

ABSTRACT

FRATTO, GENESSA M., M.S. Product and Market Analysis of the Childrenswear Industry. (Under the direction of Dr. Nancy Cassill and Dr. Michelle Jones)

This research was a result of a retail audit completed by the author in August 2003 for Cotton Incorporated. The retail audit gathered information on gender, size, product, brand, country of origin, and price of childrenswear at major retail chain stores in three United States cities. The purpose of the study was to provide insights into the childrenswear market offerings, to aid manufacturers and retailers in their understanding of the dynamics of the childrenswear retail marketing environment. The Apparel Value Chain Model (Gereffi, 1994) provided the conceptual framework for this study.

The level of specificity of the data provided an opportunity for descriptive and inferential analysis yielding comparison of marketing, product and price strategies for retailers, and brands. The research sample consisted of six national retail chains from three retail channels: discount, major chain, and specialty chain. Results provided insights into childrenswear offerings at retail channels and stores, identified if differences existed across childrenswear offerings according gender, size, product, brand and country origin, and tested for differences between price means. Finally, the research results proposed modifications to Gereffi's Apparel Value Chain Model (1994) to reflect the current product dynamics of the childrenswear market.

PRODUCT AND MARKET ANALYSIS OF THE CHILDRENSWEAR INDUSTRY

by

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BIOGRAPHY

The author, Genessa M. Fratto was born in Wakefield, Massachusetts on December 21, 1978. Her parents are Robert and Donna Fratto and she has two younger sisters, Lisa and Cara. Genessa grew up in Sandwich, Massachusetts and moved to Cary, North Carolina in 1993. She graduated from Cary High School in Cary, North Carolina in 1996 and went on to study at The University of North Carolina at Greensboro. She graduated with a Bachelor of Science Degree in Textile Products Marketing from the College of Human Environmental Sciences in 2000. Genessa then moved to Atlanta, GA and worked at The William Carter Company in apparel product development and design for two years. In 2002, Genessa moved back to North Carolina to pursue her Master of Science Degree in Textile Technology and Management. She is currently completing the requirements for her graduate degree and looks forward to a career in the apparel industry.

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CHAPTER I

INTRODUCTION

The childrenswear market has become a significant contributor to the United States apparel industry. Opportunities in childrenswear have evolved as children have gained exposure to media, society and culture; and begun to influence their parents' purchasing decisions for apparel, thus increasing demand, and resulting in changes in the distribution process (Jarnow & Dickerson, 1997).

Standard and Poor's "Apparel and Footwear Industry Survey," July 2003, reported that total apparel sales in the United States fell 1.8% in 2002 to \$163 billion down from \$166 billion in 2001. However, in 2002, sales of childrenswear increased 6% over the previous year to \$27 billion, accounting for 17% of the total apparel market, up 1% from the previous year.

For large retailers, apparel products typically flow directly from manufacturer to retailer to consumer, while smaller stores deal through wholesale channels (Jarnow & Dickerson, 1997). When specialty chains became more prominent and accepted in the late 1980's and early 1990's, and private label or store brand merchandise increased, a shift was identified that minimized the role of the manufacturer as a prominent player in the apparel distribution supply chain.

"Power refers to the ability of one channel member to induce another channel member to enhance its behavior in favor the objective of the channel

member exerting influence (Ailawadi, Boring, & Farris, 1995, p. 214).” A channel member exerting influence may try to influence the marketing strategies of another channel member at different distribution levels. The shift in the supply chain from manufacturing to marketing has given the greatest power in the supply chain to the retailer. The rise in retailer power relative to manufacturer power was attributed to retailer concentration, increased access to scanner data, and decreased brand loyalty due to increased price promotions and private label or store brand offerings (Ailawadi et al., 1995). Due to sales and marketing shifts as a result of consumer spending, the apparel production/distribution chain been modified and refined to reflect the momentum of the retailer and consumer driving the supply chain (Gereffi, 2002).

When analyzing an apparel industry segment such as childrenswear, it is important to look at that segment as it relates to the flow of products through the supply chain. Dickerson’s Textile and Apparel Production Distribution Chain (1999) illustrates the movement of apparel goods from raw materials to finished products, to retailer. Gereffi’s Apparel Value Chain model (1994) was used as a framework for this study. This model was used as an apparel industry representation and was further explored to illustrate the current dynamics of the apparel industry and more specifically, suggest modifications specific to the childrenswear industry.

Despite the important presence of childrenswear in the apparel industry, little trade or academic research has been conducted in this area. Research was

needed to understand the product dynamics of childrenswear and how those dynamics are translated to the retail selling floor.

Purpose of this Study

The purpose of the study was to provide insights into childrenswear offerings that will aid childrenswear manufacturers and retailers in their understanding of the dynamics of the retail marketing environment for childrenswear.

Specific objectives were to collect information on childrenswear offerings at major United States retail chains to:

1. Provide an overview and profile of the childrenswear market according to price frequencies among retail channels, retail stores and brand categories.
2. Determine if significant differences exist between childrenswear offerings according to gender category, size category, product category, brand category, and country of origin region among retail channels and retail stores.
3. Determine if significant differences exist between national brand and store brand childrenswear offerings among retail channels and retail stores.
4. Determine if significant differences exist between price means according to retail channels, retail stores, gender category, size category, brand category, product category, and country of origin.

5. Identify how the childrenswear market fits into Gereffi's Apparel Value Chain (1994), and how it could be modified to reflect the current product dynamics of the childrenswear market.

Significance of This Study

This study provided insight into the childrenswear market, and presented updated empirical information, rather than relying solely on secondary data such as NPD consumer purchase records. Data collected through the retail audit captured retail inventory information in June 2003 in three major United States retail markets. The retail audit data was understood to reflect the retail buyer's knowledge of current market trends and consumer demands. The level of specificity of the data provided an opportunity for descriptive and inferential analysis yielding comparison of marketing and product strategies for different retailers, brands and price comparisons.

Limitations of This Study

The limitations of this study related to sample size, time frame and scope of study.

Sample Size

Initially, this study aimed to capture childrenswear information from four retail channels: discount, mass chain, specialty chain, and department. Due to time constraints, the sample was reduced to three channels and a total of six retailers. The department retail channel was not incorporated into the analysis due to insufficient data at the end of the data collection period. The final sample for the purpose of this research included three channels (discount, major chain, specialty chain) and six retailers.

Timeframe

Data were collected over the course of two and a half weeks in June 2003. Price differences were observed among retail stores due to markdowns, geographical location, and timing of sales promotions in that particular location at the time of data collection. Clearance offerings were excluded from this study.

Scope of Study

Due to its small share of market, as well as its product differences, the newborn and infant size categories were excluded from this study. This study focused on playwear (tops and bottoms) and sleepwear. Playwear (tops and bottoms) and sleepwear accounted for 57% of the total childrenswear apparel offerings in 2000 ("American Shoppers Panel", The NPD Group, 2000). This study excluded licensed team sports team apparel (but did include licensed

character apparel), sweaters, tailored apparel, sweats and warm-up apparel, athletic apparel, robes, and loungewear due to their small share of the market totaling only 15% (“American Shoppers Panel”, The NPD Group, 2000). Playwear sets were also excluded from this study due to the wide variation of products within this category, and multiple product pricing.

Definition of Terms

Brand - A name, term, sign, symbol or design or combination of, intended to identify goods or services of one seller or group of sellers that differentiate the good from the competition (Kotler, 2003).

Childrenswear or children's apparel - Apparel/clothing products as well as accessories and hosiery in sizes newborn to boy's 20 or girl's 18 (Solinger, 1988).

Distribution channel - The route that a product follows from the raw material stage until it reaches the end consumer or user (Mueller & Smiley, 1997).

Infant size category - Products ranging in size from 3-24 months (Solinger, 1988).

Kids size category - Boy's and girl's sizes 4-20. Typically sized and styled for ages 4-12. These size ranges also offer husky and plus sizes (Solinger, 1988).

Licensed brand - A brand with production legally arranged with a manufacturer. The manufacturer has an exclusive agreement to produce these goods and pays the designer or licensor a royalty to use the brand name (Mueller & Smiley, 1997).

National brand - Product with name recognition and consumer expectation that is distributed overall several retailers within or across retail channels (Kotler, 2003).

Newborn size category - Products ranging in size from 0-3 months, that typically featuring layette and one piece silhouettes (Solinger, 1988).

Retail audit - A market research tool used to capture retail product inventory data on the selling floor prior to consumer purchase (Malhotra, 2000).

Retail channel – Also referred to as marketing channel; sets of interdependent organizations involved in the process of making a product or service available for use or consumption. Channels are structured according to pricing strategies. Examples include discount, mass, specialty channels (Kotler, 2003).

Store brand/private label - Merchandise designed and produced by a retailer for distribution within its own organization (Mueller & Smiley, 1997). Also referred to as private label, private brand, house brand and/or distributor brand.

Toddler size category - Product ranging in sizes 2T-5T. Typically sized for children ages 2- 4 (Solinger, 1988).

CHAPTER II

LITERATURE REVIEW

Apparel manufacturers of national brands have identified ways to compete with the strengthening power of the retailer. A look at the apparel industry supply chain in this literature review provides an overview of the current industry dynamics and aids in the understanding of how childrenswear manufacturers and marketers compete, including how brand manufacturers survive in a market with narrowing dependency on national brands.

Childrenswear Industry

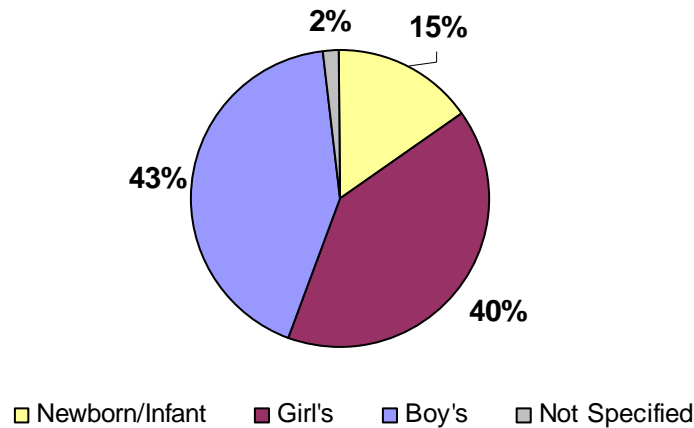
Overview/Structure

Historically, children were dressed as smaller versions of adults in apparel not specified for their size or needs (Jarnow & Dickerson, 1997). As children moved out of working in factories in the late 1930's and developed lifestyles unique to the school environment and play experiences, market opportunities for apparel to meet those needs soon developed. Thus, as children have grown into purchase decision-maker roles, product classifications in childrenswear have developed to be as significant and as varied as the offerings in the adult apparel market (Diamond & Diamond, 2002).

Childrenswear is a category identified by apparel, accessories, and hosiery in sizes newborn to boy's 20 or girl's 18 (Solinger, 1988). Childrenswear is designed according to the uniqueness of children's needs for apparel in

different stages of growth and is sized according to age (Jarnow & Dickerson, 1997). In a retail store, childrenswear products are merchandised by age or size grouping. Childrenswear marketers or manufacturers often specialize or compete within specific price levels or age/size grouping (Jarnow & Dickerson, 1997). In 2000, childrenswear (newborn, infant, boy's, girl's) accounted for 13% of the \$182.3 billion apparel market. Within the childrenswear market in 2000, boys' and girls' toddler and kids' sizes (boy's 4-7, boy's 8-20, girl's 4-6x, girl's 7-18) accounted collectively for approximately 83% of the total market (Figure 1).

Figure 1: Childrenswear Market by Gender and Size, 2000



Source: "American Shoppers Panel", The NPD Group, 2000.

Table 1 outlines the top childrenswear retailers in 2001 according to a report in Children's Business (July, 2002).

Table 1: Top Ten Childrenswear Retailers

Retailer	2001 Children's Apparel Sales (billions)	Number of Store Locations	Retail Channel Classification
Wal*Mart	\$6.7 B	2,747	Discount
Kmart	\$2.2 B	1,815	Discount
Target	\$2.05 B	1,081	Discount
Sears	\$1.83 B	870	Major Chain
JC Penney	\$1.48 B	1,074	Major Chain
Federated	\$1.1 B	460	Department
Old Navy	\$1.02 B	821	Specialty Chain
Gap Kids/Baby Gap	\$1 B	650	Specialty Chain
Kohl's	\$.974M	420	Major Chain
Sam's Club	\$.970M	509	Warehouse Club

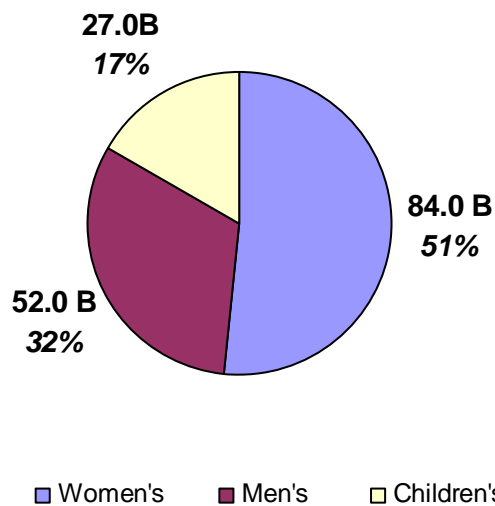
Source: Top 10 childrenswear retailers. Children's Business, July 2002, v17 i7 p7 (1).

Growth

Sales of childrenswear typically remain consistent and less volatile than adult apparel categories. Standard and Poor's Industry Surveys (Apparel and Footwear, 2003) reported that apparel sales declined 1.8% to \$163 billion from \$166 billion in 2001 and men's and women's apparel fell 1.7% (\$52 billion) and 6.1% (\$84 billion) respectively. However, in 2002, sales of childrenswear increased 6% over the previous year to \$27 billion, accounting for 17% of the total apparel market, up 1% from the previous year (Figure 2). This occurred surprisingly as the birthrate slightly but steadily declined. The positive growth rate of children presented an opportunity for constant purchasing of children's

apparel whereas adult apparel purchases may be deferred in harder economic times (Orecklin, 2003). The childrenswear category has overtime increasingly captured a greater share of the total market (Apparel and Footwear Industry Survey, 2003).

Figure 2: Apparel Market at Retail, 2002 Sales Data (billions)



Source: Standard's and Poor's Industry Surveys, Apparel and Footwear, July 2003

The purchasers of childrenswear (i.e., parents, grandparents) have contributed to increased sales in the childrenswear market. Research studies indicate that today's parents are typically older when they begin a family, and thus are more stable and financially secure to spend more disposable income on their children's apparel (Cardona & Cuneo, 2000). Salaries for new mothers in their thirties are usually higher than mother in their twenties. Most women having

children today also are more likely to be in dual-income marriages, providing greater disposable income (Apparel and Footwear Industry Survey, 2003).

Childrenswear Product Characteristics

Licensing is a major category of growth and innovation in childrenswear today (Clack, 2003). Licensing is a strategy that is used to expand the product categories of a narrow market (Kotler, 2003). Art and cartoon characters have been and will remain a driving force children's apparel design. Manufacturers, marketers and retailers look to well known, and highly promoted cartoon or entertainment characters to encourage purchases of apparel ("Character crazy," 2001). In 2001, licensing declined overall in the apparel market, experiencing a 10% loss in sales of entertainment and character-based merchandise. Conversely, childrenswear remained a stronghold in apparel sales overall and a significant portion of sales in the licensing merchandise category ("Licensing bull's eyes," 2002).

In recent months there has been a move to increase licensing endeavors in girls' apparel products. Licensing of childrenswear needs the support of a strong retail-licensor relationship to be successful in marketing and retail driven industry (Clack, 2003). Market share of childrenswear licensed logo apparel is fragmented; the highest percentage of licensing includes cartoon/tv brands.

Power in the Supply Chain

Power is defined as the ability of one channel member to induce change in another channel member's behavior or to control specific marketing decision variables in the marketing strategy (Ailawadi et al., 1995). Supply chain power is examined predominantly with regard to retailers and manufacturers.

Retailers with market power are considered barometers for power and change. Power is exercised through several means, including control over pricing, inventory, product assortment, and private labels (Ailawadi et al., 1995). Retailers and manufacturers exist in a competitive environment where they are faced with intertype competition, as stores within different channels compete for the same consumers and carry the same merchandise (Kotler, 2003).

Less inventory holdings improve the inventory turnover ratio for retailers but choke the supplier if the supplier relied on retailer as a major customer. Large retailers, like Wal*Mart, concerned with cost of capital and inventory holdings ask for suppliers to provide more products on a consignment basis, an indicator of the increase in retailer power. Retailers that have gained power over recent years invest in growth for long-term success, but not long-term relationships with suppliers (Ailawadi et al., 1995). Table 2 summarizes the marketing strategy variable through which retailers can exercise power.

Table 2: Summary of Marketing Strategy Variables and Power of Impact

Marketing Activities	Affected Components	Expected Impact of Relative Market Power
Pricing Private Labels	Gross Margin/Sales (GM/S)	Retailers should negotiate lower prices from manufacturers, thus increasing their GM/S, but only if they do not correspondingly lower their selling prices (which some retailers do as a deliberate competitive strategy). Private labels should also increase retailer gross margins.
Allowances	Advertising & Promotion/Sales (A&P/S)	Retailers should negotiate increased trade allowances from manufacturers, thus increasing manufacturer A&P/S.
Ordering Schedule Delivery Shelf Space	SG&A/Sales ROS	Retailers should negotiate more favorable terms that transfer administrative overheads to manufacturer, thus decreasing their SG&A/S and increasing their ROS.
Inventory Product Assortment (Category Mgmt)	Inventory/Sales (I/S) ROA	Retailers should either transfer inventory carrying costs to manufacturers, thus decreasing their I/S, or systems like EDI, JIT, etc. should reduce total system costs, decreasing I/S for both manufacturers and retailers.
Credit	EVA	Retailers should negotiate more favorable credit terms which reduce their administrative costs of working capital
Training Scanner Information Private Labels	Management Skills Stock price MVA	Better training and improved information systems should improve management skill ,thus increasing the potential of retailers for long term profitability and therefore higher MVA. Successful private labels should reduce dependence on manufacturer and increase potential for future profit.

Source: From "Market power and performance: a cross-industry analysis of manufacturers and retailers," Ailwadi, Borin, & Farris (1995), p. 221.

Apparel Industry Structure

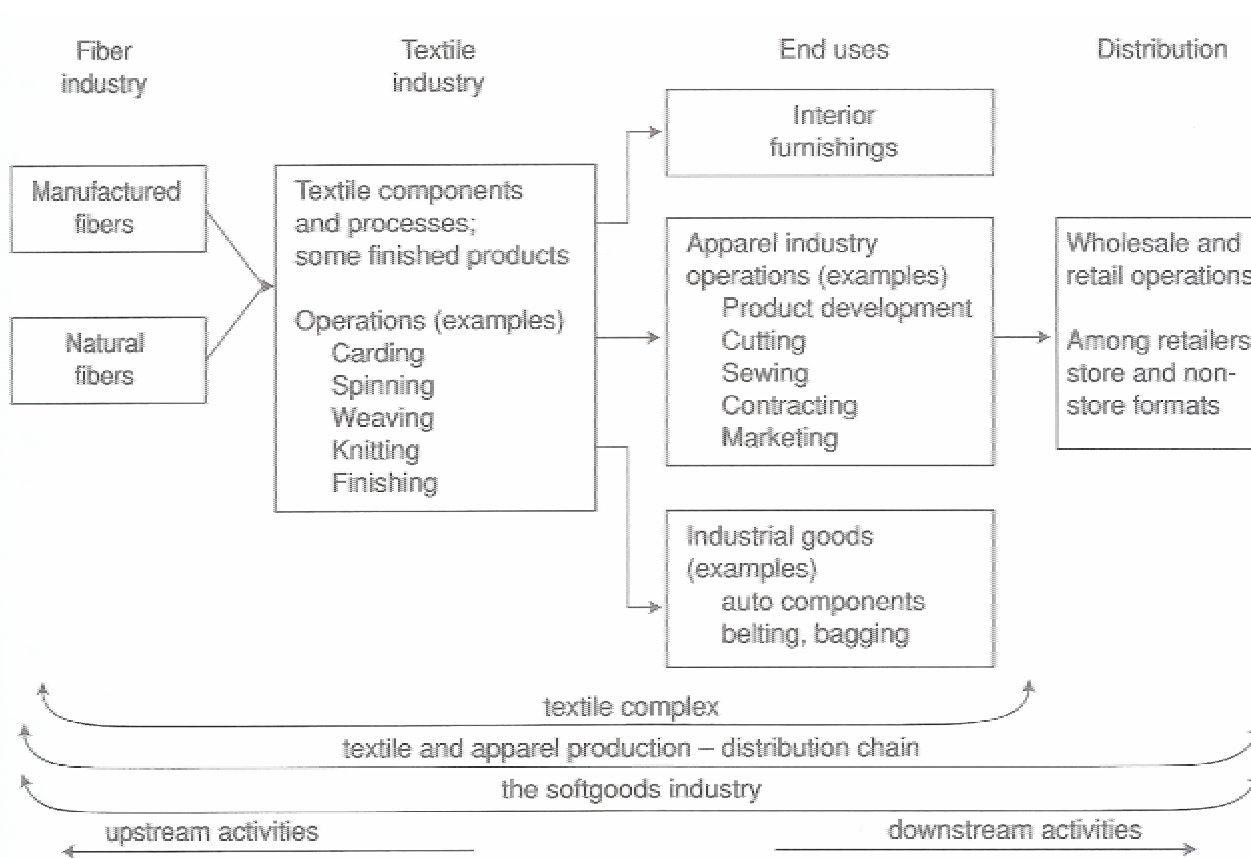
The structure of the apparel industry proposed by Dickerson's Textile and Apparel Production-Distribution Chain (1999), and Gereffi's Apparel Value Chain (1994) provided the context for examining the dynamics of the childrenswear market.

Dickerson's Portrayal

Dickerson's portrayal of the Textile and Apparel Production-Distribution Chain (1999) illustrates the movement of apparel goods from raw materials through finished products to the end retailer (Figure 3). This supply chain (Dickerson, 1999) shows the relationship of the textile complex within the soft goods industry and outlines the upstream and downstream activities.

The soft goods industry encompasses the range of fiber, textile, end use manufacturing, and distribution functions. The upstream activities are the processes prior to design and development. Downstream activities refer to product development, design, and marketing. The upstream and downstream activities take place across industries. In this portrayal, the fiber and textile industries are the motivators of the pipeline activities as indicated by the arrows (Dickerson, 1999). This model shows arrows from fiber to distribution aimed in one direction. The manufacturing and production focus of this model does not show the downstream activities or end consumers as influencers in the current apparel marketing environment.

