

The Importance of Apparel Attributes among Young Mexican-American Female Consumers

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ABSTRACT

This study investigated the importance of apparel attributes among 18-25 year old Mexican-American females and assessed the impact of garment type on attribute importance. An internet-based questionnaire was used to collect 206 responses largely from college and university students. The sample was controlled in terms of age, subculture, gender, and geography to limit any influence from these factors. The survey measured the importance of 20 intrinsic and extrinsic apparel attributes in the purchases of casual pants, tops, skirts, and dresses. Mean ratings provided an indication of overall attribute importance while repeated measures ANOVA was used to determine the impact of garment type on importance. Results showed that the vast majority of attributes are very important in apparel purchases, with intrinsic attributes rated higher overall than extrinsic attributes. Attribute importance varied by garment type most significantly in the purchases of pants and dresses, suggesting that consumers have unique purchase processes and expectations based on garment type. This study contributes to a greater understanding of the behavior of one of the fastest growing U.S. consumer groups. Findings can be used to guide targeted product development for this market and future apparel consumer research.

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Keywords: apparel, attributes, Mexican-American, consumer behavior

Introduction

Hispanic consumers were a \$1.3 trillion market in the United States in 2014, representing a purchasing power greater than some nations (Humphreys, 2014). The 2010 Census showed that 16% of the U.S.

population identifies as Hispanic or Latino, a 3% growth since the 2000 Census. This growth represents more than half of the total U.S. population growth between 2000 and 2010 (Ennis, Rios-Vargas, & Albert, 2011), and the Census projects that a fourth of the

U.S. population will be Hispanic by 2044 (U.S. Census Bureau, 2014).

U.S. Hispanics are an attractive market for apparel companies, not only due to population size, but also because these consumers show greater levels of shopping enjoyment and fashion leadership, especially women and millennials (Shephard, Kinley, & Josiam, 2014). To attract consumers, companies must develop an effective marketing mix, which includes products well-matched to their needs. Research showing the influence of ethnic identification on consumer behavior (Becerra, 2002; Donthu & Cherian, 1994; Faber & O'Guinn, 1987) suggests that companies wanting to target U.S. Hispanics must understand their unique needs. The current study aims to provide a better understanding of these needs by determining the most important attributes that Hispanic consumers consider in apparel purchases.

The 2006 "Proactive Product Development Integrating Consumer Requirements (PPDICR)" model by May-Plumlee and Little supports this study's intent by illustrating direct and indirect customer involvement in targeted apparel product development. The model integrates the Engel, Blackwell, and Miniard (1995) model of consumer behavior with the development process and identifies evaluative criteria as a direct customer input to the development process. Thus, companies that understand the importance of specific product attributes in the purchase decision should be able to use the information to tailor product development.

Review of Literature

Apparel Product Attributes

Consumers evaluate product alternatives based on a variety of attributes in their decision processes (Engel et al., 1995). To identify the attributes commonly evaluated in apparel purchases, researchers used keyword searches of *attribute* and/or *evaluative criteria importance* and/or *preference* to review articles in journals including *Clothing and Textiles Research*

Journal, Family and Consumer Sciences Research Journal, International Journal of Clothing Science and Technology, and Journal of Fashion Marketing and Management. While no "official" categorization of attributes exists, most attributes can be identified as either intrinsic or extrinsic (Eckman, Damhorst, & Kadolph, 1990; Hatch & Roberts, 1985; May-Plumlee & Little, 2006; Szybillo & Jacoby, 1974). For purposes of this study, intrinsic attributes can be considered either aesthetic or functional, and extrinsic attributes can be identified as brand / situational or expressive / symbolic.

Intrinsic attributes are inherent, physical attributes that if altered, would change the product itself (Szybillo & Jacoby, 1974). The aesthetic evaluation of clothing involves an assessment of beauty (Lamb & Kallal, 1992; Morganosky, 1984) or appearance, while functional evaluation involves a consideration of utility (Lamb & Kallal, 1992; Sproles, 1979).

Extrinsic attributes are external to the product design, and may be applied by retailers, manufacturers, or consumers (Eckman et al., 1990). Brand / situational attributes are those applied by retailers or manufacturers, or dependent on the context of the product in the market or consumer's existing wardrobe. Consumers use expressive / symbolic criteria to evaluate how a product makes them feel, how it satisfies needs, or how it can be used as a communicative tool (Abraham-Murali & Littrell, 1995; Lamb & Kallal, 1992).

