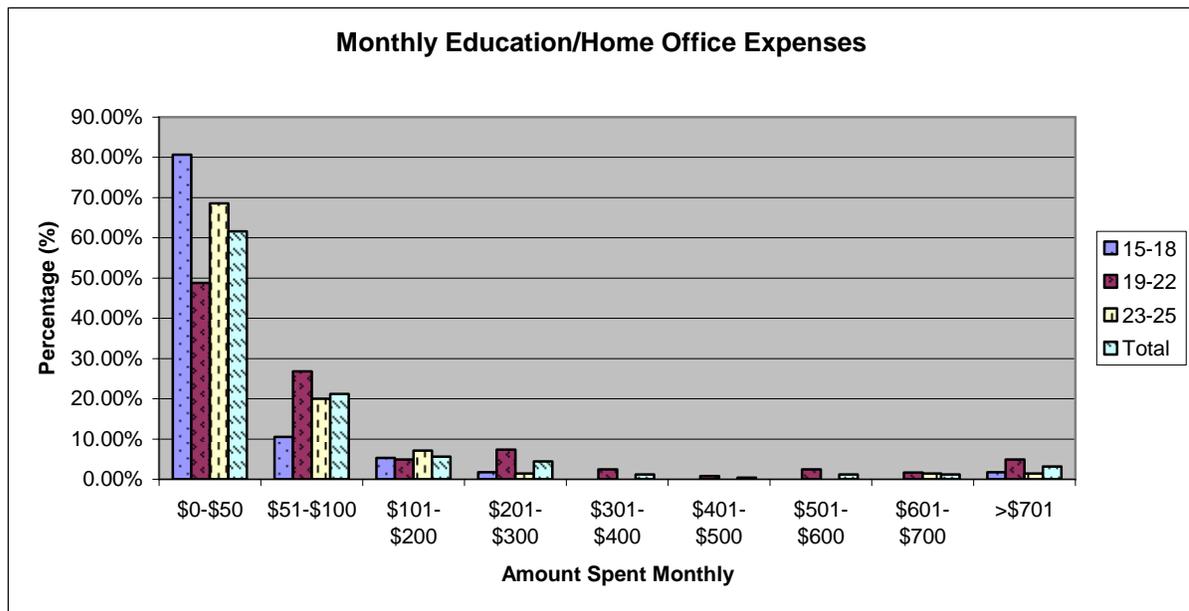


Figure 14: Monthly education/home office expenses.

### Monthly Expenses: Clothing

As seen in Figure 15, 91.2% of the sample spent between \$200 or less on clothing monthly. Forty-three percent of the 15- to 18-year-olds spent \$51-\$100 on clothing per month. However, most of the 19- to 22-year-olds and the 23- to 25-year-olds spent \$50 or less on clothing per month. The number of 19- to 22-year-olds and the number of 23- to 25-year-olds who spent more on clothing steadily decreased.

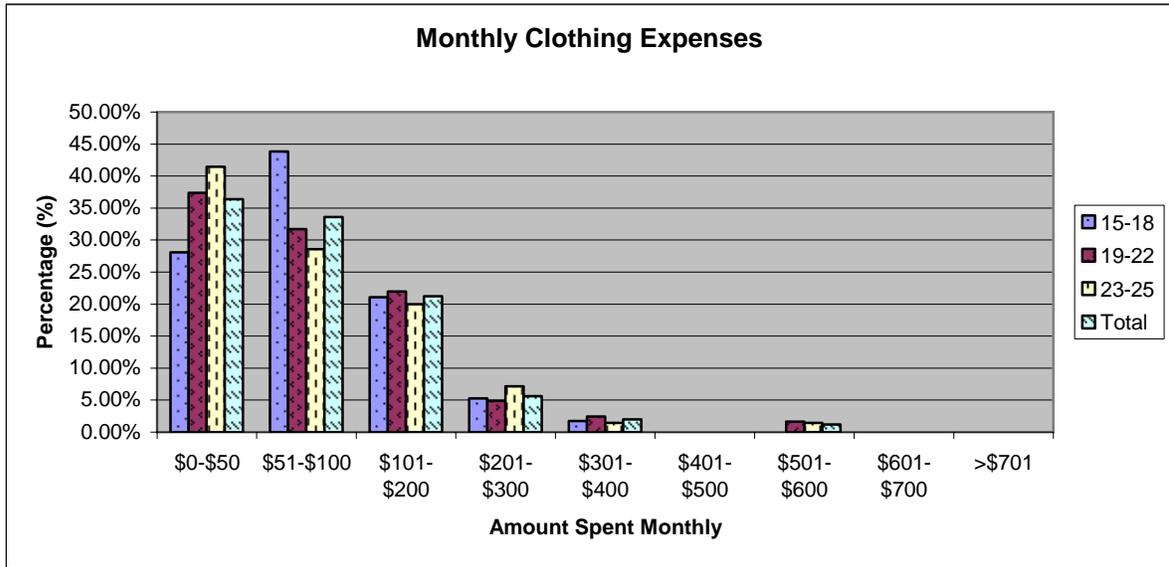


Figure 15: Monthly clothing expenses.

### Monthly Expenses: Entertainment

Finally, respondents were asked how much they spent monthly on entertainment, such as movies, eating out, CDs, DVDs, video games and travel. As seen in Figure 16, 70% of the total sample spent \$100 or less on entertainment monthly. Over 50% of the 15- to 18-year-olds spent \$50 or less on entertainment. The 19- to 22-year-olds are consistent with the total sample, however the 23- to 25-year-olds spent more than the other age groups. Over 88% of the 23- to 25-year-olds spent \$200 or less on entertainment per month.

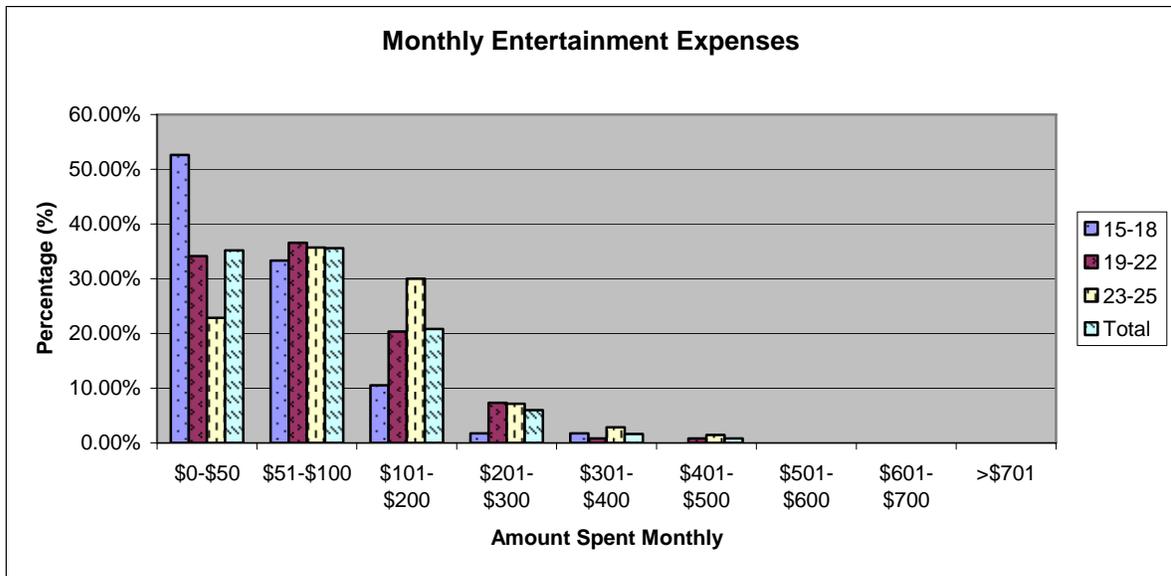


Figure 16: Monthly entertainment expenses.

### **Top Garment Selection Based on Attributes**

Respondents were asked to choose a top garment and a bottom garment that they might purchase given certain known attributes, such as style, brand price, place, fabrication and fiber content. They were first shown images of seven tops, with no information about the garments provided, and asked which garment they would most likely purchase. All respondents received this question first, though the order of the images from left to right was randomly generated. Then, the respondents were shown the images of the garments again, but with additional attribute information (brand, price, place, or fabrication and fiber content) one at a time and asked again which top they would most likely purchase given the known attribute. These four questions were asked in random order each time a new respondent logged onto the questionnaire. Therefore, some respondents knew brand and price before place, while other respondents may have known only brand and yet other respondents could have known fabrication and fiber content and brand before price. Also, each time a respondent logged on to the questionnaire, the seven garments were presented in different order. So, respondent one may have seen the garments in order of 1, 2, 3, 4, 5, 6, 7 and the second respondent may have seen the garments in order of 3, 4, 5, 6, 7, 1, 2, etc. For an image of each top garment and known attributes about the garments see Table 14. Once all questions were asked of the seven tops, the process was repeated with the seven bottom garments.

Table 14

*Attributes of the Garment Tops in the Online Questionnaire*

|  | Top 1   | Top 2   | Top 3  | Top 4   | Top 5   | Top 6   | Top 7   |
|--|---|---|--|---|---|---|---|
| <b>Style</b>                           |  |  |  |  |  |  |  |
| <b>Brand</b>                           | American Eagle  | Banana Republic   | Karen Kane   | Express   | Xhilaration   | New World   | “Store Brand”   |
| <b>Price</b>                           | \$39.50   | \$54.00   | \$68.00  | \$39.50   | \$14.99   | \$12.00   | \$40.00   |
| <b>Place</b>                           | American Eagle  | Banana Republic   | Dillard’s  | Express   | Target  | Catalog   | Internet  |
| <b>Fabrication &amp; Fiber Content</b> | Woven<br>100% Silk  | Knit<br>85% Silk,<br>15% Angora   | Woven<br>92% Silk,<br>8% Spandex   | Woven<br>93% Silk,<br>7% Spandex  | Woven<br>100% Polyester   | Nonwoven<br>70% Polyester,<br>30% Nylon   | Engineered Fabric<br>75% Polyester,<br>25% Polyethylene                             |

### Top Garment Selection

A Chi-squared test of independence showed a P-value of less than 0.05 indicating that there is a significant difference among the attributes at a 95% confidence level. Therefore, the attributes are dependent of the top (see Table 15).

Table 15

#### *Chi-Squared Test of Independence Results for Top Garments*

| <i>Test</i> | <i>Statistic</i> | <i>Df</i> | <i>P-Value</i> |
|-------------|------------------|-----------|----------------|
| Chi-Squared | 249.251          | 24        | 0.0000         |

As seen in Table 16, Top 1 was the garment significantly favored overall. Styling, brand, place and fabrication positively affected the respondents' intent to purchase Top 1. Price negatively impacted the 15- to 25-year-olds intent to purchase because Top 1 dropped to second place when price was a known attribute, indicating that fewer consumers would intend on purchasing Top 1.

Table 16

#### *Importance of Attributes to the Sample's Overall Top Garment Selections*

|              | <b>Style</b> | <b>Brand</b> | <b>Price</b> | <b>Place</b> | <b>Fabrication</b> | <b>Row Total</b> |
|--------------|--------------|--------------|--------------|--------------|--------------------|------------------|
| Top 1        | 73           | 71           | 71           | 65           | 83                 | 363              |
|              | <b>5.84%</b> | <b>5.68%</b> | 5.68%        | <b>5.20%</b> | <b>6.64%</b>       | <b>29.04%</b>    |
| Top 2        | 40           | 47           | 10           | 41           | 49                 | 187              |
|              | 3.20%        | 3.76%        | 0.80%        | 3.28%        | 3.92%              | 14.96%           |
| Top 3        | 43           | 13           | 4            | 16           | 45                 | 121              |
|              | 3.44%        | 1.04%        | 0.32%        | 1.28%        | 3.60%              | 9.68%            |
| Top 4        | 20           | 45           | 19           | 41           | 30                 | 155              |
|              | 1.60%        | 3.60%        | 1.52%        | 3.28%        | 2.40%              | 12.40%           |
| Top 5        | 29           | 44           | 75           | 64           | 14                 | 226              |
|              | 2.32%        | 3.52%        | <b>6.00%</b> | 5.12%        | 1.12%              | 18.08%           |
| Top 6        | 22           | 12           | 65           | 13           | 17                 | 129              |
|              | 1.76%        | 0.96%        | 5.20%        | 1.04%        | 1.36%              | 10.32%           |
| Top 7        | 23           | 18           | 6            | 10           | 12                 | 69               |
|              | 1.84%        | 1.44%        | 0.48%        | 0.80%        | 0.96%              | 5.52%            |
| Column Total | 250          | 250          | 250          | 250          | 250                | 1250             |
|              | 20.00%       | 20.00%       | 20.00%       | 20.00%       | 20.00%             | 100.00%          |

### Top Garment Selection Based on Style

All respondents were initially asked, “Of the below, which garment would you most likely purchase?” The respondents were only shown the seven tops and were not given any garment attributes at that time; therefore, the respondents were only choosing a garment based on styling. As seen in Figure 17, the total sample favored the styling of the American Eagle top (Top 1) the most at 29.2%. The 15- to 18-year-olds favored the Banana Republic top (Top 2) more than the other groups, while more 19- to 22-year-olds favored the Karen Kane top from Dillard’s (Top 3) at 19.51%, and the 23- to 25-year-olds favored the “engineered fabric” top (Top 7) more, at 18.57%, than the other two groups. The interest in the Express top (Top 4) declined as ages increased and the interest in the “nonwoven” top (Top 6) increased with age.

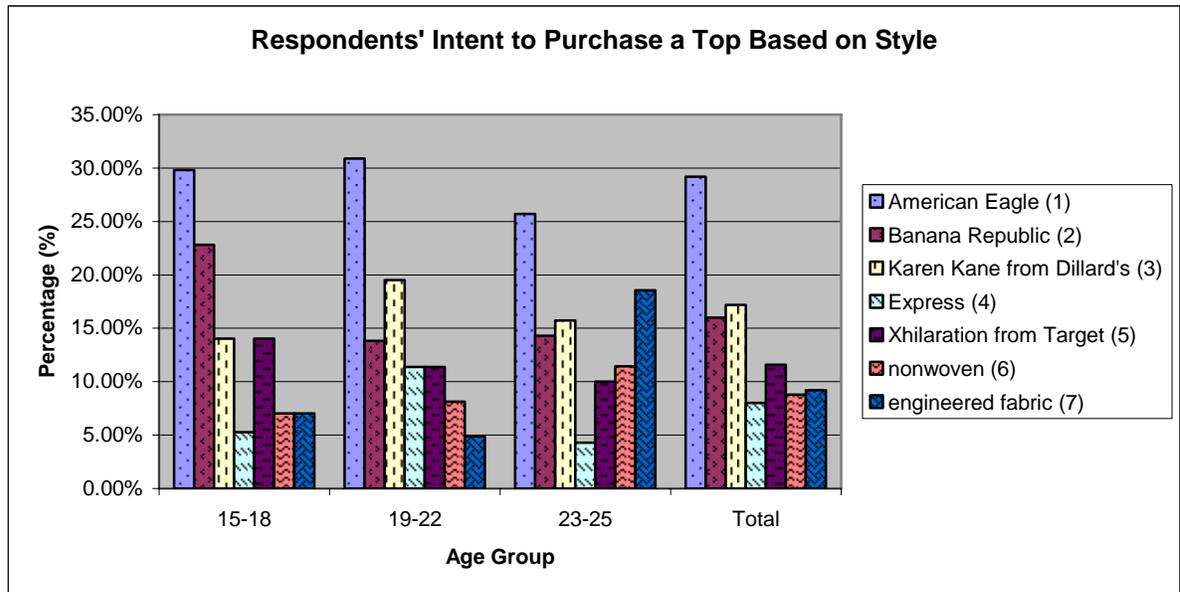


Figure 17: Respondents’ intent to purchase a top based on style.

### Top Garment Selection Based on Brand

Respondents were shown the seven garment tops and the brand of each top was given. The question was asked, “Now that you know the brand, which garment would you most likely purchase?” As seen in Figure 18, 28.4% of the total sample overall favored the American Eagle top (Top 1). At 38.6%, 15- to 18-year-olds favored the American Eagle top (Top 1) over the other brands. However, as the respondents got older, the interest in the American Eagle top (Top 1) declined and the interest in the Xhilaration top (Top 5) increased. However, each age group similarly favored the Express top (Top 4) and the Xhilaration top (Top 5).

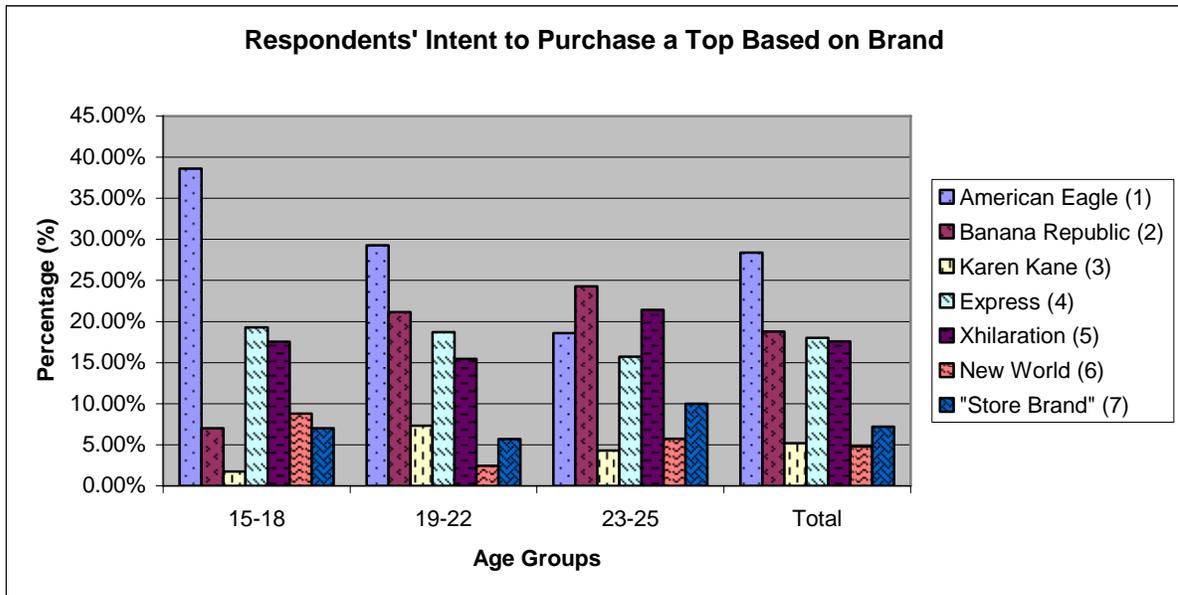


Figure 18: Respondents’ intent to purchase a top based on brand.

### Top Garment Selection Based on Price

Respondents were shown the seven garment tops with the price of each top provided. The question was asked, “Now that you know the price, which garment would you most likely purchase?” As seen in Figure 19, 30% of the total respondents chose Top 5 (\$14.99), the second least expensive garment, as the favored garment. Twenty-eight percent chose Top 1 (\$39.50) and 26% chose Top 6 (\$12.00). Over 70% of the 15- to 18-year-olds chose the two least expensive garments, Top 4 (\$39.50) and Top 5 (\$14.99). None of the 15- to 18-year-olds intended to purchase Top 3 (\$68.00), the most expensive garment, when price was the given attribute.