Figure 3: Textile and Apparel Production-Distribution Chain



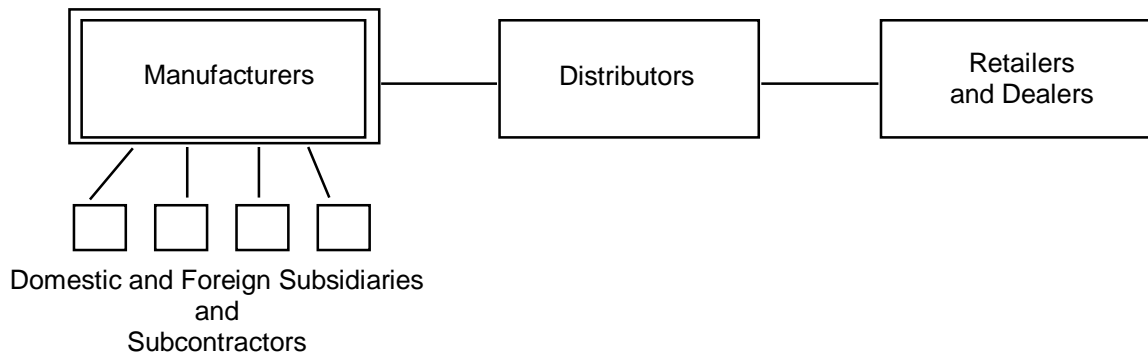
Source: Textiles and Apparel in the Global Economy, Dickerson, K., 1999, pg.19

Current Industry Dynamics

Historically, the national brand manufacturer has driven the channel of distribution. Characteristics of channel relationships involve power, dependency, conflict, satisfaction and cooperation (Kincade, Woodard, & Park, 2002). Presently, the power that was once in the hands of manufacturers has shifted to the retailers. Retailers have gained power over manufacturers in the supply chain through strategies such as mergers, acquisitions, and consolidations. This power shift is apparent as retailers began to drive sourcing strategies by demanding lower costs and shorter lead times (Gereffi, 2002). The retailers as the power holders are less dependent on the other members in the chain, less prone to conflict, and are typically more satisfied with results over the other chain members (Kincade, et al. 2002).

The design, production and marketing of a product are components of a commodity chain (Gereffi, 1999). Two types of commodity chains exist, each one allowing control from different ends of the chain. Producer-driven commodity chains empower the manufacturers as they play the key role in coordinating the production network. This type of chain is usually associated with capital and technology intensive industries. As Figure 4 shows, a producer-driven commodity chain is a similar, but simplified model of Dickerson's Production Distribution Apparel Chain (1999).

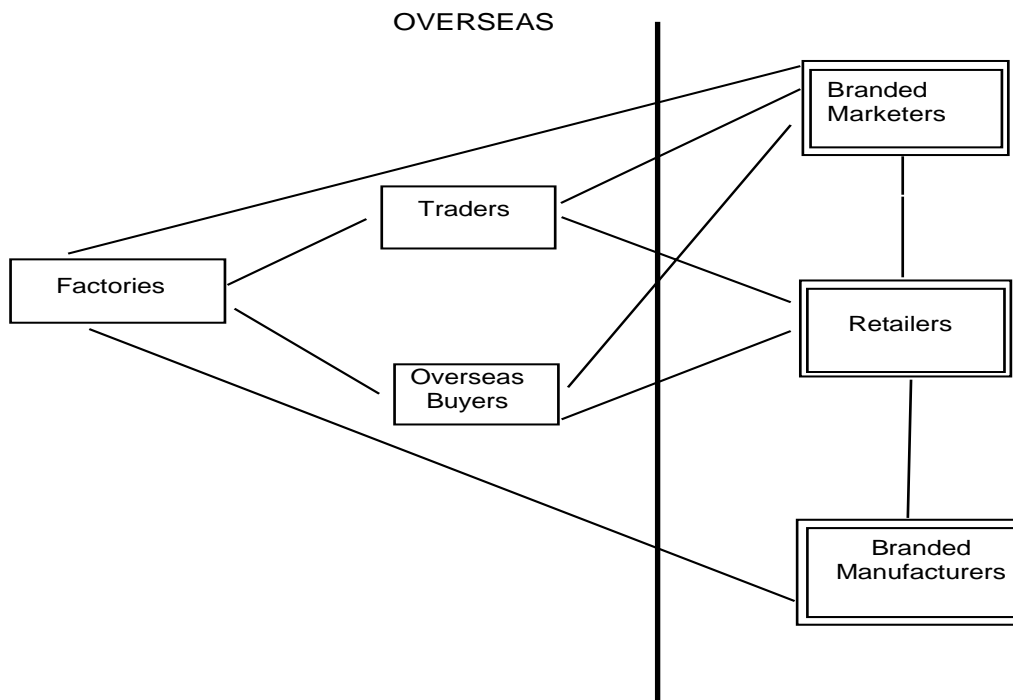
Figure 4: Producer Driven Commodity Chain



Source: Gereffi, G. (1994), The organization of buyer-driven global commodity chains: How U.S. retailers shape overseas production networks.

Buyer-driven commodities chains (Figure 5) are characterized by competitive, decentralized production networks, driven by the retailer, marketing strategies and brands. The most common representations of a buyer-driven commodity chain are retailers, apparel and fashion product companies (Gereffi, 1999). Control in buyer-driven commodity chains exist in marketing, design, merchandising and retail activities. Buyer-driven commodity chains involve firms that are highly competitive, with highly fragmented manufacturing systems. These types of business typically source manufacturing activities through a range of channels. A prominent feature of buyer-driven commodity chains is the presence of branded manufacturers, who do not own manufacturing facilities, but instead outsource (Gereffi, 1999). In a buyer-driven commodity chain, the profit and growth potential are imbedded in the businesses' ability to compete in product development, design, sales, marketing and sourcing (Gereffi, 2002).

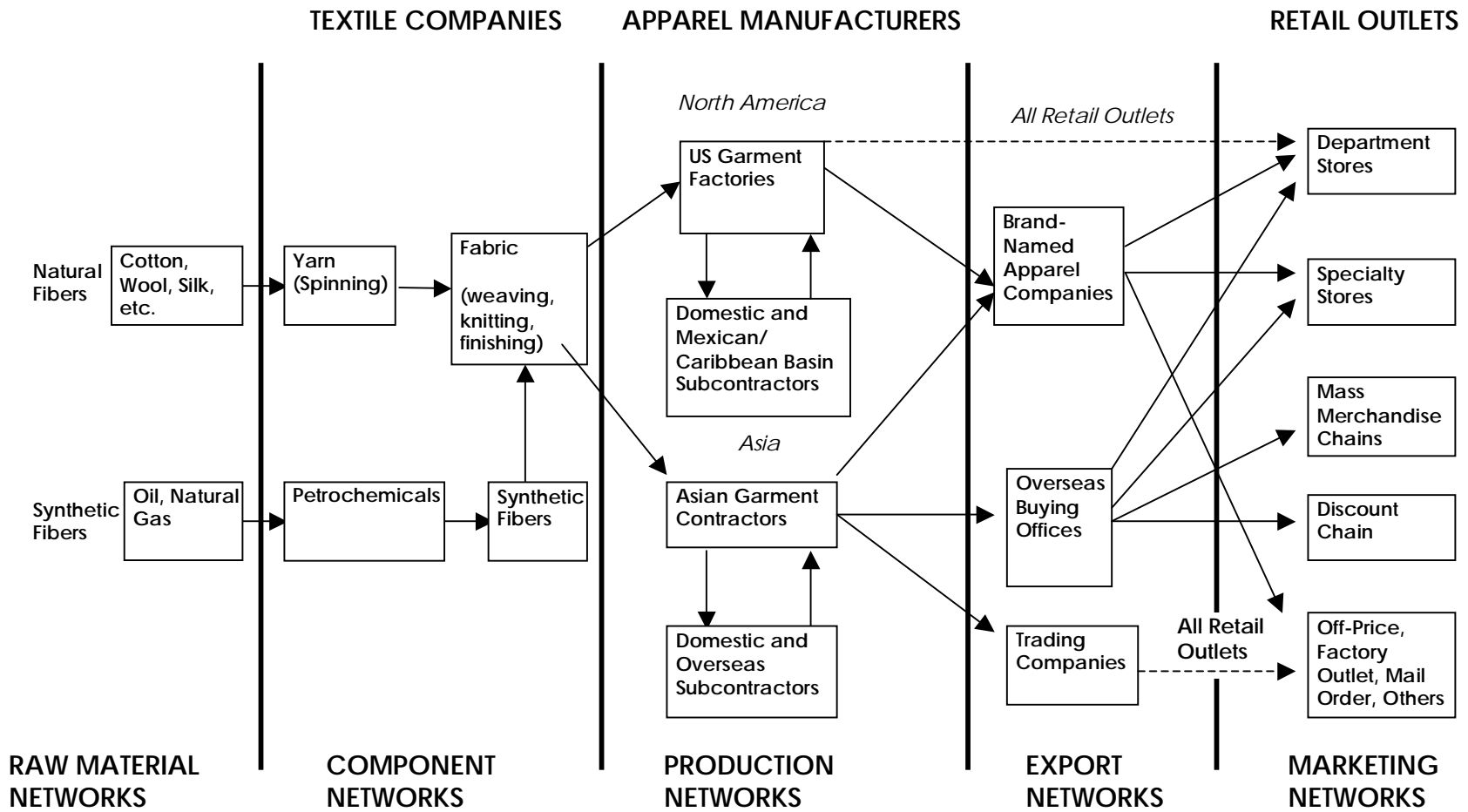
Figure 5: Buyer Driven Apparel Commodity Chain



Source: Gereffi, G. (1994), The organization of buyer-driven global commodity chains: How U.S. retailers shape overseas production networks.

The barriers to entry in an apparel commodity chain are low in the manufacturing and production end, but the downstream activities such as design and marketing can present significant barriers to entry (Gereffi, 2002). Five major networks comprise the Apparel Value Chain (Gereffi, 1994); raw material, component, product, export and marketing (Figure 6).

Figure 6: Apparel Value Chain



Source: Appelbaum and Gereffi (1994), Global Production: the apparel industry in the Pacific Rim, p. 46.

Retailer Power

Apparel is the top merchandise category for most consumer goods' retailers. Between 1987 and 1991, the five largest soft goods chains in the United States increased their share of the national apparel market from 35 to 45% (Gereffi, 2002). In the current state of the apparel industry, the retailer in the Buyer-Driven Apparel Commodity Chain (Gereffi, 1994) can be classified as a gatekeeper. The gatekeeper in this model has the ultimate decision power in transferring the brand's message from the brand marketer or manufacturer to the buying center (Kotler, 2003).

Much of the shift in power from the manufacturer to retailer began as apparel manufacturers began to "de-emphasize" their production activities, invest in sourcing activities, and promote their brand and marketing endeavors (Gereffi, 1999). The retailers' push for better prices and better products forced the manufacturer or marketer to engage in offshore sourcing activities. The retailer has gained control of the commodity chain by moving towards midstream through product development, design and marketing endeavors (Gereffi, 1999). This trend has encouraged former apparel manufacturers to venture into the retail area, thus eliminating steps in the commodity chain and focusing on direct targeting of the consumer with the product (Gereffi, 1999). The economic investment that is required to sustain a national or global brand encouraged retailers to initiate programs that ensure their suppliers are properly managing their inventory. Thus, the retailers and brand marketers have removed traditional manufacturers out of the lead role in the industry (Gereffi, 2002).

The shift in power has also increased competition and rivalry among retailers, marketers and manufacturers (Gereffi, 2002). Retailers are no longer the main customer of the manufacturer; rather they are now the main competitor. Retailers have empowered themselves to offer better products and prices, thus expanding their own sourcing interests overseas through store brand programs (Gereffi, 2002).

Competitiveness in the retail environment exists in light of industry trends related to consumers' power of choice. Consumers look for value as a total picture, price and quality combined ("Retailing: General industry surveys," 2003). Current issues facing retailers and brands are consumers' obsession with promotional pricing, prevalent towards both new and past season merchandise. Many retailers have lost the flexibility of raising product prices, forcing apparel manufacturers to cut costs outside of sourcing, in other parts of their operations. Department stores have continued to lose share to other organizations, including discounters, national chains and specialty stores ("Retailing: General industry surveys," 2003).

Value is a combination of price, quality, service and convenience; however, price is an overriding factor in consumer purchases. The discount stores have seen the largest market share increase in over the past five years, offering low prices that customers perceive as value added ("Retailing: General industry surveys," 2003). Discounters have conditioned shoppers to look for price discounts and everyday discounts rather than only sales prices. Thus, price, in some instances can not reflect product quality ("Retailing: General industry surveys," 2003).

Brands

Kotler defines a brand as a name, term, sign, symbol or design or combination of, intended to identify goods or services of one seller or group of sellers that differentiate the good from the competition (2003). Brand names are vital for marketing apparel products. Brands attract consumers and reinforce consumer confidence in the buying decision. Brand relevance to the consumer is based on product appropriateness, market conditions, and the evolution of the brand message over time. The value of a brand and its brand equity differentiates the product from its competitors, and creates an opportunity for potential advantage in new products and market segments. Brand awareness aids the consumer in processing the information, thus reducing their search time for goods (Arlen, 2000).

Table 3 outlines the ways in which branding of products affect the consumer, seller and retailer, and provide them with benefits in different areas (Kotler, 2003).

Table 3: Benefits of Brands

Consumer	<ul style="list-style-type: none"> • Identification of product quality differences • Efficient shopping
Seller/Manufacturer	<ul style="list-style-type: none"> • Attract loyal customers, and provides some shelter from competition • Legal protections and product distinction • Identify and segments markets • Build image, and gain acceptance
Retailer	<ul style="list-style-type: none"> • Product easier to handle • Hold production to quality standards • Strengthen consumer preferences • Identification of suppliers

Source: Kotler, 2003, Marketing Management, p. 418-427

Although representing a specific need or image to the consumer, brands have become standardized and repeated across channels and retailers frequently offer the same selection of national brands (Rag-trade deals, 2003). Two major brand forces in the apparel market are national brands and store brands.

National Brands

National brands are familiar and attractive to consumers, sellers, manufacturers, and retailers, and convey a perceived value to the consumer (Mueller & Smiley, 1997). National brands have become “powerful strategic

weapons” that provide a competitive edge in the market (Harvey, Rothe & Lucas, 1998, p. 1). Brands create this competitive edge by conveying image and strength and by being accessible in the market.

Store Brands

Store brand development, marketing and inventory costs are the responsibility of the retailer. Store brand programs or private labels are initiated for two major reasons: wider margins and to foster customer loyalty (“Retailing: General industry surveys,” 2003). To reduce the manufacturer’s power, differentiate product offerings, and increase value of their business, retailers are motivated to brand the retail environment by offering store brands (Gereffi, 2002). The elimination of steps in the supply chain, in turn, provides consumers with greater value, broadens the product mix and reinforces the store identity. Store brands help the retailer establish a presence and an image in the consumer’s mind, and create a repeat purchase destination to encourage brand loyalty (“Retailing: General industry surveys,” 2003).

Brand Market Share

National brands remain a stronghold in the market, but with the increasing power of the retailer, store brands have gained sales momentum and importance to the consumer (Harvey et al., 1998). The NPD Group reported that in 2002, sales of store brand or private label apparel in all retail channels was 36% of the US apparel market in 2002 (Branch, 2003). Compared to the rest of the apparel sector, whose sales decreased by 2%, store brand apparel sales have grown about 5% since 2001 (Branch, 2003).

The shift in acceptance to store brands came in the early to mid-nineties, when discount store consumers, although loyal to branded merchandise, were equally willing to purchase store brand versions of their favorite products (Liebeck, 1994). Growth in store brand products has been spurred by the expansion of category killer retailers and price clubs (Harvey et al., 1998). The retailer strategy is to develop a store brand that drives customer loyalty to the brand as well as the retailer, over the national brand. Development of a low price, high quality identity aids the retailer in increasing repeat purchases (Harvey et al., 1998).

National and Store Brand Competition

It is evident that national brands attract consumers and draw attention to retailers, but it is also acknowledged that store brands are essential tools for attracting and maintaining customers at the mass market level (“Striking a delicate balance,” 1999). The store brand concept began in the 1980’s when many retailers took on the entrepreneurial functions of apparel manufacturers, and expanded their merchandise assortment to build profit from within (Gereffi, 2002). Store brand manufacturing and marketing has improved significantly since its inception in the market and retailers have tiered their store brand approach to offer a generic as well as exclusive store brands (Harvey et al., 1998).

Store brands have not typically been viewed by the national brand manufacturer or marketer as a direct threat but rather as an alternative for the price-motivated consumer (Harvey et al., 1998). More recently, store brand products have attracted consumers at various levels and various purchasing motives. The

distribution channel influences a retailer's decision to develop a store brand program. Mass chains and specialty chains have historically participated in store brand development, while department stores were later in adopting the trend (Harvey et al., 1998). The mass merchant has been able to provide the wide product assortment at varying price ranges to satisfy both price and quality sensitive shoppers (Harvey et al., 1998).

Store brand programs can take on two forms: store brand products priced below the national brand, or store brands with distinctive name recognition and priced comparable or slightly lower than the national brand. Retailers can benefit from a store brand strategy because it helps differentiate from their nearest competitor that offers a similar national brand product mix (Kotler, 2003). Retailer's attraction to store brands is fostered by the power that the retailer gains over the consumer and national brand manufacturer (Branch, 2003).

Store brands and price-sensitive consumers are the weakening factors for national brands. Consumers are trained to purchase based on price rather than brand. Store brands similar to a national brand may be chosen over a national brand if the purchase decision is based solely on price. It is expected that with consumers' continued focus on bargains, branded apparel companies will be forced to offer fashionable products at attractive prices, and other value-added incentives in order to compete ("Retailing: general industry surveys," 2003).

National brands have implemented strategies to combat store brands by extending their brand and shifting from national advertising to in-store promotions,

with some even resorting to manufacturing store brands for the retailers (Harvey et al., 1998). With the onset of store brands entering the apparel market, national brands are faced with a highly competitive marketplace that includes new and improved, specialized store brands. Store brands that are positioned to fulfill needs superior to national brands contribute to increased consumer confidence in the retailer and provide intangible qualities and value that consumers attribute to the retailer (Harvey et al., 1998).

Cross-Brand Cannibalization

Retailers' attempt to convert consumers' loyalty from national brand products to store brand products is considered cross-brand cannibalization. The retailer is offering the consumer the national brand and tempting the consumer to switch their loyalty to the store brand. The retailer can succeed in this strategy by accidentally confusing or purposely informing the consumer (Harvey et al., 1998). Retailers actively pursue national brand cannibalization in order to convert or engage their customers with their brand equity and branded retail outlet (Harvey et al., 1998).

However, it has been noted that as consumers familiarize themselves with a store brand, store image and store loyalty may improve ways that national brands and store brands can coexist without cannibalizing each other's brand (Ailawadi, 2001). National brands have shifted their advertising expenditures from national advertising to in-store promotions where they can directly target and influence the consumer (Harvey, et al., 1998).

Exclusivity

The loss of market share to discounters has also forced marketers that typically sell to the department store channel to “step down” to the mass or discount channel. This increase of branded good at the mass channel has captured the consumer’s attention and increased apparel purchases. Responding to the appeal of mass retailers and discounters to consumers, apparel manufactures and marketers are offering branded products lines sold exclusively through these channels (“Apparel and footwear industry surveys,” 2003). Discounters are attracting more former department store shoppers, while consumers are able to take advantage of purchasing products that provide price and value (“Retailing: General industry surveys,” 2003). A brand exclusivity strategy has several potential positive outcomes for the retailers and is outlined in Table 4.

Table 4: Potential Outcome of a Brand Exclusivity Strategy

Create loyalty	Retailers bind into exclusive agreements to better define its positioning, and gain acceptance and recognition among consumers.
Attract new shoppers	Segmenting and targeting of consumers and broadening of retail shopper base.
Encourage impulse purchases	Increased cross-marketing throughout the retail aids in driving sales throughout brands, across product categories.
Leverage brand strength	Use the strength and name of a particular entity, character, and personality, to strengthen retail store brand equity.
Manage inventory	Retailer gains strength by minimizing inventory, financial investing, while maximizing strategic sourcing and management initiatives.
Improve image	Instant status or recognition in consumer segments provides momentum for acceptance in new market.

Source: Table adapted by G. Fratto, from "Retailers continue to chase exclusivity for good reasons [Electronic Version]." *DSN Retailing Today*, (2001, February 19).

Brands and Childrenswear

In 2000, it was estimated that 61% of consumers seek brands when shopping for childrenswear ("Striking a delicate balance," 1999). National brands provide product expertise, consumer loyalty and less risk in childrenswear, while store brand lines provide store branding opportunities, product differentiation and attractive margins for the retailers ("Striking a delicate balance," 1999). The importance of national brand preference in childrenswear is minimized due to the strength of sports and entertainment licensed apparel. The importance of store brands as well as the

power of the sports and entertainment licensors does not promote a stable environment for national brands in childrenswear (“Children’s apparel,” 1997).

Retailers are more likely to develop partnerships, store brand programs, characters and licensed brands that already have presence in the market and that do not require extensive testing (Clack, 2003). This exclusivity allows for a branding of the retail environment as well as a destination for shoppers (“Licensing bull’s eyes,” 2002).

The importance of branding in childrenswear begins with the marketer’s need to establish a brand and product relationship with the consumer at an early age. This can explain the significant trend in the adult market of establishing an extension of their brand in the childrenswear market (Cardona & Cuneo, 2000). Childrenswear is an area that consumers display a willingness to purchase store brands (“Children’s apparel”, 1997). Childrenswear store brand programs were first introduced as licensing agreements. Currently, retailers are not only engaging in childrenswear store brand programs, but also more in strategic partnerships, or exclusive brand agreements with established national brand childrenswear manufacturers or marketers. Retailers are forming partnerships in order to aid in the branding of their store departments and creating a destination for childrenswear products (Anonymous, 2001). Retailers have shifted their merchandising focus from offering a wide assortment of solid basics to emphasizing fashion and trends in their private label brands (“Is time on mass retailers side,” 2000).

CHAPTER III

RESEARCH METHODOLOGY

Purpose

The purpose of the study on childrenswear offerings was to provide insights that will aid childrenswear manufacturers and retailers in their understanding of the dynamics of the retail marketing environment for childrenswear.

Specific objectives were to collect information on childrenswear offerings at major United States retail chains to:

1. Provide an overview and profile of the childrenswear market according to price frequencies among retail channels, retail stores and brand categories.
2. Determine if significant differences exist between childrenswear offerings according to gender category, size category, product category, brand category, and country of origin region among retail channels and retail stores.
3. Determine if significant differences exist between national brand and store brand childrenswear offerings among retail channels and retail stores.
4. Determine if significant differences exist between price means according to retail channels, retail stores, gender category, size category, brand category, product category, and country of origin.
5. Identify how the childrenswear market fits into Gereffi's Apparel Value Chain (1994), and how it reflects current product dynamics of the childrenswear market.

Hypotheses

The retail audit validated that many variables were impacting the childrenswear marketing. Variability was observed in the marketplace among channels and within channels and the following hypotheses were formulated with key variables: gender, size, product, brand, country of origin region, price. Both null and alternative hypotheses were developed based on the researcher's work experience in the childrenswear industry as well as in-store observations and analysis of NPD 2000 projected units data for childrenswear.

The following null hypotheses were developed:

H1a₀: No differences in percentages of the gender categories (male, female) among retail channels.

H1b₀: No differences in percentages of the gender categories (male, female) among retail stores.

H2a₀: No differences in percentages of the size categories (toddler, boy's 4-7, boy's 8-20, girls 4-6x, girls 7-18) among retail channels.