All consumers do not evaluate product alternatives using the same criteria, and as such, it is important for companies to understand the attributes that their target consumers consider important. Of particular importance to this study, researchers have shown that attribute importance varies according to a range of demographic characteristics such as gender (Eckman, 1997; Williams, 2002; Williams & Slama, 1995), age (Cotton Incorporated, 2006; Eckman, 1997; Holbrook, 1986; Yoo, 2003), geography (Fiore & Kimle, 1997; Yoo, 2003), occupation (Cassill & Drake, 1987;

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Jenkins, 1973), education (Jenkins, 1973), income (Morganosky, 1987; Williams, 2002), and ethnicity (Bennur & Jin, 2013; Cotton Incorporated, 2002; Hsu & Burns, 2002; Jin, Park, & Ryu, 2010; Kang & Kim, 1998; Kim and Kang-Park, 1995; Lee & Burns, 1993; Rajagopalan & Heitmeyer, 2005; Yoo, 2003). The same consumers may consider different attributes important depending on the type of garment they are purchasing, for instance when shopping for pants versus tops or casual versus work apparel (Abraham-Murali & Littrell, 1995; Cassill & Drake, 1987; Eckman, 1997; Stemm, 1980; Williams, 2002).

Hispanic Apparel Consumer Preferences

Previous academic research and apparel industry efforts suggest an interest in understanding the product attributes that Hispanic consumers consider important, but there are inconsistencies in these efforts. For instance, research shows that Hispanic consumers consider color and style very important when shopping for fashion (D'Innocenzio, 1997; Korzenny & Korzenny, 2005). Many lines attempting to attract this market have interpreted this interest in color and style with a focus on bright colors, embellishments, and uniquely Hispanic styles (as defined by company designers). However, some researchers question these possibly stereotypical ideas of "Hispanic-ness," showing that Hispanic females prefer clean lines, simple styling (Jaramillo, 2005) and neutral colors (Pasarell, 1995).

Importance of functional attributes also varies depending on the study. A 1995 study by Pasarell shows that fabrication is an important consideration for Hispanic females, while a 2002 study by Cotton Incorporated shows that fiber content / fabric type was least important for Hispanic consumers than for other ethnicities. This same Cotton Incorporated study indicates that Hispanics value comfort and ease of care characteristics less than any other ethnic group, and are more willing to sacrifice these features for appearance. On

the other hand, durability, workmanship, and quality appear to be very important (Bellenger & Valencia, 1982; Cotton Incorporated, 2005; Herbig & Yelkur, 1997). In addition, good fit is considered a critical attribute, with a Cotton Incorporated (2006) study showing that these consumers will pay the most of all ethnic groups for good-fitting jeans.

Brand loyalty is one of the most often cited characteristics of Hispanic consumers, perhaps due to these consumers' efforts to create and/or maintain a certain image (Bellenger & Valencia, 1982; Kim, Jolly, & Kim, 2007; Pires & Stanton, 2005), or to minimize purchasing risk (Herbig & Yelkur, 1997; Kim & Kang-Park, 1995). Brand loyalty is especially high for Hispanics with strong ethnic identification, as they tend to seek out and purchase familiar brands (Deshpande, Hoyer, & Donthu, 1986; Donthu & Cherian, 1994). Price does not seem to be as critical for Hispanic consumers as for other ethnic groups (Cotton Incorporated, 2002). A 2007 study (Kim et al.) points out that Hispanics are more willing to pay regular price for apparel than Caucasian consumers. A 2002 study by Sanchez suggests that some Hispanics display liberal and impulsive spending habits in an attempt to prove their ability to provide for their families.

Limited research exists about the importance of expressive / symbolic attributes for Hispanic consumers. Research by Cotton Incorporated (2005) and Pasarell (1995) shows that Hispanic females want their clothing to be fashionable. This is especially true for Hispanic youth, who desire uniqueness (Chattalas & Harper, 2007). Research also shows that Hispanic consumers consider the opinions of family, friends, and other reference groups important in their purchases and enjoy shopping in groups (Pires & Stanton, 2005; Seock & Hathcote, 2010).

Research Gap and Purpose of the Study

The wide range of apparel attributes and their importance in product evaluation

makes this area ripe with research potential. Considering the size of the U.S. Hispanic market and irregularities in previous attribute preference studies, there is a gap in understanding which can be filled by the current research. While previous studies tend to focus on Hispanic consumers as a whole, the current study aims to provide a broad understanding of the behavior of a narrowly-defined Hispanic apparel consumer segment by answering the following questions:

1. Which apparel attributes do young Mexican-American females consider important in their casual apparel purchase decisions?, and
2. How do these attribute preferences vary based on garment type?