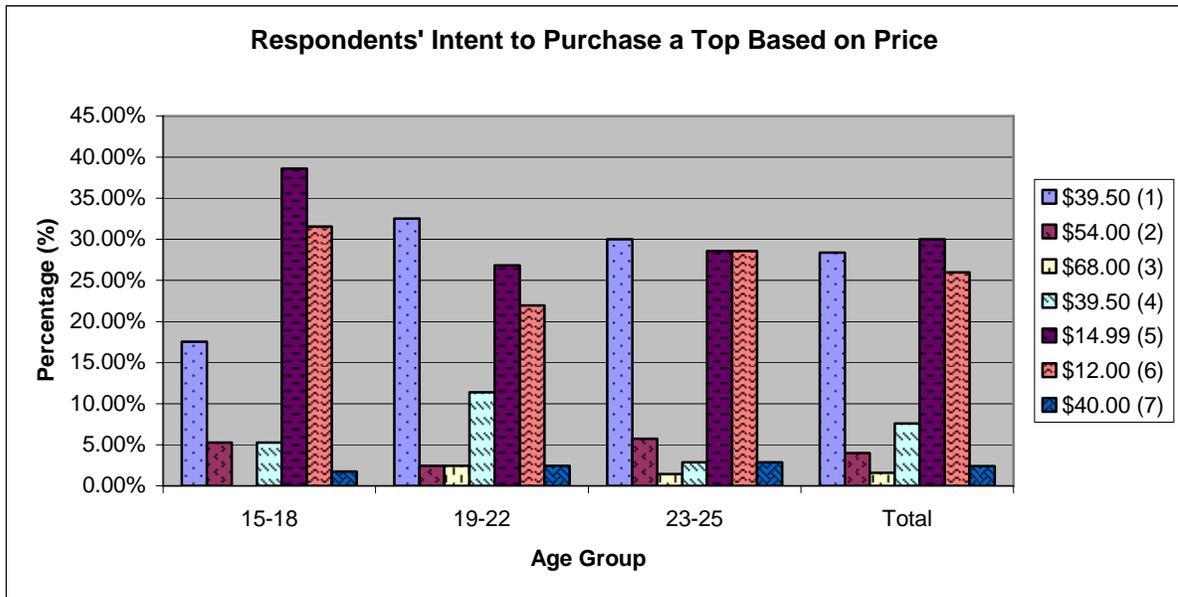


Figure 19: Respondents’ intent to purchase a top based on price.

### Top Garment Selection Based on Place

Respondents were shown the seven garment tops with the place of each top provided. The question was asked, “Now that you know the place, which garment would you most likely purchase?” As seen in Figure 20, the total sample chose American Eagle (Top 1) and Target (Top 5) at approximately 25% each. Thirty-five percent of the 15- to 18-year-olds chose American Eagle (Top 1), but the interest retail outlet American Eagle (Top 1) declined as the respondents aged. There was an increased interest retail outlet Banana Republic (Top 2) as the respondents grew older. The 15- to 18-year-olds and the 19- to 22-year-olds shared similar interest retail outlet Express (Top 4) and retail outlet Target (Top 5).

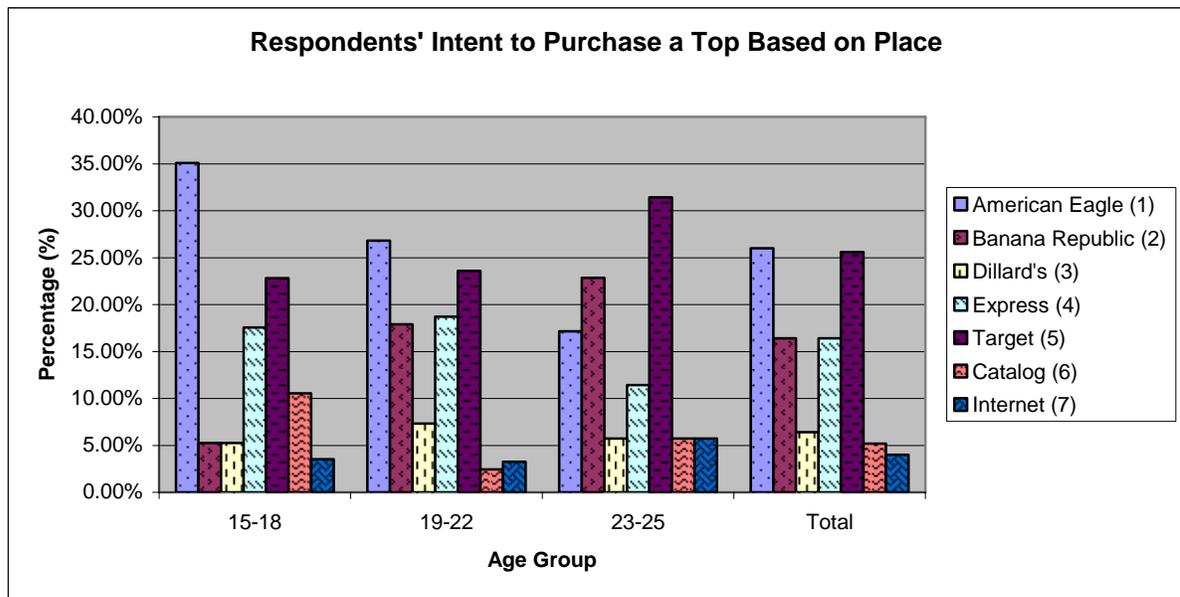


Figure 20: Respondents’ intent to purchase a top based on place.

## Top Garment Selection Based on Fabrication and Fiber Content

Respondents were shown the seven garment tops with the fabrication/fiber content of each top provided. The question was asked, “Now that you know the fabrication, which garment would you most likely purchase?” As seen in Figure 21, 33.2% of the overall sample would intend to purchase the 100% silk woven top (Top 1). As the garments became more synthetic, the less interest 15- to 18-year-olds had in purchasing the garment. The 19- to 22-year-olds and the 23- to 25-year-olds had more interest in the polyester/nylon (Top 6) blend than the 100% polyester fabric (Top 5). The interest in the polyester/polyethylene blend increased as the respondents aged.

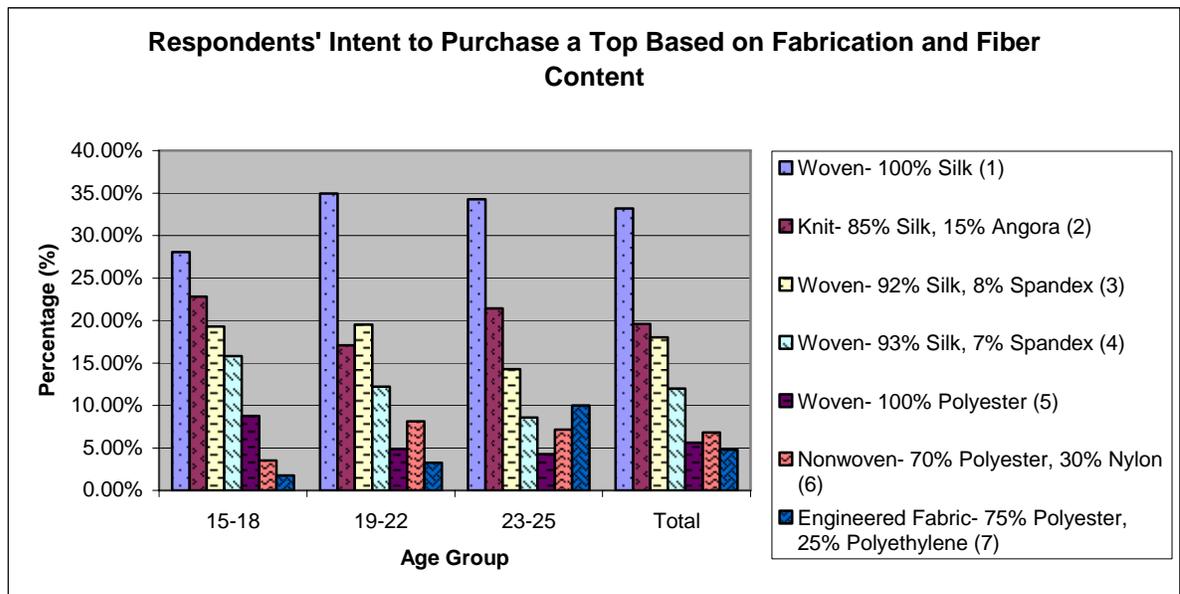


Figure 21: Respondents’ intent to purchase a top based on fabrication and fiber content.

### **Bottom Garment Selection Based on Attributes**

Respondents were asked to choose a bottom garment they might purchase given certain known attributes. They were first shown images of seven bottoms with no information about the garments provided and asked which garment they would most likely purchase based only on styling. All respondents received this question first. Then, the respondents were shown the same image of the garments, but were given one additional attribute at a time (such as brand, price, place, or fabrication and fiber content) and asked again which bottom they would most likely purchase given the known attribute. These four questions were asked in random order each time a new respondent logged onto the questionnaire. Therefore, some respondents knew brand and price before place, while other respondents may have known only brand, and yet other respondents could have known fabrication and fiber content and brand before they knew the price. Also, each time a respondent logged onto the questionnaire, the seven garments were presented in different order. So, respondent one may have seen the garments in order of 1, 2, 3, 4, 5, 6, 7, and the second respondent may have seen the garments in order of 3, 4, 5, 6, 7, 1, 2, etc. For an image of each bottom garment and known attributes about the garments see Table 17.

Table 17

*Attributes of the Garment Bottoms in the Online Questionnaire*

|  | Bottom 1  | Bottom 2  | Bottom 3   | Bottom 4  | Bottom 5   | Bottom 6  | Bottom 7  |
|--|---|---|--|---|--|---|---|
| <b>Style</b>                           |  |  |  |  |             |  |  |
| <b>Brand</b>                           | American Eagle  | Banana Republic   | BCBG Maxazria  | Express   | Xhilaration  | New World   | “Store Brand”   |
| <b>Price</b>                           | \$48.00   | \$88.00   | \$140.00   | \$69.50   | \$14.99  | \$12.00   | \$60.00   |
| <b>Place</b>                           | American Eagle  | Banana Republic   | Dillard’s  | Express   | Target   | Catalog   | Internet  |
| <b>Fabrication &amp; Fiber Content</b> | Woven<br>52% Wool,<br>48% Viscose<br>Rayon<br>Lining:<br>100% Acetate             | Woven<br>100% Silk<br>Lining:<br>100% Acetate                                     | Woven<br>100% Cotton   | Woven<br>100% Silk<br>Lining:<br>100% Polyester                                     | Knit<br>65% Polyester,<br>35% Rayon<br>Contrast 1:<br>100% Cotton<br>Contrast 2:<br>100% Nylon | Nonwoven<br>70% Polyester,<br>30% Nylon   | Engineered Fabric<br>75% Polyester,<br>25% Polyethylene                             |

### **Bottom Garment Selection**

A Chi-squared test of independence showed a P-value of less than 0.05 indicating that there is a significant difference among the attributes at a 95% confidence level. Therefore, the attributes are dependent of the bottom (see Table 18).

Table 18

#### *Chi-Squared Test of Independence Results for Bottom Garments*

| <i>Test</i> | <i>Statistic</i> | <i>Df</i> | <i>P-Value</i> |
|-------------|------------------|-----------|----------------|
| Chi-Squared | 258.541          | 24        | 0.0000         |

As seen in Table 19, Bottom 3 was significantly favored overall. Styling, brand and fabrication positively affected the respondents' intent to purchase Bottom 3. Price and place negatively impacted the 15- to 25-year-olds intent to purchase Bottom 3. When price was a known attribute, Bottom 3 dropped to fourth place indicating that fewer respondents would purchase that garment based on the associated price. When place was a known attribute, Bottom 3 dropped to second place, indicating that retail outlet had a significant effect on the 15- to 25-year-olds' intent to purchase.

Table 19

*Importance of Attributes to the Sample's Overall Bottom Garment Selections*

|              | Style        | Brand        | Price        | Place        | Fabrication   | Row Total     |
|--------------|--------------|--------------|--------------|--------------|---------------|---------------|
| Bottom 1     | 22           | 34           | 36           | 37           | 14            | 143           |
|              | 1.76%        | 2.72%        | 2.88%        | 2.96%        | 1.12%         | 11.44%        |
| Bottom 2     | 29           | 33           | 13           | 37           | 26            | 138           |
|              | 2.32%        | 2.64%        | 1.04%        | 2.96%        | 2.08%         | 11.04%        |
| Bottom 3     | 117          | 72           | 25           | 52           | 136           | 402           |
|              | <b>9.36%</b> | <b>5.76%</b> | 2.00%        | 4.16%        | <b>10.88%</b> | <b>32.16%</b> |
| Bottom 4     | 10           | 27           | 16           | 23           | 14            | 90            |
|              | 0.80%        | 2.16%        | 1.28%        | 1.84%        | 1.12%         | 7.20%         |
| Bottom 5     | 34           | 50           | 75           | 71           | 34            | 264           |
|              | 2.72%        | 4.00%        | <b>6.00%</b> | <b>5.68%</b> | 2.72%         | 21.12%        |
| Bottom 6     | 15           | 20           | 71           | 23           | 16            | 145           |
|              | 1.20%        | 1.60%        | 5.68%        | 1.84%        | 1.28%         | 11.60%        |
| Bottom 7     | 23           | 14           | 14           | 7            | 10            | 68            |
|              | 1.84%        | 1.12%        | 1.12%        | 0.56%        | 0.80%         | 5.44%         |
| Column Total | 250          | 250          | 250          | 250          | 250           | 1250          |
|              | 20.00%       | 20.00%       | 20.00%       | 20.00%       | 20.00%        | 100.00%       |

### Bottom Garment Selection Based on Style

All respondents were initially asked, “Of the below, which garment would you most likely purchase?” The respondents were shown only the seven bottoms and were not provided any garment attributes at that time. As seen in Figure 22, over 45% of the sample favored the BCBG Maxazria bottom (Bottom 3). The intent to purchase the BCBG Maxazria bottom (Bottom 3) increased as age increased and as the respondents aged, the interest in the style of the Express bottom (Bottom 4) decreased.

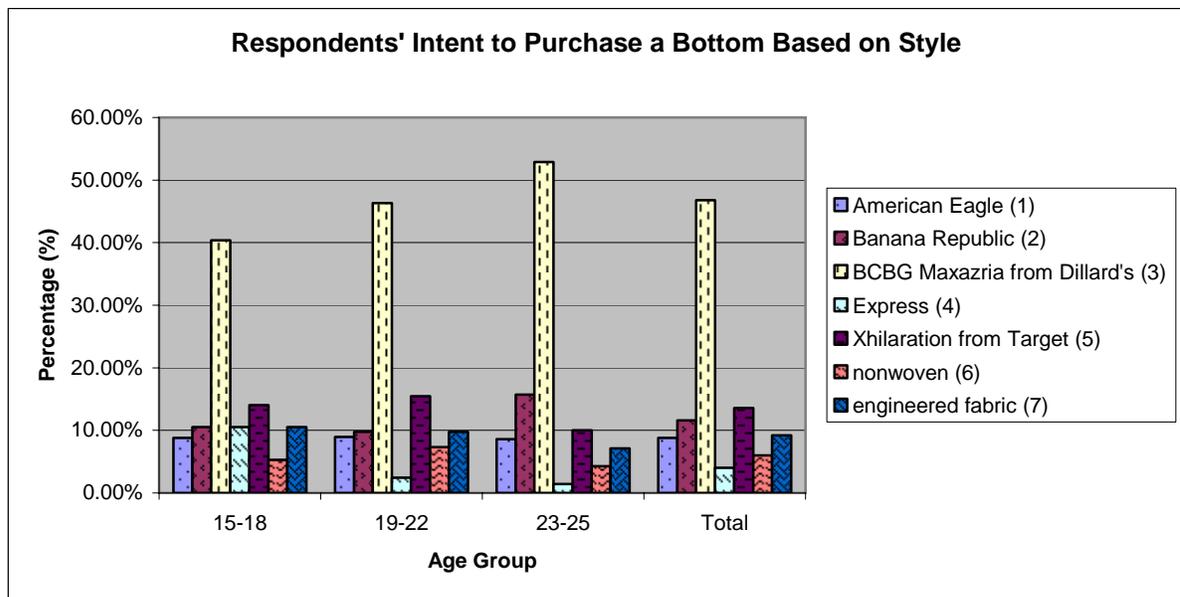


Figure 22: Respondents’ intent to purchase a bottom garment based on style.

### Bottom Garment Selection Based on Brand

Respondents were shown the seven garment bottoms and provided the brand of each bottom. The question was asked, “Now that you know the brand, which garment would you most likely purchase?” As seen in Figure 23, the overall sample favored the BCBG Maxazria bottom (Bottom 3) at 28.8%, closely followed by the Xhilaration bottom (Bottom 5) at 20%. Only 10.53% of the 15- to 18-year-olds favored the BCBG Maxazria bottom (Bottom 3), while more than 35% of the 19- to 22-year-olds and 31.43% of the 23- to 25-year-olds favored the BCBG Maxazria bottom (Bottom 3). When the 15- to 18-year-olds knew the brand, their interest in Bottom 3 decreased and their interest in Bottom 1, Bottom 4, and Bottom 5 increased.

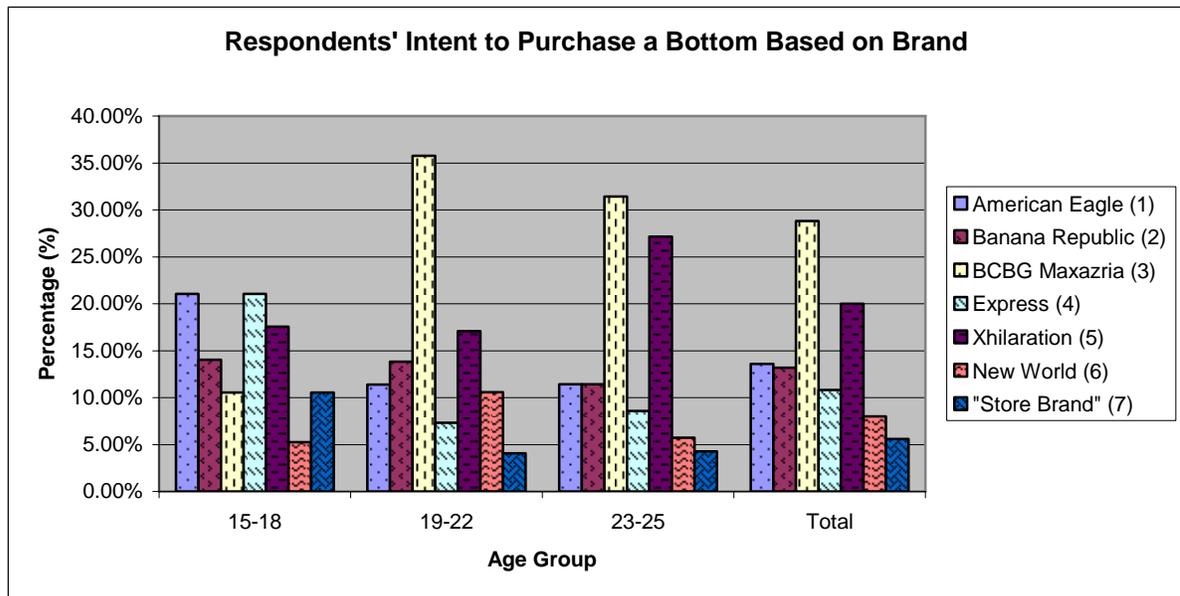


Figure 23: Respondents’ intent to purchase a bottom garment based on brand.

### Bottom Garment Selection Based on Price

Respondents were shown the seven garment bottoms and provided the price of each. The question was asked, “Now that you know the price, which garment would you most likely purchase?” As seen in Figure 24, 30% of the total sample favored the \$14.99 Xhilaration bottom (Bottom 5) from Target and another 28.4% favored the \$12.00 “nonwoven” bottom (Bottom 6). These were the two least expensive garments of the group. The interest in the \$140.00 BCBG Maxazria bottom (Bottom 3) from Dillard’s increased with age, while the 15- to 18-year-olds had a stronger interest in the \$69.50 Express bottom (Bottom 4) than the other two age groups.