H2b₀: No differences in percentages of the size categories (toddler, boy's 4-7, boy's 8-20, girl's 4-6x, girl's 7-18) among retail stores.

H3a₀: No differences in percentages of the product categories (tops, bottoms and sleepwear) among retail channels.

H3b₀: No differences in percentages of the product categories (tops, bottoms and sleepwear) among retail stores.

H4a₀: No differences in percentages of the brand categories (national brand, store brand) among retail channels.

H4b₀: No differences in percentages of the brand categories (national brand, store brand) among retail stores.

H5a₀: No differences in percentages of the country of origin regions among retail channels.

H5b₀: No differences in percentages of the country of origin regions among retail stores.

H6a₀: No differences in percentages of the gender categories (male, female) among brand categories.

H6b₀: No differences in percentages of the size categories (toddler, boy's 4-7, boy's 8-20, girl's 4-6x, girl's 7-18) among brand categories.

H6c₀: No differences in percentages of the product categories (tops, bottoms, sleepwear) among brand categories.

H6d₀: No differences in percentages of the country of origin region among brand categories.

The following alternative hypotheses were developed:

H7_A: Differences existed between price means among

H7a_A: Retail channels

H7b_A: Retail stores

H7c_A: Gender categories

H7d_A: Size categories

H7e_A: Brand categories

H7f_A: Product categories

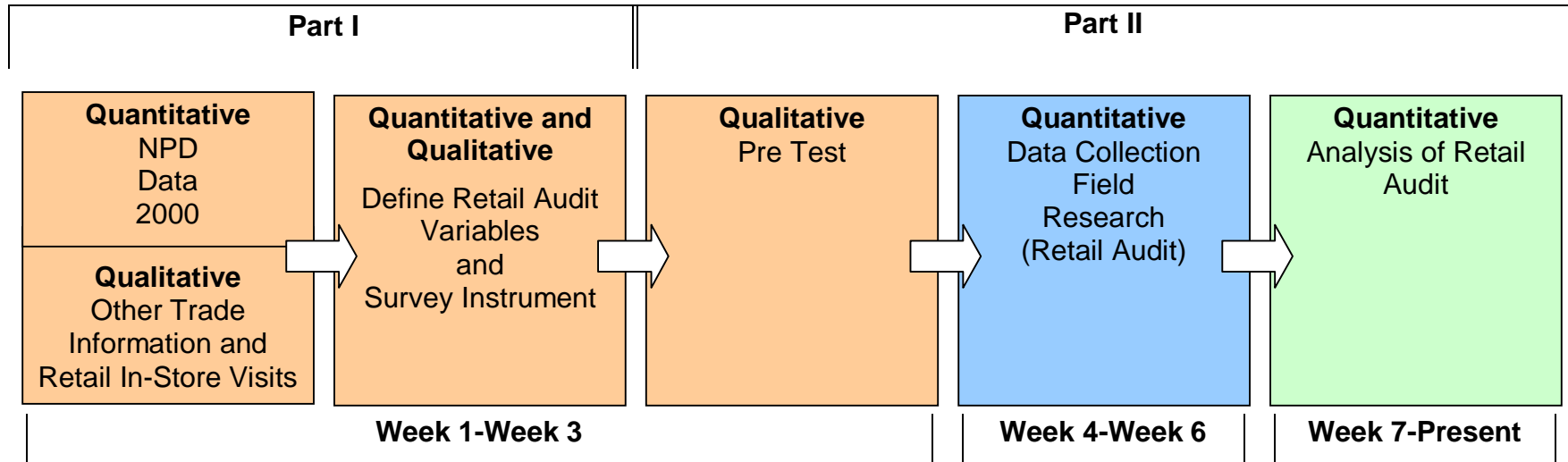
H7g_A: Country of origin regions

Research Design

The research for this study involved both qualitative and quantitative research, and was conducted in two parts (Figure 7). Part I included gathering trade information as well as using 2000 NPD projected unit data for childrenswear. The NPD data was used to define the childrenswear market, specifically with information about channel, retailer, brand, product, price, and US locations. Results from Part I provided the retail audit variables and a framework for the survey instrument format for Part II (retail audit).

Part II of this research involved the retail audit, and captured detailed product information about childrenswear product offerings on the retail sales floor in three United States cities (Raleigh, North Carolina; St. Louis, Missouri; Denver, Colorado). The retail audit was used as a research tool to record childrenswear product information on the retail floor. The retail audit structure was useful because it provided actual product data from the selling floor.

Figure 7: Research Design



Source: Adapted by G. Fratto from Childrenswear Audit Research Design, Cotton Incorporated, M. Messura, 2003

Instrument Development

In order to develop the retail audit instrument for Part II of the research, variables were identified that were important to evaluating childrenswear products. Appendix A provides the matrix survey instrument used for data collection. As shown in Table 5, the following steps were taken to develop the survey instrument.

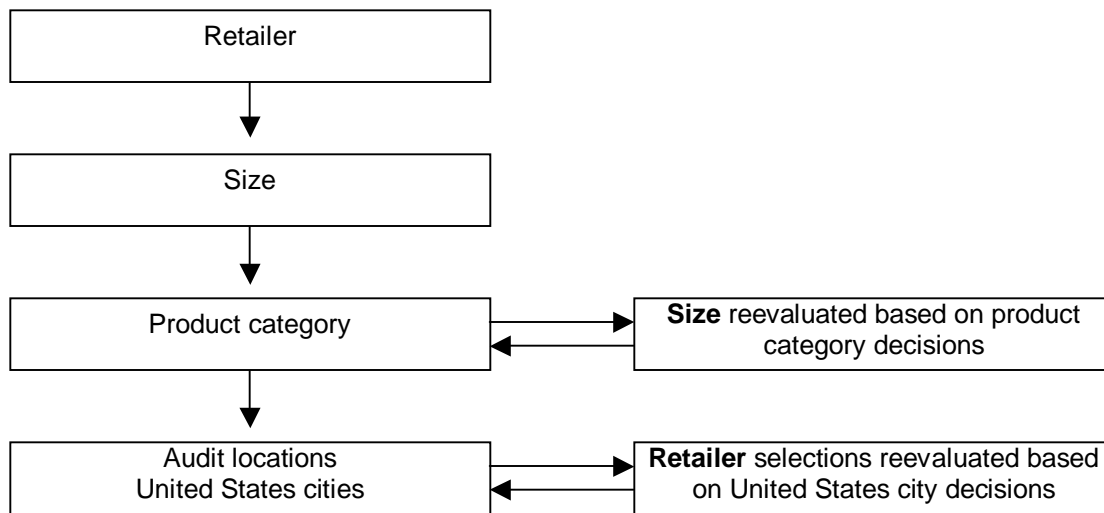
Table 5: Instrument Development Part I and Part II

Step	Process	Tools	Contribution to Instrument Development
PART I Step 1	<ul style="list-style-type: none"> Survey the current market environment and historical consumer purchase data from 2000 	<ul style="list-style-type: none"> 2000 NPD projected units data for childrenswear <ul style="list-style-type: none"> -gender -size -retailer -brand -style -price -product category -United States regions Trade literature Internet research Personal childrenswear industry work experience Retail In-store research 	<ul style="list-style-type: none"> Define market and identify retailers products, brands Answer questions: <ul style="list-style-type: none"> -Where do consumers purchase children's apparel products? -What are the leading childrenswear product categories? -Do childrenswear product offerings differ by United States regions? -How are childrenswear products sized? -Who are the leading childrenswear retailers based on sales? -How are childrenswear products displayed? -What are the major childrenswear brands in childrenswear apparel sales? -What product information is important and useful to childrenswear product marketers?
Step 2	<ul style="list-style-type: none"> Analyze Step 1 	<ul style="list-style-type: none"> Excel Discussion and brainstorming sessions 	<ul style="list-style-type: none"> Identify key variables and develop survey instrument <ul style="list-style-type: none"> -Gender category -Size category -Brand category -Product category -Price -Country of origin
PART II Step 3	<ul style="list-style-type: none"> Develop draft of instrument for retail audit with results from (Steps 1-2) 	<ul style="list-style-type: none"> Excel 	<ul style="list-style-type: none"> Survey Instrument
Step 4	<ul style="list-style-type: none"> Pre-test survey instrument and data collection medium at retail stores in Raleigh, NC 	<ul style="list-style-type: none"> Store walk-throughs Handheld personal computer Handheld audio recorder Survey Instrument 	<ul style="list-style-type: none"> Analyze store environments Develop strategy for data collection Determine best medium for data collection with product type
Step 5	<ul style="list-style-type: none"> Data Collection 	<ul style="list-style-type: none"> Handheld audio recorder Survey instrument 	<ul style="list-style-type: none"> Record information on childrenswear offerings on retail selling floor

Sample Selection

Figure 8 outlines the steps involved in sample selection for this study. Sample selection variables included retailer, size, product category and United States cities. The sample selection process was both linear and horizontal in nature with several variables reevaluated at each stage in the process. Throughout the sample selection, several visits were made to retail stores in Raleigh, North Carolina, in order to gain a preliminary understanding of the scope of the childrenswear offerings.

Figure 8: Sample Selection



Retail Channels and Retail Stores

The process of selecting the retail store sample for the audit began by identifying the top performing retailers in the area of childrenswear. This selection began with ten retailers but was narrowed as more information was

learned regarding childrenswear and the feasibility of data collection within the given time frame for the study.

Retailer samples were selected based on the following criteria:

1. *Presence of childrenswear apparel offerings in areas being explored*
2. *Locations in major metropolitan centers in United States*

It was established that there was a need to look at childrenswear from several types of retail establishments in order to effectively obtain a snapshot of the industry.

3. *Established presence as a top performing childrenswear retailer*

Retailers were chosen based on their past performance in childrenswear sales and the presence of childrenswear national and store brands. In order to identify a retailer's presence in childrenswear apparel offerings, retailers were initially identified by childrenswear retail sales. An industry publication, *Children's Business*, identified the top ten childrenswear retailers based on childrenswear retail sales within major channels (2002). These retailers were all national chains and represented five major retail channels, including discount, mass chain, department, specialty chain, and warehouse club. By expanding the scope of the audit among channels, the sample gave a better representation of total market offerings. Table 6 identifies the retailers and their performance in the childrenswear category.

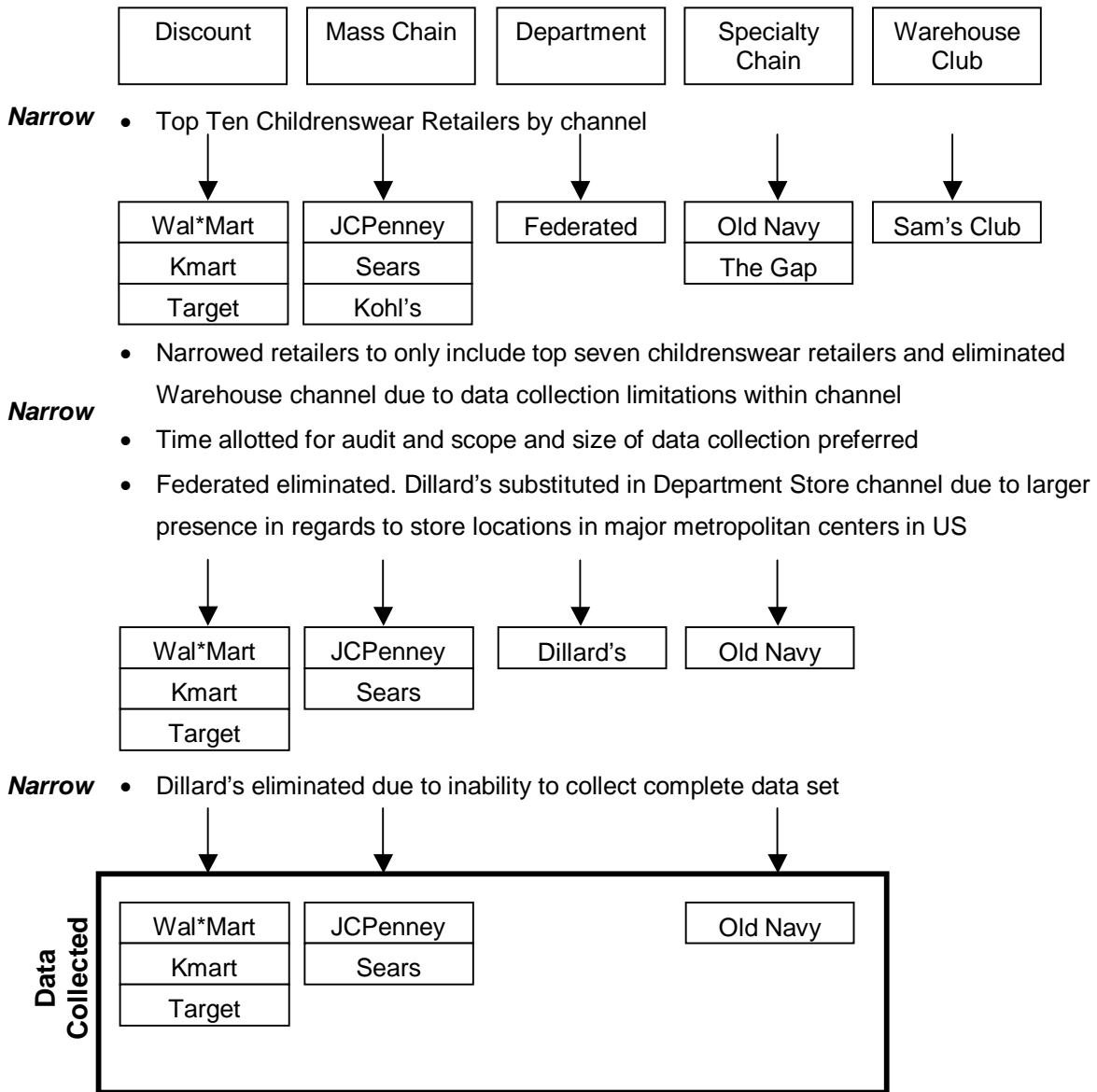
Table 6: Top Ten Childrenswear Retailers

Retailer	2001 Children's Apparel Sales	Number of Locations	channel Classification
Wal*Mart	6.7 B	2,747	Discount
Kmart	2.2 B	1,815	Discount
Target	2.05 B	1,081	Discount
Sears	1.83 B	870	Major Chain
JC Penney	1.48 B	1,074	Major Chain
Federated	1.1 B	460	Department
Old Navy	1.02 B	821	Specialty Chain
Gap Kids/Baby Gap	1.0 B	650	Specialty Chain
Kohl's	974M	420	Major Chain
Sam's Club	970M	509	Warehouse Club

Source: Top 10 children's wear retailers. Children's Business, July 2002, v17 i7 p7 (1).

Information was gained regarding childrenswear department size and product scope that helped determine the retail sample size. It was established that allotted time period for the audit, seven of the top ten childrenswear retailers were deemed appropriate for evaluation. Once the number of retailers was established, the next task was to identify retailers located in several large metropolitan cities. The sample of ten retailers was narrowed to seven in order to complete the survey within the 14 day time period. The seven retailers represented the discount, mass chain, department, and specialty chain channels. The department store sample was later excluded due to lack of ability to collect data. The final sample size included six retailers in three retail channels. The retail store and retail channel selection process is detailed in Figure 9.

Figure 9: Childrenswear Retail Channel and Retail Store Selection

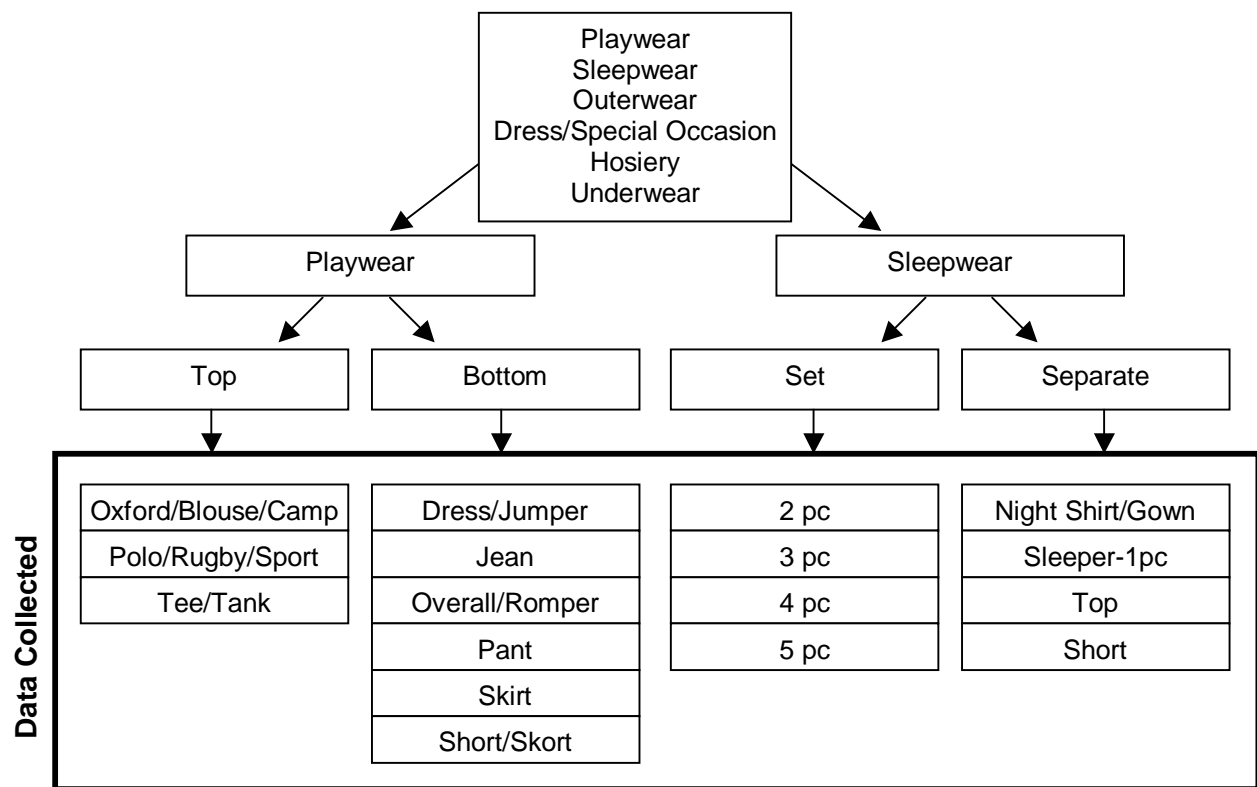


Product Category

The product focus of the research was playwear and sleepwear. These two product categories were widely available in the market and easily identified in all retail locations. According to NPD 2000 projected units data for childrenswear, playwear (tops and bottoms) accounted for approximately 53% of

the total product offerings in childrenswear. Sleepwear, although a smaller portion of the market, was an area of interest for this study in regards to licensing and country of origin. Figure 10 depicts the decision process of narrowing the product category variables for sample. Within playwear and sleepwear, data were collected on specific styles (i.e. tee/tank, jean, night shirt/gown).

Figure 10: Product Category Variables

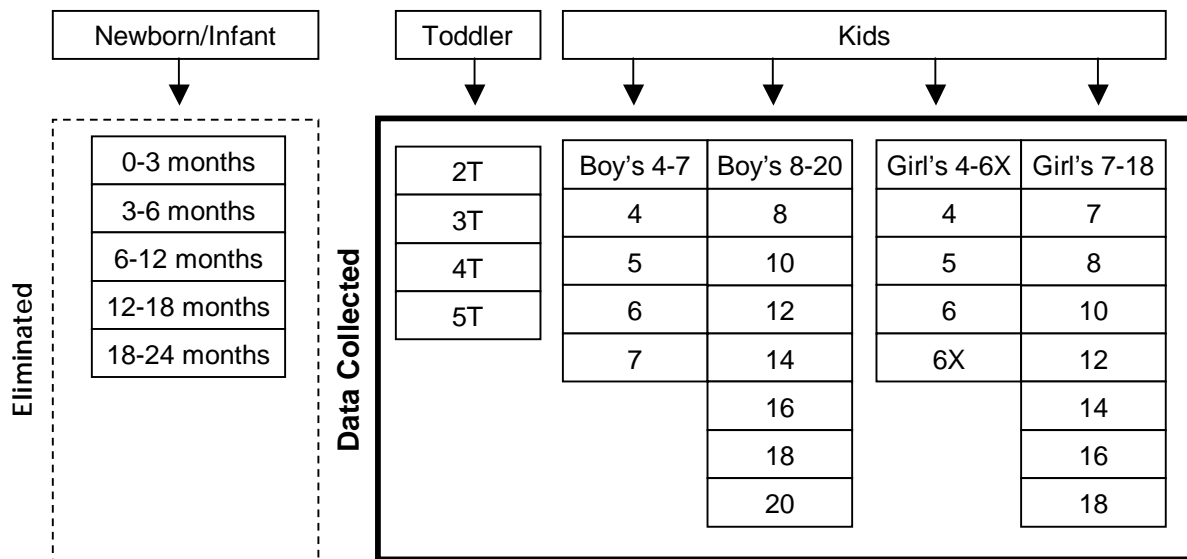


Size

Childrenswear products were available in seven major size categories: newborn, infant, toddler, boy's 4-7, and boy's 8-20, girl's 4-6x, girl's 7-18. The newborn/infant size range offered products that were distinctly different in product type from toddler, boy's 4-7, boy's 8-20, girl's 4-6x and girl's 7-18

products, and were difficult to classify using the playwear and sleepwear category distinctions. It was determined that these differences made it more difficult for product comparison over size ranges. In addition, the market share of the size category as compared to the other sizes was significantly less and a more thorough, in-depth data collection could be completed by eliminated the newborn/infant size. Figure 11 shows the breakdown of size variable within the large size categories and outlines the breadth of data collection in regards to size.

Figure 11: Size Selection



Location Selection

It was established that the retail audit would be performed in at least three United States' cities selected based on the following criteria:

1. *Large metropolitan area representing the major geographic region, and retail center of the United States.*

Appendix B lists the top 25 retail markets of the United States (“Retailing: general industry surveys,” 2003).

2. *Presence of retail chain in multiple channels (discount, mass chain, specialty chain) and presence of multiple locations of chosen retailers.*

The need for several retail chains that represented multiple channels offering childrenswear (Appendix C), and the presence of several locations of the retailers to ensure complete data collection in the case a complete data set could not be gathered from a single retail store location.

3. *Ease of travel to and within city and to selected retailers.*

Three and four city audits were considered, but ultimately, a three city audit was more feasible with the time allotted and the amount of product analyzed in the audit.

The regional evaluations were performed on several regions within the US with major metropolitan centers and representative samples of the US demographics. The NPD transaction data was analyzed to identify the major regional locations that were feasible for travel within the time period and also had high transactions of childrenswear products.

An initial analysis was completed using NPD transaction data to determine the percentages of product category offerings in each region. Overall, the regions did not differ significantly by product category offerings. These findings

allowed for flexibility in choosing a sample city due the representative nature of all locations in regards to product category offerings.

The following regions were potential data collection locations: Mountain, West North Central, South Atlantic and Northeast. Table 7 outlines the regional locations and the major metropolitan areas within those locations.