Methodology

Research questions were addressed through primary data collection and the study was approved by the institutional review board of the home institution as well as by several institutions used for sampling.

Sample

Study participation was constrained in terms of subculture, age, gender, and geography to control for the effect of these factors on research findings. Previous researchers stress the importance of recognizing subcultural variation in Hispanic market research (Korzenny & Korzenny, 2005; Luna & Gupta, 2001; Pires & Stanton, 2005). The Mexican-American population was selected because it is the largest U.S. subculture. This subculture has an average age of 25, which is younger than the average U.S. and overall Hispanic population, lending additional support for age restrictions. The sample was recruited from the four Southwestern states of California, Texas, Arizona, and New Mexico because Mexican-Americans are geographically concentrated in these areas (Brown & Patten, 2013).

To reach a large pool of potential respondents, the sample was recruited from colleges and universities within the four

identified states. Hispanic Serving Institutions and large universities were contacted through their offices of diversity / multiculturalism as well as via student organizations, sororities, and faculty. Contacts were asked to forward the survey to interested students and others who fit the study criteria. Facebook and Google advertising was used as a secondary method of sample recruitment.

Instrument

An internet-based questionnaire was designed for data collection. While overall internet use within the Hispanic market is lower than use for non-Hispanic whites and blacks, internet use is higher among younger, English-language-dominant, and educated Hispanics (Lopez, Gonzalez-Barrera, & Patten, 2013). Thus, internet survey administration was considered appropriate for this study.

The instrument included questions for informed consent, screening, and demographics, in addition to an ethnic measure and a scale to measure attribute importance. The ethnic measure to determine respondents' generational and acculturation status was included because of the potential impact of these factors on consumer behavior (Kim & Arthur, 2003; Rajagopalan & Heitmeyer, 2005). Respondents were classified as first, second, mixed-second, or third-generation+ Hispanics based on their birth country and their parents' birth countries. Marín and Marín's (1991) short acculturation scale asked respondents to provide their language use in a variety of situations (while reading and thinking, while at home and with friends) on a five-point scale from only Spanish (1) to only English (5). Respondents were then identified as highly acculturated if their answers on the scale averaged 3.01 or above, and lowly acculturated if the average was 3.00 or below.

The attribute measure used a Likert-type rating scale in which respondents rated the importance of 20 apparel attributes shown in Table 1. These 20 attributes were

chosen based on extensive literature review; they represent some of the most commonly investigated attributes and attributes that have been previously noted as important for Hispanic consumers. The 20 attributes were classified as either *intrinsic: aesthetic*, *intrinsic: functional*, *extrinsic: brand / situational*, or *extrinsic: expressive / symbolic*. These categories were not used in survey administration but only for organization and presentation of information. Respondents rated the importance of each attribute on a scale of not at all important (1) to critical (5). Though ratings of pre-selected criteria can limit the complexity of answers and contribute to data skew, it is commonly used for its ease of administration, tabulation, and

analysis. Previous studies have also relied on this method (Cassill & Drake, 1987; Eckman et al., 1990; Forney, Park, & Brandon, 2005; Hsu & Burns, 2002; Lee & Burns, 1993; Stemm, 1980). Respondents were asked to indicate the importance of the attributes when shopping for casual pants, tops, skirts, and dresses, separately, because attribute importance may vary by garment type. The term *casual* was included to provide respondents context for their ratings. Prior to rating attributes, respondents were asked if they regularly wore the garment type in question; if they stated *no*, they were not asked to rate attribute importance for that garment type. Respondents assigned their own definitions to the attributes and the term *casual*.

Table 1. Attributes included the current study

Category	Attribute
Intrinsic: Aesthetic	Color / pattern Styling Appearance Beauty / attractiveness
Intrinsic: Functional	Fit / sizing Quality (construction, durability, workmanship) Ease of care Comfort Fiber content / fabrication
Extrinsic: Brand / Situational	Versatility with existing wardrobe Price Brand name / store name Country of origin
Extrinsic: Expressive / Symbolic	Appropriateness for end use Suitability for the individual Fashionability Sexy Individuality / uniqueness Promotes high self esteem Pleasing to others

The instrument was pilot tested with 16 Hispanic females ranging from the ages of 18 to 25 to evaluate its validity. They were recruited via email solicitation from the home state of the researcher and from various Hispanic subcultures for convenience. Pilot test participants were

asked to evaluate the survey's clarity and organization. Pilot test participants noted difficulty differentiating between several attributes that were presented as separate aspects of the same construct (for instance, the pilot study included separate attributes for *aesthetic fit* and *functional fit*). The final

version of the survey included one attribute name for each of the following attributes to address these concerns – *fit / sizing*, *quality*, and *comfort*. The instrument was offered in English and Spanish, and was translated using the back translation technique (Donthu & Cherian, 1994; Marín & Marín, 1991).