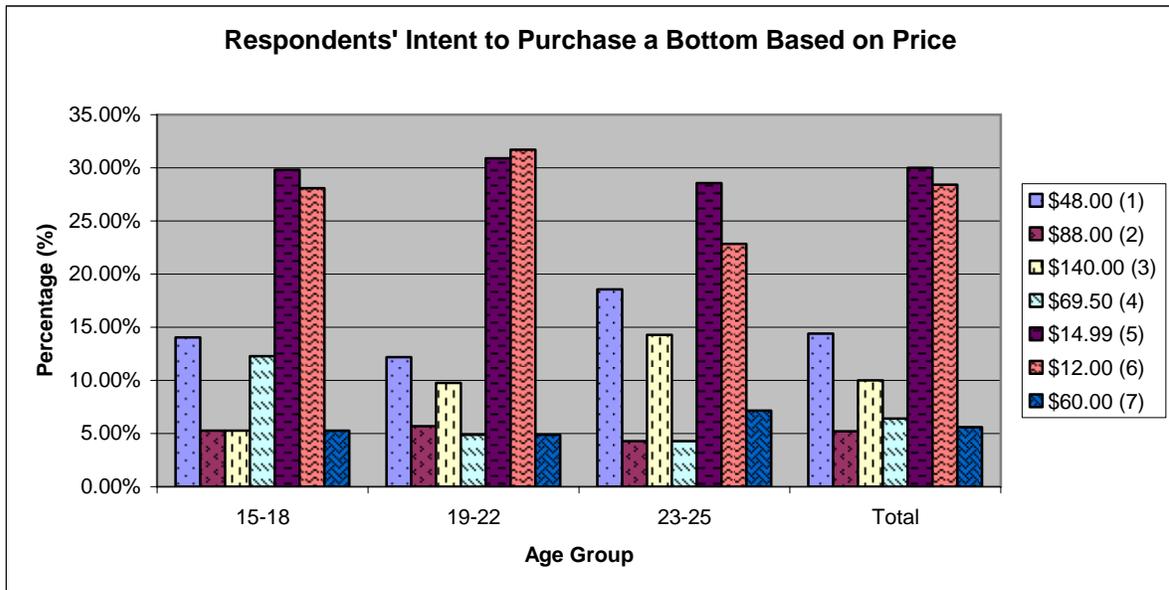


Figure 24: Respondents’ intent to purchase a bottom garment based on price.

**Bottom Garment Selection Based on Place**

Respondents were shown the seven garment bottoms and provided the retail outlet from which each garment was sold. The question was asked, “Now that you know the place, which garment would you most likely purchase?” As seen in Figure 25, 28.4% of the total sample chose Express (Bottom 4), followed by Dillard’s (Bottom 3) at 20.8%. These results were similar for the 19- to 22-year-olds and the 23- to 25-year-olds. However, the 15- to 18-year-olds responded differently, heavily favoring Target (Bottom 5) at 33%. Interest in American Eagle (Bottom 1) and Express (Bottom 4) decreased with age and the interest in Internet shopping (Bottom 7) increased with age.

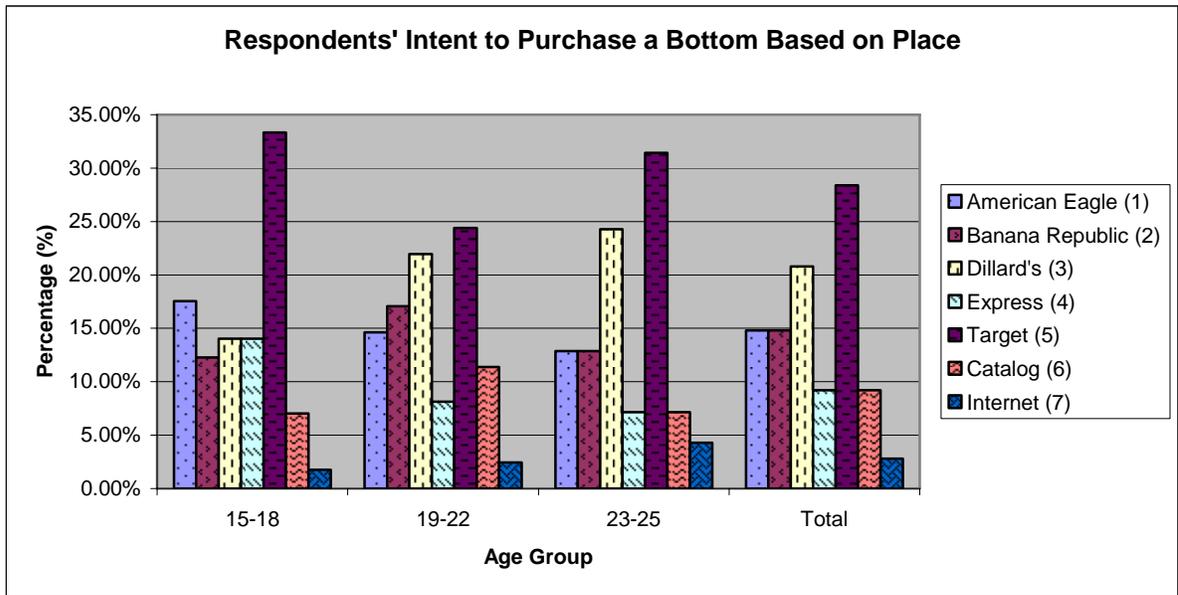


Figure 25: Respondents’ intent to purchase a bottom garment based on place.

**Bottom Garment Selection Based on Fabrication and Fiber Content**

Respondents were shown the seven garment bottoms and provided the fabrication and fiber content of each garment. The question was asked, “Now that you know the fabrication, which garment would you most likely purchase?” As seen in Figure 26, 54.4% of the total

sample would intend to purchase the 100% woven cotton bottom (Bottom 3). While more than 50% of respondents in each age group would intend to purchase the 100% woven cotton bottom (Bottom 3), the percentage of respondents who had an interest in purchasing the 100% woven cotton bottom (Bottom 3) continued to increase as age increased. Each age group had an equal interest in the 65% polyester, 35% rayon knit bottom (Bottom 5) at approximately 13% each. The age groups also had an equal interest in the 70% polyester, 30% nylon nonwoven bottom (Bottom 6) at approximately 6% each. The 15- to 18-year-olds favored the 100% woven silk bottom (Bottom 2) over the other groups and the 19- to 22-year-olds and 23- to 25-year-olds had a stronger interest in the 75% polyester, 25% polyethylene bottom (Bottom 7) than the 15- to 18-year-olds.

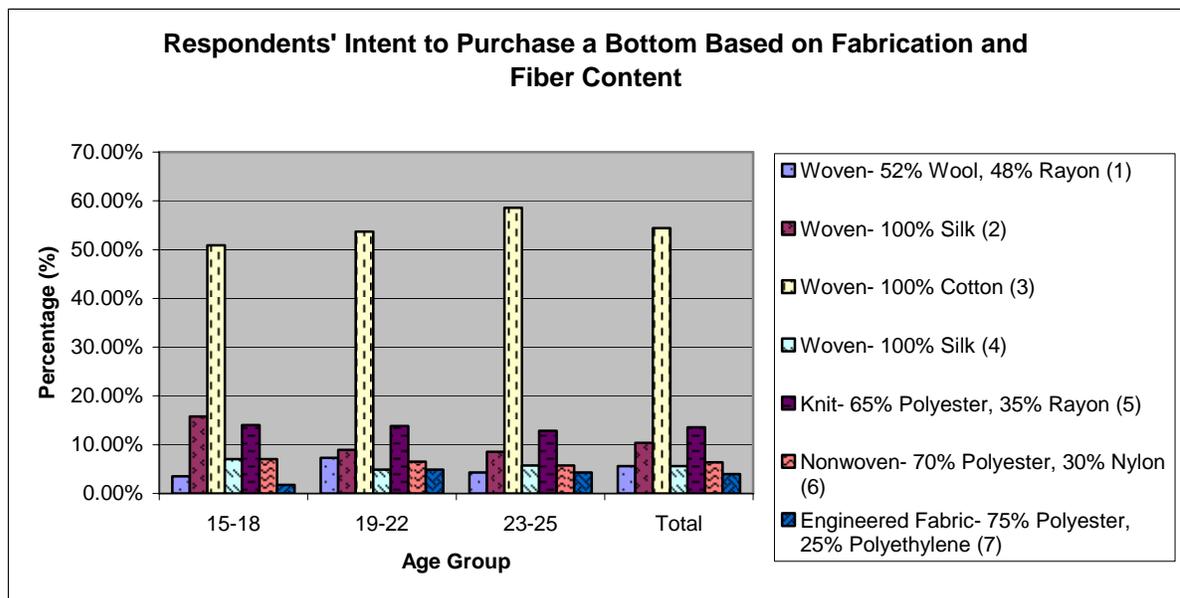


Figure 26: Respondents' intent to purchase a bottom garment based on fabrication and fiber content.

## Garment Selection by Fashion Group

Respondents were asked to choose the fashion style in which they perceived themselves to belong. They were allowed to choose more than one fashion style, and therefore, totals will equal more than the sample size of 250. The nineteen fashion styles, as listed in Table 3, were grouped by similarities in style of dress. This led to seven different fashion groups listed in Table 20.

Table 20

### *Fashion Groups*

|         | <b>Name of Fashion Group</b> | <b>Fashion Styles</b>                           |
|---------|------------------------------|---|
| Group 1 | Classic                      | Beachy<br>Casual<br>Classic<br>Preppy<br>Sporty |
| Group 2 | Skater/Surfer                | Skater<br>Surfer                                |
| Group 3 | Punk                         | Gothic<br>Grunge<br>Punk<br>Rocker              |
| Group 4 | Eclectic                     | Artsy<br>Boho<br>Earth<br>Eclectic<br>Girly     |
| Group 5 | Unique                       | Unique  |
| Group 6 | Urban                        | Urban   |
| Group 7 | Trendy                       | Trendy  |

## Top Garment Selection by Fashion Group

### Fashion Group 1: Classic

A Chi-squared test of independence showed a P-value of less than 0.05 indicating that there is a significant difference among the attributes at 95% confidence level. Therefore, the attributes are dependent on the top (see Table 21).

Table 21

*Chi-Squared Test of Independence Results for the Classic Fashion Group: Top Garments*

| <i>Test</i> | <i>Statistic</i> | <i>Df</i> | <i>P-Value</i> |
|-------------|------------------|-----------|----------------|
| Chi-Squared | 237.464          | 24        | 0.0000         |

As seen in Table 22, the Classic Fashion Group (Group 1) significantly favored the American Eagle top (Top 1) over the other tops. They chose the American Eagle top (Top 1) as the favored garment when style, brand, place and fabrication (100% woven silk) were known attributes. The Classic Group switched to the \$14.99 price range (the next to least expensive garment) when price was the known attribute. The “engineered fabric” top (Top 7) was the group’s least favored garment overall. The “engineered fabric” top (Top 7) was also the least favored when fabrication (75% polyester, 25% polyethylene) was known. The “nonwoven” top (Top 6) was the least favored when style, brand (New World) and place (catalog) were known. The \$68.00 Karen Kane top (Top 3) from Dillard’s (the most expensive top) was the least favored when price was the known attribute.

Table 22

*Importance of Attributes to the Classic Fashion Group on Top Garment Selections*

| Classic Group | Style        | Brand        | Price        | Place        | Fabrication  | Row Total     |
|---------------|--------------|--------------|--------------|--------------|--------------|---------------|
| Top 1         | 68           | 66           | 67           | 58           | 76           | 335           |
|               | <b>5.96%</b> | <b>5.79%</b> | 5.88%        | <b>5.09%</b> | <b>6.67%</b> | <b>29.39%</b> |
| Top 2         | 36           | 43           | 9            | 38           | 44           | 170           |
|               | 3.16%        | 3.77%        | 0.79%        | 3.33%        | 3.86%        | 14.91%        |
| Top 3         | 41           | 12           | 3            | 15           | 43           | 114           |
|               | 3.60%        | 1.05%        | 0.26%        | 1.32%        | 3.77%        | 10.00%        |
| Top 4         | 19           | 43           | 19           | 41           | 28           | 150           |
|               | 1.67%        | 3.77%        | 1.67%        | 3.60%        | 2.46%        | 13.16%        |
| Top 5         | 25           | 40           | 69           | 57           | 13           | 204           |
|               | 2.19%        | 3.51%        | <b>6.05%</b> | 5.00%        | 1.14%        | 17.89%        |
| Top 6         | 18           | 8            | 55           | 9            | 14           | 104           |
|               | 1.58%        | 0.70%        | 4.82%        | 0.79%        | 1.23%        | 9.12%         |
| Top 7         | 21           | 16           | 6            | 10           | 10           | 63            |
|               | 1.84%        | 1.40%        | 0.53%        | 0.88%        | 0.88%        | 5.53%         |
| Column Total  | 228          | 228          | 228          | 228          | 228          | 1140          |
|               | 20.00%       | 20.00%       | 20.00%       | 20.00%       | 20.00%       | 100.00%       |

**Fashion Group 2: Skater/Surfer**

A Chi-squared test of independence showed a P-value of less than 0.05 indicating that there is a significant difference among the attributes at 95% confidence level. Therefore, the attributes are dependent on the top (see Table 23).

Table 23

*Chi-Squared Test of Independence Results for the Skater/Surfer Fashion Group: Top Garments*

| Test        | Statistic | Df | P-Value |
|-------------|-----------|----|---------|
| Chi-Squared | 37.733    | 24 | 0.0369  |

Note: some cell counts < 5.

As seen in Table 24, the Skater/Surfer Fashion Group (Group 2) also significantly favored the American Eagle top (Top 1) over the other tops and each attribute had a positive effect on the group's intent to purchase. The Banana Republic top (Top 2) and the

Xhilaration top (Top 5) from Target were the least favored overall. However, there were garments that were not selected at all when certain attributes were known.

Table 24

*Importance of Attributes to the Skater/Surfer Fashion Group on Top Garment Selections*

| Skater/Surfer Group | Style         | Brand         | Price        | Place         | Fabrication  | Row Total     |
|---------------------|---------------|---------------|--------------|---------------|--------------|---------------|
| Top 1               | 7             | 6             | 5            | 6             | 5            | 29            |
|                     | <b>11.67%</b> | <b>10.00%</b> | <b>8.33%</b> | <b>10.00%</b> | <b>8.33%</b> | <b>48.33%</b> |
| Top 2               | 1             | 1             | 0            | 1             | 1            | 4             |
|                     | 1.67%         | 1.67%         | 0.00%        | 1.67%         | 1.67%        | 6.67%         |
| Top 3               | 2             | 0             | 0            | 0             | 3            | 5             |
|                     | 3.33%         | 0.00%         | 0.00%        | 0.00%         | 5.00%        | 8.33%         |
| Top 4               | 0             | 3             | 0            | 3             | 2            | 8             |
|                     | 0.00%         | 5.00%         | 0.00%        | 5.00%         | 3.33%        | 13.33%        |
| Top 5               | 0             | 0             | 3            | 1             | 0            | 4             |
|                     | 0.00%         | 0.00%         | 5.00%        | 1.67%         | 0.00%        | 6.67%         |
| Top 6               | 1             | 0             | 4            | 0             | 0            | 5             |
|                     | 1.67%         | 0.00%         | 6.67%        | 0.00%         | 0.00%        | 8.33%         |
| Top 7               | 1             | 2             | 0            | 1             | 1            | 5             |
|                     | 1.67%         | 3.33%         | 0.00%        | 1.67%         | 1.67%        | 8.33%         |
| Column Total        | 12            | 12            | 12           | 12            | 12           | 60            |
|                     | 20.00%        | 20.00%        | 20.00%       | 20.00%        | 20.00%       | 100.00%       |

**Fashion Group 3: Punk**

A Chi-squared test of independence showed a P-value of less than 0.05 indicating that there is a significant difference among the attributes at 95% confidence level. Therefore, the attributes are dependent on the top (see Table 25).

Table 25

*Chi-Squared Test of Independence Results for the Punk Fashion Group: Top Garments*

| Test        | Statistic | Df | P-Value |
|-------------|-----------|----|---------|
| Chi-Squared | 42.264    | 24 | 0.0121  |

Note: some cell counts < 5.

As seen in Table 26, the Punk Fashion Group (Group 3) also significantly favored the American Eagle top (Top 1). The American Eagle top (Top 1) and the Banana Republic top (Top 2) were the most favored when style was the factor for intent to purchase. When brand was the known attribute, the generic “store brand” (Top 7) was the most favored top. When price was the known attribute, the respondents of changed their purchase attentions again and chose the \$12.00 “nonwoven” top (Top 6) (the least expensive top) as their favored top. The “nonwoven” top (Top 6) from a catalog and the Xhilaration top (Top 5) from Target tied as most favored when place was the known attribute. The American Eagle top (Top 1) was the most favored again when fabrication (100% woven silk) was known and the woven Karen Kane top (Top 3) made of 92% silk, 8% spandex tied with Top 1 when fabrication and fiber content were known. Overall, the Express top (Top 4) was significantly least favored. However, there were several garments that were not chosen when certain attributes were known.

Table 26

*Importance of Attribute to the Punk Fashion Group on Top Garment Selections*

| Punk Group   | Style        | Brand        | Price         | Place        | Fabrication  | Row Total     |
|--------------|--------------|--------------|---------------|--------------|--------------|---------------|
| Top 1        | 5            | 2            | 4             | 2            | 5            | 18            |
|              | <b>6.67%</b> | 2.67%        | 5.33%         | 2.67%        | <b>6.67%</b> | <b>24.00%</b> |
| Top 2        | 5            | 2            | 0             | 2            | 3            | 12            |
|              | <b>6.67%</b> | 2.67%        | 0.00%         | 2.67%        | 4.00%        | 16.00%        |
| Top 3        | 3            | 0            | 1             | 2            | 5            | 11            |
|              | 4.00%        | 0.00%        | 1.33%         | 2.67%        | <b>6.67%</b> | 14.67%        |
| Top 4        | 0            | 1            | 0             | 1            | 0            | 2             |
|              | 0.00%        | 1.33%        | 0.00%         | 1.33%        | 0.00%        | 2.67%         |
| Top 5        | 0            | 2            | 2             | 3            | 0            | 7             |
|              | 0.00%        | 2.67%        | 2.67%         | <b>4.00%</b> | 0.00%        | 9.33%         |
| Top 6        | 1            | 3            | 8             | 3            | 2            | 17            |
|              | 1.33%        | 4.00%        | <b>10.67%</b> | <b>4.00%</b> | 2.67%        | 22.67%        |
| Top 7        | 1            | 5            | 0             | 2            | 0            | 8             |
|              | 1.33%        | <b>6.67%</b> | 0.00%         | 2.67%        | 0.00%        | 10.67%        |
| Column Total | 15           | 15           | 15            | 15           | 15           | 75            |
|              | 20.00%       | 20.00%       | 20.00%        | 20.00%       | 20.00%       | 100.00%       |

**Fashion Group 4: Eclectic**

A Chi-squared test of independence showed a P-value of less than 0.05 indicating that there is a significant difference among the attributes at 95% confidence level. Therefore, the attributes are dependent on the top (see Table 27).

Table 27

*Chi-Squared Test of Independence Results for Fashion Group Four Top Garments*

| Test        | Statistic | Df | P-Value |
|-------------|-----------|----|---------|
| Chi-Squared | 132.112   | 24 | 0.0000  |

As seen in Table 28, the Punk Fashion Group (Group 4) also significantly favored Top 1 over the other tops. Additionally, they chose Top 1 as the favored garment when each attribute was known (American Eagle, \$39.50, woven/100% silk). Their least favored garment was the “engineered fabric” top (Top 7). This top was least favored when place

(Internet) and fabrication (“engineered fabric”/75% polyester, 25% polyethylene) were known and Top 5 was equally least favored when fabrication (woven/100% polyester) was known. Top 3 was the least favored when brand (Karen Kane) and price (\$68.00, the most expensive) were known. The Express top (Top 4) was least favored when only styling was considered.

Table 28

*Importance of Attributes to the Eclectic Fashion Group on Top Garment Selections*

| Eclectic Group | Style        | Brand        | Price        | Place        | Fabrication  | Row Total     |
|----------------|--------------|--------------|--------------|--------------|--------------|---------------|
| Top 1          | 45           | 37           | 48           | 36           | 49           | 215           |
|                | <b>6.16%</b> | <b>5.07%</b> | <b>6.58%</b> | <b>4.93%</b> | <b>6.71%</b> | <b>29.45%</b> |
| Top 2          | 23           | 29           | 5            | 26           | 33           | 116           |
|                | 3.15%        | 3.97%        | 0.68%        | 3.56%        | 4.52%        | 15.89%        |
| Top 3          | 19           | 5            | 3            | 8            | 25           | 60            |
|                | 2.60%        | 0.68%        | 0.41%        | 1.10%        | 3.42%        | 8.22%         |
| Top 4          | 12           | 28           | 11           | 25           | 19           | 95            |
|                | 1.64%        | 3.84%        | 1.51%        | 3.42%        | 2.60%        | 13.01%        |
| Top 5          | 19           | 23           | 40           | 34           | 6            | 122           |
|                | 2.60%        | 3.15%        | 5.48%        | 4.66%        | 0.82%        | 16.71%        |
| Top 6          | 14           | 11           | 34           | 10           | 8            | 77            |
|                | 1.92%        | 1.51%        | 4.66%        | 1.37%        | 1.10%        | 10.55%        |
| Top 7          | 14           | 13           | 5            | 7            | 6            | 45            |
|                | 1.92%        | 1.78%        | 0.68%        | 0.96%        | 0.82%        | 6.16%         |
| Row Column     | 146          | 146          | 146          | 146          | 146          | 730           |
|                | 20.00%       | 20.00%       | 20.00%       | 20.00%       | 20.00%       | 100.00%       |

**Fashion Group 5: Unique**

A Chi-squared test of independence showed a P-value of less than 0.05 indicating that there is a significant difference among the attributes at 95% confidence level. Therefore, the attributes are dependent on the top (see Table 29).