Table 7: Regional Locations

Mountain	West North Central	South Atlantic	North East
Albuquerque, NM Colorado Springs, CO *Denver, CO Flagstaff, AZ Reno, NV Salt Lake City, UT	Des Moines, IA Minneapolis, MN Kansas City, MO Omaha NE *St. Louis, MO Topeka, KS Wichita, KS	Atlanta, GA Baltimore, MD Charleston, SC Dover, DE Norfolk, VA *Raleigh, NC Richmond, VA	Harrisburg, PA Philadelphia, PA

***Cities Selected**

Pretest

The pretest was conducted with the survey instrument with six stores in Raleigh, North Carolina, prior to data collection. The pretest was utilized to test the survey instrument for data collection and to gain a better understanding of approximate time needed to collect data at each store, given the number of products, size of store departments, and potential challenges or obstacles.

Data Collection

Retail audits were conducted at sites in Raleigh, North Carolina, St. Louis, Missouri, and Denver, Colorado, over a two and a half week time period in June of 2003.

- Raleigh, North Carolina June 11-17, 2003
- St. Louis, Missouri June 18-21, 2003
- Denver, Colorado June 22-27, 2003

Within each city, data were collected over a four-day time period. Several locations of the retailers were selected as potential data collection areas, so as not to take up too much time in one store location. Time for data collection in the store varied depending on store size, store personnel, and merchandise presentation. The average time spent in each store was approximately four hours. The data collection from the retail stores in a particular city is a representation of at least two store locations within that city.

When the researcher entered a store, the departments were visually surveyed and data collection began. A handheld audio recorder was used to collect data. The researcher would evaluate each garment, and information was recorded pertaining to the variables established in the survey instrument. The researcher also noted the number of offerings of each garment, the number of styles and/or colors. The data was spoken into the recorder at the discretion of the researcher and was inputted in no particular order. The order was based on the ease and feasibility of the data collection at the present time.

There were a total of 8,846 records in the data set. Table 8 shows the breakdown of the data collection size by retail channel, retail store, size category, gender category, product category, brand category, and country of origin region.

Table 8: Record Totals by Selected Variables

<i>Variable</i>	Number of Records
<i>Retail Channel</i>	
Discount	4521
Mass Chain	3210
Specilaty Chain	1115
<i>Retail Store</i>	
Wal*Mart	1736
Target	1432
Kmart	1353
Sears	1683
JCPenney	1527
Old Navy	1115
<i>Gender</i>	
Female	4992
Male	3832
Unknown	22
<i>Size</i>	
Toddler	1889
Girls 4-6x	1498
Boys 4-7	1272
Girls 7-18	2238
Boys 8-20	1717
Unknown	232
<i>Product Category</i>	
Top	3941
Bottom	4116
Sleepwear	761
Unknown	28
<i>Brand Category</i>	
<i>Number Brands in Study</i>	209
National Brand	2963
Store Brand	5666
Unknown	217
<i>Country of Origin</i>	
North America	4132
South America	140
Europe	6
Asia	3407
Africa	803
Ocenia	67
Unknown	291

Note. The total number of records, for data analysis in this study, was 8846. Unknowns represented data that was unclear and undeterminable, or that the information was not recorded at the time of data collection. Multiple style/color offerings totaled ~22,000, however, multiple styles not used in this study's analysis.

Prior to analysis, there were several steps taken to ensure the usability and quality of the data. *First*, the audio recordings were transcribed into readable form and stored using Excel. The data was edited and checked for accuracy and consistency throughout the transcribing process. Throughout the process of transcribing, all data records were housed in separate spreadsheets, identified by the retailer and then by the regional location. Prior to combining the files, the data was checked again for consistency. *Second*, all data records for each retailer in each region were combined with their respective retailer in the other regions. The data was checked again for accuracy. *Third*, all retailer records were combined into one large spreadsheet, and the data were coded. All records were numerically coded; any records containing partial or no information were coded as 9. *Fourth*, the records were sorted according to each variable.

Data Analysis

Stage 1: Descriptive

General descriptive analysis and histogram analysis were performed to provide a descriptive profile of price frequencies among retail channels, retail stores and brand categories.

Stage 2: Testing of Hypotheses

Chi-square analysis was used to test for differences among retail channels, retail stores, and brand categories ($H1a_0$ - $H6d_0$). Analysis of variance (ANOVA) was used to test mean differences in price among the various independent variables ($H7_A$ - $H7_gA$). Least square means (LS Means) provided a

degree of measurement among the variables. A $p = .05$ level was used to determine significance for all hypotheses.

Stage 3: Model Adaptation

Gereffi's Buyer Driven Apparel Commodity Chain model (1994) was adapted using results from descriptive (Stage 1) and hypothesis testing (Stage 2).

Table 9 presents the statistical analysis process.

Table 9: Summary of Statistical Analysis

Hypotheses	Variable(s)	Process
H1a ₀ -H5b ₀	Retail Channel Retail Store Gender Size Product Category Brand Category	1. Frequencies and descriptive statistics 2. Report data 3. Chi-Square analysis to test hypotheses
H6a ₀ -H6d ₀	Brand Category <i>National Brand</i> <i>Store Brand</i>	1. Sort data in Excel by Brand Category (Store, National) 2. Frequencies and descriptive statistics 3. Chi-Square analysis to test hypotheses
H7a _A -H7g _A	Price	1. Frequencies and descriptive statistics 2. Analysis of variance (ANOVA) to test mean differences in price across the independent variables

Operational Definitions

Brand category - Refers to either a national brand or store brand (retailer's own brand).

Country of origin region - Refers the continent that represents the country of origin indicated on the offering.

Gender category - Refers to the group classifying childrenswear intended for either male or female wearers.

Offerings - The number of styles and or colors of one particular product. A product is counted as an offering of another when all information is the same.

Playwear - This product category includes apparel for everyday use and includes tops and bottoms.

Product category - The apparel item's classification within the overall category of childrenswear. Relates to the overall product description, i.e. playwear, sleepwear, top, bottom.

Retail channel - The group of retailers classified by price, product, promotion and place. Also refers to the means of getting the product to the end consumer. Retail channels referred to in this study include discount, mass chain, specialty chain.

Retail store - The sales location of the childrenswear offerings

Set - A product category with two or more pieces.

Size category - Refers to the age and life stage definition of childrenswear offerings that include toddler, boy's 4-7, boy's 8-20, girls 4-6x, and girls 7-18.

Sleepwear - Product category of childrenswear used solely for sleep attire, excluding those garments that may be used for sleep attire such as robes, loungewear and underwear. Includes, but is not limited to, fleece one-pieces, nightshirts, footed pajamas, and separates.

CHAPTER IV

RESULTS

Sample Description

The sample consisted of six retail stores representing the discount, major chain, and specialty chain retail channels. Data were collected from the six retail stores at multiple locations within Raleigh, North Carolina; St. Louis, Missouri; and Denver, Colorado. Data were gathered from three locations of each retail store for a total of eighteen sources of data. Each retail store offered childrenswear in categories for male and female, toddler, boy's 4-7, boy's 8-20, girl's 4-6x and girl's 7-18. Table 10 provides detailed information about the sample, including the retail channel distinction, business description/NAICS, and number of childrenswear brands offered (national and store brand).

Table 10: Sample Description

Store	Retail Channel Classification	NAICS	Number of Childrenswear Brands Offered¹
A	Discount	45291 Warehouse Clubs and Superstores 45299 All Other General Merchandise Stores	27
B	Discount	45211 Department Stores 45299 All Other General Merchandise Stores	21
C	Discount	45291 Warehouse Clubs and Superstores 45299 All Other General Merchandise Stores	20
D	Major Chain	45211 Department Stores 44131 Automotive Parts and Accessories Stores 42112 Motor Vehicle Supplies and New Parts 44413 Hardware Stores	56
E	Major Chain	45211 Department Stores 44611 Pharmacies and Drug Stores	85
F	Specialty Chain	44814 Family Clothing Stores	1

¹ Number refers to the amount of childrenswear brands recorded in retail audit data collection

Childrenswear Profile

The following histograms were developed to depict the price competitive dynamics of the childrenswear market. The histograms visually depicted the frequency of price occurring in retail channels, retail stores and brand categories within the childrenswear market (Figures 12, 13, 14).

The most frequented price range was \$7.00-\$13.00. The major chain channel had the most extreme range of prices, extending out to \$55.00. Both the discount and specialty chain channel remained in under \$25.00. Retail stores within the same retail channel had similar price distributions. All retail stores appeared to be competing within a price range between \$7.00 and \$13.00; however, stores D and E of the major chain channel extended their childrenswear offerings to \$55.00, well past the range of the discount and specialty chain channels.

Store brands in this sample overall had a larger presence and were offered at a lower price range. Store brands and national brands' prices overlapped in the \$2.50-\$16.00 price range.

Recognizing the overlap of price frequencies among retail channels, retail stores and brand categories provided a means for further investigation to determine differences among gender category, size category, product category, brand category, country of origin region of childrenswear offerings as explored in the hypotheses.

Figure 12: Price Frequencies Among Retail Channels

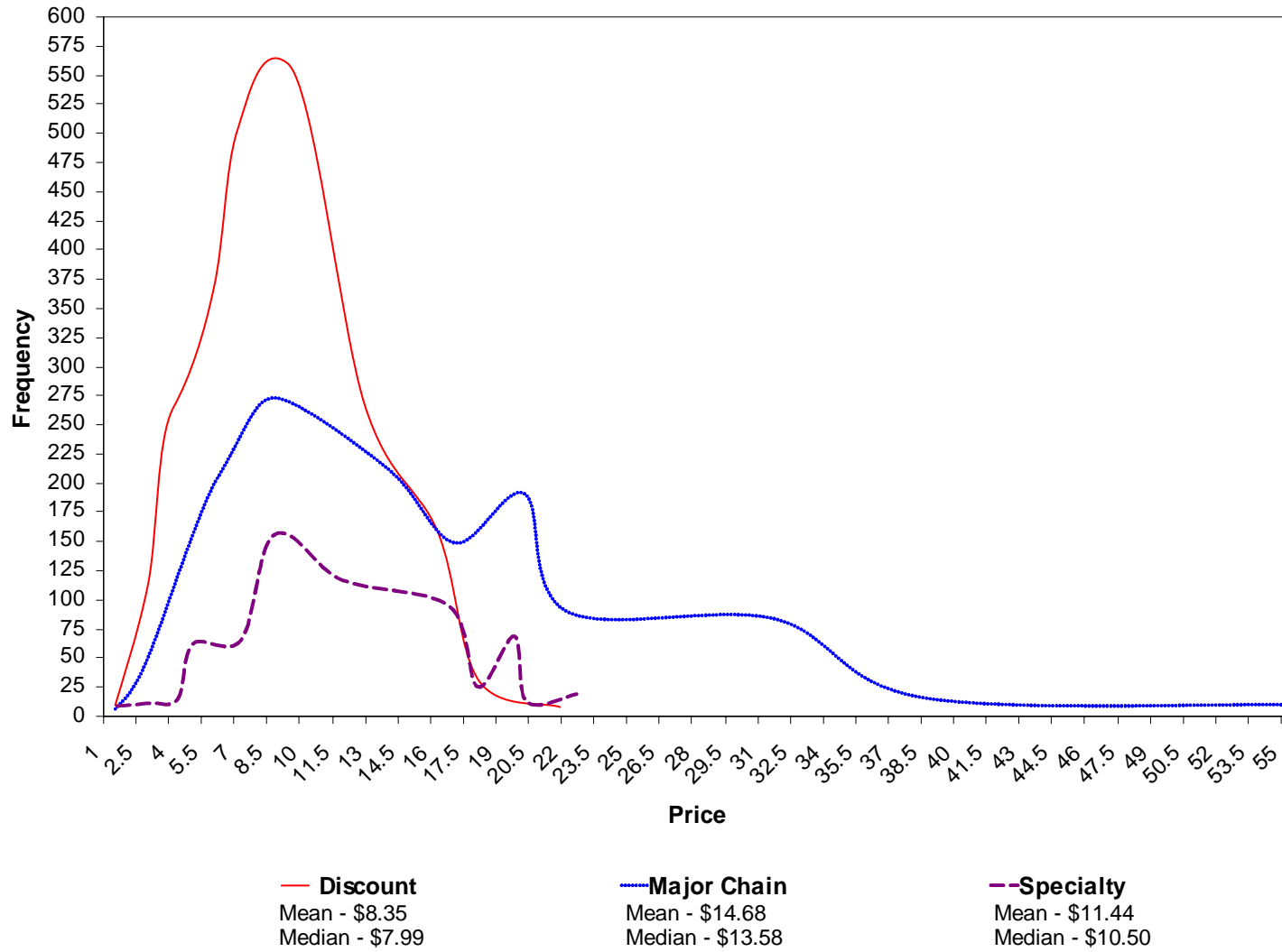
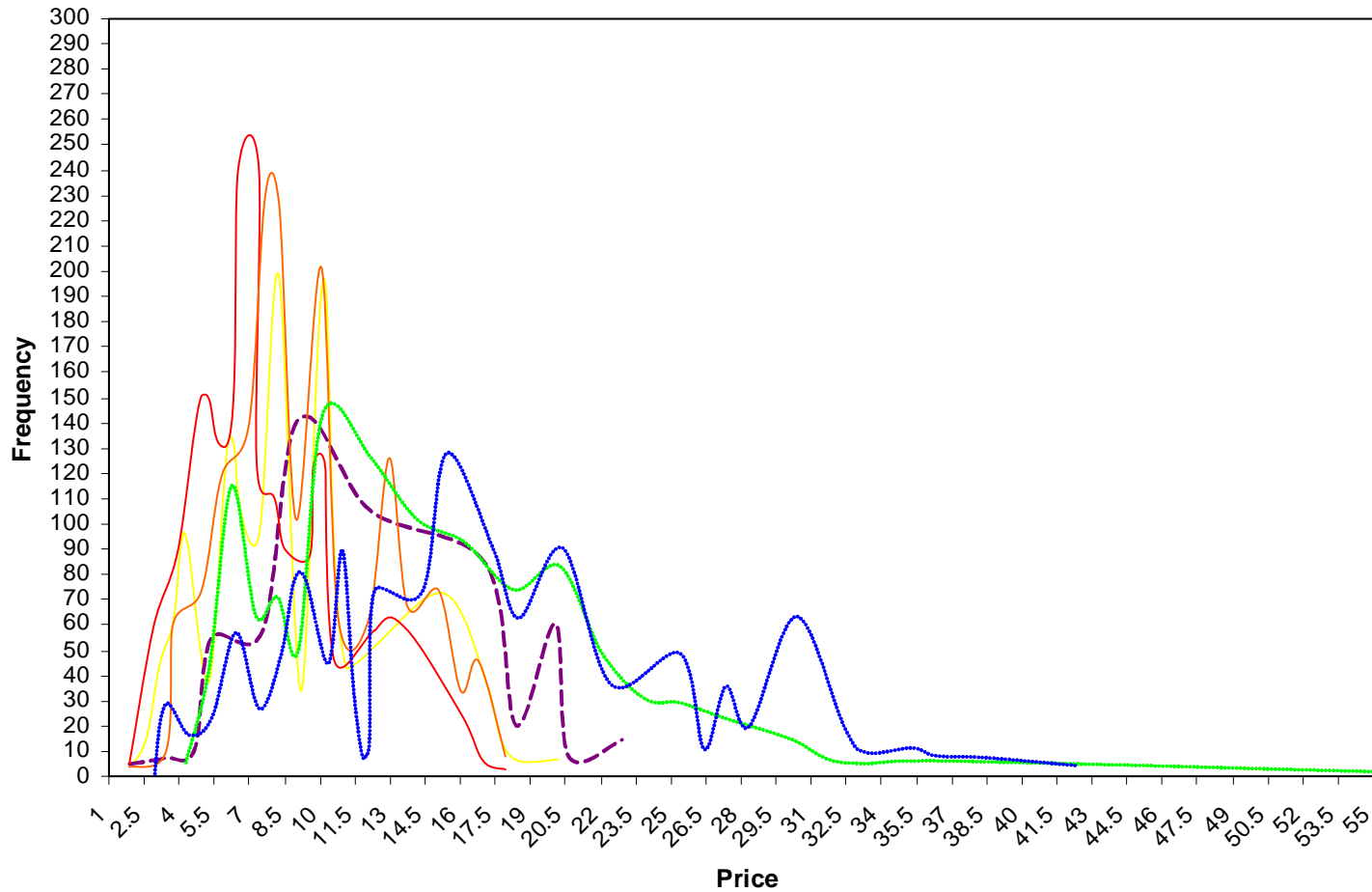
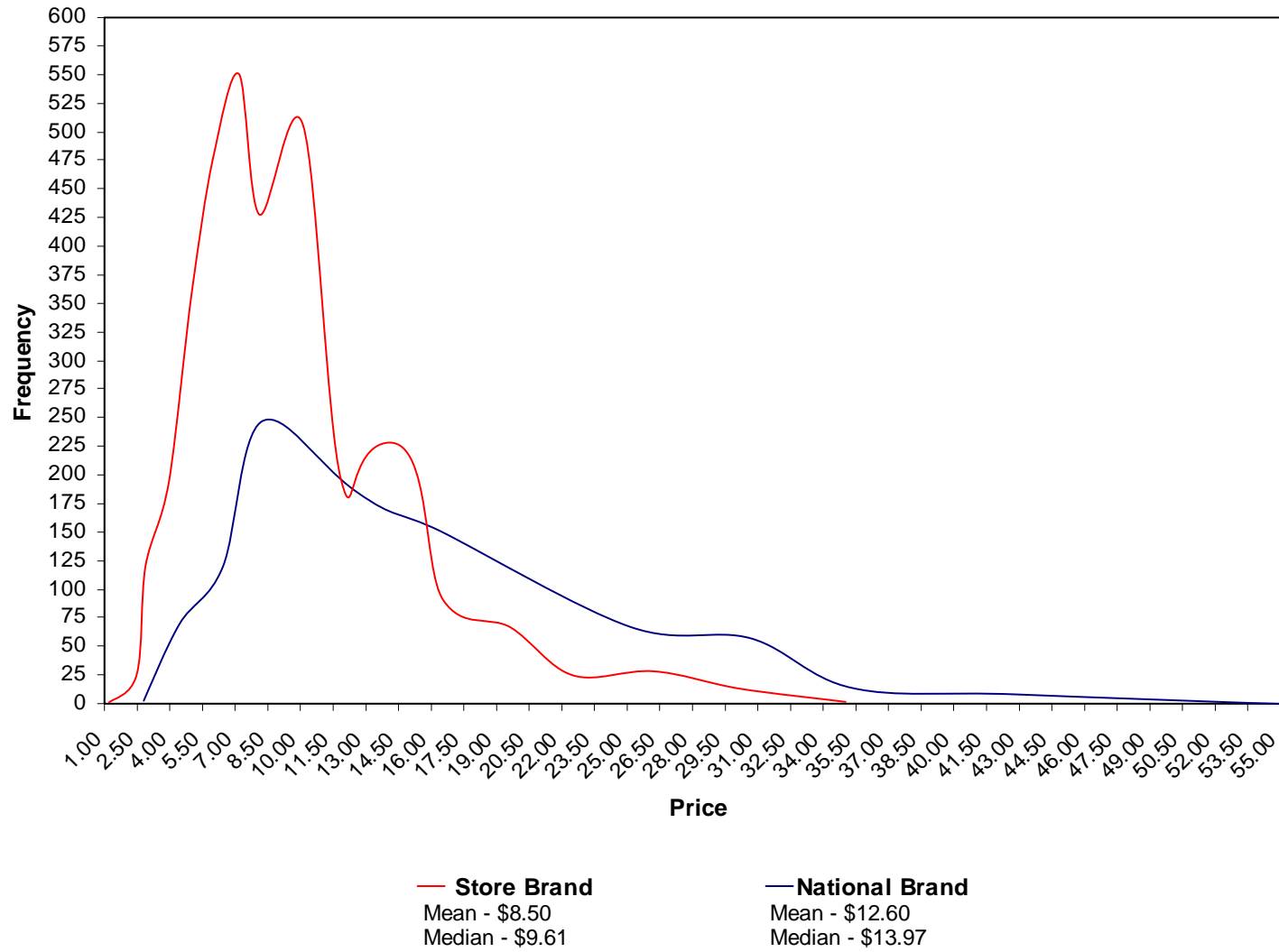


Figure 13: Price Frequencies Among Retail Stores



Store A	Store B	Store C	Store D	Store E	Store F
Mean - \$7.75	Mean - \$9.09	Mean - \$8.68	Mean - \$13.74	Mean - \$15.50	Mean - \$11.44
Median - \$6.94	Median - \$7.99	Median - \$7.99	Median - \$12.00	Median - \$14.40	Median - \$10.50

Figure 14: Price Frequencies Among Brand Categories



Hypotheses Testing

H1a₀: No differences in percentages of the gender categories (male, female) among retail channels.

H1b₀: No differences in percentages of the gender categories (male, female) among retail stores.

To determine if significant differences in percentages of the *gender categories* existed among retail channels and retail stores, a contingency table, independent-samples chi-square test was conducted (Table 11 and 12).

Gender categories among retail channels (H1a₀, Table 11)

Within all retail channels, female offerings were the majority at 56.65% (n=4999). The major chain channel had the greatest variation between expected and observed offerings, with higher than expected male offerings and slightly lower than expected female offerings. The discount and specialty chain channels had higher than expected female offerings and lower than expected male offerings.

Significant differences in percentages of the *gender categories* (male, female) existed among retail channels ($\chi^2 = 30.55$; $p < 0.0001$). Hypothesis 1a₀ was rejected. A greater number of female offerings than male offerings were observed among all retail channels. The discount channel and specialty chain channel had similar findings, with higher than expected female offerings and lower than expected male offerings.

Table 11: Gender Categories Among Retail Channels

	Male	Female	
Discount			
Expected (E)*	1933.74	2527.26	n= 4461
Observed (O)**	1838	2623	n= 4461
(E-O) ² /E	4.74	3.63	
	41.20%	58.80%	
Major Chain			
Expected (E)*	1410.97	1844.03	n= 3255
Observed (O)**	1535	1720	n= 3255
(E-O) ² /E	10.90	8.34	
	47.16%	52.84%	
Specialty Chain			
Expected (E)*	480.29	627.71	n= 1108
Observed (O)**	452	656	n= 1108
(E-O) ² /E	1.67	1.28	
	40.79%	59.21%	
Overall			
Observed (O)**	3825	4999	N= 8824
	43.35%	56.65%	

$$\chi^2 (2, N = 8824) = 30.5548, p = < 0.0001$$

* Expected = $(n_i * n_j)/n$

** Observed = n_{ij}

Note. A total of twenty-two records were excluded from this analysis. Nineteen records were of no gender (neutral) and three records did not have information pertaining to the gender category variable. Percentages in table are row percentages.

Gender categories among retail stores (H1b₀, Table 12)

Stores A and B of the discount channel had the highest overall percentage of female offerings, at 60.71% and 66.64% respectively (Table 12). Male offerings were higher than expected in retail Stores C, D and E and lower than expected in Stores A, B and F. However, female offerings were higher than expected in Stores A, B and F and lower than expected in Stores C, D and E.