Data Analysis

Mean ratings were used to summarize attribute importance across the individual garment categories for the entire sample and to address Research Question 1. One-way ANOVA analysis enabled researchers to investigate for any effect of generational status or acculturation on attribute ratings. A repeated measures ANOVA was used to determine if mean ratings for each attribute were significantly different by garment type, thus addressing Research Question 2. This analysis was limited to the portion of the sample that indicated regular wear of *all* garment types. The repeated measures ANOVA was selected because the respondents in each group (ratings by garment type) are the same, and therefore not independent. Mauchly's test for sphericity was used to determine if the differences in the variances of each combination of ratings were roughly equal, an important assumption for dependent data. Violations of sphericity ($p \leq .05$) mean that the F -statistic cannot be used without increasing the Type I error rate. If Mauchly's test was significant, the Greenhouse-Geisser estimate of sphericity (ϵ) was used to determine the type of correction needed to detect significant differences between ratings; if ϵ was less than .75, the Greenhouse-Geisser correction was used, and if ϵ was greater than .75, the Huynh-Feldt correction was used. If Mauchly's test was not significant, sphericity was assumed and the F -statistic was used. Post-hoc pairwise comparisons using the Bonferroni correction were analyzed to indicate the nature of any significant differences found in attribute ratings across garment types (Field, 2013).

Results and Discussion

Sample Characteristics

Given the method of sample recruitment (email forwards and online advertising), a response rate was not calculated. Two hundred and six usable surveys were completed, 196 in English, and 16 in Spanish. The geographic distribution of the sample closely mirrored the overall population distribution for 18-25 year old Mexican-Americans. Forty-one percent of the sample was from California, 36% Texas, 14% New Mexico, and 9% Arizona. Almost 95% of the respondents were recruited from colleges and universities, which impacted other demographic characteristics of the sample. Sixty-seven percent reported completing some college, 23% were college graduates, 6% had completed post-graduate work, and 4% reported high school as the highest educational level achieved. Sixty-seven percent reported an annual income less than \$25,000, 18% reported income above \$25,000, and 15% did not report income; it is assumed that respondents reported personal income, but this was not specified in the questionnaire. Seventy percent of the sample worked in office or professional roles, and the remaining 10% were split across occupations in service / sales and homemaking, or were not employed.

Eighteen percent of respondents were first-generation U.S. residents, 39% second-generation, 17% second-mixed-generation (one parent born in the U.S.), and 26% third-generation+. Using Marín and Marín's (1991) short acculturation scale, 72% of respondents were considered highly acculturated and 28% lowly acculturated.

Attribute Importance

Descriptive statistics showing the importance of the 20 attributes are presented in Table 2. Attributes are presented in the previously mentioned categories and by garment type. Table 2 includes mean ratings for the entire sample, but sample sizes vary by garment type because all respondents did

not indicate regular wear of each garment. Of the 206 respondents, 190 regularly wore

casual pants, 201 tops, 85 skirts, and 108 dresses.

Table 2. Attribute importance ratings by garment category for the entire sample (1-not at all important, 5-critical)