Table 29

*Chi-Squared Test of Independence Results for Unique Fashion Group: Top Garments*

| <i>Test</i> | <i>Statistic</i> | <i>Df</i> | <i>P-Value</i> |
|-------------|------------------|-----------|----------------|
| Chi-Squared | 53.199           | 24        | 0.0005         |

Note: some cell counts < 5.

As seen in Table 30, the Unique Fashion Group (Group 5) also significantly favored the American Eagle top (Top 1) overall. When style and fabrication (woven/100% silk) were known, the American Eagle top (Top 1) was the favored. Brand (American Eagle), price (\$39.50) and place (American Eagle) negatively impacted the group’s intent to purchase because fewer chose Top 1 when these attributes were known. Instead, the Unique Fashion Group chose the Xhilaration top (Top 5) from Target when brand and place were known. When price was the known attribute they equally chose the \$14.99 Target top (Top 5) and the \$12.00 “nonwoven” top (Top 6), which were the least expensive garments.

Table 30

*Importance of Attributes to the Unique Fashion Group on Top Garment Selections*

| Unique Group  | Style        | Brand        | Price        | Place        | Fabrication  | Row Totals    |
|---------------|--------------|--------------|--------------|--------------|--------------|---------------|
| Top 1         | 20           | 13           | 16           | 14           | 23           | 86            |
|               | <b>6.45%</b> | 4.19%        | 5.16%        | 4.52%        | <b>7.42%</b> | <b>27.74%</b> |
| Top 2         | 11           | 13           | 3            | 11           | 12           | 50            |
|               | 3.55%        | 4.19%        | 0.97%        | 3.55%        | 3.87%        | 16.13%        |
| Top 3         | 8            | 4            | 2            | 4            | 10           | 28            |
|               | 2.58%        | 1.29%        | 0.65%        | 1.29%        | 3.23%        | 9.03%         |
| Top 4         | 6            | 5            | 4            | 5            | 7            | 27            |
|               | 1.94%        | 1.61%        | 1.29%        | 1.61%        | 2.26%        | 8.71%         |
| Top 5         | 8            | 16           | 18           | 20           | 4            | 66            |
|               | 2.58%        | <b>5.16%</b> | <b>5.81%</b> | <b>6.45%</b> | 1.29%        | 21.29%        |
| Top 6         | 8            | 6            | 18           | 7            | 5            | 44            |
|               | 2.58%        | 1.94%        | <b>5.81%</b> | 2.26%        | 1.61%        | 14.19%        |
| Top 7         | 1            | 5            | 1            | 1            | 1            | 9             |
|               | 0.32%        | 1.61%        | 0.32%        | 0.32%        | 0.32%        | 2.90%         |
| Column Totals | 62           | 62           | 62           | 62           | 62           | 310           |
|               | 20.00%       | 20.00%       | 20.00%       | 20.00%       | 20.00%       | 100.00%       |

### **Fashion Group 6: Urban**

A chi-squared test of independence showed a P-value of less than 0.05 indicating that there is a significant difference among the attributes at 95% confidence level. Therefore, the attributes are dependent on the top (see Table 31).

Table 31

#### *Chi-Squared Test of Independence Results for the Urban Fashion Group: Top Garments*

| <i>Test</i> | <i>Statistic</i> | <i>Df</i> | <i>P-Value</i> |
|-------------|------------------|-----------|----------------|
| Chi-Squared | 38.321           | 24        | 0.0321         |

Note: some cell counts < 5.

As see in Table 32, the Urban Fashion Group (Group 6) also significantly favored the American Eagle top (Top 1). All attributes had a positive affect on the purchase of Top 1 (American Eagle, \$39.50, woven/100% silk). The group chose the 85% silk and 15% angora knit Banana Republic top (Top 2) equally to the 100% silk woven American Eagle top (Top 1) when fabrication was the known attribute. The Urban Fashion Group's least favored top was the "engineered fabric" top (Top 7). There were several garments that the group would not intend to purchase when certain attributes were known.

Table 32

*Importance of Attributes to the Urban Fashion Group on Top Garment Selections*

| Urban Group  | Style  | Brand  | Price  | Place  | Fabrication | Row Total |
|--------------|--------|--------|--------|--------|-------------|-----------|
| Top 1        | 9      | 10     | 11     | 9      | 8           | 47        |
|              | 6.00%  | 6.67%  | 7.33%  | 6.00%  | 5.33%       | 31.33%    |
| Top 2        | 5      | 4      | 0      | 1      | 8           | 18        |
|              | 3.33%  | 2.67%  | 0.00%  | 0.67%  | 5.33%       | 12.00%    |
| Top 3        | 6      | 2      | 1      | 2      | 6           | 17        |
|              | 4.00%  | 1.33%  | 0.67%  | 1.33%  | 4.00%       | 11.33%    |
| Top 4        | 4      | 7      | 3      | 6      | 5           | 25        |
|              | 2.67%  | 4.67%  | 2.00%  | 4.00%  | 3.33%       | 16.67%    |
| Top 5        | 4      | 2      | 10     | 6      | 2           | 24        |
|              | 2.67%  | 1.33%  | 6.67%  | 4.00%  | 1.33%       | 16.00%    |
| Top 6        | 1      | 4      | 5      | 4      | 1           | 15        |
|              | 0.67%  | 2.67%  | 3.33%  | 2.67%  | 0.67%       | 10.00%    |
| Top 7        | 1      | 1      | 0      | 2      | 0           | 4         |
|              | 0.67%  | 0.67%  | 0.00%  | 1.33%  | 0.00%       | 2.67%     |
| Column Total | 30     | 30     | 30     | 30     | 30          | 150       |
|              | 20.00% | 20.00% | 20.00% | 20.00% | 20.00%      | 100.00%   |

**Fashion Group 7: Trendy**

A Chi-squared test of independence showed a P-value of less than 0.05 indicating that there is a significant difference among the attributes at 95% confidence level. Therefore, the attributes are dependent on the top (see Table 33).

Table 33

*Chi-Squared Test of Independence Results for the Trendy Fashion Group: Top Garments*

| Test        | Statistic | Df | P-Value |
|-------------|-----------|----|---------|
| Chi-Squared | 89.609    | 24 | 0.0000  |

Note: some cell counts < 5.

As see in Table 34, the Trendy Fashion Group (Group 7) also significantly favored the American Eagle top (Top 1) over the other tops. All attributes had a positive effect on the group's intent to purchase Top 1 (American Eagle, \$39.50, woven/100% silk). The least

avored top among the Trendy Group was the “engineered fabric” top (Top 7). When brand was the known attribute, the least favored garment was the New World top (Top 6).

Table 34

*Importance of Attributes to the Trendy Fashion Group on Top Garment Selections*

| Trendy Group | Style        | Brand        | Price        | Place        | Fabrication  | Row Total     |
|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| Top 1        | 36           | 29           | 37           | 28           | 40           | 170           |
|              | <b>6.92%</b> | <b>5.58%</b> | <b>7.12%</b> | <b>5.38%</b> | <b>7.69%</b> | <b>32.69%</b> |
| Top 2        | 11           | 25           | 3            | 21           | 15           | 75            |
|              | 2.12%        | 4.81%        | 0.58%        | 4.04%        | 2.88%        | 14.42%        |
| Top 3        | 17           | 5            | 2            | 6            | 16           | 46            |
|              | 3.27%        | 0.96%        | 0.38%        | 1.15%        | 3.08%        | 8.85%         |
| Top 4        | 9            | 18           | 9            | 18           | 13           | 67            |
|              | 1.73%        | 3.46%        | 1.73%        | 3.46%        | 2.50%        | 12.88%        |
| Top 5        | 14           | 17           | 32           | 24           | 9            | 96            |
|              | 2.69%        | 3.27%        | 6.15%        | 4.62%        | 1.73%        | 18.46%        |
| Top 6        | 9            | 4            | 19           | 4            | 6            | 42            |
|              | 1.73%        | 0.77%        | 3.65%        | 0.77%        | 1.15%        | 8.08%         |
| Top 7        | 8            | 6            | 2            | 3            | 5            | 24            |
|              | 1.54%        | 1.15%        | 0.38%        | 0.58%        | 0.96%        | 4.62%         |
| Column Total | 104          | 104          | 104          | 104          | 104          | 520           |
|              | 20.00%       | 20.00%       | 20.00%       | 20.00%       | 20.00%       | 100.00%       |

**Summary of the Fashion Groups’ Top Choices**

Table 35 shows the highest ranked tops among each fashion group. The style of the American Eagle top (Top 1) ranked first in all fashion groups. The Punk Fashion Group (Group 3) equally chose the Banana Republic top (Top 2) as their favored top. The American Eagle brand top (Top 1) ranked first among the Classic, Skater/Surfer, Eclectic, Urban and Trendy Fashion Groups. The Punk Fashion Group chose the generic “store brand” top (Top 7) and the Unique Fashion Group chose the Xhilaration brand top (Top 5). The Classic, Punk, and Unique Fashion Groups chose the garments that were on the low price range (\$12.00 - \$14.99). The Skater/Surfer, Eclectic, Urban and Trendy Groups chose the garments that were in the mid price range (\$39.50). No group chose garments in the high price range

(\$40.00 - \$68.00). The Classic, Skater/Surfer, Eclectic, Urban and Trendy Fashion Groups chose American Eagle (Top 1) specialty store as their favored retail outlet. The Punk Fashion Group chose Target (Top 5) and catalog shopping (Top 6) as their favored retail outlet, and the Unique Fashion Group chose Target (Top 5) as their favored retail outlet. All fashion groups ranked the 100% silk woven top (Top 1) first when fabrication and fiber content were known. The Punk Fashion Group equally ranked the woven 92% silk, 85 spandex top (Top 3) number one along with Top 1, and the Urban Fashion Group equally ranked the knitted 85% silk, 15% angora top (Top 2) number one along with Top 1.

Table 35

*First Choice Tops for Each Fashion Group*

| <b>Fashion Group</b>              | <b>Style</b>   | <b>Brand</b>                          | <b>Price</b>                                       | <b>Place</b>                                      | <b>Fabrication</b>  |
|-----------------------------------|--|---------------------------------------|--|---|---|
| <b>Classic:<br/>Group 1</b>       | <b>Top 1</b><br>Patterned with lace trim<br>Outlined bust  | <b>Top 1</b><br>American Eagle        | <b>Top 5</b><br>\$14.99                            | <b>Top 1</b><br>American Eagle                    | <b>Top 1</b><br>Woven<br>100% Silk  |
| <b>Skater/Surfer:<br/>Group 2</b> | <b>Top 1</b><br>Patterned with lace trim<br>Outlined bust  | <b>Top 1</b><br>American Eagle        | <b>Top 1</b><br>\$39.50                            | <b>Top 1</b><br>American Eagle                    | <b>Top 1</b><br>Woven<br>100% Silk  |
| <b>Punk:<br/>Group 3</b>          | <b>Top 1</b><br>Patterned with lace trim<br>Outlined bust<br><b>Top 2</b><br>Light solid with wide dark<br>lace trim | <b>Top 7</b><br>Generic “store brand” | <b>Top 6</b><br>\$12.00                            | <b>Top 5</b><br>Target<br><b>Top 6</b><br>Catalog | <b>Top 1</b><br>Woven<br>100% Silk<br><b>Top 3</b><br>Woven<br>92% Silk, 8% Spandex |
| <b>Eclectic:<br/>Group 4</b>      | <b>Top 1</b><br>Patterned with lace trim<br>Outlined bust  | <b>Top 1</b><br>American Eagle        | <b>Top 1</b><br>\$39.50                            | <b>Top 1</b><br>American Eagle                    | <b>Top 1</b><br>Woven<br>100% Silk  |
| <b>Unique:<br/>Group 5</b>        | <b>Top 1</b><br>Patterned with lace trim<br>Outlined bust  | <b>Top 5</b><br>Xhilaration           | <b>Top 5</b><br>\$14.99<br><b>Top 6</b><br>\$12.00 | <b>Top 5</b><br>Target                            | <b>Top 1</b><br>Woven<br>100% Silk  |
| <b>Urban:<br/>Group 6</b>         | <b>Top 1</b><br>Patterned with lace trim<br>Outlined bust  | <b>Top 1</b><br>American Eagle        | <b>Top 1</b><br>\$39.50                            | <b>Top 1</b><br>American Eagle                    | <b>Top 1</b><br>Woven<br>100% Silk<br><b>Top 2</b><br>Knit<br>85% Silk, 15% Angora  |
| <b>Trendy:<br/>Group 7</b>        | <b>Top 1</b><br>Patterned with lace trim<br>Outlined bust  | <b>Top 1</b><br>American Eagle        | <b>Top 1</b><br>\$39.50                            | <b>Top 1</b><br>American Eagle                    | <b>Top 1</b><br>Woven<br>100% Silk  |

Note: Refer to Table 14 for garment images.

## Bottom Garment Selection by Fashion Group

### Fashion Group 1: Classic

A Chi-squared test of independence showed a P-value less than 0.05 indicating that there is a significant difference among the attributes at 95% confidence level. Therefore, the attributes are dependent on the bottom (see Table 36).

Table 36

*Chi-Squared Test of Independence Results for the Classic Fashion Group: Bottom Garments*

| <i>Test</i> | <i>Statistic</i> | <i>Df</i> | <i>P-Value</i> |
|-------------|------------------|-----------|----------------|
| Chi-Squared | 248.535          | 24        | 0.0000         |

As seen in Table 37, the Classic Fashion Group (Group 1) significantly chose the BCBG Maxazria bottom (Bottom 3) from Dillard's as their most favored skirt. Style, brand (BCBG Maxazria) and fabrication (woven/100% cotton) positively affected the purchase intent of Bottom 3. The \$140.00 price (the most expensive garment) and place (Dillard's) negatively impacted the purchase intentions the Classic Fashion Group had for the BCBG Maxazria bottom (Bottom 3) because the percentage of respondents who chose this skirt dropped. The \$12.00 (the least expensive garment) bottom (Bottom 6) was the most favored when price was known, and the Xhilaration bottom (Bottom 5) from Target was the most chosen when retail outlet was known. The group's least favored garment overall was the "engineered fabric" bottom (Bottom 7). This garment was least favored when brand (generic "store brand"), price (\$60.00), place (Internet) and fabrication ("engineered fabric"/75% polyester, 25% polyethylene) were known.

Table 37

*Importance of Attributes to the Classic Fashion Group on Bottom Garment Selection*

| Classic Group | Style        | Brand        | Price        | Place        | Fabrication   | Row Total     |
|---------------|--------------|--------------|--------------|--------------|---------------|---------------|
| Bottom 1      | 21           | 33           | 34           | 34           | 13            | 135           |
|               | 1.84%        | 2.89%        | 2.98%        | 2.98%        | 1.14%         | 11.84%        |
| Bottom 2      | 27           | 32           | 13           | 35           | 25            | 132           |
|               | 2.37%        | 2.81%        | 1.14%        | 3.07%        | 2.19%         | 11.58%        |
| Bottom 3      | 111          | 65           | 24           | 50           | 128           | 378           |
|               | <b>9.74%</b> | <b>5.70%</b> | 2.11%        | 4.39%        | <b>11.23%</b> | <b>33.16%</b> |
| Bottom 4      | 10           | 26           | 15           | 23           | 13            | 87            |
|               | 0.88%        | 2.28%        | 1.32%        | 2.02%        | 1.14%         | 7.63%         |
| Bottom 5      | 22           | 42           | 62           | 58           | 24            | 208           |
|               | 1.93%        | 3.68%        | 5.44%        | <b>5.09%</b> | 2.11%         | 18.25%        |
| Bottom 6      | 15           | 19           | 67           | 21           | 16            | 138           |
|               | 1.32%        | 1.67%        | <b>5.88%</b> | 1.84%        | 1.40%         | 12.11%        |
| Bottom 7      | 22           | 11           | 13           | 7            | 9             | 62            |
|               | 1.93%        | 0.96%        | 1.14%        | 0.61%        | 0.79%         | 5.44%         |
| Column Total  | 228          | 228          | 228          | 228          | 228           | 1140          |
|               | 20.00%       | 20.00%       | 20.00%       | 20.00%       | 20.00%        | 100.00%       |

**Fashion Group 2: Skater/Surfer**

A Chi-squared test of independence showed a P-value less than 0.05 indicating that there is a significant difference among the attributes at 95% confidence level. Therefore, the attributes are dependent on the bottom (see Table 38).

Table 38

*Chi-Squared Test of Independence Results for the Skater/Surfer Fashion Group: Bottom Garments*

| Test        | Statistic | Df | P-Value |
|-------------|-----------|----|---------|
| Chi-Squared | 36.825    | 24 | 0.0455  |

Note: some cell counts < 5.

As seen in Table 39, the Skater/Surfer Fashion Group (Group 2) also significantly chose the BCBG Maxazria bottom (Bottom 3) overall. Styling, brand (BCBG Maxazria) and fabrication (woven/100% cotton) positively impacted the group’s intent to purchase Bottom

3. The American Eagle bottom (Bottom 1) was equally chosen as the favored garment when brand was a known attribute. The American Eagle bottom (Bottom 1) was the most favored garment when retail outlet was a known attribute, and the \$12.00 “nonwoven” bottom (Bottom 6) (the least expensive garment) was the favored garment when price was the known attribute. The least favored garment among the Skater/Surfer Fashion Group was the Express bottom (Bottom 4). Some garments were not chosen when certain attributes were known.

Table 39

*Importance of Attributes to the Skater/Surfer Fashion Group on Bottom Garment Selection*

| Skater/Surfer Group | Style        | Brand        | Price        | Place        | Fabrication   | Row Total     |
|---------------------|--------------|--------------|--------------|--------------|---------------|---------------|
| Bottom 1            | 2            | 3            | 2            | 5            | 0             | 12            |
|                     | 3.33%        | <b>5.00%</b> | 3.33%        | <b>8.33%</b> | 0.00%         | 20.00%        |
| Bottom 2            | 2            | 1            | 0            | 1            | 2             | 6             |
|                     | 3.33%        | 1.67%        | 0.00%        | 1.67%        | 3.33%         | 10.00%        |
| Bottom 3            | 5            | 3            | 1            | 1            | 8             | 18            |
|                     | <b>8.33%</b> | <b>5.00%</b> | 1.67%        | 1.67%        | <b>13.33%</b> | <b>30.00%</b> |
| Bottom 4            | 0            | 1            | 1            | 1            | 0             | 3             |
|                     | 0.00%        | 1.67%        | 1.67%        | 1.67%        | 0.00%         | 5.00%         |
| Bottom 5            | 0            | 1            | 3            | 3            | 1             | 8             |
|                     | 0.00%        | 1.67%        | 5.00%        | 5.00%        | 1.67%         | 13.33%        |
| Bottom 6            | 0            | 1            | 4            | 1            | 0             | 6             |
|                     | 0.00%        | 1.67%        | <b>6.67%</b> | 1.67%        | 0.00%         | 10.00%        |
| Bottom 7            | 3            | 2            | 1            | 0            | 1             | 7             |
|                     | 5.00%        | 3.33%        | 1.67%        | 0.00%        | 1.67%         | 11.67%        |
| Column Total        | 12           | 12           | 12           | 12           | 12            | 60            |
|                     | 20.00%       | 20.00%       | 20.00%       | 20.00%       | 20.00%        | 100.00%       |

**Fashion Group 3: Punk**

A Chi-squared test of independence showed a P-value great than or equal to 0.05 indicating there was not a significant difference among the attributes and the garments at 95% confidence level. Therefore, the bottom garment may have no relationship to the garment attribute (see Table 40).