Significant differences in percentages of the *gender categories* existed among retail stores ($\chi^2 = 139.50$; $p < 0.0001$). Hypothesis 1b₀ was rejected. Two of the discount channel retail stores were similar in gender category offerings. For

example, retail stores A and B (discount channel) both had higher female offerings than male offerings. However, Store C of the discount channel did not have similar gender category offerings as its retail channel (discount) members, but instead was similar to Stores D and E (major chain channel). Store F (specialty channel) actually had similar gender category offerings to Stores A and B of the discount channel.

Table 12: Gender Categories Among Retail Stores

	Male	Female	
Store A			
Expected (E)*	728.24	951.76	n= 1680
Observed (O)**	660	1020	n= 1680
(E-O) ² /E	6.39	4.89	
	39.29%	60.71%	
Store B			
Expected (E)*	619.87	810.13	n= 1430
Observed (O)**	477	953	n= 1430
(E-O) ² /E	32.93	25.20	
	33.36%	66.64%	
Store C			
Expected (E)*	585.63	765.37	n= 1351
Observed (O)**	701	650	n= 1351
(E-O) ² /E	22.73	17.39	
	51.89%	48.11%	
Store D			
Expected (E)*	658.45	860.55	n= 1519
Observed (O)**	677	842	n= 1519
(E-O) ² /E	0.52	0.40	
	44.57%	55.43%	
Store E			
Expected (E)*	752.52	983.48	n= 1736
Observed (O)**	858	878	n= 1736
(E-O) ² /E	14.79	11.31	
	49.42%	50.58%	
Store F			
Expected (E)*	480.29	627.71	n= 1108
Observed (O)**	452	656	n= 1108
(E-O) ² /E	1.67	1.28	
	40.79%	59.21%	
Overall			
Observed (O)**	3825	4999	N= 8824
	43.35%	56.65%	

$$\chi^2 (5, N = 8824) = 139.4988, p = < 0.0001$$

* Expected = $(n_i * n_j)/n$

** Observed = n_{ij}

Note. A total of 22 records were excluded from this analysis. Nineteen records were gender Neutral and 3 records did not have information pertaining to the gender category variable. Percentages in table are row percentages.

H2a₀: No differences in percentages of the size categories (toddler, boy's 4-7, boy's 8-20, girl's 4-6x, girl's 7-18) among retail channels.

H2b₀: No differences in percentages of the size categories (toddler, boy's 4-7, boy's 8-20, girl's 4-6x, girl's 7-18) among retail stores.

To determine if significant differences in percentages of the *size categories* existed among retail channels and retail stores, a contingency table, independent-samples chi-square test was conducted (Tables 13 and 14).

Size categories among retail channels (H2a₀; Table 13)

The girl's 7-18 size category comprised the majority of offerings in the discount and major chain channel. Toddler offerings had the highest presence in the specialty chain channel or 35.45% of the total offerings. Boy's 4-7 size category had the lowest percentage overall with 14.77% of the total offerings.

Toddler offerings were lower than expected in the discount channel but higher than expected in both the major chain and specialty chain channel. Boy's 4-7 offerings were slightly higher than expected in the discount channel and lower than expected in the major chain and specialty chain channel. Boy's 8-20 had higher than expected results in the major chain channel but had slightly lower than expected result in the discount and specialty chain channel. Girl's 4-6x offerings were higher than expected in the discount channel at 25.61%, but were lower expected in the major chain and specialty chain channel.

Conversely, the girl's 7-18 offerings were slightly higher than expected in the major chain and specialty chain channel and slightly lower than expected in the discount channel.

Significant differences in percentages of the *size categories* existed among retail channels ($\chi^2 = 340.77$; $p < 0.0001$). Hypothesis 2a₀ was rejected. Among all retail channels, girl's' 7-18 size was most prevalent. Toddler was more prevalent among the major chain and specialty chain channel. The discount channel had different findings than the major chain and specialty chain channel with the majority of its offerings in girl's 4-6x and girl's 7-18 size category, while the major chain and specialty chain channel had the majority of their offerings in toddler and girl's 7-18.

Table 13: Size Category Among Retail Channels

	<i>Toddler</i>	<i>Boys 4-7</i>	<i>Boys 8-20</i>	<i>Girls 4-6x</i>	<i>Girls 7-18</i>	
Discount						
Expected (E)*	952.18	641.17	865.48	755.09	1128.09	n= 4342
Observed (O)**	715	695	825	995	1112.00	n= 4342
(E-O) ² /E	59.08	4.52	1.89	76.23	0.23	
	16.47%	16.01%	19.00%	22.92%	25.61%	
Major Chain						
Expected (E)*	708.54	477.11	644.02	561.88	839.44	n= 3231
Observed (O)**	805	463	708	390	865	n= 3231
(E-O) ² /E	13.13	0.42	6.36	52.58	0.78	
	24.91%	14.33%	21.91%	12.07%	26.77%	
Chain						
Expected (E)*	228.29	153.72	207.50	181.03	270.46	n= 1041
Observed (O)**	369	114	184	113	261	n= 1041
(E-O) ² /E	86.74	10.26	2.66	25.57	0.33	
	35.45%	10.95%	17.68%	10.85%	25.07%	
Overall						
Observed (O)**	1889	1272	1717	1498	2238	N= 8614
	21.93%	14.77%	19.93%	17.39%	25.98%	

$$\chi^2 (2, N = 8614) = 340.77, p = < 0.0001$$

* Expected = $(n_i * n_j) / n$

** Observed = n_{ij}

Note. A total of 232 records were excluded from this analysis. Nine records were size Neutral 4-20 and 223 records did not have information pertaining to the Size category variable. Percentages in table are row percentages.

Size categories among retail stores (H2b₀; Table 14)

Stores A and B have the majority of their offerings in the girl's 4-6x and girl's 7-18 size category. Store C overall has a difference emphasis in all of its size categories. Girl's 4-6x and girl's 7-18 size category comprised the majority of offerings for Stores A and B of the discount channel. The concentration of girl's 4-6x and girl's 7-18 size categories in the Stores A and B of the discount channel accounted for higher than expected offerings. Conversely, toddler, boy's 4-7 and boy's 8-20 size categories comprised the majority of offerings in Store C of the same retail channel.

Stores D, E and F behave similarly with the majority of their offerings in toddler, boy's 8-20 and girl's 7-18 size categories. Stores D and E of the major chain channel and Store F of the specialty chain channel were similar in size categories with a greater emphasis on the toddler and girl's 7-18 size category. Stores D and E of the major chain channel also had higher than expected offerings in the toddler size category. Stores D and E were very similar to expectations in girl's 7-18 size category but lower than expected for girl's 4-6x. Store E varied slightly with a greater percentage of offerings in the boy's 8-20 size category than Store D. Store F has the greatest percentage of toddler offerings, 35.45%, of all the retail stores. Although Store F accounted for higher than expected offerings in the toddler size category, it had lower than expected offerings in all other size categories.

Significant differences in percentages of the *size categories* existed among retail stores ($\chi^2 = 526.50$; $p < 0.0001$). Hypothesis 2b₀ was rejected. Within channels, retail stores have similar size categories. Toddler and girl's 7-18 were the most prevalent size categories to the majority of retail stores. Store C size category offerings were different than its discount retail channel members and other retail stores outside of its retail channel. Similarities were noticed among retail channel members but overall there were significant differences among the retail stores according to size category.

Table 14: Size Category Among Retail Stores

	<i>Toddler</i>	<i>Boys 4-7</i>	<i>Boys 8-20</i>	<i>Girls 4-6x</i>	<i>Girls 7-18</i>	
Store A						
Expected (E)*	365.56	246.16	332.28	289.90	433.10	n= 1667
Observed (O)**	195	239	332	420	481	n= 1667
	79.58	0.21	0.00	58.39	5.30	
	11.70%	14.34%	19.92%	25.19%	28.85%	
Store B						
Expected (E)*	296.27	199.50	269.29	234.94	351.00	n= 1351
Observed (O)**	230	179	192	376	374	n= 1351
	14.82	2.11	22.18	84.69	1.51	
	17.02%	13.25%	14.21%	27.83%	27.68%	
Store C						
Expected (E)*	290.35	195.51	263.91	230.25	343.99	n= 1324
Observed (O)**	290	277	301	199	257	n= 1324
	0.00	33.97	5.21	4.24	22.00	
	21.90%	20.92%	22.73%	15.03%	19.41%	
Store D						
Expected (E)*	332.89	224.16	302.58	263.98	394.39	n= 1518
Observed (O)**	373	249	285	212	399	n= 1518
	4.83	2.75	1.02	10.24	0.05	
	24.57%	16.40%	18.77%	13.97%	26.28%	
Store E						
Expected (E)*	375.65	252.95	341.45	297.90	445.05	n= 1713
Observed (O)**	432	214	423	178	466	n= 1713
	8.45	6.00	19.48	48.26	0.99	
	25.22%	12.49%	24.69%	10.39%	27.20%	
Store F						
Expected (E)*	228.29	153.72	207.50	181.03	270.46	n= 1041
Observed (O)**	369	114	184	113	261	n= 1041
	86.74	10.26	2.66	25.57	0.33	
	35.45%	10.95%	17.68%	10.85%	25.07%	
Overall						
Observed (O)**	1889	1272	1717	1498	2238	N= 8614
	21.93%	14.77%	19.93%	17.39%	25.98%	

$\chi^2 (20, N = 8614) = 526.4997, p = < 0.0001$

* Expected = $(n_i * n_j)/n$

** Observed = n_{ij}

Note. A total of 232 records were excluded from this analysis. Nine records were size Neutral 4-20 and 223 records did not have information pertaining to the Size category variable. Percentages in table are row percentages.

H3a₀: No differences in percentages of the product categories (tops, bottoms and sleepwear) among retail channels.

H3b₀: No differences in percentages of the product categories (tops, bottoms and sleepwear) among retail stores.

To determine if significant differences in *product categories* existed among retail channels and retail stores, a contingency table, independent-samples chi-square test was conducted (Table 15 and 16).

Product category among retail channels (H3a₀; Table 15)

The discount channel and specialty chain channel maintained an almost equal balance between tops and bottoms. The major chain channel had higher than expected bottom offerings and the lowest percentage of tops offerings among all retail channels.

Sleepwear accounted for the smallest percentage of offerings among all retail channels. Sleepwear in the specialty chain channel was significantly lower than expected. The major chain channel had higher than expected offerings of sleepwear and the highest percentage of sleepwear offerings among all retail channels at 10.27%.

Significant differences in percentages of the *product categories* existed among retail channels ($\chi^2= 200.23$; $p<0.0001$). Hypothesis 3a₀ was rejected. Tops and bottoms make up the majority of product category offerings among all retail channels. Sleepwear was most prevalent in the major chain channel. The discount and specialty chain channel were most similar according to product category.

Table 15: Product Categories Among Retail Channels

	Top	Bottoms	Sleepwear	
Discount				
Expected (E)*	1989.27	2077.60	384.12	n= 4451
Observed (O)**	2151	1879	421	n= 4451
(E-O) ² /E	13.15	18.99	3.54	
	48.33%	42.22%	9.46%	
Major Chain				
Expected (E)*	1453.41	1517.94	280.65	n= 3252
Observed (O)**	1220	1698	334	n= 3252
(E-O) ² /E	37.48	21.36	10.14	
	37.52%	52.21%	10.27%	
Specialty Chain				
Expected (E)*	498.32	520.45	96.23	n= 1115
Observed (O)**	570	539	6	n= 1115
(E-O) ² /E	10.31	0.66	84.60	
	51.12%	48.34%	0.54%	
Overall				
Observed (O)**	3941	4116	761	N= 8818
	44.69%	46.68%	8.63%	

$$\chi^2 (4, N = 8818) = 200.23, p = < 0.0001$$

* Expected = $(n_i * n_j)/n$

** Observed = n_{ij}

Note. A total of 28 records were excluded from this analysis. Twenty eight records did not have information pertaining to the Product category variable. Percentages in table are row percentages.

Product categories among retail stores (H3b₀; Table 16)

Stores D and E had higher than expected bottom offerings. Stores A, B, C and F had the majority of their product category offerings in tops. Stores A and B of the discount channel had higher than expected top offerings and lower than expected bottom offerings. Store F of the specialty chain channel had both higher than expected top and bottom offerings. Stores B and C were most similar having 45.31% and 46.98% respectively of tops offerings, very close to expectations.

Sleepwear had a smaller presence among retail stores. Stores B and D had the highest percentage of sleepwear offerings, while Store F had lower than expected and the lowest percentage of offerings (less than 1%).

Significant differences in percentages of the *product categories* existed among retail stores ($\chi^2 = 248.63$; $p < 0.0001$). Hypothesis 3b₀ was rejected. Overall, tops and bottoms were the most prevalent product category among all retail stores. Sleepwear has the strongest presence in Store D of the major chain channel; however, sleepwear was almost nonexistent in Store F of the specialty chain channel. Overall, retail stores within the same retail channel had similar product category offerings.

Table 16: Product Categories Among Retail Stores

	Top	Bottoms	Sleepwear	
Store A				
Expected (E)*	751.73	785.11	145.16	n= 1682
Observed (O)**	874	657	151	n= 1682
(E-O) ² /E	19.89	20.90	0.24	
	51.96%	39.06%	8.98%	
Store B				
Expected (E)*	638.21	666.55	123.24	n= 1428
Observed (O)**	647	624	157	n= 1428
(E-O) ² /E	0.12	2.72	9.25	
	45.31%	43.70%	10.99%	
Store C				
Expected (E)*	599.33	625.94	115.73	n= 1341
Observed (O)**	630	598	113	n= 1341
(E-O) ² /E	1.57	1.25	0.06	
	46.98%	44.59%	8.43%	
Store D				
Expected (E)*	679.78	709.96	131.26	n= 1521
Observed (O)**	570	754	197	n= 1521
(E-O) ² /E	17.73	2.73	32.92	
	37.48%	49.57%	12.95%	
Store E				
Expected (E)*	773.63	807.98	149.39	n= 1731
Observed (O)**	650	944	137	n= 1731
(E-O) ² /E	19.76	22.90	1.03	
	37.55%	54.53%	7.91%	
Store F				
Expected (E)*	498.32	520.45	96.23	n= 1115
Observed (O)**	570	539	6	n= 1115
(E-O) ² /E	10.31	0.66	84.60	
	51.12%	48.34%	0.54%	
Overall				
Observed (O)**	3941	4116	761	N= 8818
	44.69%	46.68%	8.63%	

$$\chi^2 (10, N = 8818) = 248.63, p = < 0.0001$$

* Expected = $(n_i * n_j)/n$

** Observed = n_{ij}

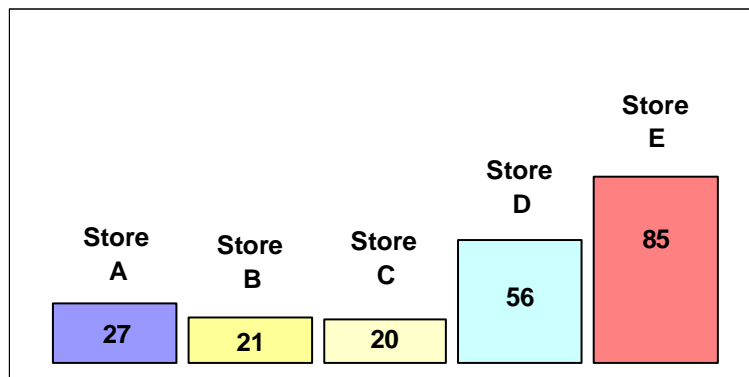
Note. A total of 28 records were excluded from this analysis. Twenty eight records did not have information pertaining to the product category variable. Percentages in table are row percentages.

H4a₀: No differences in percentages of the brand categories (national brand, store brand) among retail channels.

H4b₀: No differences in percentages of the brand categories (national brand, store brand) among retail stores.

Childrenswear brands were identified as either national or store. All retail stores in the sample, with the exception of Store F of the specialty chain channel, offered both national and store brands. The retail store with the highest number of brand offerings among its three locations was Store E. Store E (major chain channel) offered a selection of 85 different childrenswear brands (including national and store brands).

Figure 15: Number of Brands per Retail Store



Note. Store F was excluded from this analysis. Store F only carries one Store brand.

To determine if significant differences in percentages of the *brand categories* existed among retail channels and retail stores, a contingency table, independent-samples chi-square test was conducted (Tables 17 and 18).

Brand categories among retail channels (H4a₀; Table 17)

Store brands accounted for 65.33% of the total brand category offerings. The discount channel had higher than expected store brand offerings but lower than expected national brand offerings. Store brand in the discount channel accounted for approximately 75% of the total offerings. Consistent with the overall high number of brand offerings in the major chain channel retail stores, national brands had a larger presence than store brands. The major chain channel had higher than expected national brand offerings and lower than expected store brand offerings.

Significant differences in percentages of the *brand categories* existed among retail channels ($\chi^2 = 1739.08$; $p < 0.0001$). Hypothesis 4a₀ was rejected. Store brands have a large presence overall among retail channels. Store brands were more prevalent in the discount channel while national brands were more prevalent in the major chain channel.

Table 17: Brand Categories Among Retail Channels

	National Brand	Store Brand	
Discount			
Expected (E)*	1516.98	2859.02	n= 4376
Observed (O)**	1075	3301	n= 4376
(E-O) ² /E	128.77	68.33	
	24.57%	75.43%	
Major Chain			
Expected (E)*	1105.50	2083.50	n= 3189
Observed (O)**	1934	1255	n= 3189
(E-O) ² /E	620.92	329.45	
	60.65%	39.35%	
Specialty Chain			
Expected (E)*	386.52	728.48	n= 1115
Observed (O)**	0	1115	n= 1115
(E-O) ² /E	386.52	205.09	
	0.00%	100.00%	
Overall			
Observed (O)**	3009	5671	N= 8680
	34.67%	65.33%	

$$\chi^2 (2, N = 8680) = 1739.08, p = < 0.0001$$

* Expected = $(n_i * n_j)/n$

** Observed = n_{ij}

Note. A total of 166 records were excluded from this analysis. One hundred and twenty six records did not have information pertaining to the brand category variable. Percentages in table are row percentages.

Brand categories among retail stores (H4b₀; Table 18)

Stores A, B and C of the discount channel have higher than expected store brand offerings and lower than expected national brand offerings. The highest percentage (78.09%) of store brand offerings was found in Store B of the discount channel. Stores D and E of the major chain channel had higher than expected national brand offerings and lower than expected store brand offerings.

Significant differences in percentages of the *brand categories* existed among retail stores ($\chi^2 = 1739.08$; $p < 0.0001$). Hypothesis 4b₀ was rejected.

Store brands have a larger presence among Stores A, B and C of the discount channel. Stores D and E of the major chain channel behave similarly and have a larger presence of national brand offerings. Retail stores within the same retail channel have similar brand category offerings.

Table 18: Brand Categories Among Retail Stores

	National Brand	Store Brand	
Store A			
Expected (E)*	576.49	1086.51	n= 1663
Observed (O)**	439	1224	n= 1663
(E-O) ² /E	32.79	17.40	
	26.40%	73.60%	
Store B			
Expected (E)*	479.43	903.57	n= 1383
Observed (O)**	303	1080	n= 1383
(E-O) ² /E	64.93	34.45	
	21.91%	78.09%	
Store C			
Expected (E)*	461.06	868.94	n= 1330
Observed (O)**	333	997	n= 1330
(E-O) ² /E	35.57	18.87	
	25.04%	74.96%	
Store D			
Expected (E)*	518.60	977.40	n= 1496
Observed (O)**	809	687	n= 1496
(E-O) ² /E	162.61	86.28	
	54.08%	45.92%	
Store E			
Expected (E)*	586.89	1106.11	n= 1693
Observed (O)**	1125	568	n= 1693
(E-O) ² /E	493.37	261.78	
	66.45%	33.55%	
Store F			
Expected (E)*	386.52	728.48	n= 1115
Observed (O)**	0	1115	n= 1115
(E-O) ² /E	386.52	205.09	
	0.00%	100.00%	
Overall			
Observed (O)**	3009	5671	N= 8680
	34.67%	65.33%	

$$\chi^2 (5, N = 8680) = 1799.67, p = < 0.0001$$

* Expected = $(n_i * n_j)/n$

** Observed = n_{ij}

Note. A total of 166 records were excluded from this analysis. One hundred and twenty six records did not have information pertaining to the brand category variable. Percentages in table are row percentages.

H5a₀: No differences in percentages of the country of origin regions among retail channels.

H5b₀: No differences in percentages of the country of origin regions among retail stores.

To determine if significant differences in percentages of the *country of origin regions* existed among retail channels and retail stores, a contingency table, independent-samples chi-square test was conducted (Tables 19 and 20).

Country of origin region among retail channels (H5a₀; Table 19)

North America and Asia country of origin region accounted for the largest percentage of offerings, 48.10% and 40.00% respectively. The specialty chain channel had significantly higher than expected offerings with labels denoting South America and Africa as the country of origin regions.

Significant differences in percentages of the *country of origin regions* existed among retail channels ($\chi^2= 793.73$; $p<0.0001$). Hypothesis 5a₀ was rejected. Although discount and major chain retail channels were similar in their selection of offerings with country of origins' of North America and Asia, the specialty chain, including Store F, reported a higher percentage of offerings from Asia and Africa.

Table 19: Country of Origin Regions Among Retail Channels

	<i>North America</i>	<i>South America</i>	<i>Europe</i>	<i>Asia</i>	<i>Africa</i>	<i>Ocenia/ Australia</i>	
Discount							
Expected (E)*	2078.80	70.43	3.02	1714.05	403.99	33.71	n= 4304
Observed (O)**	2135	21	2	1694	435	17	n= 4304
(E-O) ² /E	1.52	34.69	0.34	0.23	2.38	8.28	
	49.61%	0.49%	0.05%	39.36%	10.11%	0.39%	
Major Chain							
Expected (E)*	1520.94	51.53	2.21	1254.08	295.58	24.66	n= 3149
Observed (O)**	1723	26	3	1204	143	50	n= 3149
(E-O) ² /E	26.84	12.65	0.28	2.00	78.76	26.03	
	54.72%	0.83%	0.10%	38.23%	4.54%	1.59%	
Specialty Chain							
Expected (E)*	532.26	18.03	0.77	438.87	103.44	8.63	n= 1102
Observed (O)**	274	93	1	509	225	0	n= 1102
(E-O) ² /E	125.31	311.63	0.07	11.21	142.86	8.63	
	24.86%	1.00%	0.09%	46.19%	20.42%	0.00%	
Overall							
Observed (O)**	4132	140	6	3407	803	67	N= 8555
	48.30%	1.64%	0.07%	39.82%	9.39%	0.78%	

$\chi^2 (10, N = 8555) = 793.73, p = < 0.0001$

* Expected = $(n_i * n_j) / n$

** Observed = n_{ij}

Note. A total of 291 records were excluded from this analysis. Two hundred and ninety one records did not have information pertaining to the country of Origin Region variable. Percentages in table are row percentages.

Country of origin regions among retail stores (H5b₀; Table 20)

The North America region accounted for more than 50% of Store A, B, D and E's offerings while Asia was more predominant in Store C and F. Stores D and E (major chain channel) had similar country of origin region offerings with the majority of offerings from North America and Asia. Store D, however, had a higher percentage of offerings from Africa (7.64%) than Store E (1.84%). Store D also had significantly higher than expected offerings from Oceania/Australia.