Attribute		Pants (n=190)		Tops (n=201)		Skirts (n=85)		Dresses (n=108)	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Intrinsic: Aesthetic	Color / pattern	4.26	.793	4.42	.809	4.27	.944	4.60	.735
	Styling	4.30	.776	4.48	.701	4.41	.835	4.67	.723
	Appearance	4.55	.731	4.65	.623	4.55	.716	4.74	.536
	Beauty / attractiveness	4.13	.900	4.34	.829	4.29	.784	4.56	.688
Intrinsic: Functional	Fit / sizing	4.87	.435	4.84	.406	4.87	.402	4.91	.291
	Quality (durability, construction, workmanship)	4.12	.963	4.05	.999	3.86	1.104	4.07	.964
	Ease of care	3.62	1.129	3.64	1.163	3.54	1.191	3.62	1.228
	Comfort	4.38	.825	4.30	.820	4.38	.873	4.29	.967
	Fiber content / fabrication	3.29	1.148	3.37	1.238	3.24	1.269	3.33	1.326
Extrinsic: Brand / Situational	Versatility with wardrobe	4.01	.989	3.95	1.043	3.86	1.093	3.25	1.435
	Price	4.29	.907	4.20	1.007	4.18	.953	4.00	1.119
	Brand name / store name	2.56	1.227	2.56	1.248	2.39	1.245	2.32	1.252
	Country of origin	1.87	1.068	1.89	1.081	1.68	.978	1.81	1.069
Extrinsic: Expressive / Symbolic	Appropriateness for end use	3.44	1.129	3.33	1.193	3.33	1.248	3.34	1.305
	Suitability for the individual	4.01	.954	3.77	1.044	3.84	1.089	3.92	.987
	Sexy	3.29	1.198	3.52	1.257	3.67	1.219	3.76	1.143
	Fashionability	3.83	1.035	3.96	1.053	4.20	.923	4.23	.973
	Individuality/ uniqueness	3.53	1.189	3.85	1.090	3.87	1.121	4.16	.978
	Promotes high self esteem	3.76	1.228	3.86	1.210	3.99	1.096	4.11	1.044
	Pleasing to others	2.86	1.271	3.00	1.302	3.22	1.322	3.26	1.278

Table 2. shows that respondents considered the majority of attributes at least somewhat important. Only *brand name / store name* and *country of origin* received mean ratings below 3 for all garment types, with the latter receiving consistently the lowest ratings of all attributes studied. The low rating for *brand name / store name* is interesting considering previously noted brand loyalty within the Hispanic market (Bellenger & Valencia, 1982; Deshpande et al., 1986; Donthu & Cherian, 1994; Herbig & Yelkur, 1997; Kim et al., 2007; Kim &

A Kang-Park, 1995; Pires & Stanton, 2005). This group of Hispanic youth may not feel the same motivation to purchase established brands as the older, possibly less acculturated Hispanics evaluated in previous studies, or perhaps they simply aren't loyal to specific stores. *Country of origin* was not important for these consumers, possibly due to the fact that these respondents have grown up in a global society.

Across all garments, *fit / sizing* received the highest mean ratings, approaching levels of critical importance.

Fit / sizing ratings were also similar across the sample, as this attribute had the lowest standard deviation of all attributes. The importance of garment fit is consistent with the 2006 Cotton Incorporated findings.

When studied as a whole, intrinsic attributes appeared to be more important in apparel purchases than extrinsic. *Color / pattern, styling, appearance, beauty / attractiveness, fit / sizing, and comfort* all received mean ratings greater than 4 across all garment types. Respondents clearly consider garment aesthetics to be important, which supports previous findings from D’Innocenzio (1997) and Korzenny and Korzenny (2005). High mean ratings for *comfort* do not support findings from the 2002 Cotton Incorporated study which suggested that Hispanic consumers might be willing to compromise comfort for aesthetics.

The only *extrinsic* attribute receiving consistent mean ratings over 4 was *price*. Respondents in this study do not appear to be as insensitive to price (Cotton Incorporated, 2002; Kim et al., 2007) or willing to spend impulsively as previous studies suggest (Sanchez, 2002).

Though previous research shows the importance of reference groups in Hispanic consumer decision processes (Pires & Stanton, 2005; Seock & Hathcote, 2010), respondents in this study were more concerned with purchasing apparel that serves their own individual needs. The highest rated attributes in the *extrinsic: expressive / symbolic* category were *suitability for the individual, fashionability, individuality / uniqueness, and promotes high self-esteem*, with mean ratings for each of these attributes very close to 4 for all garments. The lowest rated attribute in this category was *pleasing to others*. The importance of serving individual needs supports Chattalas and Harper’s (2007) findings, a study that also focused on Hispanic youth.

Generational status and acculturation did not appear to heavily

impact attribute ratings for respondents in this study. Of the 160 individual one-way ANOVA tests performed (20 attributes X four garment types X two ethnic factors), there were only seven significant findings. In addition, there was no discernable pattern in the attributes or garment types where significance was found.