Table 40

*Chi-Squared Test of Independence Results for the Eclectic Fashion Group: Bottom Garments*

| Test        | Statistic | Df | P-Value |
|-------------|-----------|----|---------|
| Chi-Squared | 29.520    | 24 | 0.2012  |

Note: some cell counts < 5.

As seen in Table 41, the Xhilaration bottom (Bottom 5) from Target was the most favored garment of the Punk Fashion Group (Group 3) and the least favored garment among the group was the Express bottom (Bottom 4). However, there is no significant relation between the garments and attributes.

Table 41

*Importance of Attribute to the Punk Fashion Group on Bottom Garment Selection*

| Punk Group   | Style        | Brand        | Price        | Place         | Fabrication  | Row Total     |
|--------------|--------------|--------------|--------------|---------------|--------------|---------------|
| Bottom 1     | 4            | 4            | 2            | 3             | 2            | 15            |
|              | <b>5.33%</b> | 5.33%        | 2.67%        | 4.00%         | 2.67%        | 20.00%        |
| Bottom 2     | 3            | 0            | 1            | 2             | 2            | 8             |
|              | 4.00%        | 0.00%        | 1.33%        | 2.67%         | 2.67%        | 10.67%        |
| Bottom 3     | 4            | 3            | 1            | 1             | 7            | 16            |
|              | <b>5.33%</b> | 4.00%        | 1.33%        | 1.33%         | <b>9.33%</b> | 21.33%        |
| Bottom 4     | 0            | 0            | 1            | 0             | 0            | 1             |
|              | 0.00%        | 0.00%        | 1.33%        | 0.00%         | 0.00%        | 1.33%         |
| Bottom 5     | 3            | 6            | 6            | 8             | 3            | 26            |
|              | 4.00%        | <b>8.00%</b> | <b>8.00%</b> | <b>10.67%</b> | 4.00%        | <b>34.67%</b> |
| Bottom 6     | 0            | 1            | 4            | 1             | 1            | 7             |
|              | 0.00%        | 1.33%        | 5.33%        | 1.33%         | 1.33%        | 9.33%         |
| Bottom 7     | 1            | 1            | 0            | 0             | 0            | 2             |
|              | 1.33%        | 1.33%        | 0.00%        | 0.00%         | 0.00%        | 2.67%         |
| Column Total | 15           | 15           | 15           | 15            | 15           | 75            |
|              | 20.00%       | 20.00%       | 20.00%       | 20.00%        | 20.00%       | 100.00%       |

**Fashion Group 4: Eclectic**

A Chi-squared test of independence showed a P-value less than 0.05 indicating that there is a significant difference among the attributes at 95% confidence level. Therefore, the attributes are dependent on the bottom (see Table 42).

Table 42

*Chi-Squared Test of Independence Results for the Eclectic Fashion Group: Bottom Garments*

| <i>Test</i> | <i>Statistic</i> | <i>Df</i> | <i>P-Value</i> |
|-------------|------------------|-----------|----------------|
| Chi-Squared | 133.005          | 24        | 0.0000         |

As seen in Table 43, the Eclectic Fashion Group (Group 4) significantly chose BCBG Maxazria bottom (Bottom 3) over all other bottoms. Style, brand (BCBG Maxazria) and fabrication (woven/100% cotton) had a positive effect on the group’s intent to purchase Bottom 3. The \$140 price (the most expensive garment) and place (Dillard’s) negatively impacted the group’s intent to purchase Bottom 3 because more respondents chose the \$14.99 Xhilaration bottom (Bottom 5) from Target (the second least expensive garment) when price and place were the known attributes. The group’s least favored garment was the “engineered fabric” bottom (Bottom 7). This garment was least favored when brand (generic “store brand”), place (Internet) and fabrication (“engineered fabric”/75% polyester, 25% polyethylene) were known. The \$88.00 Banana Republic bottom (Bottom 2) was least favored when price was known, and the Express bottom (Bottom 4) and the “nonwoven” bottom (Bottom 6) were least favored when only styling was known.

Table 43

*Importance of Attributes to the Eclectic Fashion Group on Bottom Garment Selection*

| Eclectic Group | Style        | Brand        | Price        | Place        | Fabrication   | Row Total     |
|----------------|--------------|--------------|--------------|--------------|---------------|---------------|
| Bottom 1       | 16           | 19           | 19           | 21           | 10            | 85            |
|                | 2.19%        | 2.60%        | 2.60%        | 2.88%        | 1.37%         | 11.64%        |
| Bottom 2       | 17           | 16           | 7            | 20           | 18            | 78            |
|                | 2.33%        | 2.19%        | 0.96%        | 2.74%        | 2.47%         | 10.68%        |
| Bottom 3       | 65           | 47           | 15           | 32           | 76            | 235           |
|                | <b>8.90%</b> | <b>6.44%</b> | 2.05%        | 4.38%        | <b>10.41%</b> | <b>32.19%</b> |
| Bottom 4       | 6            | 17           | 10           | 13           | 9             | 55            |
|                | 0.82%        | 2.33%        | 1.37%        | 1.78%        | 1.23%         | 7.53%         |
| Bottom 5       | 25           | 30           | 50           | 43           | 20            | 168           |
|                | 3.42%        | 4.11%        | <b>6.85%</b> | <b>5.89%</b> | 2.74%         | 23.01%        |
| Bottom 6       | 6            | 9            | 35           | 11           | 7             | 68            |
|                | 0.82%        | 1.23%        | 4.79%        | 1.51%        | 0.96%         | 9.32%         |
| Bottom 7       | 11           | 8            | 10           | 6            | 6             | 41            |
|                | 1.51%        | 1.10%        | 1.37%        | 0.82%        | 0.82%         | 5.62%         |
| Column Total   | 146          | 146          | 146          | 146          | 146           | 730           |
|                | 20.00%       | 20.00%       | 20.00%       | 20.00%       | 20.00%        | 100.00%       |

**Fashion Group 5: Unique**

A Chi-squared test of independence showed a P-value of less than 0.05 indicating that there is a significant difference among the attributes at 95% confidence level. Therefore, the attributes are dependent on the bottoms (see Table 44).

Table 44

*Chi-Squared Test of Independence Results for the Unique Fashion Group: Bottom Garments*

| Test        | Statistic | Df | P-Value |
|-------------|-----------|----|---------|
| Chi-Squared | 48.617    | 24 | 0.0021  |

Note: some cell counts < 5.

As seen in Table 45, the Unique Fashion Group (Group 5) also significantly chose the BCBG Maxazria bottom (Bottom 3). The group favored Bottom 3 when style, brand (BCBG Maxazria) and fabrication (woven/100% cotton) were known attributes. Bottom 3 dropped from first to last place when price was known, indicating that the \$140.00 price (the most

expensive garment) had a negative affect on the respondents' purchase intentions of Bottom 3. The place of Bottom 3 (Dillard's) also had a negative affect on the respondents purchase intentions. When price and retail outlets were the known attributes, the group favored the second least expensive \$14.99 Xhilaration bottom (Bottom 5) from Target. Overall, the Unique Fashion Group favored the "engineered fabric" bottom (Bottom 7) least. Bottom 7 was least favored when fabrication ("engineered fabric"/75% polyester, 25% polyethylene), place (Internet) and price (\$60.00) were known attributes. The Express bottom (Bottom 4) was least favored when style and brand were known attributes, and the New World bottom (Bottom 6) was equally least favored when brand was known.

Table 45

*Importance of Attributes to the Unique Fashion Group on Bottom Garment Selection*

| Unique Group  | Style        | Brand        | Price        | Place        | Fabrication  | Row Total     |
|---------------|--------------|--------------|--------------|--------------|--------------|---------------|
| Bottom 1      | 8            | 9            | 10           | 9            | 7            | 43            |
|               | 2.58%        | 2.90%        | 3.23%        | 2.90%        | 2.26%        | 13.87%        |
| Bottom 2      | 8            | 8            | 5            | 9            | 9            | 39            |
|               | 2.58%        | 2.58%        | 1.61%        | 2.90%        | 2.90%        | 12.58%        |
| Bottom 3      | 24           | 19           | 3            | 10           | 25           | 81            |
|               | <b>7.74%</b> | <b>6.13%</b> | 0.97%        | 3.23%        | <b>8.06%</b> | <b>26.13%</b> |
| Bottom 4      | 3            | 5            | 5            | 5            | 4            | 22            |
|               | 0.97%        | 1.61%        | 1.61%        | 1.61%        | 1.29%        | 7.10%         |
| Bottom 5      | 11           | 10           | 21           | 20           | 10           | 72            |
|               | 3.55%        | 3.23%        | <b>6.77%</b> | <b>6.45%</b> | 3.23%        | 23.23%        |
| Bottom 6      | 4            | 5            | 15           | 7            | 6            | 37            |
|               | 1.29%        | 1.61%        | 4.84%        | 2.26%        | 1.94%        | 11.94%        |
| Bottom 7      | 4            | 6            | 3            | 2            | 1            | 16            |
|               | 1.29%        | 1.94%        | 0.97%        | 0.65%        | 0.32%        | 5.16%         |
| Column Totals | 62           | 62           | 62           | 62           | 62           | 310           |
|               | 20.00%       | 20.00%       | 20.00%       | 20.00%       | 20.00%       | 100.00%       |

### **Fashion Group 6: Urban**

A Chi-squared test of independence showed a P-value greater than or equal to 0.05. This indicates there is not a significant difference and, therefore, possibly no relation between the garment and the attributes (see Table 46).

Table 46

*Chi-Squared Test of Independence Results for the Urban Fashion Group: Bottom Garments*

| <i>Test</i> | <i>Statistic</i> | <i>Df</i> | <i>P-Value</i> |
|-------------|------------------|-----------|----------------|
| Chi-Squared | 34.617           | 24        | 0.0743         |

Note: some cell counts < 5.

As seen in Table 47, the Urban Fashion Group (Group 6) also chose the BCBG Maxazria bottom (Bottom 3) overall. When style, brand (BCBG Maxazria), place (Dillard's) and fabrication (woven/100% cotton) were the known attributes, the group chose Bottom 3. When price was the known attribute, Bottom 3 (\$140.00-the most expensive garment) dropped to third place. The least favored skirt was the Express bottom (Bottom 4). However, there is no statistical significance to prove relationship between the garments and attributes.

Table 47

*Importance of Attributes to the Urban Fashion Group on Bottom Garment Selection*

| Urban Group  | Style        | Brand        | Price        | Place        | Fabrication   | Row Total     |
|--------------|--------------|--------------|--------------|--------------|---------------|---------------|
| Bottom 1     | 3            | 3            | 1            | 5            | 2             | 14            |
|              | 2.00%        | 2.00%        | 0.67%        | 3.33%        | 1.33%         | 9.33%         |
| Bottom 2     | 3            | 5            | 3            | 5            | 2             | 18            |
|              | 2.00%        | 3.33%        | 2.00%        | 3.33%        | 1.33%         | 12.00%        |
| Bottom 3     | 12           | 8            | 3            | 6            | 16            | 45            |
|              | <b>8.00%</b> | <b>5.33%</b> | 2.00%        | <b>4.00%</b> | <b>10.67%</b> | <b>30.00%</b> |
| Bottom 4     | 1            | 3            | 2            | 2            | 1             | 9             |
|              | 0.67%        | 2.00%        | 1.33%        | 1.33%        | 0.67%         | 6.00%         |
| Bottom 5     | 4            | 3            | 7            | 5            | 3             | 22            |
|              | 2.67%        | 2.00%        | 4.67%        | 3.33%        | 2.00%         | 14.67%        |
| Bottom 6     | 3            | 3            | 12           | 5            | 3             | 26            |
|              | 2.00%        | 2.00%        | <b>8.00%</b> | 3.33%        | 2.00%         | 17.33%        |
| Bottom 7     | 4            | 5            | 2            | 2            | 3             | 16            |
|              | 2.67%        | 3.33%        | 1.33%        | 1.33%        | 2.00%         | 10.67%        |
| Column Total | 30           | 30           | 30           | 30           | 30            | 150           |
|              | 20.00%       | 20.00%       | 20.00%       | 20.00%       | 20.00%        | 100.00%       |

**Fashion Group 7: Trendy**

A Chi-squared test of independence showed a P-value less than 0.05 indicating a significant difference among the attributes at 95% confidence level. Therefore, the attributes are dependent on the bottoms (see Table 48).

Table 48

*Chi-Squared Test of Independence Results for the Trendy Fashion Group: Bottom Garments*

| Test        | Statistic | Df | P-Value |
|-------------|-----------|----|---------|
| Chi-Squared | 88.873    | 24 | 0.0000  |

Note: some cell counts < 5.

As seen in Table 49, the Trendy Fashion Group (Group 7) also significantly favored Bottom 3. Style, brand (BCBG Maxazria), place (Dillard's) and fabrication (woven/100% cotton) had a positive influence on the group's intent to purchase Bottom 3. Price had a negative impact on the intent to purchase Bottom 3 (\$140.00-the most expensive garment)

because Bottom 3 dropped to third place when price was known. The \$14.99 Xhilaration bottom (Bottom 5) from Target (the second least expensive garment) was favored most when price was the known attribute. The group’s least favored skirt was the Express bottom (Bottom 4). The skirt was least favored when style, price (\$69.50) and fabrication (woven/100% silk) were known. The New World “nonwoven” bottom (Bottom 6) and the generic “store brand” “engineered fabric” bottom (Bottom 7) were least favored when brand was known, and Bottom 7 was least favored when the retail outlet (Internet) was known.

Table 49

*Importance of Attributes to the Trendy Fashion Group on Bottom Garment Selection*

| Trendy Group | Style        | Brand        | Price        | Place        | Fabrication   | Row Total     |
|--------------|--------------|--------------|--------------|--------------|---------------|---------------|
| Bottom 1     | 10           | 16           | 15           | 18           | 7             | 66            |
|              | 1.92%        | 3.08%        | 2.88%        | 3.46%        | 1.35%         | 12.69%        |
| Bottom 2     | 10           | 20           | 8            | 21           | 10            | 69            |
|              | 1.92%        | 3.85%        | 1.54%        | 4.04%        | 1.92%         | 13.27%        |
| Bottom 3     | 48           | 36           | 16           | 23           | 54            | 177           |
|              | <b>9.23%</b> | <b>6.92%</b> | 3.08%        | <b>4.42%</b> | <b>10.38%</b> | <b>34.04%</b> |
| Bottom 4     | 4            | 10           | 6            | 8            | 6             | 34            |
|              | 0.77%        | 1.92%        | 1.15%        | 1.54%        | 1.15%         | 6.54%         |
| Bottom 5     | 13           | 10           | 29           | 22           | 12            | 86            |
|              | 2.50%        | 1.92%        | <b>5.58%</b> | 4.23%        | 2.31%         | 16.54%        |
| Bottom 6     | 7            | 6            | 23           | 8            | 8             | 52            |
|              | 1.35%        | 1.15%        | 4.42%        | 1.54%        | 1.54%         | 10.00%        |
| Bottom 7     | 12           | 6            | 7            | 4            | 7             | 36            |
|              | 2.31%        | 1.15%        | 1.35%        | 0.77%        | 1.35%         | 6.92%         |
| Column Total | 104          | 104          | 104          | 104          | 104           | 520           |
|              | 20.00%       | 20.00%       | 20.00%       | 20.00%       | 20.00%        | 100.00%       |

**Summary of the Fashion Groups’ Bottom Choices**

As seen in Table 50, all fashion groups chose the dark colored skirt with an embellish yoke (Bottom 3). The Punk Fashion Group equally chose the gray three tiered skirt (Bottom 1) as their favored bottom. The Classic, Eclectic, Unique, Urban and Trendy Fashion Groups chose the BCBG Maxazria brand bottom (Bottom 3) as their favored skirt. The Skater/Surfer

Fashion Group also chose the BCBG Maxazria bottom (Bottom 3) as their favored, but equally chose the American Eagle brand bottom (Bottom 1) as their favorite skirt. The Punk Fashion Group chose the Xhilaration brand bottom (Bottom 5) as their favorite skirt. Every fashion group chose a skirt that was in the bottom price range (\$12.00 - \$14.99). The Classic, Punk, Eclectic and Unique Fashion Groups ranked Target (Bottom 5) as the first choice in retail outlet. The Urban and Trendy Fashion Groups chose Dillard's (Bottom 3) as their first choice in retail outlets, and the Skater/Surfer Fashion Group chose American Eagle (Bottom 1) as their favored retail outlet. Every fashion group ranked the woven, 100% cotton bottom (Bottom 3) first when fabrication and fiber content were the provided garment attribute.

Table 50

*First Choice Bottoms for Each Fashion Group*

| <b>Fashion Group</b>              | <b>Style</b>   | <b>Brand</b>  | <b>Price</b>               | <b>Place</b>                      | <b>Fabrication</b>                      |
|-----------------------------------|--|---|----------------------------|-----------------------------------|---|
| <b>Classic:<br/>Group 1</b>       | <b>Bottom 3</b><br>Dark colored with<br>embellished yoke   | <b>Bottom 3</b><br>BCBG Maxazria                                      | <b>Bottom 6</b><br>\$12.00 | <b>Bottom 5</b><br>Target         | <b>Bottom 3</b><br>Woven<br>100% Cotton |
| <b>Skater/Surfer:<br/>Group 2</b> | <b>Bottom 3</b><br>Dark colored with<br>embellished yoke   | <b>Bottom 1</b><br>American Eagle<br><b>Bottom 3</b><br>BCBG Maxazria | <b>Bottom 6</b><br>\$12.00 | <b>Bottom 1</b><br>American Eagle | <b>Bottom 3</b><br>Woven<br>100% Cotton |
| <b>Punk:<br/>Group 3</b>          | <b>Bottom 1</b><br>Gray three tiered skirt<br><b>Bottom 3</b><br>Dark colored with<br>embellished yoke | <b>Bottom 5</b><br>Xhilaration  | <b>Bottom 5</b><br>\$14.99 | <b>Bottom 5</b><br>Target         | <b>Bottom 3</b><br>Woven<br>100% Cotton |
| <b>Eclectic:<br/>Group 4</b>      | <b>Bottom 3</b><br>Dark colored with<br>embellished yoke   | <b>Bottom 3</b><br>BCBG Maxazria                                      | <b>Bottom 5</b><br>\$14.99 | <b>Bottom 5</b><br>Target         | <b>Bottom 3</b><br>Woven<br>100% Cotton |
| <b>Unique:<br/>Group 5</b>        | <b>Bottom 3</b><br>Dark colored with<br>embellished yoke   | <b>Bottom 3</b><br>BCBG Maxazria                                      | <b>Bottom 5</b><br>\$14.99 | <b>Bottom 5</b><br>Target         | <b>Bottom 3</b><br>Woven<br>100% Cotton |
| <b>Urban:<br/>Group 6</b>         | <b>Bottom 3</b><br>Dark colored with<br>embellished yoke   | <b>Bottom 3</b><br>BCBG Maxazria                                      | <b>Bottom 6</b><br>\$12.00 | <b>Bottom 3</b><br>Dillard's      | <b>Bottom 3</b><br>Woven<br>100% Cotton |
| <b>Trendy:<br/>Group 7</b>        | <b>Bottom 3</b><br>Dark colored with<br>embellished yoke   | <b>Bottom 3</b><br>BCBG Maxazria                                      | <b>Bottom 5</b><br>\$14.99 | <b>Bottom 3</b><br>Dillard's      | <b>Bottom 3</b><br>Woven<br>100% Cotton |

Note: Refer to Table 17 for garment images.

### 15- to 25-Year-Olds Response to “Nonwoven” and “Engineered Fabric”

Four garments were added to the questionnaire to see if respondents would intend to purchase a garment labeled “nonwoven” or a garment labeled “engineered fabric.” A top and bottom garment were labeled “nonwoven” with a fiber content of polyester and nylon. Another top and bottom garment were labeled “engineered fabric” with a fiber content of polyester and polyethylene. The following are the results in relation to the other purchased garments.

#### Top Garment Selection

A Chi-squared test of independence showed a P-value of less than 0.05 indicating that there is a significant difference among the attributes at a 95% confidence level. Therefore, the attributes are dependent on the top (see Table 51).