Store C's behavior was unique from its retail channel members (discount), with lower than expected offerings in North America, and higher than expected offerings in both Asia and Africa. Store C had 15.12% of its offerings from Africa as compared to discount stores (A and B) with only 9.73% and 5.78% respectively. Although the majority of offerings overall were from North America and Asia, Stores C and F had a slightly more fragmented approach as they have more offerings from Africa than other retail stores within and outside their retail channel.

Significant differences in percentages of the *country of origin regions* existed among retail stores ($\chi^2 = 1043.01$; $p < 0.0001$). Hypothesis 5b₀ was rejected. North America and Asia were most prevalent among all retail stores. North America and Asia were most important among Stores A, B, D and E, where those regions account for the majority of their offerings. Although members of different retail channels, Stores C and F had similar findings with the majority of their offerings from Asia, and at least 15% from Africa.

Table 20: Country of Origin Regions Among Retail Stores

	<i>North America</i>	<i>South America</i>	<i>Europe</i>	<i>Asia</i>	<i>Africa</i>	<i>Ocenia Australia</i>	
Store A							
Expected (E)*	789.21	26.74	1.15	650.74	153.37	12.80	n= 1634
Observed (O)**	842	5	0	628	159	0	n= 1634
(E-O) ² /E	3.53	17.67	1.15	0.79	0.21	12.80	
	51.53%	0.31%	0.00%	38.43%	9.73%	0.00%	
Store B							
Expected (E)*	660.25	22.37	0.96	544.40	128.31	10.71	n= 1367
Observed (O)**	806	2	0	480	79	0	n= 1367
(E-O) ² /E	32.17	18.55	0.96	7.62	18.95	10.71	
	58.96%	0.15%	0.00%	35.11%	5.78%	0.00%	
Store C							
Expected (E)*	629.34	21.32	0.91	518.92	122.30	10.20	n= 1303
Observed (O)**	487	14	2	586	197	17	n= 1303
(E-O) ² /E	32.19	2.52	1.29	8.67	45.62	4.53	
	37.38%	1.07%	0.15%	44.97%	15.12%	1.30%	
Store D							
Expected (E)*	708.07	23.99	1.03	583.83	137.60	11.48	n= 1466
Observed (O)**	778	20	2	516	112	38	n= 1466
(E-O) ² /E	6.91	0.66	0.92	7.88	4.76	61.25	
	53.07%	1.36%	0.14%	35.20%	7.64%	2.59%	
Store E							
Expected (E)*	812.88	27.54	1.18	670.25	157.97	13.18	n= 1683
Observed (O)**	945	6	1	688	31	12	n= 1683
(E-O) ² /E	21.48	16.85	0.03	0.47	102.06	0.11	
	56.15%	0.36%	0.06%	40.88%	1.84%	0.71%	
Store F							
Expected (E)*	532.26	18.03	0.77	438.87	103.44	8.63	n= 1102
Observed (O)**	274	93	1	509	225	0	n= 1102
(E-O) ² /E	125.31	311.63	0.07	11.21	142.86	8.63	
	24.86%	8.44%	0.09%	46.19%	20.42%	0.00%	
Overall							
Observed (O)**	4132	140	6	3407	803	67	N= 8555
	48.30%	1.64%	0.07%	39.82%	9.39%	0.78%	

χ^2 (25, N = 8555) = 1043.01, p = < 0.0001

* Expected = $(n_i * n_j)/n$

** Observed = n_{ij}

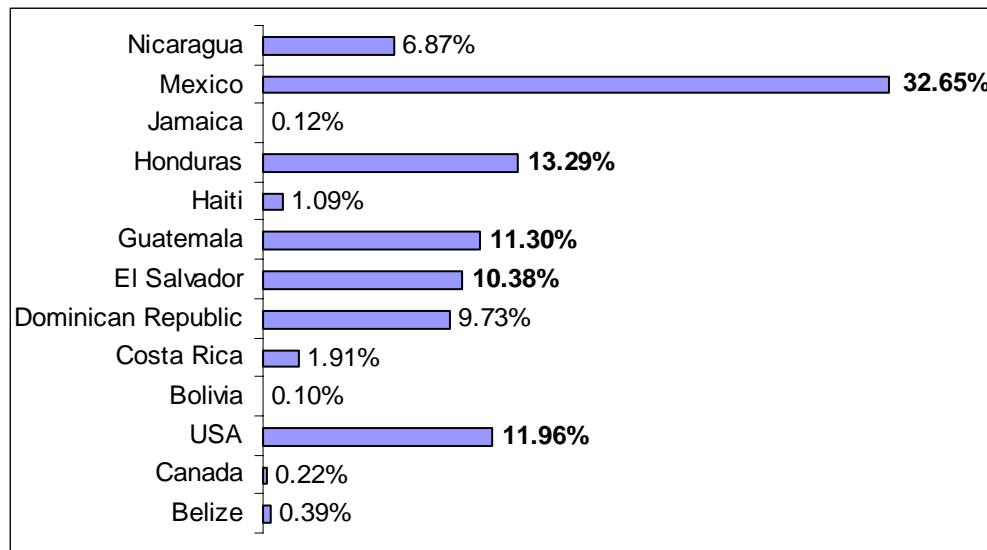
Note. A total of 291 records were excluded from this analysis. Two hundred and ninety one records did not have information pertaining to the country of Origin Region variable. Percentages in table are row percentages.

Country of origin region's distribution, North America and Asia (Fig. 17, 18)

North America and Asia accounted for the highest percentages of offerings overall. Figures 17 and 18 explore distribution among the countries within the two regions. Mexico contributed to 32.65% of the North America offerings. The United States accounted for only 11.96% of North America

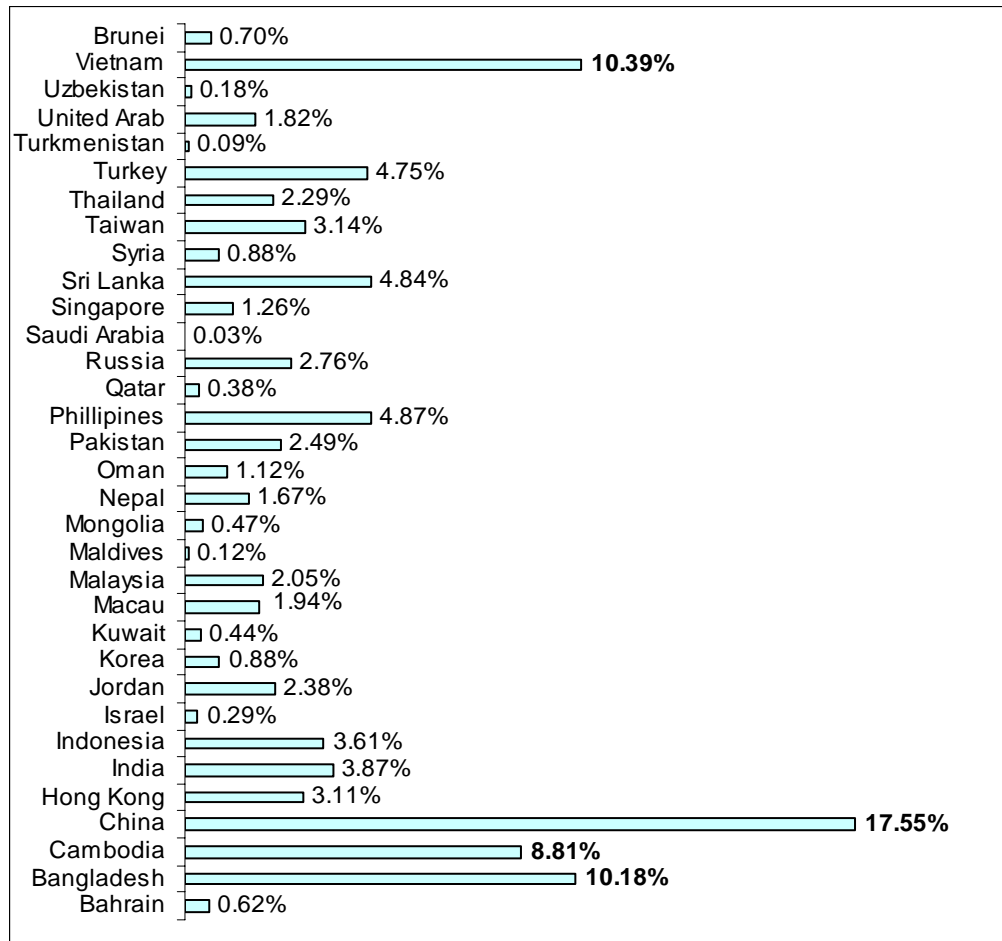
offerings. The balances of North America offerings were from countries including Honduras, El Salvador, Guatemala, and the Dominican Republic. See Appendix C for country of origin region definitions.

Figure 16: North America Country of Origin Region's Distribution



China, Vietnam, Bangladesh and Cambodia comprised the majority of Asia's offerings. China represented the largest country within the Asian region with 17.55% of offerings.

Figure 17: Asia Country of Origin Region's Distribution



The country of origin region for tops and bottoms was almost proportionally opposite (Table 21). The majority of tops originated in North America, while the majority of bottoms originated in Asia, followed respectively by North America and then Africa. Sleepwear was almost evenly distributed among North America and Asia.

Table 21: Product Categories Country of Origin Region Shares

	Tops	Bottoms	Sleepwear
North America	57.32%	37.32%	43.50%
South America	2.61%	0.44%	2.50%
Europe	0.08%	0.02%	0.26%
Asia	28.14%	47.21%	45.34%
Africa	7.87%	11.64%	1.84%
Oceania	1.19%	0.49%	0.00%
Unknown	2.79%	2.89%	6.57%

H6a₀: No differences in percentages of the gender categories (male, female) among brand categories.

To determine if significant differences in percentages of the *gender categories* existed among brand categories, a contingency table, independent-samples chi-square test was conducted (Table 22).

National brands were approximately 50% Male and 50% female; store brands were dominated by female offerings at 60.12%. National brands have higher than expected male offerings and lower than expected female offerings. Store brands behaved opposite of national brands, with higher than expected female offerings and lower than expected male offerings.

Significant differences in percentages of the *gender categories* existed among brand categories ($\chi^2 = 86.94$; $p < 0.0001$). Hypothesis 6a₀ was rejected.

Male offerings and female offerings were equally prevalent in national brands.
 Female offerings were more prevalent in store brands.

Table 22: Gender Categories Among Brand Categories

	Male	Female	
National Brand			
Expected (E)*	1309.18	1699.82	n= 3009
Observed (O)**	1514	1495	n= 3009
(E-O) ² /E	32.04	24.68	
	50.32%	49.68%	
Store Brand			
Expected (E)*	2457.82	3191.18	n= 5649
Observed (O)**	2253	3396	n= 5649
(E-O) ² /E	17.07	13.15	
	39.88%	60.12%	
Overall			
Observed (O)**	3767	4891	N= 8658
	43.51%	56.49%	

$$\chi^2 (1, N = 8658) = 86.94, p = < 0.0001$$

* Expected = $(n_i * n_j)/n$

** Observed = n_{ij}

Note. A total of 188 records were excluded from this analysis. Nineteen records were gender Neutral. Three records did not have information pertaining to the gender category variable. One hundred and sixty six records did not have information pertaining to the brand category variable. Percentages in table are row percentages.

H6b₀: No differences in percentages of size categories (toddler, boy's

4-7, boy's 8-20, girl's 4-6x, girl's 7-18) among brand categories.

To determine if significant differences in percentages of the *size categories* existed among brand categories, a contingency table, independent-samples chi-square test was conducted (Table 23).

National brands were comprised of 24.18% of the girl's 7-18 and 23.75% of the boy's 8-20 size categories. Store brands had higher than expected

offerings in the toddler, girl's 4-6x and girl's 7-18 size category, and lower than expected boy's 4-7 and 8-20 offerings.

Significant differences in percentages of the *size categories* existed among brand categories ($\chi^2= 117.68$; $p<0.0001$). Hypothesis 6b₀ was rejected. Boy's 8-20 and girl's 7-18 were more prevalent in the national brand category while toddler and girl's 7-18 were more prevalent in the store brand category.

Table 23: Size Categories Among Brand Categories

	<i>Toddler</i>	<i>Boys 4-7</i>	<i>Boys 8-20</i>	<i>Girls 4-6x</i>	<i>Girls 7-18</i>	
National Brand						
Expected (E)*	653.62	440.07	592.96	513.01	769.34	n= 2969
Observed (O)**	566	545	705	435	718	n= 2969
(E-O) ² /E	11.75	25.02	21.17	11.86	3.43	
	19.06%	18.36%	23.75%	14.65%	24.18%	
Store Brand						
Expected (E)*	1210.38	814.93	1098.04	949.99	1424.66	n= 5498
Observed (O)**	1298	710	986	1028	1476	n= 5498
(E-O) ² /E	6.34	13.51	11.43	6.41	1.85	
	23.61%	12.91%	17.93%	18.70%	26.85%	
Overall						
Observed (O)**	1864	1255	1691	1463	2194	N= 8467
	22.01%	14.82%	19.97%	17.28%	25.91%	

$$\chi^2 (5, N = 8467) = 117.68, p = < 0.0001$$

* Expected = $(n_i * n_j)/n$

** Observed = n_{ij}

Note. A total of 379 records were excluded from this analysis. Nine were Size Neutral 4-20. Two hundred and twenty three records did not have information pertaining to the Size category variable. One hundred and forty seven records did not have information pertaining to the brand category variable. Percentages in table are row percentages.

H6c₀: No differences in percentages of product categories (tops, bottoms, sleepwear) among brand categories.

To determine if significant differences in percentages of the *product categories* existed among brand categories, a contingency table, independent-samples chi-square test was conducted (Table 24).

National brands had equal shares of both tops and bottoms, approximately 42%. Store brands had higher than expected top and bottom offerings; top and bottom offerings were lower than expected in national brands. Sleepwear was higher than expected in national brands and lower than expected in store brands.

Significant differences in percentages of the *product categories* existed among brand categories ($\chi^2 = 334.84$; $p < 0.0001$). Hypothesis $6c_0$ was rejected. Tops and bottoms were the most prevalent product categories for both national and store brands. Sleepwear was more prevalent in national brands.

Table 24: Product Categories Among Brand Categories

	Top	Bottoms	Sleepwear	
National Brand				
Expected (E)*	1346.95	1397.83	250.22	n= 2995
Observed (O)**	1257	1264	474	n= 2995
(E-O) ² /E	6.01	12.81	200.14	
	41.97%	42.20%	15.83%	
Store Brand				
Expected (E)*	2545.05	2641.17	472.78	n= 5659
Observed (O)**	2635	2775	249	n= 5659
(E-O) ² /E	3.18	6.78	105.92	
	46.56%	49.04%	4.40%	
Overall				
Observed (O)**	3892	4039	723	N= 8654
	44.97%	46.67%	8.35%	

$$\chi^2 (2, N = 8654) = 334.84, p = < 0.0001$$

* Expected = $(n_i * n_j)/n$

** Observed = n_{ij}

Note. A total of 192 records were excluded from this analysis. Twenty eight records did not have information pertaining to the Product category variable. One hundred and sixty four records did not have information pertaining to the brand category variable. Percentages in table are row percentages.

H6d₀: No differences in percentages of country of origin region among brand categories.

To determine if significant differences in percentages of the *country of origin regions* existed among brand categories, a contingency table, independent-samples chi-square test was conducted (Table 25).

National brands were comprised predominantly of North America and Asia offerings. National brands had higher than expected offerings from North America but lower than expected offering from Asia and Africa. Store brands had higher than expected offerings from Asia and Africa but lower than expected

offerings from North America. Africa had a stronger presence in store brand offerings (12.90%) than national brand offerings (2.88%).

Significant differences in percentages of the *country of origin regions* existed among brand categories ($\chi^2= 398.98$; $p<0.0001$). Hypothesis 6d₀ was rejected. Store brands were more diversified according to country of origin region. Africa was more prevalent in the store brand category than the national brand category.

Table 25: Country of Origin Regions Among Brand Category

	<i>North America</i>	<i>South America</i>	<i>Europe</i>	<i>Asia</i>	<i>Africa</i>	<i>Ocenia Australia</i>	
National Brand							
Expected (E)*	1395.82	47.69	2.06	1144.66	273.13	22.65	n= 2886
Observed (O)**	1767	28	3	988	83	17	n= 2886
(E-O) ² /E	98.70	8.13	0.43	21.44	132.35	1.41	
	61.23%	0.97%	0.10%	34.23%	2.88%	0.59%	
Store Brand							
Expected (E)*	2672.18	91.31	3.94	2191.34	522.87	43.35	n= 5525
Observed (O)**	2301	111	3	2348	713	49	n= 5525
(E-O) ² /E	51.56	4.25	0.22	11.20	69.13	0.74	
	41.65%	2.01%	0.05%	42.50%	12.90%	0.89%	
Overall							
Observed (O)**	4068	139	6	3336	796	66	N= 8411
	48.37%	1.65%	0.07%	39.66%	9.46%	0.78%	

$\chi^2 (5, N = 8411) = 398.98, p = < 0.0001$

* Expected = $(n_i * n_j)/n$

** Observed = n_{ij}

H7_A: Differences in price exist among a) retail channel, b) retail store, c) gender category, d) size category, e) brand category, f) product category, g) country of origin region.

The price of childrenswear offerings ranged from \$1.79 to \$55.00 (regular-\$2.00 to \$55.00, sale-\$1.79 to \$32.00).

A one-way analysis of variance was used to determine if significant differences existed between price means among the entire sample. Results of the one-way analysis of variance (Table 26) indicated that there were significant differences in price among the variables in the sample, $F(25, 8498) = 399.95$, $p < .0001$. The mean price was \$11.15. Hypothesis 7_A was accepted.

Table 26: Price for Childrenswear Offerings

Dependent Variable:		Price			
Source	DF	Sum of Squares	Mean Squares	F Value	Pr > F
Model	25	161529.59	6461.18	399.95	<.0001
Error	8498	137285.74	16.16		
Corrected Total	8523	298815.33			
	R-Square	Coeff Var	Root MSE	Price Mean	
	0.540567	36.0595	4.02	11.15	

A factorial, two-way analysis of variance was conducted to determine if significant differences existed between price means among retail channels, retail stores, gender categories, size categories, brand categories, product categories, and country of origin regions (Table 27).

Table 27: Results from ANOVA (Hypotheses 7a-7g)

	Price LSMEAN	F value	p>F
Retail Channel		1263.26	<0.0001
Discount	8.22		
Major Chain	13.08		
Specialty Chain	12.33		
Retail Store		552.01	<0.0001
A	7.38		
B	8.82		
C	8.47		
D	12.54		
E	13.63		
F	12.33		
Gender Category		6.12	0.0004
Male	10.52		
Female	11.31		
<i>Missing Values (3)</i>			
Size Category		184.6	<0.0001
Toddler	9.11		
Boys 4-7	11.73		
Boys 8-20	13.46		
Girls 4-6x	11.73		
Girls 7-18	12.57		
<i>Missing Values (223)</i>			
Brand Category		361.96	<0.0001
National Brand	12.59		
Store Brand	9.69		
<i>Missing Values (166)</i>			
Product Category		855.87	<0.0001
Tops	8.89		
Bottoms	13.68		
Sleepwear	12.46		
<i>Missing Values (28)</i>			
Country of Origin Region		47.06	<0.0001
North America	11.40		
South America	10.88		
Europe	12.55		
Asia	12.73		
Africa	11.20		
Oceania/Australia	8.05		
<i>Missing Values (291)</i>			

Note. ANOVA results with retail store, rather than retail channel in the model in order to avoid having a nested model.

H7a_A: Significant differences exist between price means among *retail channels*.

Results of the two-way analysis of variance (Table 27) indicated that there were significant mean differences in price among retail channels $F(2) = 1263.26$, $p < .0001$. Hypothesis 7a_A was accepted. The discount channel had the lowest childrenswear price mean (\$8.22), and the major chain channel had the highest price mean (\$13.15). The specialty chain channel's price mean was \$12.39.

H7b_A: Significant differences exist between price means among *retail stores*.

Results of the two-way analysis of variance (Table 27) indicated that there were significant differences in price among retail stores, $F(5) = 552.01$, $p < .0001$. Hypothesis 7b_A was accepted. Stores within the same retail channel had similar price means. The highest overall price mean was Store E of the major chain channel (\$13.63). Both Stores D and E of the major chain channel had the highest price means for all retail stores. Store A of the discount channel had the lowest overall price mean (\$7.38). Price means of stores B and C of the discount channel were at least \$1.00 higher than the price mean of Store A of the same channel.

H7c_A: Significant differences exist between price means among *gender categories*.

Results of the two-way analysis of variance (Table 27) indicated that there were significant differences in price among gender categories, $F(3) = 6.12$, p

<.0004. Hypothesis 7c_A was accepted. Female offerings are higher priced than Male offerings.

H7d_A: Significant differences exist between price means among *size categories*.

Results of the two-way analysis of variance (Table 27) indicated that there were significant differences in price among size categories, $F(6) = 184.60$, $p < .0001$. Hypothesis 7d_A was accepted. Boy's 8-20 had the highest price mean of all size categories at \$12.78. Boy's 4-7 and girl's 4-6x had similar price means of \$11.04 and \$11.05 respectively. Toddler offerings had the lowest price mean (\$8.43).

H7e_A: Significant differences exist between price means among *brand categories*.

Results of the two-way analysis of variance (Table 27) indicated that there were significant differences in price among brand categories, $F(2) = 361.96$, $p < .0001$. Hypothesis 7e_A was accepted. National brand offerings had a higher price mean than store brand offerings.

H7f_A: Significant differences exist between price means among *product categories*.

Results of the two-way analysis of variance (Table 27) indicated that there were significant differences in price among product categories, $F(3) = 855.87$, $p < .0001$. Hypothesis 7f_A was accepted. Bottoms had the highest price mean (\$12.99). Tops had the lowest price mean (\$8.21). Sleepwear, with the majority of offerings found in the major chain retail channel, had a price mean of \$11.77.

H7g_A: Significant differences exist between price means among country of origin regions.

Results of the two-way analysis of variance (Table 27) indicated that there were significant differences in price among country of origin regions, $F(6) = 47.06$, $p < .0001$. Hypotheses 7g_A was accepted. Asia offerings had the highest price mean (\$12.05). The lowest price mean was the Oceania/Australia offerings (\$7.37).

Summary Results

Among retail channels (H1a₀-H5b₀)

Gender Categories

- The female category comprised the majority of offerings among retail channels (56.65%).
- The major chain channel had the greatest variation between expected and observed offerings (higher than expected male offerings, and slightly lower than expected female offerings).
- The discount and specialty chain channel had higher than expected female offerings, and lower than expected male offerings.

Size Categories

- The girl's' 7-18 category comprised the majority of offerings among retail channels.
- The girl's 4-6x and girl's 7-18 categories comprised the majority of the discount channel's offerings.

- The toddler and girl's 7-18 categories comprised the majority of major chain and specialty chain channel's offerings.