The Impact of Garment Type on Attribute Importance

A repeated measures ANOVA was used to determine if attribute ratings were significantly different by garment type. This portion of the analysis focused only on respondents who indicated regular wear of all garment types (n=54). To reduce the possibility of Type I errors, Mauchly’s test for sphericity was used to guide any needed corrections in degrees of freedom. Post hoc pairwise comparisons using the Bonferroni correction were analyzed to indicate the nature of any significant differences found in attribute ratings across garment types (Field, 2013). Findings are presented by attribute category.

Intrinsic: Aesthetic Attributes

Table 3. presents the results of the repeated measures ANOVA testing performed to determine if the importance of intrinsic aesthetic attributes was significantly different by garment type. *Color / pattern, styling, and beauty / attractiveness* attributes showed significant differences in ratings. While post-hoc pairwise comparisons using the Bonferroni correction showed no significant difference in the *color / pattern* ratings in any garment pairs, both *styling* and *beauty / attractiveness* attributes were rated significantly different in pants and dresses purchases. Results showed in both cases that the attributes were rated significantly higher in dress purchases than pant purchases. It is possible that consumer perception of style and beauty in current dresses and pants options impacted these ratings.

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Table 3. Results of repeated measures ANOVA – Intrinsic: Aesthetic Attributes

	Pants		Tops		Skirts		Dresses		F value	p value
	Mean	SD	Mean	SD	Mean	SD	Mean	SD		
Color / pattern +	4.30	.743	4.41	.687	4.44	.691	4.56	.634	2.874	.041*
Styling	4.34	.708	4.46	.605	4.52	.693	4.69	.543	4.897	.003*
Appearance	4.61	.596	4.61	.712	4.52	.746	4.70	.603	1.919	.129
Beauty / attractiveness +	4.13	.825	4.30	.816	4.33	.700	4.46	.770	3.955	.011*

+Mauchly’s test indicated a violation of sphericity assumption. Degrees of freedom were corrected in all cases using Huynh-Feldt estimates.

*statistically different mean values within garment type comparisons

Intrinsic: Functional Attributes

Table 4. presents the results of the repeated measures ANOVA testing performed to determine if the importance of intrinsic functional attributes was significantly different by garment type.

None of the five attributes in this category showed significant differences in ratings, indicating that the attributes were considered similarly important no matter the garment type being evaluated for purchase.

Table 4. Results of repeated measures ANOVA – Intrinsic: Functional Attributes

	Pants		Tops		Skirts		Dresses		F value	p value
	Mean	SD	Mean	SD	Mean	SD	Mean	SD		
Fit / sizing #	4.87	.391	4.91	.293	4.91	.293	4.91	.293	.663	.441
Quality (construction, durability, workmanship) +	4.09	.957	4.15	.920	3.98	1.090	4.09	.896	1.236	.298
Ease of care +	3.61	1.123	3.69	1.006	3.76	1.132	3.67	1.166	.521	.653
Comfort	4.35	.731	4.31	.722	4.44	.793	4.30	.924	1.104	.349
Fiber content / fabrication +	3.52	1.112	3.44	1.208	3.56	1.239	3.57	1.354	.391	.728

Mauchly’s test of sphericity was undefined. Greenhouse-Geisser correction was used.

+ Mauchly’s test indicated a violation of sphericity assumption. Degrees of freedom were corrected in all cases using Huynh-Feldt estimates.

Extrinsic: Brand / Situational Attributes

Table 5. presents the results of the repeated measures ANOVA testing performed to determine if the importance of extrinsic brand / situational attributes was significantly different by garment type. *Versatility with existing wardrobe* and *brand name / store name* attributes showed significant differences in ratings. Post-hoc pairwise comparisons using the Bonferroni correction showed that respondents considered *versatility with existing wardrobe* significantly less important when

A shopping for dresses than for any other garment type. This finding is possibly because dresses are one-piece garments that may not depend on the versatility with other wardrobe items expected of separate tops and bottoms. While *brand name / store name* was one of the lower rated attributes overall, it was significantly more important for pants purchases than dresses purchases. A potential explanation for this finding is that consumers may rely on brands or stores for wardrobe staples such as pants,

especially if they have unique fit preferences.

Table 5. Results of repeated measures ANOVA – Extrinsic: Brand / Situational Attributes

	Pants		Tops		Skirts		Dresses		F value	p value
	Mean	SD	Mean	SD	Mean	SD	Mean	SD		
Versatility with wardrobe +	4.13	.912	3.98	1.037	4.02	1.055	3.57	1.312	7.920	.000*
Price	4.22	.925	4.17	1.060	4.17	.986	4.02	1.173	1.065	.366
Brand name / store name +	2.72	1.265	2.61	1.250	2.46	1.209	2.33	1.229	5.444	.003*
Country of origin +	1.89	1.160	1.96	1.165	1.81	1.100	1.89	1.160	.797	.475

+Mauchly's test indicated a violation of sphericity assumption. Degrees of freedom were corrected in all cases using Huynh-Feldt estimates.