Table 51

#### *Chi-Squared Test of Independence Results for Top Garments*

| <i>Test</i> | <i>Statistic</i> | <i>Df</i> | <i>P-Value</i> |
|-------------|------------------|-----------|----------------|
| Chi-Squared | 249.251          | 24        | 0.0000         |

#### Nonwoven

As seen in Table 52, the “nonwoven” top (Top 6), was ranked fifth place when all attributes were considered. When the sample was asked to choose a top they would intend to purchase based only on styling and no other attribute information, the “nonwoven” top (Top 6) ranked sixth among the other seven tops. When fabrication and fiber content (70% polyester, 30% nylon) were given, the rank of the top increased from sixth to fifth place among the other tops. The 70% polyester, 30% nylon nonwoven top was liked more than the

100% polyester woven top (Top 5) and the 75% polyester, 25% polyethylene “engineered fabric.”

**Engineered Fabric**

As seen in Table 52, the “engineered fabric” top (Top 7) came in last place when all attributes were considered. When respondents were provided with just an image of the garments and no other attributes were known, Top 7 ranked fifth of seven but when the respondents were given that fabrication and fiber content of Top 7, the garment dropped to last place indicating that the 75% polyester, 25% polyethylene “engineered fabric” was like less than all the other garments’ fabrications.

Table 52

*Importance of Attributes to the Sample’s Overall Top Garment Selections*

|              | <b>Style</b> | <b>Brand</b> | <b>Price</b> | <b>Place</b> | <b>Fabrication</b> | <b>Row Total</b> |
|--------------|--------------|--------------|--------------|--------------|--------------------|------------------|
| Top 1        | 73           | 71           | 71           | 65           | 83                 | 363              |
|              | 5.84%        | 5.68%        | 5.68%        | 5.20%        | 6.64%              | 29.04%           |
| Top 2        | 40           | 47           | 10           | 41           | 49                 | 187              |
|              | 3.20%        | 3.76%        | 0.80%        | 3.28%        | 3.92%              | 14.96%           |
| Top 3        | 43           | 13           | 4            | 16           | 45                 | 121              |
|              | 3.44%        | 1.04%        | 0.32%        | 1.28%        | 3.60%              | 9.68%            |
| Top 4        | 20           | 45           | 19           | 41           | 30                 | 155              |
|              | 1.60%        | 3.60%        | 1.52%        | 3.28%        | 2.40%              | 12.40%           |
| Top 5        | 29           | 44           | 75           | 64           | 14                 | 226              |
|              | 2.32%        | 3.52%        | 6.00%        | 5.12%        | 1.12%              | 18.08%           |
| Top 6        | 22           | 12           | 65           | 13           | 17                 | 129              |
|              | 1.76%        | 0.96%        | 5.20%        | 1.04%        | 1.36%              | 10.32%           |
| Top 7        | 23           | 18           | 6            | 10           | 12                 | 69               |
|              | 1.84%        | 1.44%        | 0.48%        | 0.80%        | 0.96%              | 5.52%            |
| Column Total | 250          | 250          | 250          | 250          | 250                | 1250             |
|              | 20.00%       | 20.00%       | 20.00%       | 20.00%       | 20.00%             | 100.00%          |

### **Bottom Garment Selection**

A Chi-squared test of independence showed a P-value of less than 0.05 indicating that there is a significant difference among the attributes at a 95% confidence level. Therefore, the attributes are dependent on the bottom (see Table 53).

Table 53

#### *Chi-Squared Test of Independence Results for Bottom Garments*

| <i>Test</i> | <i>Statistic</i> | <i>Df</i> | <i>P-Value</i> |
|-------------|------------------|-----------|----------------|
| Chi-Squared | 258.541          | 24        | 0.0000         |

### **Nonwoven**

As seen in Table 54, the “nonwoven” bottom (Bottom 6) was ranked third place when all attributes were considered. The “nonwoven” bottom ranked sixth when the respondents were shown only an image of the garment. When fabrication and fiber content were given the “nonwoven” bottom increased to fourth place, indicating that the “nonwoven” fabrication, the polyester/nylon blend, or both had a positive impact on the consumer’s intent to purchase.

### **Engineered Fabric**

As seen in Table 54, the “engineered fabric” bottom (Bottom 7), ranked last when all attributes were considered. The bottom ranked fourth out of seven when only an image of the garments was shown with no the attribute information provided. When the fabrication and fiber content of the garment were provided, Bottom 7 fell from fourth place to last place indicating that fabrication and fiber content had a negative impact on the respondents’ intent to purchase the “engineered fabric” bottom (Bottom 7).

Table 54

*Importance of Attributes to Overall Bottom Garment Selections*

|              | <b>Style</b> | <b>Brand</b> | <b>Price</b> | <b>Place</b> | <b>Fabrication</b> | <b>Row Total</b> |
|--------------|--------------|--------------|--------------|--------------|--------------------|------------------|
| Bottom 1     | 22           | 34           | 36           | 37           | 14                 | 143              |
|              | 1.76%        | 2.72%        | 2.88%        | 2.96%        | 1.12%              | 11.44%           |
| Bottom 2     | 29           | 33           | 13           | 37           | 26                 | 138              |
|              | 2.32%        | 2.64%        | 1.04%        | 2.96%        | 2.08%              | 11.04%           |
| Bottom 3     | 117          | 72           | 25           | 52           | 136                | 402              |
|              | 9.36%        | 5.76%        | 2.00%        | 4.16%        | 10.88%             | 32.16%           |
| Bottom 4     | 10           | 27           | 16           | 23           | 14                 | 90               |
|              | 0.80%        | 2.16%        | 1.28%        | 1.84%        | 1.12%              | 7.20%            |
| Bottom 5     | 34           | 50           | 75           | 71           | 34                 | 264              |
|              | 2.72%        | 4.00%        | 6.00%        | 5.68%        | 2.72%              | 21.12%           |
| Bottom 6     | 15           | 20           | 71           | 23           | 16                 | 145              |
|              | 1.20%        | 1.60%        | 5.68%        | 1.84%        | 1.28%              | 11.60%           |
| Bottom 7     | 23           | 14           | 14           | 7            | 10                 | 68               |
|              | 1.84%        | 1.12%        | 1.12%        | 0.56%        | 0.80%              | 5.44%            |
| Column Total | 250          | 250          | 250          | 250          | 250                | 1250             |
|              | 20.00%       | 20.00%       | 20.00%       | 20.00%       | 20.00%             | 100.00%          |

## **CHAPTER V – Summary and Future Research**

### **Summary**

“The youth market is vitally important simply because it is so large” (Bronson, 2000, p. 34). The sheer size of the generation, in which 15- to 25-year-olds belong, will have effects not only on the present state of the retailing market but also the future of the market as the generation ages. Marketers understand the purchasing power of these consumers as a whole, but they do not necessarily understand the fashion groups within the large generation or what attributes each fashion group finds important when intending to purchase a garment. “Marketers are especially eager to understand this next generation of consumers” (Paul, 2001, p. 44).

### **Purpose**

The purpose of this study was to understand more about the lifestyle and consumer behavior of the 15- to 25-year-old United States female consumer, in terms of their intent to purchase apparel products. An online questionnaire was used to collect data on the age group and determine if known factors and attributes of a garment would influence the consumers’ intent to purchase a specific garment. Research questions that assisted in the structure of the study were as follows:

Research Question One:

What known attributes have an effect on the likelihood to purchase a garment?

1a. Does the product styling affect the likelihood of purchase?

1b. Does brand affect the likelihood of purchase?

1c. Does price affect the likelihood of purchase?

1d. Does retail outlet affect the likelihood of purchase?

1e. Does fabrication affect the likelihood of purchase?

Research Question Two:

What impact does a consumer's fashion style have on the intent to purchase a specific garment?

Research Question Three:

What impact does the term "nonwoven" or "engineered fabric" have on the 15 to 25 year old consumer's intent to purchase?

## **Methodology**

### **Pilot Studies**

To assist with the development of the final online questionnaire, two pilot studies were conducted. The first pilot study included 21 male and female college age respondents. The survey helped collect information on a respondent's typical activities, stores shopped and brands worn, as well as provide feedback on the structure of the survey. The second pilot survey included 29 respondents: 28 females and 1 male, who were all 16 or 17 years old. These respondents were asked to list their favorite stores shopped and brands worn. They were also asked to state their fashion style. These responses help collect a database of fashion styles and popular stores and brands. Nineteen fashion styles were collected including: artsy, beachy, boho, casual, classic, earth, eclectic, girly, gothic, grunge, preppy, punk, rocker, skater, sporty, surfer, trendy, unique and urban. The following stores were among the most popular between both age groups: Express, GAP, Banana Republic, Limited, American Eagle and Old Navy.

### **Purchased Garments**

These top stores were visited to determine if similar styled garments could be found in all stores. The stores were narrowed down to include three specialty stores: American Eagle, Banana Republic, and Express; one department store: Dillard's; and one discount store: Target. The similar garments that appeared in these stores were camisole tops and peasant skirts. A top and a bottom were purchased from each of the five stores.

### **Garment Design and Production**

In order to answer research question three, four garments were designed to be added to the questionnaire along with the purchased garments. A camisole and skirt were made out of a polyester and nylon blend nonwoven and labeled "nonwoven." Another camisole and skirt were made out of a polyester and polyethylene blend nonwoven and labeled "engineered fabric."

### **Questionnaire Development**

High resolution garments of the pictures were taken and added to the final online questionnaire. The questionnaire included questions regarding demographics and psychographics, and asked respondents to choose garments they would intend to purchase based on known attributes such as style, brand, price, place and fabrication and fiber content. Every respondent's first question within the garment sections was which garment they would intend to purchase based on styling alone. They were only shown the seven tops, or seven bottoms, with no other information about the garments' attributes. Once this initial question was answered, the remaining questions regarding the attributes brand, price, place and fabrication and fiber content were shown in random order from respondent to respondent.

This was done to eliminate bias of seeing one attribute before the other. To control bias in seeing the garments in a certain order across the row, each time a respondent logged onto the questionnaire, the pictures were presented in a different order than the respondent before. The pictures remained in the same order throughout the rest of the questionnaire.

### **Questionnaire Distribution**

The questionnaire was distributed through a convenience sampling method. A cover letter with a link to the questionnaire's website was emailed to 64 friends, family, and acquaintances with the request that the recipients would forward the link to others in the 15- to 25-year-old age range, as the cover letter asked them to do. The cover letter was also sent to approximately 750 students through a college's weekly email, 79 females on the university's Woman's Lacrosse Club and 105 high school seniors from the college's summer research program (STEP).

### **Data Analysis**

Data was exported from the online database to a Microsoft Excel file, then prepared and coded for analysis. Stat Crunch was used to analyze the data required to answer the three research questions. The chi-squared test of independence tested if a significant relationship exists between two or more categorical variables and if the differences in categorical data are significantly different. Note, the test does not indicate the strength of the relationship, just whether one exists or not.

## Results

### Sample

A total of 250 United States females between the ages of 15 and 25 answered the online questionnaire. Fifty-seven were between the ages of 15 and 18, 123 were between the ages of 19 and 22, and 70 were between the ages of 23 and 25. The groups were broken up into three groups with the assumption of high school age (15-18), college age (19-22), and post-college age (23-25). Breaking up the large group was one way to assist in understanding the group better because each group was going to have a different lifestyle which will effect how one communicates to these individual age groups (Paul, 2000).

Over 80% of the total respondents were Caucasian, 7.6% were African-American, 3.6% were Asian, 1.2% were Hispanic and one respondent reported "other." Most respondents reported that they resided in a middle size city while attending high school. As the respondents aged, the level of education achieved increased. The 15- to 18-year-olds were either not employed or held a part-time job. This is probably due to the fact that they are still in high school and holding a full-time job while in high school would not be possible. The 19- to 22-year-olds ranged from not employed to holding more than one job. The majority had a part-time job. This age group is primarily in college and therefore most hold part-time jobs or borrow money. Only a small percent would have finished school, or not attend college, and therefore started a full-time position. Over 68% of the 23- to 25-year-olds hold a full-time position. Overall, the number of respondents who hold a full-time position increase with age. This would also support why monthly income increases with the age of the respondents. Additionally, the percent of respondents who received 25% or less of their

income from other sources increased as respondents aged, indicating that as respondents age, they received less financial assistance.

### **Monthly Expenses**

Respondents were asked how much they spend monthly on expenses such as housing, food, car payment, car insurance, gasoline, medical expenses, health and beauty supplies, education/home office supplies, clothing, and entertainment. Over the majority of 15- to 18-year-olds spend \$50 or less on the following items per month: housing, food, car payments, car insurance, gasoline, medical expenses, health and beauty supplies, education/home office supplies, and entertainment. These figures are low, most likely, because their parents or care takers pay these bills. This age group stated that over 50% are unemployed and 45.61% report they received more than 75% of their monthly income from sources other than employment. However, this age group spent more on clothing than they do on all other expenses; approximately 43% of 15- to 18-year-olds report spending between \$51 and \$100 per month on clothing. This is most likely possible because they do not have the responsibilities of the two older age groups and can therefore spend more on items such as clothing. This does not, however, explain why they do not spend a higher amount on entertainment, as well. The 15- to 18-year-olds may spend more on clothing because image is important to that age group. Clothing not only attracts attention, but assists in self-enhancement and creates an outgoing and socially acceptable appearance (Littrel et al., 1990). The developmental process and learning social skills peaks around eighteen. During this developmental process, the 15- to 18-year-olds experiment with fads and fashions because their clothing is critical in helping them identify with a social group (Sproles, 1979).

The 19- to 22-year-olds spend a similar amount on car payments, car insurance, medical expenses and health and beauty supplies as the 15- to 18-year-olds. These expenses are most likely still covered by their parents since this is an age group that could still be in college and therefore receiving assistance. The majority reports a monthly income of less than \$833 and 32.52% receive more than 75% of their income from sources other than employment. This group spends more on housing, food, gasoline, and entertainment than the 15- to 18-year-olds. These are common bills in which a parent may not continue to pay while the student is in college. The age group spends more on education/home office supplies than the other two age groups. This is to be expected with an age group that is, most likely, in college and spending money on tuition, fees, school books and computer supplies. However, this age group spends less on clothing than the 15- to 18-year-olds report spending. This is likely because they have to reallocate funds to other bills such as housing, food and gasoline, and the 19- to 22-year-olds appear to choose to spend more on entertainment than they do on clothing.

The 23- to 25-year-olds spend approximately the same on health and beauty supplies as the other two groups. However, they spend more on car payments, car insurance and medical expenses. This is probably due to the fact that this age group is out of college and no longer living under their parents' assistance. Furthermore, most insurance companies will not allow a child of this age to remain under the parents' insurance. The 23- to 25-year-olds spend more on housing, food, gasoline, and entertainment per month than the other two age groups. Over 68% of this age group hold a full-time job and report making more money than the other two age groups. This group may be supporting the costs of an apartment or

beginning to buy their first home. With their disposable income, they spend more on entertainment than they do on clothing. Possibly because they have the money to do so and entertainment after work is a popular activity for this age group. According to Shepherdson (2000), their time is spent doing leisure activities like listening to music, hanging out with their friend, seeing movies, eating out or just watching TV. They spend less on education/home office supplies than the 19- to 22-year-olds, but more than the 15- to 18-year-olds. This may be most likely due to the fact that major costs have decreased and now their parents no longer pay for typical home office supplies as parents would for the 15- to 18-year-olds. The 23- to 25-year-olds report spending the least amount of money on clothing compared to the other two age groups. Image and keeping up with the latest trends may not be as important to them as the other age groups, especially when the monies come from their own accounts. This group chose to spend their disposable income on entertainment more than clothing.

### **Research Question 1**

What known attributes have an effect on the likelihood to purchase a garment? A chi-squared test of independence showed a p-value less than 0.05. This result indicated there is a significant relationship between the garments and attributes.

**1a. Does the product styling affect the likelihood of purchase?** Yes, styling did have an affect on the likelihood of purchase. The most favored garment was the patterned top with lace trim and an outlined bust (Top 1). This top may have stood out because it was the only patterned top in the group. Eckman et al. (1990) found that purchasers were most impacted by color/pattern when deciding to purchase a garment. The top three garment

choices all had wide, lace trims. The least favored top garment had a bow, which no other garments had. The least favored bottom garment also had a bow, suggesting that this age range is not fond of bows. The two most favored bottom garments were the ones that had the most significant design difference from the other skirts.

Top 3 was favored when styling was known, but respondents significantly decreased intent to purchase of this top when brand (Karen Kane), price (\$68.00 – the most expensive), and place (Dillard's) were known; showing that even if the style is liked, other attributes will keep a consumer from purchasing the garment. This switch in product choice is supported by Eckman et al. (1990), who found that consumers initially select garments based on color, pattern, style and fiber/fabric and that price is a factor that impacts the purchase decision of consumers.

The dark colored, embellished yoke bottom (Bottom 3) was most favored when styling was known. Price had the most significant affect on the intent to purchase this garment; most likely because this garment was over \$100.00. The price may be too high for the 15- to 25-year-old consumers.

**1b. Does brand affect the likelihood of purchase?** Yes, brand did have an affect on the likelihood of purchase. The intent to purchase the Express top (Top 4) increased when brand was known, and the intent to purchase the Karen Kane top (Top 3) decreased when brand was known. The three most favored top garments were specialty store brands. The least favored brand was a fictitious brand (New World) created for the research questionnaire.

The popularity of the BCBG Maxazria bottom (Bottom 3) remained in first place when brand was known, but fewer respondents chose this skirt than when just styling was known. There appears to be no commonality in the rank of the bottom brands, possibly indicating that style had a bigger effect on the purchasers' intent than brand.

**1c. Does price affect the likelihood of purchase?** Yes, price did have an affect on the likelihood of purchase. The \$39.50 top (Top 1) dropped from first to second place when price was known. The seconded least expensive garment (\$14.99) was chosen first when price was known, and the least expensive garment (\$12.99) was third place. There was another top that cost \$39.50, but that garment was not equally ranked with the other \$39.50 top (Top 1) indicating that styling had an affect even when price was known. Price had the biggest impact on respondents' intent to purchase a garment. Most respondents switched garments when price was the known attribute.

The intent to purchase Bottom 3 significantly decreased from 45% to 10% of respondents who would intend to purchase this garment when price was known. This is most likely because Bottom 3 was the most expensive skirt at over \$100. This shows that respondents are only willing to spend within limitations. The price range for the top garments was \$12.00 to \$68.00 while the range for the bottom garments was \$12.00 to \$140.00. The consumers were still willing to spend money for the top they like the most. However, they were not willing to spend the \$140, indicating there is a limit at which a 15- to 25-year-old consumer will spend for a product style they really like. The top three bottom garments chosen when price was known were the three least expensive garments. The most expensive top garment was chosen last, but the most expensive bottom garment (\$140.00) was chosen

fourth of seven. This garment had more embellishment than the other garments in the high price range (\$60.00 - \$140.00) indicating that consumers are willing to pay more for a garment with embellishment.

The reason for these dramatic switches in product could be explained by previous research. Eckman et al. (1990) found that price is one of the factors that support the decision whether or not to purchase a garment. Additionally, research by Davis (1987) found that the two most heavily accessed attributes were style and price.

**1d. Does retail outlet affect the likelihood of purchase?** Yes, place did have an affect on the likelihood of purchase. The rank of retail outlets was different for top and bottom garments. Target ranked within in the top two choices for both the top and the bottom garments. However, the other retail outlets favored for the top garments (the specialty store American Eagle and the department store Dillard's) were the retail outlets that sold the respondents highest ranked top garment (Top 1) and bottom garment (Bottom 3). This result indicates style still had an impact on the consumers' intent to purchase even when retail outlet was known. The catalog and Internet ranked last in both the top and bottom garments. There are two possible reasons for this result. One, 23% of the respondents are 18 years old or younger and, therefore, may not have a credit card to be able to purchase from a catalog or the Internet. Second, this age group possibly sees shopping as an experience and enjoys the instant gratification of receiving the product upon purchase; catalog and Internet shopping can not provide these same feelings.

**1e. Does fabrication affect the likelihood of purchase?** Yes, fabrication and fiber content did have an affect on the likelihood of purchase. The 100% woven silk American

Eagle top (Top 1) gained popularity when fabrication and fiber content were known. When the purchase of top garments were considered, natural fabrics were chosen first then synthetic fabrics; indicating that fabric content may affect the purchase intentions of 15- to 25-year-olds more than fabrication. The polyester and polyethylene fabric was last place. This may be due to this age group not recognizing polyethylene as a fiber.