Product Categories

- The top and bottom categories comprised the majority of all retail channel offerings.
- The sleepwear category comprised the smallest percentage all retail channel offerings.
- The specialty chain channel had lower than expected sleepwear category offerings.
- The major chain channel had the highest percentage of the sleepwear category (10.27%).

Brand Categories

- The store brand category comprised the majority of all retail channel offerings (65.33%).
- Higher than expected store brand category and lower than expected national brand category were observed in the discount channel.
- The store brand category comprised seventy-five percent of discount channel offerings.
- The national brand category comprised the majority of the major chain channel offerings.

Country of Origin Region

- North America and Asia regions comprised the majority of the retail channel offerings.

- Higher than expected offerings from Africa were observed in the discount and specialty chain channel.

Among Retail Stores (H1a₀-H5b₀)

Gender Categories

- The female category comprised the majority of Store A and B's (discount channel) offerings.

Size Categories

- The toddler and girl's 7-18 categories comprised the majority of retail store offerings.
- The girl's 4-6x and girl's 7-18 categories comprised the majority of Store A and B (discount channel) offerings.
- The toddler, boy's 4-7, and boy's 8-20 categories comprised the majority of Store C's (discount channel) offerings.
- The toddler, boy's 8-20 and girl's 7-18 categories comprised the majority of Stores D, E and F's offerings.
- Store F had the highest percentage of the toddler category (35.45%).

Product Categories

- The top and bottom categories comprised the majority of retail store offerings.
- The top category comprised the majority of Stores A, B, C and F's offerings.
- The sleepwear category comprised the smaller percentage of retail store offerings.
- The sleepwear category comprised the majority of Store B and Store D offerings.

- The sleepwear category was lower than expected (less than 1%) in Store F.

Brand Categories

- All retail stores, with the exception of Store F (specialty chain channel), offered both national and store brands.
- Store E offered the highest number of brands among all retail stores (eighty-five brands, including national and store brands).
- The store brand category comprised the majority of Store A, B and C's (discount channel) offerings.
- Store B (discount channel) had the highest percentage (78.09%) of store brands.
- The national brand category comprised the majority of Store D and E's (major chain channel) offerings.

Country of Origin Regions

- North America and Asia regions comprised the majority of the retail store offerings.
- North America accounted for more than 50% of Store A, B, D and E's offerings while Asia was more predominant in Store C and F.
- The majority of Store C and F's offerings originated from Asia.
- Store C (discount channel) had higher than expected offerings from Asia and Africa and lower than expected offerings from North America.

Profile of Brand Categories (H6a₀-H6d₀)

Table 28: Brand Categories Comparison

	National Brand	Store Brand
Gender Categories	<ul style="list-style-type: none"> • 50% male, 50% female 	<ul style="list-style-type: none"> • Female dominated (60.12%)
Size Categories	<ul style="list-style-type: none"> • Highest percentage: boy's 8-20 (23.75%) and girl's 7-18 (24.18%) 	<ul style="list-style-type: none"> • Highest percentage: toddler and girl's 7-18
Product Categories	<ul style="list-style-type: none"> • Highest percentage: tops and bottoms • Higher than expected offerings: sleepwear • Lower than expected: tops and bottoms 	<ul style="list-style-type: none"> • Highest percentage: tops and bottoms • Higher than expected offerings: tops and bottoms • Lower than expected: sleepwear
Country of Origin Regions	<ul style="list-style-type: none"> • Highest percentage: North America and Asia • Higher than expected offerings: North America • Lower than expected offerings: Asia and Africa 	<ul style="list-style-type: none"> • Highest percentage: Asia and Africa • Higher than expected offerings: North America • Lower than expected offerings: North America

Price Differences (H7_A-H7g_A)

- Childrenswear offerings ranged from \$1.79 to \$55.00.
- Mean price: \$11.15.
- Significant differences between price means within the sample, $F(25, 8498) = 399.95, p < .0001$.

Retail Channel

- Significant differences exist between price means among *retail channels*, $F(2) = 1263.26$, $p < .0001$.
- The highest price mean (\$13.15) was observed in the major chain channel.
- The lowest price mean (\$8.22) was observed in the discount channel.
- The mid-range price mean (\$12.39) was observed in the specialty chain channel.

Retail Store

- Significant differences existed between price means among *retail stores*, $F(5) = 552.01$, $p < .0001$.
- The highest price mean (\$13.63) was observed in Store E (major chain channel).
- The lowest price mean (\$7.38) was observed in Store A (discount channel).

Gender Categories

- Significant differences existed between price means among *gender categories*, $F(3) = 6.12$, $p < .0004$.
- The female category had a higher price mean (\$11.31) than the male category (\$10.52).

Size Categories

- Significant differences existed between price means among *size categories*, $F(6) = 184.60$, $p < .0001$.
- The highest price mean (\$12.78) was observed among the boy's 8-20 category.

- The lowest price mean (\$8.43) was observed among the toddler category.

Brand Categories

- Significant differences existed between price means among *brand categories*, $F(2) = 361.96, p < .0001$.
- The national brand category had a higher price mean (\$12.59) than the store brand category (\$9.69).

Product Categories

- Significant differences existed between price means among *product categories*, $F(3) = 855.87, p < .0001$.
- The bottom category had a higher price mean (\$12.99) than the top category (\$8.21).

- Country of Origin

- Significant differences existed between price means among *country of origin regions*, $F(6) = 47.06, p < .0001$
- The highest price mean (\$12.05) was observed among the Asia region.
- The lowest price mean (\$7.37) was observed among the Oceania/Australia region.

Final Profile with Model Modifications (Research Objective #5)

Power among retail channels exists where consumers can find the highest quality product at the best price. The discount channel has the power in the childrenswear market as determined by domination of store brands and price competitiveness. The control of price distributions among the market is evident when the majority of offerings among all channels are competing in a small price

range of \$7.00-\$13.00. Both the discount and specialty chain channels have concentrated price distributions ranging from \$2.00 to about \$25.00 while the major chain channel, although competing directly with the discount channel on the majority of its offerings, extends its prices above \$25.00 to over \$50.00.

The major chain channel has focused much of their product mix on national brand promotion, and less on developing a store brand label. This type of strategy may also explain the wide range of prices seen in the major chain channel, and also reflects a lack of focus among brand offerings and price. It seems that while the discount and specialty chain channel understand their positioning to the consumer, the major chain channel is trying to please all consumers. This retail channel tends to lower prices to reach the level of the discount channels stores and the low price specialty chain stores but also maintains offerings priced similar to department channel stores. However, these extreme price ranges could also be viewed as a planned strategy where the major chain channel retailers are tiering brands within their store to fit with various pricing strategies to appeal to many consumers.

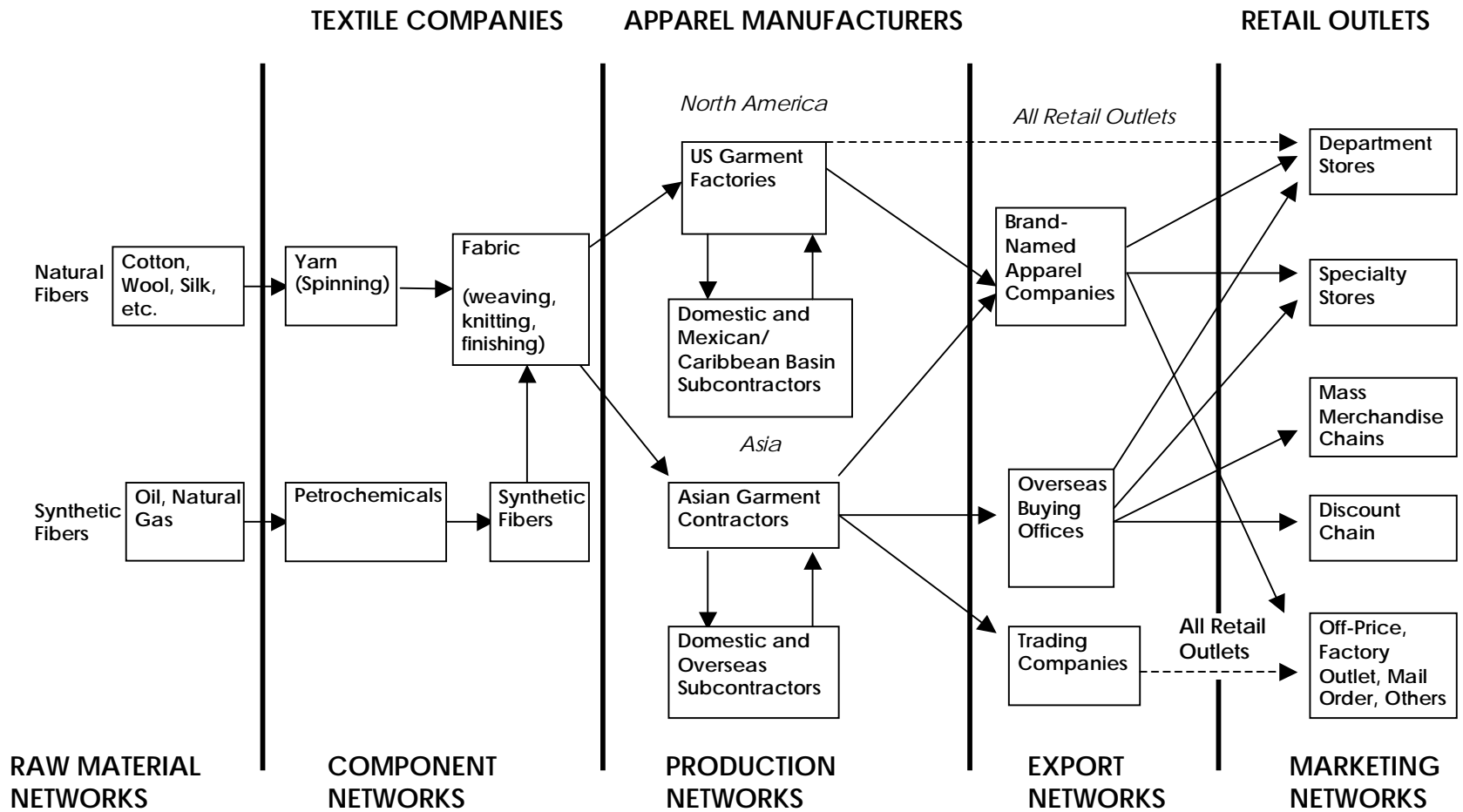
Approximately 65% of all childrenswear offerings was categorized as a store brand or private label, and are on the forefront of offering competitive pricing and product category offerings. Power is defined as the ability of one channel member to induce change in another channel member's behavior or to control specific marketing decision variables in the marketing strategy (Ailawadi et al., 1995). An indicator of retail power is the strength of store brands among

all retail stores, especially in the discount channel where approximately 75% of its offerings are classified as store brands.

A noted point of difference among national brand and store brand offerings is the country of origin region. Although North America and Asia are the top country of origin regions for both national and store brands, store brand offerings are more diversified among several continents including Africa and South America. The retailers are not only offering more of their product to the consumer, but they are also offering it at a lower price from a more advantageous sourcing venue. The retailer may also potentially achieve higher margins by paying less for production but charging the consumer a higher price compared to the cost of production. Gereffi's Apparel Value Chain Model (1994) (Figure 18), although inclusive of the production and marketing networks of an apparel supply chain, could be updated/modified to include consumer demand as a push factor to the retail outlets (marketing networks).

The specific nature and product dynamics of the childrenswear market provide a unique opportunity for retailers. To understand that the childrenswear industry may not follow the patterns of the adult apparel industry is an important concept. Power in the childrenswear industry also includes the ability to relay an idea or emotion to children through the use of characters (via licensing), color, and design appeal.

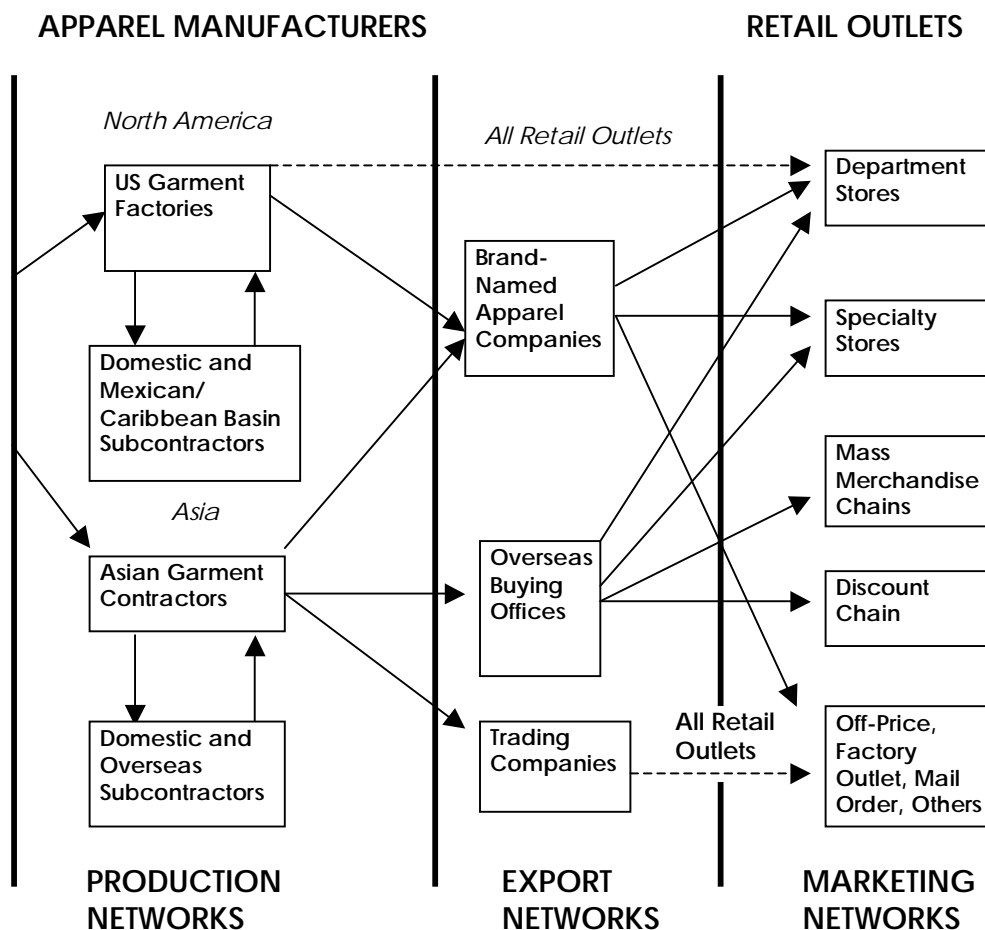
Figure 18: Apparel Value Chain



Source: Global Production: the apparel industry in the Pacific Rim, Appelbaum and Gereffi (1994), p. 46.

For the purpose of this research, the networks of focus in the Apparel Value Chain are the production, export and marketing networks including the apparel manufacturers, and retail outlets (Figure 19).

Figure 19: Apparel Value Chain, Focus Area for Modification

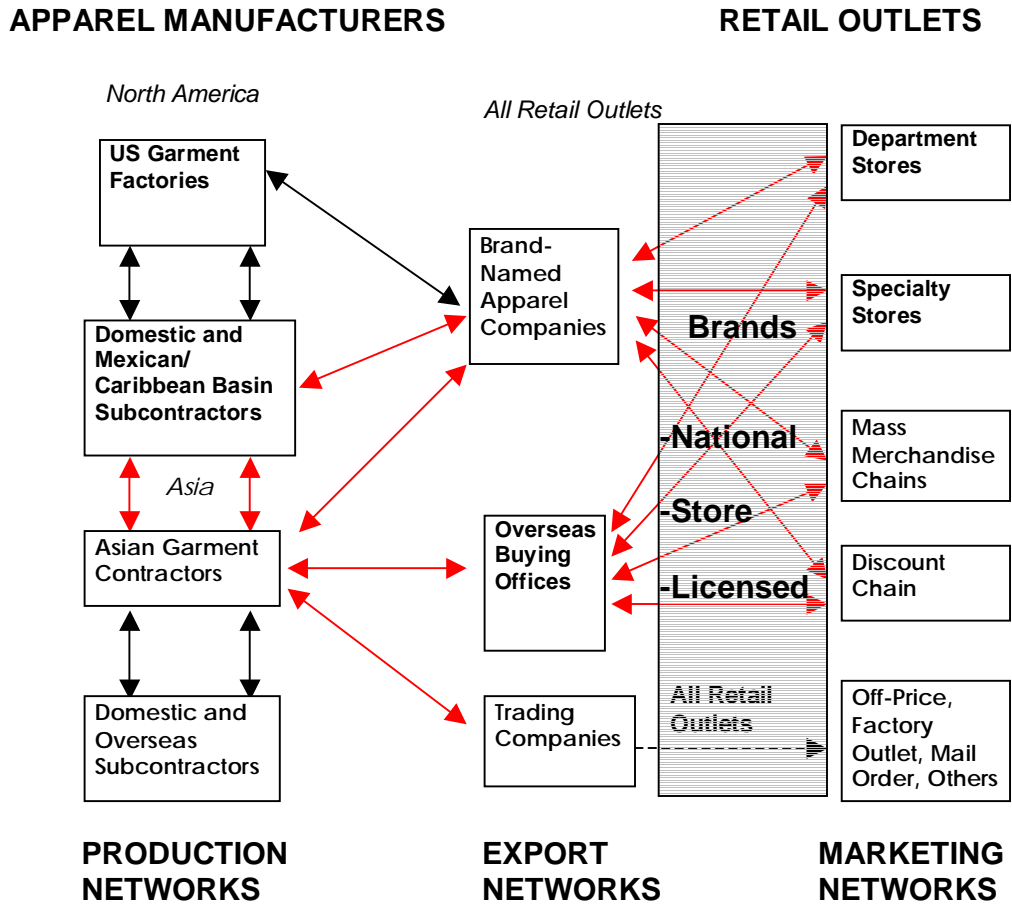


Source: Global Production: the apparel industry in the Pacific Rim, Appelbaum and Gereffi (1994), p. 46.

Modifications proposed to this model are based on the observations and results from the data analysis (Figure 20). There are increased two-way relationships between all members of the supply chain, indicating a push-pull

marketing dynamic. Two-way arrows are inserted to show the collaborative and continuous relationship that exists among members of the same marketing network and between networks. A link was added between the *brand-named apparel companies* and the *discount chain*, as a result of the high percentage of branded offerings in the discount channel noted in this study. One-way arrows were changed to two way arrows from the *export networks* the *production networks* to represent the various sourcing strategies identified in this study. Two-way arrows were added to link brand-named apparel companies to the *domestic and Mexican/Caribbean basin subcontractors* accounting for the high percentage of product originating from this region as identified in this study. Two -way arrows were also added to link *Asian garment factories* to the *domestic and Mexican/Caribbean basin subcontractors*, and *domestic and overseas subcontractor*. A link was removed from the *US garment factories* to the *department stores*. It is understood that the link may have existed due to the past direct relationship, bypassing the *export networks* that existed with *US garment factories* and *department stores*. The influence of brands, national and store, in the childrenswear market is evident in the *marketing networks*. *Brands* were added as a layering component of the *export* and *marketing networks*. While future research is needed to account for the influence of the consumer, it is expected that the *consumer* does exert influence in the *marketing networks* and thus the entire value chain.

Figure 20: Apparel Value Chain, Proposed Modifications for Childrenswear



Source: Adapted by G. Fratto (2004) based on Global Production: the apparel industry in the Pacific Rim, Annelbaum and Gereffi (1994). p. 46.

CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

Summary

The purpose of the study was to provide insights into childrenswear offerings that will aid childrenswear manufacturers and retailers in their understanding of the dynamics of the retail marketing environment for childrenswear. A retail audit was conducted, categorizing childrenswear at six major retailers in Raleigh, North Carolina; St. Louis, Missouri; and Denver, Colorado, over a three week period in June of 2003. Eighteen total locations were audited representing six retail stores and three retail channels. Retailers were selected based on their membership in specific retail channels including discount, major chain, specialty chain and their offerings of childrenswear apparel. The data were collected by visiting each store and recording childrenswear offerings information into an audio data recorder.

A profile of the childrenswear industry encompasses identifying price frequencies among retail channels, retail stores and brand categories. Differences existed between exist between childrenswear offerings according to gender category, size category, product category, brand category, and country of origin region among retail channels and retail stores. Table 29 provides a summary of these differences (H1a₀-H5b₀).

Table 29: Conclusions of Hypotheses 1a₀-5b₀

Gender	<ul style="list-style-type: none"> • Female gender category comprised the majority of offerings among retail channels. • The discount channel was female dominated while the major chain channel was male dominated. • Store C of the discount channel had similar gender category offerings to major chain channel stores (Stores D and E). • Store F (specialty channel) had similar gender category offerings to discount channel stores (Store A and B).
<i>Size Category</i>	<ul style="list-style-type: none"> • Girl's' 7-18 size category comprised the majority of offerings among retail channels. • The discount channel was dominated by girl's 4-6x and girl's 7-18 while the major chain and specialty chain channels were dominated by toddler and girl's 7-18. • Toddler and girl's 7-18 were the most prevalent size categories to the majority of retail stores. • Store C size category offerings were different than its discount retail channel members and other retail stores outside of its retail channel. • Store F has the greatest percentage of toddler offerings, 35.45%, of all the retail stores.
<i>Product Category</i>	<ul style="list-style-type: none"> • Tops and Bottoms make up the majority of product category offerings among all retail channels. • The discount and specialty chain channel were most similar according to product category. • Sleepwear accounted for the smallest percentage of offerings among all retail channels. • The major chain channel had the highest percentage of sleepwear offerings but was almost nonexistent in the specialty chain channel. • Retail stores within the same retail channel typically had similar product category offerings.

Table 29: Conclusions of Hypotheses 1a₀-5b₀ (Continued)

<p><i>Brand Category</i></p>	<ul style="list-style-type: none"> • Store Brands had a large presence overall among retail channels (65.33%). • Seventy-five percent of discount channel offerings were classified as a store brands. • National brands had a more prevalent presence in the major chain channel. • All retail stores in the sample, with the exception of Store F (specialty chain) offered both national and store brands. • Store E offerings were the highest number of brands among all retail stores (eighty-five childrenswear brands, including national and store brands). • Retail stores within the same retail channel had similar brand category offerings.
<p><i>Country of Origin Region</i></p>	<ul style="list-style-type: none"> • North America and Asia were the most prevalent country of origin regions. • Africa and South America were more prevalent in the specialty chain channel. • North America accounted for more than 50% of Store A, B, D and E's offerings, while Asia was more predominant in Store C and F. • Store C and F, although members of different retail channels had similar country of origin offerings and shares from Asia and Africa.

Differences existed between national brand and store brand childrenswear offerings among retail channels and retail stores. Table 30 provides a summary of these differences (H6a₀-H6d₀).