*statistically different mean values within garment type comparisons

Extrinsic: Expressive / Symbolic Attributes

Table 6. presents the results of the repeated measures ANOVA testing performed to determine if the importance of extrinsic expressive / symbolic attributes was significantly different by garment type. Four attributes in this category, *sexy*, *fashionability*, *individuality / uniqueness*, and *pleasing to others*, showed significant differences in ratings by garment type. Post-hoc pairwise comparisons using the Bonferroni correction showed that respondents considered *fashionability*

significantly more important when shopping for skirts and dresses than when shopping for pants. Also, the attributes *sexy* and *individuality / uniqueness* were significantly more important for dresses than pants. The fact that these attributes were less important when shopping for pants may be due to fewer styles and fabrications in pants versus skirts and dresses, or different wear expectations for these garments. Post-hoc pairwise comparisons showed no significant difference in the *pleasing to others* ratings in any garment pairs.

Table 6. Results of repeated measures ANOVA – Extrinsic: Expressive/Symbolic Attributes

	Pants		Tops		Skirts		Dresses		F value	p value
	Mean	SD	Mean	SD	Mean	SD	Mean	SD		
Appropriateness for end use +	3.61	1.054	3.41	1.125	3.63	1.186	3.67	1.244	2.218	.100
Suitability for the individual +	4.20	.877	3.94	.878	3.96	.971	4.06	.856	2.191	.095
Sexy +	3.44	1.160	3.74	1.169	3.74	1.102	3.87	1.010	5.592	.002*
Fashionability +	3.93	.866	4.19	.953	4.31	.865	4.39	.811	7.512	.000*
Individuality / uniqueness +	3.80	1.071	4.06	1.071	4.04	1.009	4.20	.855	5.725	.002*
Promotes high self esteem	4.04	1.181	4.09	1.103	4.04	1.098	4.20	.998	1.247	.295
Pleasing to others +	2.83	1.356	3.04	1.317	3.20	1.265	3.22	1.254	3.809	.016*

+Mauchly's test indicated a violation of sphericity assumption. Degrees of freedom were corrected in all cases using Huynh-Feldt estimates.

*statistically different mean values within garment type comparisons

Implications for Future Research

This study is an important contribution to the field of Hispanic consumer research. It focuses on a subset of the Hispanic market that is experiencing significant growth in the U.S – Mexican-American youth. Through its attempt to understand attribute importance in various garment purchases, it presents a broad picture of the apparel purchase process of these consumers. Results are particularly applicable in the front-end of apparel product development, including line planning and research, and design and concept development, showing the application of the May-Plumlee and Little (2006) PPDICR model used as the foundation for this study.

Findings show that young Mexican-American females conduct a complex decision process in their casual apparel purchases, and the process differs slightly by garment type. The vast majority of the 20 attributes studied are considered at least somewhat important, if not critical, in their purchases. *Intrinsic* attributes are more important overall than *extrinsic* attributes, suggesting that product features can be manipulated to satisfy customer demands. In particular, the high ratings for *fit / sizing* clearly indicate the need for apparel companies to focus on fit preferences and needs for this market. In addition, attribute importance seems to be most different in pant and dress purchases. While this could be a reflection of perceived differences in available styles between these garment types currently in the market, it does imply varying expectations for these purchases. The relative lack of importance of attributes such as *brand name / store name* and *country of origin* suggests great availability for market competition and sourcing options.

This study presents opportunities for future research. A future study could expand on the findings related to individual attributes. For instance, studies could focus on defining fit preferences within this market, understanding the physical body characteristics that predominate in the

market, and translating this information into fit recommendations for this group. In addition, future studies could determine the appearance and style features these consumers desire given these attributes' importance. Furthermore, qualitative studies could yield more understanding into the reasons behind attribute importance. Finally, a similar study could be conducted on other subcultures, ages, genders, and geographical areas within the Hispanic market, and the study could be extended to other ethnic groups.