The rank of bottom garments when fabrication and fiber content were known was similar the rank of bottom garments when styling was known. However, there was an increase in the number of respondents who would intend to purchase the woven, 100% cotton bottom (Bottom 3) when fabrication and fiber content were known. A study by Davis (1987) found that those respondents significantly chose the 100% cotton garment chosen over the other garment fabrics. Again, the product containing polyester and polyethylene came in last place. This shows again that the respondents may not be familiar with the fiber polyethylene and therefore fewer respondents are choosing that garment when fabrication and fiber content are known.

**Research Question 2:** What impact does a consumer's fashion style have on the intent to purchase a specific garment?

The 15 to 25 year old age group is quite large and therefore different subgroups exist within the cohort (Paul, 2001). This research studied different fashion groups because differences in dress can be observed in the 15 to 25 year old age group (Gurel et al., 1972). Additionally, differences in lifestyle can effect evaluative criteria used to make purchase decisions (Cassill & Drake, 1987; Blackwell et al., 2001). Eckman et al. (1990) found that consumers are not consistent of evaluation of a garment from one type of garment to another.

This may explain why some groups placed importance on different attributes when purchasing a top versus purchasing a skirt. Furthermore, Gurel et al. (1972) found that choice of clothing is determined in part by the personality and beliefs of the person; hence why different groups may react differently to known attributes.

**Classic Fashion Group (1): Beachy, casual, classic, preppy and sporty.** When considering the purchase of a top garment, the Classic Fashion Group consistently chose the American Eagle 100% woven silk top (Top 1) except for when price was the known attribute. The group then chose the second least expensive \$14.99 top (Top 5) indicating that price has an impact on the Classic Fashion Group's intent to purchase a top.

The group intended to purchase the dark colored embellished yoke BCBG Maxazria 100% woven cotton skirt (Bottom 3) when styling, brand, and fabrication were known attributes. However, the Classic Fashion Group chose the least expensive \$12.00 bottom (Bottom 6) when price was the known attribute, and chose the Target bottom (Bottom 5) when retail outlet was known.

This Classic Fashion Group appears to be price sensitive because the group chose the garments in the lowest price range (\$12.00 - \$14.99). The group did not change purchase intentions when the place of the top garment was known (specialty store American Eagle), but did change purchase intentions when the place of the bottom garment was known (from department store Dillard's to discount store Target). This switch indicates that the Classic Fashion Group is not willing to shop at department stores. The group did not change purchase intentions when brand and fabrication were known, indicating that brand and fabrication have no impact on the Classic Fashion Group's intent to purchase a garment.

**Skater/Surfer Fashion Group (2): Skater and surfer.** This group consisted of only 12 respondents and therefore there were less than 5 counts in some cells when the chi-squared test was ran indicating a weaker statistic. When intending to purchase a top, the Skater/Surfer Fashion Group was consistent in purchasing the patterned top with lace trim and an outlined bust (Top 1). Whether brand, price, place or fabrication and fiber content were known, this group consistently chose the American Eagle, \$39.50, 100% woven silk top (Top 1).

When shown only the bottom images with no identifying attributes, the Skater/Surfer Fashion Group chose the dark colored skirt with the embellished yoke (Bottom 3). However, when provided brand and place, the group returned to the same brand (American Eagle) and place (American Eagle) that they chose when considering the purchase of a top garment. The group was willing to pay the price of Top 1 (\$39.50) even though it was not the least expensive, but when considering the purchase of a bottom they chose the least expensive. This indicates that the group is willing to pay more for the top either because they liked the style enough to pay the price or the price of the top (\$39.50) was within their spending limit. However, the Skater/Surfer Fashion Group was not willing to pay more for the bottom either because they did not like the style enough to spend \$140.00 or the \$140.00 price tag was out of their spending limit.

A very high percentage, 13.33%, of the respondents chose the 100% cotton fabric possibly because this group wears a lot of cotton garments, mainly t-shirts, and therefore, recognized the material. The inconsistency in the purchase decision of the skirts could have been caused by the fact that skaters and surfers do not often wear skirts, or skirts of this style.

No respondents in the Skater/Surfer Fashion Group had an interest in catalog shopping (Top 6) or the “nonwoven” top (Top 6), even though this top had been chosen when style and price were known attributes. When the group was considering the purchase of a skirt, no one chose to shop on the Internet (Bottom 7) - even though they had chosen this garment when style was a known attribute. The lack of interest in catalog and Internet shopping may be due to the fact that some respondents are younger than 18 years of age and therefore, not able to purchase products from these retail outlets. Another possible cause for this lack of interest in catalog and Internet shopping could be that the Skater/Surfer Fashion Group prefers to have their garments immediately instead of waiting for the product to ship.

**Punk Fashion Group (3): Gothic, grunge, punk, rocker**. This group consisted of only 15 respondents and therefore, some cell counts were less than 5 when the chi-square test was ran indicating a weaker statistical test. Additionally, the p-value was greater than or equal to 0.05 indicating there was no significant relationship found between the garments and attributes when this group considered the purchase of bottoms.

When considering the purchase of a top this group was very inconsistent, possibly because these style tops do not reflect the typical style this fashion group would wear. The favored top when brand was a given attribute was the garment labeled generic “store brand.” This result indicates that the other brands in the questionnaire were brands they do not typically wear or that brand is not an important attribute to Punk Fashion Group. However, when intending to purchase bottom garments the Punk Fashion Group chose the brand Xhilaration from Target instead of the generic “store brand.” Further research would need to be conducted to determine the reason for this.

When price was the known attribute, this group chose the least expensive top (Top 6) at \$12.00 and the second least expensive bottom (Bottom 5) at \$14.99. These results indicate that price has an impact on the purchase intentions of the Punk Fashion Group. The group favored shopping at Target and catalogs, indicating that they have no interest in the specialty stores in the questionnaire or department stores. The top chosen fabrication and fiber content were 100% silk and a silk/spandex blend. There was another top that was a silk/spandex blend, but no respondents in this fashion group chose this garment. They also did not choose this garment when styling was a consideration. These results indicate that styling impacts the purchase decision of the Punk Fashion Group.

**Eclectic Fashion Group (4): Artsy, boho, earth, eclectic, girly.** The Eclectic Fashion Group chose the top and bottom garment that had the most different and stand out feature. This group consistently chose patterned top with lace trim from American Eagle (Top 1) when considering the purchase of a top garments, indicating that other attributes did not have an affect on purchasing a garment when they liked the style of the top. When considering the purchase of a bottom garment, the group did switch bottoms when price and place were known. This switch in price indicated that they are willing to pay for their favored styled garment, but on to a certain price range. The Eclectic Fashion Group was willing to pay the \$39.50 for a top (Top 1) but was not willing to pay \$140 for the skirt (Bottom 3). Instead, the group switched to the \$14.99 bottom (Bottom 5). While the group did not switch retail outlet when purchasing a top, they did switch when purchasing a bottom. The Eclectic Fashion Group switched from department store (Bottom 3) to the discount store Target (Bottom 5) when retail outlet was known, indicating that this group does not shop at a

department store. While the group did not change purchase intentions when fabrication and fiber content were known, more respondents switched to the 100% woven cotton bottom (Bottom 3) indicating that the group favored cotton over other fibers.

**Unique Fashion Group (5): Unique.** This group consisted of 62 respondents and therefore some cell counts were less than 5 when the chi-squared test was ran; therefore, the statistic is not as strong as if there were more individuals in this fashion group. The Unique Fashion Group also chose the garments with the most embellishment and stand out design features (Top 1 and Bottom 3). The group switched to the Xhilaration top (Top 5) when brand was known, but did not change their choice on the skirt. The group chose Target for both the top (Top 5) and bottom (Bottom 5) when retail outlet was given. The brand and place results indicate that the Unique Fashion group does not shop at specialty stores and prefers to shop at discount stores such as Target. When price was a known factor the group switched to the least expensive garments (\$12.00 - \$14.99), indicating that the Unique Fashion Group is price sensitive when considering the purchase of a garment. The fabrication and fiber content appear to have no effect on the group's intent to purchase because the group did not switch purchase intentions when provided the garments fabrication and fiber content.

**Urban Fashion Group (6): Urban.** This group consisted of 30 respondents and therefore, some cell counts were less than 5 when the chi-squared test was ran. These numbers mean that the statistic is weaker than a statistic with higher respondents. Additionally, there was no significant relationship found between the garments and attributes when this group considered the purchase of bottom garments.

This group consistently chose the patterned, lace trimmed top by American Eagle (Top 1) no matter what attribute was known. The 100% woven silk top (Top 1) and 85% silk, 15% angora knit top (Top 2) were equally chosen when fabrication and fiber content were known attributes. These tops were the highest quality of fibers, 100% silk and a silk/angora blend.

The Urban Fashion Group consistently chose the embellished yoke skirt by BCBG Maxazria (Bottom 3), except for when price was known. In this case, the respondents chose the least expensive bottom (\$12.00). Since they did not switch purchase intentions when intending to purchase a top, it appears that the Urban Fashion Group is only willing to pay so much for a garment of which they like the style. Overall, the Urban Fashion Group purchased garments based on style and other attributes did not impact their purchase intentions.

**Trendy Fashion Group (7): Trendy.** This group consisted of 104 respondents, yet some cell counts were less than 5 when the chi-squared test was ran. This indicates that the statistic is weaker than if the cells had a higher cell count than five.

The Trendy Fashion Group also did not switch purchase intents as different attributes were provided. Since the group did not switch from the originally selected garment, it appears that the other attributes do not have an impact on the garment they intended to purchase. The Trendy Fashion Group did switch on one occasion. When the prices of the bottom garments were provided, the group switched from the most expensive bottom (\$140.00) to the second least expensive bottom (\$14.99). Since the group did switch to purchase the cheaper garment when considering the purchase of a top, it appears as if they are willing to pay a higher cost, but not as high as the \$140.00 skirt (Bottom 3).

**Summary of the fashion groups' choices.** There were differences in the groups' responses when brand, price and place were known attributes, but there was an overall similarity when styling and fabrication were known. All fashion groups chose the patterned skirt with lace trim and an outline bust (Top 1). This garment was the top that had a design that stood out from the other designs. The group chose a combination of silk or silk blends when considering the purchase of a top garment. All of these garments chosen first were woven garments with the exception of the Urban Fashion Group. This group ranked the woven and knit top equally.

The fashion groups were consistent on the purchase intentions of bottom garments when styling, price and fabrication were known attributes. The fashion groups chose the dark colored skirt with an embellished yoke (Bottom 3) over other the other bottoms. This style was design that stood out the most from the other designs. The fashion groups, however, switched to a bottom garment that was in the lower price range (\$12.00 - \$14.99), even though they chose the most expensive bottom when styling was considered. A possible successful product would be an embellished yoke peasant skirt but at a lower price range. Every fashion group chose the woven, 100% cotton skirt (Bottom 3) over the other fabrication and fiber contents.

**Research Question 3:** What impact does the term “nonwoven” or “engineered fabric” have on the 15 to 25 year old consumer's intent to purchase?

Deciding what to call nonwoven fabric has been a challenge. Marketers do not like what the term nonwoven implies, and technically, anything can be a nonwoven since anything not woven, even a brick, can be a nonwoven (Maycumber, 2000). This researched

looked at how the term “nonwoven” or “engineered fabric” impacted the 15 to 25 year old respondents’ intent to purchase. The terms “nonwoven” and “engineered fabric” were used because these are two popular terms currently used in the industry.

When only style was shown, the “nonwoven” top (Top 6) ranked six out of seven. The “nonwoven” top (Top 6) increased to fifth place when fabrication and fiber content were known, indicating that fabrication and fiber content (70% polyester, 30% nylon) had a positive impact on the 15- to 25-year-olds’ intent to purchase. When fabrication and fiber content were known attributes, the sample chose the “nonwoven” polyester blend top (Top 6) after all the silk blend tops (Top 1 - Top 4), but before the 100% polyester top (Top 5). However, the respondents did not choose the “engineered fabric” polyester blend top (Top 7) before the 100% polyester top (Top 5). The “engineered fabric” top (Top 7) ranked five out of seven when only styling was known, but the “engineered fabric” top (Top 7) dropped from fifth to last place when fabrication and fiber content were known. This indicates that fabrication and fiber content had a negative impact on the 15- to 25-year-olds’ intent to purchase the polyester and polyethylene “engineered fabric” top (Top 7).

When the bottom garments were presented with no attribute information provided, the “nonwoven” bottom (Bottom 6) ranked six of seven. The “nonwoven” bottom’s (Bottom 6) rank increased to four of seven when fabrication and fiber content were known. This response indicates that the “nonwoven” polyester and nylon blend bottom (Bottom 6) has a positive impact on the consumers’ intent to purchase. This bottom (Bottom 6) ranked higher than the wool and rayon blend bottom (Bottom 1), the silk bottom with polyester lining (Bottom 4), and the polyester and polyethylene blend bottom (Bottom 7). The “engineered

fabric” however had the opposite response. When only the images of the bottoms were presented, the “engineered fabric” bottom (Bottom 7) ranked four out of seven. However, when the respondents were presented with the fabrication and fiber content of the “engineered fabric” bottom (Bottom 7), it dropped from fourth to last place. In both the top and bottom garments, the “engineered” polyester and polyethylene blend fabric (Bottom 7) came in last place when fabrication and fiber content were known. These results indicate that the 15- to 25-year-olds would not intend to purchase an “engineered fabric” with a polyester and polyethylene blend. Because the consumers were willing to purchase the other garments that were polyester and polyester blends it appears as if they were not interested in either the “engineered fabric” or the polyethylene fiber. This may be due to their unfamiliarity with the fiber polyethylene; however, fabrication and fiber content can not be differentiated due to the way the question was asked in the final online questionnaire.

The results of the questionnaire showed that the attributes styling, brand, price, place and fabrication and fiber content have a statistically significant ( $p$ -value less than 0.05) affect on the 15- to 25-year-old consumer’s intent to purchase an apparel product. Overall, there was a statistically significant difference ( $p$ -value less than 0.05) among the fashion groups’ responses when brand, price and place were known attributes. However, there was an overall similarity when styling and fabrication were known. The favored style among all fashion groups was the top garment with the most embellishment and the bottom garment with the most embellishment. For top garments, the most favored fabrications were woven silk or silk blend fabrics, over synthetics and synthetic blends. The most favored fabrication for the bottom garments was a woven, 100% cotton fabric, over silk and synthetic blends.

Fabrication and fiber content had a statistically significant (p-value less than 0.05) positive affect on the “nonwoven” polyester/nylon blend garments, but had a negative affect on the “engineered fabric” polyester/polyethylene blend garments.

### **Future Research**

This research provides insight into the affects of garment attributes (such as styling, brand, price, place and fabrication and fiber content) when 15- to 25-year-olds consider the purchase of certain garments. There are opportunities for future research related to this study.

This research covered only female respondents between 15 and 25 years old, so additional research with male consumers could be explored. Additionally, other age groups could be researched as well.

Even though the sample consisted of 250, respondents the questionnaire was administered via a convenience sampling method. Further research could be done to control for an equal distribution of ages relative to the population. Furthermore, there was no record of the location in which the respondents resided. Additional research could be completed to control for a better distribution of regional locations of the respondents.

This research collected information on whether different fashion groups placed importance on different attributes when considering the purchase of a garment. Further research could be conducted on each individual fashion group. Once the fashion groups were split up in this study, some fashion groups were not well represented. Other studies could be completed to control for an even distribution of each fashion group. Additionally, the garments included in this study were all similarly styled garments to control for bias. Further research could include garments that would be of interest for each fashion group. Other

possible research would be to collect information on each fashion group by surveying each fashion group separately.

This study looked at the impact “nonwoven” or “engineered fabric” had on the consumer’s intent to purchase a garment when fabrication was the known attribute. It appears as if fabrication title or fiber content may have had an affect on the respondent’s intent to purchase the garment. Further research could control for this and possibly separate the two known attributes. Additionally, the researcher chose the brand, price and place of the “nonwoven” and “engineered fabric” garments. Future research can control for these attributes by labeling the “nonwoven” and “engineered fabric” garments with brand names and retail outlets already in the market and recognized by the survey respondents.

## REFERENCES

- Abraham-Murali, L., & Littrell, M. A. (1995). Consumers' perceptions of apparel quality over time: An exploratory study. *Clothing and Textile Research Journal*, 13(3), 149-158.
- Alch, M. L. (2000). The echo-boom generation: A growing force in american society. *The Futurist*, 34(5), 42-46.
- Bettman, J. R., & Sujan, M. (1987). Effects of framing on evaluation of comparable and noncomparable alternative by expert and novice consumers. *Journal of Consumer Research*, 14(2), 141-154.
- Bronson, C. (2000). Star power. (cover story). *SGB: Sporting Goods Business*, 33(13), 32.
- Browne, B. A., & Kaldenberg, D. O. (1997). Conceptualizing self-monitoring: Links to materialism and product involvement. *Journal of Consumer Marketing*, 14(1), 31-44.
- Butler, I. (2004). Emerging worldwide markets and nonwoven technologies. *Nonwovens Industry*, 35(10), 44-49.
- Casselmann-Dickson, M. A., & Damhorst, M. L. (1993). Female bicyclists and interest in dress: Validation with multiple measures. *Clothing and Textile Research Journal*, 11(4), 7-17.
- Cassill, N. L., & Drake, M. F. (1987). Apparel selection criteria related to female consumers' lifestyle. *Clothing and Textile Research Journal*, 6(1), 20-28.
- Corfman, K. P. (1991). Comparability and comparison levels used in choices among consumer products. *Journal of Marketing Research*, 28(3), 368-374.
- Davis, L. L. (1987). Consumer use of label information in ratings of clothing quality and clothing fashionability. *Clothing and Textile Research Journal*, 6(1), 9-14.
- Dickson, P. R. (1982). Person-situation: Segmentation's missing link. *Journal of Marketing*, 46, 56-64.
- Dockery, A. (2003). Australian partnership seeks to commercialize nonwoven wool. *Apparel Magazine*, 45(3), 12.
- Eckman, M., Damhorst, M. L., & Kadolph, S. J. (1990). Toward a model of the in-store purchase decision process: Consumer use of criteria for evaluating women's apparel. *Clothing and Textile Research Journal*, 8(2), 13-22.

- Forney, J. C., Park, E. J., & Brandon, L. (2005). Effects of evaluative criteria on fashion brand extension. *Journal of Fashion Marketing Management*, 9(2), 156-165.
- Gensch, D. H., & Javalgi, R. G. (1987). The influence of involvement on disaggregate attribute choice models. *Journal of Consumer Research*, 14(1), 71-82.
- Goldsmith, R. E., Freiden, J. B., & Eastman, J. K. (1995). Generality/specificity issue in consumer innovativeness research. *Technovation*, 15(10), 601-612.
- Gurel, L. M., Wilbur, J. C., & Gurel, L. (1972). Personality correlates of adolescent clothing styles. *Journal of Home Economics*, 64(3), 42-47.
- Ha, Y., & Stoel, L. (2004). Internet apparel shopping behaviors: The influence of general innovativeness. *International Journal of Retail & Distribution Management*, 32(8), 377-385.
- Harkin, F. (2002). Frontier fashion Forget chainmail and silver trim, Fiona Harkin finds laboratories are stitching up the future with nonwoven fabrics, interactive fibres and nanotechnology. *The Financial Times (London, England)* [Electronic version], pp. 11. Retrieved October 21, 2004, from LexisNexis database.
- Howe, N., & Strauss, W. (2000). *Millennials rising: The next great generation*. New York, NY: Vintage Books.
- Jarvis, C. (1997). Present and future opportunities for nonwovens in apparel. *Nonwovens Industry*, 28(5), 40-42.
- Johnson, M. D. (1988). Comparability and hierarchical processing in multialternative choice. *Journal of Consumer Research*, 15(3), 303-314.
- Johnson, M. J., & Moore, E. C. (2001). *Apparel product development*. Upper Saddle River, NJ: Prentice Hall.
- Kim, H., Damhorst, M. L., & Lee, K. (2002). Apparel involvement and advertisement processing. *Journal of Fashion Marketing and Management*, 6(3), 277-302.
- Littrell, M. A., Damhorst, M. L., & Littrell, J. M. (1990). Clothing interests, body satisfaction, and eating behavior of adolescent females: Related or independent dimensions?. *Adolescence*, 25(97), 77-95.
- Marlatt, A. (1999). Yen for e-tail. *Internet World*, 5(26), 39-41.