Table 30: Conclusions of Hypotheses 6a₀-6d₀

	National Brand	Store Brand
Gender Category	<ul style="list-style-type: none"> • 50% male, 50% female 	<ul style="list-style-type: none"> • Female dominated (60.12%)
Size Category	<ul style="list-style-type: none"> • Most prevalent size categories: boy's 8-20 (23.75%) and girl's 7-18 (24.18%) 	<ul style="list-style-type: none"> • Most prevalent size ranges: toddler and girl's 7-18 • Lower than expected offerings: boy's 4-7 and boy's 8-20
Product Category	<ul style="list-style-type: none"> • Most prevalent product categories: Tops and bottoms • Comprised equally of both top and bottom offerings (42%) • Higher than expected offerings: Sleepwear • Lower than expected: Tops and bottoms 	<ul style="list-style-type: none"> • Most prevalent product categories: Tops and bottoms • Higher than expected offerings: Tops and bottoms offerings • Lower than expected: Sleepwear
Country of Origin Region	<ul style="list-style-type: none"> • Most prevalent country of origin regions: North America and Asia • Higher than expected offerings: North America • Lower than expected offerings: Asia and Africa. 	<ul style="list-style-type: none"> • Higher than expected offerings: Asia and Africa • Lower than expected offerings: North America • Africa had a stronger presence in Store brand offerings (12.90%) • More diversified than national brands

Differences existed between price means according to retail channels, retail stores, gender category, size category, brand category, product category, and country of origin. Table 31 provides a summary of these differences (H7₀-H6d₀).

Table 31: Conclusions of Hypotheses 7_A, 7a_A-7g_A

	National Brand
Overall	<ul style="list-style-type: none"> • The price of childrenswear offerings ranged from \$1.79 to \$55.00, with a mean of \$11.15. • Significant differences in price means existed within the sample.
Retail Channels	<ul style="list-style-type: none"> • Mean differences existed among retail channels: <ul style="list-style-type: none"> ○ Price mean, discount channel \$8.22 (lowest). ○ Price mean, major chain channel \$13.15 (highest). ○ Price mean, specialty chain channel \$12.39.
Retail Stores	<ul style="list-style-type: none"> • Mean differences existed among retail stores: <ul style="list-style-type: none"> ○ Price mean, Store E (major chain channel) \$13.63 (highest) ○ Price mean, Store A (discount channel) \$7.38 (lowest)
Gender Category	<ul style="list-style-type: none"> • Mean differences existed among gender categories: <ul style="list-style-type: none"> ○ Female offerings are higher priced than male offerings.
Size Category	<ul style="list-style-type: none"> • Mean differences existed among size categories: <ul style="list-style-type: none"> ○ Price mean, boy's 8-20 \$12.78 (highest). ○ Price mean, toddler \$8.43 (lowest).
Brand Category	<ul style="list-style-type: none"> • Mean differences existed among brand categories: <ul style="list-style-type: none"> ○ National brand offerings had a higher price mean than store brand offerings.
Product Category	<ul style="list-style-type: none"> • Mean differences occurred among product categories of childrenswear offerings. <ul style="list-style-type: none"> ○ Price mean, bottoms \$12.99 (highest). ○ Price mean, tops \$8.21 (lowest). ○ Price mean, sleepwear, \$11.77.
Country of Origin Region	<ul style="list-style-type: none"> • Mean differences occurred among country of origin region of childrenswear offerings: <ul style="list-style-type: none"> ○ Price mean, Asia \$12.05 (highest). ○ Price mean, Oceania/Australia \$7.37 (lowest).

The childrenswear market fits into Gereffi's Apparel Value Chain model (1994) with modifications to the *production, export and marketing networks*. The push-pull marketing dynamics to show the collaborative and continuous relationship that exists among members of the same marketing network and between networks were visualized in this model by changing the one-way arrows to two-way arrows. A new two-way arrow was inserted between *brand-named apparel companies* and the *discount chain*, as a result of the high percentage of branded offerings in the discount channel noted in this study. One way arrows were changes to two-way arrows from the *export networks* the *production networks* to represent the various sourcing strategies identified in this study. A link was removed from the *US garment factories* to the *department stores*. It is understood that the link may have existed due to the past direct relationship, bypassing the *export networks* that existed with *US garment factories* and *department stores*. *Brands* were added as a layering component of the *export and marketing networks*.

Power does exist at the helm of the retailer in the way of price, store brands and product assortment. Retailers are capitalizing on their store brand strategy with an advantageous sourcing than their national brand competitor, yielding lower prices than the national brands to the end consumer.

Conclusions

- 1) Differences existed among retail channels according to gender categories, size categories, brand categories, product categories, and country of origin regions.
- 2) Differences existed among retail stores according to gender categories, size categories, brand categories, product categories, and country of origin regions.
- 3) Brands
 - a. Brand power dynamics were occurring in childrenswear.
 - b. Store brands and private labels were on the forefront of offering competitive pricing and product category offerings.
 - c. The discount channel relied heavily on store brands, with approximately seventy-five percent of total offerings as recorded in the study.
 - d. In contrast, the major chain channel retail stores focused marketing mix on national brand promotion, and less store brand development.
 - e. Store brand offerings were more diversified among several continents, including Africa and South America.
- 4) Price
 - a. Differences existed between price means within retail channels and retail stores.

- b. The majority of offerings among all channels were competing in a small price range of \$7.00-\$13.00.
 - c. Discount and specialty chain channel retail stores had concentrated price distributions ranging from \$2.00 to about \$25.00 while the major chain channel ranges from \$2.00 to above to over \$50.00.
 - d. The price range of the major chain channel could have demonstrated a lack of focus among brand offerings and price, and trying to appease all consumers.
- 5) Childrenswear consisted of production, export and market networks. The modifications of the *production, export and marketing networks* of Gereffi's Apparel Value Chain model (1994) illustrated the push-pull marketing dynamics to show the collaborative and continuous relationship that exists among members of the same marketing network and between networks. Power did exist at the helm of the retailer in the way of price, store brands and product assortment, and the ability of a brand to convey an idea or emotion to children through the use of character, color, and design appeal.

Recommendations

Industry

- 1) Retailers must acknowledge that competition within channels and outside of channels may leave them competing solely on price, forcing differentiation in another area, such as product attributes (store branding, design, character licensing).

- 2) Retailers with store brands or seeking to develop store brands compete with sourcing strategies and by branding its store environment.
- 3) Retailers and manufacturers/marketing must recognize emotional impact of childrenswear brands on consumers.

Future Research

- 1) Pair wise comparison would need to be conducted to identify childrenswear marketplace differences between retail channels, retail stores, gender categories, size categories, brand categories, product categories and country of origin regions.
- 2) A broader audit of childrenswear could include other retail channels (i.e. off-price and department) thus providing a more complete illustration of the retail marketing environment for childrenswear.
- 3) Future research could include more childrenswear products (sportswear, hosiery, loungewear) and size ranges (newborn and infant) categories. This expanded study would provide a more thorough overall picture of the retail marketing environment for childrenswear.
- 4) The role of the consumer in the childrenswear industry merits further examination. Specific research issues could consist of a) commoditization of brand b) role of fashion, c) value equation, d) emotional appeal via licensing, strategies, and e) price as a differentiation tool.
- 5) Pricing strategies within the childrenswear industry need further explanation. Two key studies include a) intra-, and inter-competition (within channel and across channels).

- 6) Licensing is a major category of growth and innovation in childrenswear today (Clack, 2003). Future research could examine the impact of licensing and may provide competition strategies for children's manufacturers, market and retailers.
- 7) An analysis of retail stores would provide insight into the a) retailer's position in the market, b) brand value, and c) the retailers pricing strategies. Comparing those views with the results of the pricing analysis provided in this report would provide a means to measure the cohesiveness of a retailer's strategy.
- 8) Future research could audit childrenswear online offerings as it compares to retail store offerings. All retail stores chosen for this research had a website and online viewing and or purchasing options. This audit could provide information and a cross comparison of retailers, and their product and pricing strategies online as compared to in store.
- 9) The role of the consumer in model needs to be included, thus would require more research related to consumer demographics, attitudinal and purchase data.

References

- Abend, J. (2000, October). Battle of the brands [Electronic Version]. *Bobbin*, 37-38, 40.
- Ailawadi, K. L. (2001). The retail power-performance conundrum: what have we learned [Electronic Version] *Journal of Retailing*, 77, 299-318
- Ailawadi, K., Norm, B., Farris, P.W. (1995). Market power and performance [Electronic Version]. *Journal of Retailing*, 71(3), p. 211-248
- American shoppers panel. (2000). The NPD Group.
- Anonymous. (2001, June 4). Brands, flair buoy sales [Electronic Version]. *DSN Retailing Today*, 40(11), A16.
- Apparel and footwear industry surveys. (2003, July 3). Standard's and Poor's [Electronic Version].
- Appelbaum, R. P. Gereffi, G. (1994) *Global Production: the apparel industry in the Pacific Rim*, p. 46.
- Arlen, J. (2000, October 23). Brands smell sweet to apparel shoppers [Electronic Version]. *DSN retailing today*, 39(20), A6-7. Retrieved October 13, 2003 from Proquest Business Source Elite.
- Branch, S. (2003, June, 12). Going private: store brands go way upscale as designer items lose cachet [Electronic Version]. *Wall Street Journal*, pp. B1. Retrieved October 16, 2003 from Proquest Business Source Elite.
- Cardona, M. M., & Canoe, A. (2000, October 9). Retailers reaching out to capture kids' clout; from apparel to furniture, lines adapt to tap into \$150 mil spending power of youth. *Advertising Age*, 71, 16. Retrieved October 20, 2003 from InfoTrac Onefile.
- Character crazy. (2001, October 1). *DSN Retailing Today*, 40(19), 23. Retrieved October 20, 2003 from InfoTrac Onefile.
- Children's apparel. (1997, October 20). *DSN Retailing Today*, 36(20), 27. Retrieved October 1, 2003 from ABI/INFORM Global.

- Clack, E. (2003, June). Licensing business in the upswing: key players in entertainment licensing report a renewed sense of optimism as they prepare for licensing 2003, the industry trade show [Electronic Version]. *Children's Business*, 18(6), 28-30. Retrieved October 16, 2003 from InfoTrac Onefile.
- Diamond, E. & Diamond, E. (2002). *The world of fashion* (3rd ed.). New York: Fairchild Publications.
- Dickerson, K. G. (1999). *Textiles and apparel in the global community* (3rd ed.). Upper Saddle River, NJ: Merrill.
- Gereffi, G. (1994). *The organization of buyer-driven global commodity chains: How U.S. retailers shape overseas production networks*. Westport, CT: Praeger.
- Gereffi, G. (2002). Prospects for Industrial Upgrading by Developing Countries in the Global Apparel Commodity Chain [Electronic Version]. *International Journal of Business and Society* 3, (1), 27-60.
- Harvey, M., Rothe, J. T., & Lucas, L. A. (1998). The "trade dress" controversy": a case of strategic cross-brand cannibalization [Electronic Version]. *Journal of Marketing Theory and Practice*, 6, 1-15. Retrieved November 10, 2003 from ABI Inform database.
- Hoch, S. J. (1996, Winter). How should national brands think about private label [Electronic Version]. *Sloan Management Review*, 37, 89-103.
- Jarnow, J. & Dickerson, K. G. (1997). *Inside the fashion business* (6th ed.). Upper Saddle River, NJ: Merrill.
- Kotler, P. (2003). *Marketing management* (11th ed.). Upper Saddle River, NJ: Prentice Hall.
- Is time on mass retailers side [Electronic Version]. (2000, October 23). *DSN Retailing Today*, 39(20), A12. Retrieved October 20, 2003 from InfoTrac Onefile.
- Lazich, R. S. (2003). *Market Share Reporter*. Detroit, MI: Gale.
- Licensing bull's eye's: exclusives [Electronic Version]. (2002, February, 11). *DSN Retailing Today*, 41(3), A8-A9. Retrieved October 20, 2003 from InfoTrac Onefile.

- Liebeck, L. (1994). Consumers want national brands, but will buy private label [Electronic Version]. *Discount Store News*, 33, 25-26.
- Lisanti, T. (2001, February 19). Retailers continue to chase exclusivity for good reasons [Electronic Version]. *DSN Retailing Today*, 40(4), 11. Retrieved October 21, 2003 from Ebsco Business Source Elite.
- Malhotra (2000) *Marketing research, an applied orientation* 3rd ed.). Prentice Hall College Division.
- Mueller, C. S. & Smiley, E. L. (1995). *Marketing today's fashion* (3rd ed.). Upper Saddle River, NJ: Prentice Hall Education, Career and Technology.
- Orecklin, M. (2003, July 14). Spending it all on the kids: in an unsteady economy, many parents are looking the worse for wear, but they're turning their children into fashion plates [Electronic Version]. *Time*, 162(2), 42. Retrieved October 13, 2003 from InfoTrac Onefile.
- Rag-trade deals. (2003, August 9). *Economist*, 368(8336), 54-55.
- Retailing: general industry surveys. (2003, May 22). Standard's and Poor's [Electronic Version].
- Sayman, S., Hoch, S. J., & Raju, J. S. (2002). Positioning of store brands [Electronic Version]. *Marketing Science*, 21(4), 378-397.
- Solinger, J. (1988). *Apparel manufacturing handbook: analysis, principles and practice* (2nd ed.). Columbia, SC: Bobbin Media Corp.
- Striking the delicate balance [Electronic Version]. (1999, February, 22). *Discount Store News*, 38 (4), A12, A14. Retrieved October 12, 2003 from Proquest Business Source Elite.
- Top brands 2003 [Electronic Version]. (2003, October 13). *DSN Retailing Today*. Retrieved October 20, 2003, from http://www.dsnretailingtoday.com/in_this_issue/index.cfm?ID=34.

APPENDIX A: SURVEY INSTRUMENT

City	Store	Gender	Size	Brand	Product	Top	TopOffer	Bottom	BtmOffer	Sleepwear	SleepSet	SleepOffer	Price	Origin
Raleigh	Wal-Mart	F	G4-6x	Hanes Her Way	Top	Tee/Tank	20						3.94	Mexico
Raleigh	Wal-Mart	F	G7-18	Hanes Her Way	Top	Tee/Tank	20						3.94	Mexico
Raleigh	Wal-Mart	F	G4-6x	Hanes her Way	Bottom			Short/Scooter	11				3.94	Mexico
Raleigh	Wal-Mart	F	G7-18	Hanes her Way	Bottom			Short/Scooter	11				3.94	Mexico
Raleigh	Wal-Mart	F	G4-6x	No Boundaries	Top	Tee/Tank	4						6.27	El Salvador
Raleigh	Wal-Mart	F	G4-6x	No Boundaries	Bottom			Pant	4				8.32	Lesotho
Raleigh	Wal-Mart	F	G4-6x	No Boundaries	Bottom			Short/Scooter	4				5.32	Lesotho
Raleigh	Wal-Mart	F	Todd	Faded Glory Auth	Bottom			Overall/Romper	1				8.44	Nepal
Raleigh	Wal-Mart	M	Todd	Faded Glory Auth	Bottom			Short/Scooter	1					
Raleigh	Wal-Mart	F	Todd	Faded Glory Auth	Bottom			Skirt	1				7.92	Bangladesh
Raleigh	Wal-Mart	F		Faded Glory Auth	Bottom			Dress/Jumper	1				7.84	Sri Lanka
Raleigh	Wal-Mart	F	Todd	Faded Glory Auth	Bottom			Dress/Jumper	1				7.84	China
Raleigh	Wal-Mart	F	Todd	Faded Glory Auth	Bottom			Overall/Romper	1				8.92	Bangladesh
Raleigh	Wal-Mart	F	Todd	Faded Glory Auth	Bottom			Dress/Jumper	1				7.84	Sri Lanka
Raleigh	Wal-Mart	F	Todd	Faded Glory Auth	Bottom			Pant	1				9.92	Bangladesh
Raleigh	Wal-Mart	F	Todd	Faded Glory Auth	Bottom			Short/Scooter	1				6.44	Egypt
Raleigh	Wal-Mart	F	Todd	Faded Glory Auth	Bottom			Short/Scooter	1				4.88	Mexico
Raleigh	Wal-Mart	F	Todd	Faded Glory Auth	Bottom			Jean	1				7.84	Mexico
Raleigh	Wal-Mart	M	Todd	Haddad Apparel	Sleepw ear					Set	2		6.73	Syria
Raleigh	Wal-Mart	M	Todd	Haddad Apparel	Sleepw ear					Set	2		6.73	Syria
Raleigh	Wal-Mart	M	Todd	Kids Simply Basic	Sleepw ear					Set	2	2	6.82	Belize
Raleigh	Wal-Mart	M	Todd	Disney Whinnie th	Sleepw ear					Set	2	2	9.42	Sw aziland

APPENDIX B: TOP 25 RETAIL MARKETS IN THE UNITED STATES (2002)

TOP 25 RETAILING MARKETS – 2002

(Ranked by population)

POPULATION RANK-SMSA	POPULATION IN 2002 (000)	EFFECTIVE BUYING INCOME* (MIL. \$)	RANK FOR TOTAL RETAIL SALES	% U.S. SALES	TOTAL RETAIL SALES (MIL. \$)	HEALTH & PER- SONAL CARE STORE SALES (MIL. \$)	GENERAL MERCHANDISE STORE SALES (MIL. \$)	APPAREL, ACCESSORY STORE SALES (MIL. \$)	FURNITURE, HOME FURNISHING SALES (MIL. \$)
1. Los Angeles-Long Beach	9,911.5	162,414	1	3.06	114,078	6,673	11,753	7,657	2,952
2. New York	9,468.6	178,434	3	2.47	91,947	8,895	6,622	12,956	3,028
3. Chicago	8,489.5	181,652	2	2.89	107,798	7,493	9,930	7,432	2,958
4. Washington	5,187.8	127,460	4	1.85	68,758	2,966	8,431	4,379	2,644
5. Philadelphia	5,150.9	104,537	5	1.81	67,333	5,242	6,301	3,849	1,728
6. Detroit	4,468.2	93,832	7	1.70	63,484	5,673	9,785	2,665	1,772
7. Atlanta	4,456.7	94,150	6	1.80	66,901	2,150	7,499	2,828	2,039
8. Houston	4,440.2	86,501	8	1.66	61,692	2,341	7,823	3,155	2,277
9. Boston-Lawrence-Lowell- Brookton	4,059.6	93,942	10	1.57	58,490	3,432	4,854	3,927	1,445
10. Dallas	3,800.9	83,546	9	1.57	58,558	2,400	6,525	3,073	2,015
11. Phoenix-Mesa	3,552.7	67,143	12	1.33	49,659	2,623	6,064	1,589	1,456
12. Riverside-San Bernadino	3,493.9	49,658	15	1.11	41,481	2,010	6,831	1,760	907
13. Minneapolis-St.Paul	3,069.3	67,765	11	1.40	52,081	2,200	5,728	2,081	1,823
14. Orange County, CA	2,984.7	60,603	13	1.32	49,026	2,250	5,440	2,411	1,424
15. San Diego	2,960.1	54,832	16	1.10	40,832	1,701	6,019	2,181	1,187
16. Nassau-Suffolk, NY	2,803.5	63,588	14	1.23	45,756	2,713	4,932	2,771	1,263
17. Baltimore	2,635.6	52,779	18	0.93	34,565	2,156	3,428	2,246	907
18. St. Louis	2,632.1	52,286	22	0.88	32,650	1,743	4,318	1,102	847
19. Tampa-St.Petersburg- Clearwater	2,519.6	50,427	19	0.92	34,087	1,500	3,467	1,068	687
20. Seattle-Bellevue-Everett	2,509.2	63,262	17	1.06	39,492	1,901	5,810	1,961	1,127
21. Oakland	2,498.3	57,429	24	0.84	31,337	1,335	2,951	1,147	721
22. Miami	2,354.4	38,741	31	0.73	27,329	2,391	2,522	2,402	635
23. Pittsburgh	2,339.7	42,884	28	0.78	28,880	2,064	3,218	1,500	703
24. Cleveland-Lorain-Elyria	2,246.4	43,467	27	0.78	29,024	3,083	3,092	1,233	1,110
25. Denver	2,237.6	51,274	21	0.90	33,606	983	4,146	1,297	1,401

*Computed by Sales & Marketing Management. SMSA-Standard Metropolitan Statistical Area.

Source: Sales & Marketing Management.

APPENDIX C: RETAIL STORE AND RETAIL CHANNEL SELECTION

Store	A	B	C	D	E	F	G	H Option 1	I Option 2
Channel	Discount	Discount	Discount	Major Chain	Major Chain	Specilaty Chain	Major Chain	Department	Department
Mountain									
Denver, CO	x	x	x	x	x	x	x	x	x
Albuquerque, NM							No		
Reno, NV							No		
Colorado Springs, CO	x	x	x	x	x	x	x	x	No
Flagstaff, AZ							No		
Salt Lake City, UT							No		
West North Central									
Minneapolis, MN	x	x	x	x	x	x	x	No	No
Des Moines, IA	x	x	x	x	x	x	x	No	No
Topeka, KS	x	x	x	x	x	x	x	x	No
Witchita, KS	x	x	x	x	x	x	x	x	No
Omaha NE	x	x	x	x	x	x	x	x	No
Kansas City, MO	x	x	x	x	x	x	x	x	No
St. Louis, MO	x	x	x	x	x	x	x	x	x
South Atlantic									
Baltimore, MA	x	x	x	x	x	x	x	No	x
Atlanta, GA	x	x	x	x	x	x	x	x	x
Dover, DE							No		
Norfolk, VA							No		
Charleston, SC							No		
Richmond/Petersburg, VA	x	x	x	x	x	x	x	x	No
Raleigh	x	x	x	x	x	x	x	x	x
North East									
Harrisburg, PA	x	x	x	x	x	x	x	No	x
Philadelphia, PA	x	x	x	x	x	x	x	No	x
NJ	x	x	x	x	x	x	x	No	x

	Option 1 3 Cities <i>Store A, B, C, D, E, F, H</i>	Option 2 4 Cities <i>Store A, B, C, D, E, F, I</i>
Mountain	Denver, CO	Denver, CO
West North Central	St. Louis, MO	Kansas City, MO
South Atlantic	Raleigh, NC	Raleigh, NC
North East		Harrisburg, PA/New Jersey

APPENDIX D: COUNTRY OF ORIGIN REGION DEFINITIONS

Country of Origin Region	Countries Recorded in Data Collection		
North America	Belize		
	Bolivia		
	Canada		
	Costa Rica		
	Dominican Republic		
	El Salvador		
	Guatemala		
	Haiti		
	Honduras		
	Jamaica		
	Mexico		
	Nicaragua		
United States of America			
South America	Brazil		
	Columbia		
	Ecuador		
	Guyana		
	Peru		
Europe	Armenia		
	Bulgaria		
Asia	Bahrain	Macau	Sri Lanka
	Bangladesh	Malaysia	Syria
	Brunei	Maldives	Taiwan
	Cambodia	Mongolia	Thailand
	China	Nepal	Turkey
	Hong Kong	Oman	Turkmenistan
	India	Pakistan	United Arab Emirates
	Indonesia	Philippines	Uzbekistan
	Israel	Qatar	Vietnam
	Jordan	Russia	
	Korea	Saudi Arabia	
	Kuwait	Singapore	
	Africa	Egypt	
Kenya			
Lesotho			
Madagascar			
Mauritius			
Morocco			
Namibia			
South Africa			
Swaziland			
Oceania/Australia	Fiji		
	Micronesia		
	Northern Mariana Islands		
	Yap Federated States of Micronesia		