- Maycumber, S. G. (2000, May 26). Important fabric innovations will come from nontraditional sources; new apparel nonwovens from several players will share the spotlight in the coming years. *Daily News Record*, pp. 56.
- May-Plumlee, T., & Little, T. J. (2006). Proactive product development integrating consumer requirements. *International Journal of Clothing Science & Technology*, 18(1), 53-66.
- Morton, L. P. (2002). Targeting generation Y. *Public Relations*, 47(2), 46-48.
- Paul, P. (2001). Getting inside gen Y. *American Demographics*, 23(9), 42-49.
- Pennington-Gray, L., Fridgen, J. D., & Stynes, D. (2003). Cohort segmentation: An application to tourism. *Leisure Sciences*, 25, 341-361.
- Pourdeyhimi, B. (2004). Nonwovens and tradition textile know-how. *Textile World*, 154(8), 42-45.
- Shepherdson, N. (2000). New kids on the lot. *American Demographics*, 22(1), 44.
- Shim, S., & Bickle, M. C. (1994). Benefit segments of the female apparel market: Psychographics, shopping orientation, and demographics. *Clothing and Textile Research Journal*, 12(2), 1-12.
- Solomon, M. R., & Rabolt, N. J. (2004). *Consumer behavior in fashion*. Upper Saddle River, NJ: Prentice Hall.
- Sproles, G. B. (1979). *Fashion: Consumer behavior toward dress*. Minneapolis, MN: Burgess Publishing Company.
- Tigert, D. J., Ring, L. R., & King, C. W. (1976). Fashion involvement and buying behavior: A methodological study. *Advances in Consumer Research*, 3, 481-484.
- Tilin, A. (2001). Slick as teflon! Tough as kevlar! Limber as lycra! *Wired* [Electronic version], 9(10). Available: [http://www.wired.com/wired/archive/9.10/abfabs\\_pr.html](http://www.wired.com/wired/archive/9.10/abfabs_pr.html)
- Walzer, E. (2001). Textile makers use nonwovens, corn for material gain. *Sporting Goods Business*, 34(13), 34-35.
- Ward, S. (1974). Consumer socialization. *Journal of Consumer Research*, 1, 1-14.

## **APPENDICES**

# **APPENDIX A**

## **Pilot Survey 1a**

### **College Questionnaire**

### **College Questionnaire Cover Letter**

My name is Kate Dutton and I am a graduate student in Textile and Apparel Management. I am requesting your participation in an online pilot survey about lifestyles that will assist me in product development research.

If you are willing to participate, the following link will take you to the online pilot survey which will take approximately 5 minutes to complete:

<http://www.cals.ncsu.edu/surveybuilder/Form.cfm?testID=1408>

Please reply to [kcdutton@ncsu.edu](mailto:kcdutton@ncsu.edu) if you have any comments or suggestions about the survey.

Your participation is greatly appreciated.

Thank you,  
Kate Dutton

## College Questionnaire

### Pilot Lifestyle Questionnaire

This submission is anonymous

This survey is intended for United States males and females ages 15-25. Please answer all questions as accurately as possible and do not submit more than once. Thank You.

---

Red indicates changes to be made after reviewing the pilot survey and feedback from survey respondents.

1. Age: (Check one)

- younger than 15 < 15
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25
- older than 25 > 25

2. Gender: (Check one)

- Male
- Female

3. Race: (Check one)

- Caucasian
- African-American
- Asian
- Native American
- Hispanic/Latino
- Other:

4. Education: (Check all that apply) Needs one question asking highest degree achieved and one question asking if enrolled in school.

- Attending High School
- Graduated High School
- Attending College Full-Time
- Attending College Part-Time
- Bachelor degree
- Masters degree
- Doctorial degree

5. What city and state do you currently reside in?

In what city and state do you currently reside? (Please answer the following way: City, State. Ex: New York, NC)

6. How long have you lived in this city? Provide Choices

- < 1 Year
- 1 - 2 Years
- 3 - 4 Years
- 5 - 10 Years
- > 10 Years

7. If you have not lived in that city all of your life, what other city/state did you live in? **If you have not lived in that city all of your life, in what other city/state did you live?**  
(Please answer the following way: City, State. Ex: New York, NC)

8. Employment: (Check all that apply)

- Full-Time
- Part-Time
- Not Employed

9. If working part-time, how many hours do you work a week? (Check one)

- 0-5 hours
- 6-10 hours
- 11-15 hours
- 16-20 hours

10. What is your MONTHLY income, AFTER TAXES, from all sources? (ex: employment, parents, significant other, **gifts**, etc.) (Check One)

- < 833
- 833 - 1249
- 1250 - 1665
- 1666 - 2082
- 2083 - 2499
- 2500 - 2915
- 2916 - 3332
- 3333 - 3749
- 3750 - 4166
- > 4166

11. About what percent of your MONTHLY income is provided by sources other than employment? (ex: parents, grandparents, friends, significant other, gifts, etc.)(Check one)

- 0% 0%
- Less than 5% < 5%
- Between 5 and 50 % 5% – 50%
- Greater than 50% > 50%
- 100% 100%

| Monthly Expenses   | < 5%                     | 6- 10%                   | 11- 15%                  | 16- 20%                  | 21- 25%                  | 26- 30%                  | 31- 50%                  | 50- 75%                  | >75%                     |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 12. About what percent of your monthly income do you spend on HOUSING?   | <input type="checkbox"/> |
| 13. About what percent of your monthly income do you spend on FOOD? (ex: grocery)                                    | <input type="checkbox"/> |
| 14. About what percent of your monthly income do you spend on CAR PAYMENTS?  | <input type="checkbox"/> |
| 15. About what percent of your monthly income do you spend on CAR INSURANCE?   | <input type="checkbox"/> |
| 16. About what percent of your monthly income do you spend on GASOLINE?  | <input type="checkbox"/> |
| 17. About what percent of your monthly income do you spend on MEDICAL? (ex: insurance, prescriptions, doctor visits) | <input type="checkbox"/> |
| 18. About what percent of monthly income do you spend on HEALTH AND BEAUTY? (ex: gym membership, cosmetics, salons)  | <input type="checkbox"/> |

|  |                          |                          |                          |                          |                          |                          |                          |                          |                          |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 19. About what percent of your monthly income do you spend on EDUCATION/HOME OFFICE? (ex: school supplies, tuition, fees, parking, computer ink and paper) | <input type="checkbox"/> |
| 20. About what percent of your monthly income do you spend on CLOTHING?  | <input type="checkbox"/> |
| 21. About what percent of your monthly income do you spend on ENTERTAINMENT? (ex: movies, eating out, CDs, DVDs, video games, travel)                      | <input type="checkbox"/> |

22. What is your most common activity for weekend entertainment? (~~ex: Movies, Travel, Night Clubs, Eating Out, etc.~~) **Provide choices**

- Athletics
- Bars/Clubs
- Concerts
- Eating Out
- Movies
- Parties
- Reading
- Shopping
- Traveling
- Other:

23. What are some of your most favorite bands/singers?

24. What are some of your most favorite movies?

25. What are some of your most favorite TV shows?

26. What sports do you like to PLAY? (Check all that apply)

- Football
- Basketball
- Baseball/Softball
- Ice Hockey
- Soccer
- Golf
- Tennis
- Lacrosse
- Field Hockey
- Other

27. What sports do you like to WATCH? (Check all that apply)

- Football
  - Basketball
  - Baseball/Softball
  - Ice Hockey
  - Soccer
  - Tennis
  - Golf
  - Lacrosse
  - Field Hockey
  - Other
- Switch to be consistent to the above question

28. What brands of clothing do you wear most?

29. What is your most favorite garment to wear? (Check one)

- Sweater
- Sweatshirt
- Polo Shirt
- Button down/Dress Shirt
- T-Shirt
- Jacket
- Pants
- Jeans
- Sweatpants
- Skirts
- Shorts
- Accessories (purses, jewelry, hats, shoes, etc.)
- Other

30. What is your favorite color? (Check one)

- White
- Red
- Orange
- Yellow
- Green
- Blue
- Purple
- Pink
- Brown
- Grey
- Black
- Other:

31. What color do you like to wear the most? (Check one)

- White
- Red
- Orange
- Yellow
- Green
- Blue
- Purple
- Pink
- Brown**
- Grey
- Black
- Other:

32. Where do you purchase most of your clothing? (Check one)

- Internet
- Discount Stores (ex: Wal-Mart, Target)
- Off Price Stores (ex: TJ Maxx, Marshalls)
- Department Stores (ex: Dillard's, Sears, Nordstrom)
- Specialty Stores (ex: American Eagle, Banana Republic, Guess)
- Catalogs

33. What fashion group(s) describes your style best? (Check all that apply)

- Preppy
- Gothic
- Grunge
- Hip-Hop/Streetwear
- Trendy/Fashion Forward
- Sporty
- ~~Conservative/Classic~~ → Classic/Conservative → Classic is a better known fashion term than conservative
- Other:

## **APPENDIX B**

### **Pilot Survey 1b**

#### **Rising High School Senior Questionnaire**

**Rising High School Senior Questionnaire**

Your Style Category: \_\_\_\_\_

Age: \_\_\_\_\_ Gender: \_\_\_\_\_

Brief description of that style:

---

---

---

---

---

What brands fit in this style category?

Where do you buy these brands?

- Optional -

What celebrity best represents this style? \_\_\_\_\_

Typical weekly activities:

TV shows viewed:

Music: (band names ... pop, rap, country, etc.)

## **APPENDIX C**

### **Thesis Online Questionnaire**

#### **15 to 25 year old United States Female**

Note: Appendix C is a Microsoft Word document of the online edition of the questionnaire. A Microsoft Word document was used for this appendix because some answers were provided in drop down menus, and therefore, all answers would not be visible if the online edition of the questionnaire was shown in this appendix.

Note: A reminder that questions 20 through 23 and questions 25 through 28 appeared in random order. For example, each time a new respondent visited the online edition of the questionnaire the questions would appear in a different order than they appeared for previous respondents.

### **Thesis Online Questionnaire Cover Letter**

My name is Kate Dutton and I am a graduate student in Textile and Apparel Management at North Carolina State University. I am requesting your participation in an online survey about lifestyles. Such participation will assist in my product development research. This survey will take approximately 10 minutes to complete.

If you are willing to participate please click the following link, as it will launch the online survey:

[http://www.tx.ncsu.edu/grad\\_projects/katedutton/](http://www.tx.ncsu.edu/grad_projects/katedutton/)

You may also assist in my research by forwarding this e-mail to other 15 to 25 year old females residing in the United States.

Thank you. Your participation is greatly appreciated.

## Thesis Online Questionnaire

This survey is intended for United States females ages 15-25. Please answer all questions as accurately as possible and so not submit more than once. Thank you.

1. Age: (Check one)
  - 15
  - 16
  - 17
  - 18
  - 19
  - 20
  - 21
  - 22
  - 23
  - 24
  - 25
  
2. Gender: (Check one)
  - Male
  - Female
  
3. Race: (Check on)
  - African-American / Black
  - Asian
  - Caucasian / White
  - Hispanic / Latino
  - Native American
  - Other: \_\_\_(text box)\_\_\_
  
4. What is the highest degree that you have achieved? (Check one)
  - High School Diploma or equivalent
  - Associate Degree
  - Bachelor Degree
  - Master Degree
  - Doctorate Degree
  - None of the Above
  
5. While in high school, in what size city did (do) you reside? Choose the answer based on your perception of the city size.
  - Metropolitan
  - Large
  - Medium
  - Small
  - Country

6. Employment: (Check all that apply)
- Full-Time
  - Part-Time
  - Not Employed
7. What is your MONTHLY income, AFTER TAXES, from all sources? (ex: employment, parents, significant other, gifts, etc) (Check one)
- < 833
  - 833-1249
  - 1250-1665
  - 1666-2082
  - 2083-2499
  - 2500-2915
  - 2916-3332
  - 3333-3749
  - 3750-4166
  - > 4166
8. About what percent of your MONTHLY income is provided by sources other than employment? (ex: parents, grandparents, friends, significant other, gifts) (Check one)
- 0% - 25%
  - 26% - 50%
  - 51% - 75%
  - 76% - 100%

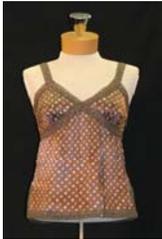
| Monthly Expenses   | \$0-\$50 | \$51-\$100 | \$101-\$200 | \$201-\$300 | \$301-\$400 | \$401-\$500 | \$501-\$600 | \$601-\$700 | > \$701 |
|--|----------|------------|-------------|-------------|-------------|-------------|-------------|-------------|---------|
| 9. About how much do you spend per month on HOUSING?             |          |            |             |             |             |             |             |             |         |
| 10. About how much do you spend per month on FOOD? (ex: grocery) |          |            |             |             |             |             |             |             |         |
| 11. About how much do you spend per month on CAR PAYMENTS?       |          |            |             |             |             |             |             |             |         |
| 12. About how much do you spend per month on CAR INSURANCE?      |          |            |             |             |             |             |             |             |         |
| 13. About how much do you spend per month on GASOLINE?           |          |            |             |             |             |             |             |             |         |

|   |  |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|--|
| 14. About how much do you spend per month on MEDICAL? (ex: insurance, prescriptions, doctor visits)                                       |  |  |  |  |  |  |  |  |  |
| 15. About how much do you spend per month on HEALTH AND BEAUTY? (ex: gym membership, cosmetics, salons)                                   |  |  |  |  |  |  |  |  |  |
| 16. About how much do you spend per month on EDUCATION/HOME OFFICE? (ex: school supplies, tuition, fees, parking, computer ink and paper) |  |  |  |  |  |  |  |  |  |
| 17. About how much do you spend per month on CLOTHING?  |  |  |  |  |  |  |  |  |  |
| 18. About how much do you spend per month on ENTERTAINMENT? (ex: movies, eating out, CDs, DVDs, video games, travel)                      |  |  |  |  |  |  |  |  |  |

**TOPS**

19. Of the below, which garment would you most likely purchase?

Click on picture to enlarge

|   |   |   |   |  |   |   |
|---|---|---|---|--|---|---|
|  |  |  |  |  |  |  |
| <input type="radio"/>  | <input type="radio"/>   | <input type="radio"/>   |

20. Now that you know the fabrication, which garment would you most likely purchase?  
Click on picture to enlarge

|   |   |   |   |  |   |   |
|---|---|---|---|--|---|---|
|  |  |  |  |  |  |  |
| Woven<br>100% Silk  | Knit<br>85% Silk,<br>15% Angora   | Woven<br>92% Silk,<br>8% Spandex  | Woven<br>93% Silk,<br>7% Spandex  | Woven<br>100%<br>Polyester   | Nonwoven<br>70%<br>Polyester,<br>30% Nylon  | Engineered<br>Fabric<br>75%<br>Polyester,<br>25%<br>Polyethylene                    |
| <input type="radio"/>  | <input type="radio"/>   | <input type="radio"/>   |

21. Now that you know the price, which garment would you most likely purchase?  
Click on picture to enlarge

|  |  |  |  |   |  |  |
|--|--|--|--|---|--|--|
|  |  |  |  |  |  |  |
| \$39.50  | \$54.00  | \$68.00  | \$39.50  | \$14.99   | \$12.00  | \$40.00  |
| <input type="radio"/>   | <input type="radio"/>  | <input type="radio"/>  |

22. Now that you know the place, which garment would you most likely purchase?  
Click on picture to enlarge

|   |   |   |   |  |   |   |
|---|---|---|---|--|---|---|
|  |  |  |  |  |  |  |
| American<br>Eagle   | Banana<br>Republic  | Dillard's   | Express   | Target   | Catalog   | Internet  |
| <input type="radio"/>  | <input type="radio"/>   | <input type="radio"/>   |

23. Now that you know the brand, which garment would you most likely purchase?  
Click on picture to enlarge

|   |   |   |   |  |   |   |
|---|---|---|---|--|---|---|
|  |  |  |  |  |  |  |
| American Eagle  | Banana Republic   | Karen Kane  | Express   | Xhilaration  | New World   | Store Brand   |
| <input type="radio"/>  | <input type="radio"/>   | <input type="radio"/>   |

## SKIRTS

24. Of the below, which garment would you most likely purchase?  
Click on picture to enlarge

|  |  |  |  |   |  |  |
|--|--|--|--|---|--|--|
|  |  |  |  |  |  |  |
| <input type="radio"/>   | <input type="radio"/>  | <input type="radio"/>  |

25. Now that you know the fabrication, which garment would you most likely purchase?  
Click on picture to enlarge

|   |   |   |   |  |   |   |
|---|---|---|---|--|---|---|
|  |  |  |  |            |  |  |
| Woven<br>52% Wool,<br>48% Viscose<br>Rayon<br>Lining:<br>100% Acetate               | Woven<br>100% Silk<br>Lining:<br>100% Acetate                                       | Woven<br>100% Cotton  | Woven<br>100% Silk<br>Lining:<br>100% Polyester                                     | Knit<br>65% Polyester,<br>35% Rayon<br>Contrast 1:<br>100% Cotton<br>Contrast 2:<br>100% Nylon | Nonwoven<br>70% Polyester,<br>30% Nylon   | Engineered<br>Fabric<br>75% Polyester,<br>25% Polyethylene                            |
| <input type="radio"/>  | <input type="radio"/>   | <input type="radio"/>   |

26. Now that you know the price, which garment would you most likely purchase?

Click on picture to enlarge

|   |   |   |   |  |   |   |
|---|---|---|---|--|---|---|
|  |  |  |  |  |  |  |
| \$48.00   | \$88.00   | \$140.00  | \$69.50   | \$14.99  | \$12.00   | \$60.00   |
| <input type="radio"/>  | <input type="radio"/>   | <input type="radio"/>   |

27. Now that you know the place, which garment would you most likely purchase?

Click on picture to enlarge

|   |   |   |   |  |   |   |
|---|---|---|---|--|---|---|
|  |  |  |  |  |  |  |
| American Eagle  | Banana Republic   | Dillard's   | Express   | Target   | Catalog   | Internet  |
| <input type="radio"/>  | <input type="radio"/>   | <input type="radio"/>   |

28. Now that you know the brand, which garment would you most likely purchase?

Click on picture to enlarge

|   |   |   |   |  |   |   |
|---|---|---|---|--|---|---|
|  |  |  |  |  |  |  |
| American Eagle  | Banana Republic   | BCBG Maxazria   | Express   | Xhilaration  | New World   | Store Brand   |
| <input type="radio"/>  | <input type="radio"/>   | <input type="radio"/>   |

29. What is your most common activity for weekend entertainment? (Check all that apply)

- Athletics
- Bar/Clubs
- Concerts
- Eating Out
- Movies
- Parties
- Reading
- Shopping
- Traveling
- Other: \_\_\_\_(*text box*)\_\_\_\_

30. What are some of your most favorite bands/singer?

*(text box for open-ended response)*

31. What are some of your most favorite movies?

*(text box for open-ended response)*

32. What are some of your most favorite TV shows?

*(text box for open-ended response)*

33. What sports do you like to PLAY? (Check all that apply)

- Baseball / Softball
- Basketball
- Field Hockey
- Football
- Golf
- Ice Hockey
- Lacrosse
- Soccer
- Tennis
- Other: \_\_\_\_(*text box*)\_\_\_\_

34. What sports do you like to WATCH? (Check all that apply)

- Football
- Basketball
- Baseball / Softball
- Ice Hockey
- Soccer
- Golf
- Tennis
- Lacrosse
- Field Hockey
- Other: \_\_\_\_(*text box*)\_\_\_\_

35. What brands of clothing do you wear most?

*(text box for open-ended response)*

36. Where do you purchase most of your clothing? (Check one)

- Catalogs
- Department Stores (ex: Dillard's, Sears, Nordstrom)
- Discount Stores (ex: Wal-Mart, Target)
- Internet
- Off Price Stores (ex: TJ Maxx, Marshalls)
- Outlets
- Specialty Stores (ex: American Eagle, Banana Republic, Guess)

37. What fashion group(s) best describes your style? (Check all that apply)

- Artsy
- Beachy
- Boho
- Casual
- Classic
- Earth
- Eclectic
- Girly
- Gothic
- Grunge
- Preppy
- Punk
- Rocker
- Skater
- Sporty
- Surfer
- Trendy
- Unique
- Urban
- Other: \_\_\_\_*(text box)*\_\_\_\_