The study was limited by methodological issues in sampling and instrument development. Due to sample restrictions to 18-25 year old Mexican-American females from the Southwestern U.S., results are not generalizable to the entire Hispanic population. In addition, the primary sample recruitment from colleges and universities skewed the sample toward more educated Hispanics who tend to be more acculturated. Internet survey administration further skewed the sample toward more acculturated Hispanics. Respondents also self-selected to participate, which could also impact results. As previously mentioned, ratings of pre-selected attributes are sometimes associated with skew, as respondents are inclined to rate some criteria higher than they might actually be considered in actual purchases. Also, findings are presented with the understanding that respondents used their own definitions of the individual attributes and the term *casual*, as these terms were not formally defined in the survey. Finally, while respondents were asked about garment wear prior to rating attributes, they were not asked questions to gauge their general interest in style and fashion. Respondents with greater interest in this area may rate attributes differently than respondents not as interested in style and fashion or more interested in function.

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References

- Abraham-Murali, L., & Littrell, M. A. (1995). Consumers' conceptualization of apparel attributes. *Clothing and Textiles Research Journal*, 13(2), 65-74. DOI: 10.1177/0887302X9501300201
- Becerra, E. P. (2002). The impact of felt ethnicity on purchasing behavior: Hispanic influence on other cultures. Proceedings from *Decision Sciences Institute Annual Meeting*, 1466-1471.
- Bellenger, D. N., & Valencia, H. (1982). Understanding the Hispanic market. *Business Horizons*, 25(3), 47-50.
- Bennur, S. & Jin, B. (2013). Cross-cultural investigation of US and Indian consumer's apparel attribute choices applying Kano's theory. *Journal of Fashion Marketing and Management*, 17(3), 306-321. DOI: 10.1108/JFMM-03-2012-0007
- Brown, A. & Patten, E. (2013). *Hispanics of Mexican origin in the United States, 2011*. Pew Research Center. Retrieved from <http://www.pewhispanic.org/files/2013/06/MexicanFactsheet.pdf>
- Cassill, N. L., & Drake, M. F. (1987). Apparel selection criteria related to female consumers' lifestyle. *Clothing and Textiles Research Journal*, 6(1), 20-28. DOI: 10.1177/0887302X8700600104
- Chattalas, M., & Harper, H. (2007). Navigating a hybrid cultural identity: Hispanic teenagers' fashion consumption influences. *Journal of Consumer Marketing*, 24(6), 351-357. DOI: 10.1108/07363760710822936
- Cotton Incorporated. (2002). Understanding the multicultural consumer base. *Textile Consumer*. Cary, NC: Cotton Incorporated.
- Cotton Incorporated. (2005, October). *Latina fashion: From Vogue to K-mart*. Retrieved March 8, 2007 from <http://www.cottoninc.com/pressreleases/?articleID=354>
- Cotton Incorporated. (2006, May). *Supply chain insights: The Hispanic consumer*. Retrieved March 20, 2008 from http://www.cottoninc.com/SupplyChainInsights/TheHispanicConsumer/TheHispanicConsumer.pdf?CFID=7323430&CF_TOKEN=98681696
- D'Innocenzio, A. (1997). The new style: Multicultural. *Women's Wear Daily*, 173, 38.
- Deshpande, R., Hoyer, W. D., & Donthu, N. (1986). The intensity of ethnic affiliation: A study of the sociology of Hispanic consumption. *The Journal of Consumer Research*, 13(2), 214-220. DOI: 10.1086/209061
- Donthu, N., & Cherian, J. (1994). Impact of strength of ethnic identification on Hispanic shopping behavior. *Journal of Retailing*, 70(4), 383-393. DOI: 10.1016/0022-4359(94)90006-X
- Eckman, M. (1997). Attractiveness of men's suits: The effect of aesthetic attributes and consumer characteristics. *Clothing and Textiles Research Journal*, 15(4), 193-202. DOI: 10.1177/0887302X9701500401
- Eckman, M., Damhorst, M. L., & Kadolph, S. J. (1990). Toward a model of the in-store purchase decision process: Consumer use of criteria for evaluating women's apparel. *Clothing and Textiles Research Journal*, 8(2), 13-22. DOI: 10.1177/0887302X9000800202
- Engel, J. F., Blackwell, R. D., & Miniard, P. W. (1995). *Consumer Behavior* (8th ed). Fort Worth, TX: The Dryden Press.
- Ennis, S.R., Rios-Vargas, M., & Albert, N. (2011). *The Hispanic Population: 2010*. U.S. Census Bureau. Retrieved from <http://www.census.gov/prod/cen2010/briefs/c2010br-04.pdf>
- Faber, R. J., & O'Guinn, T. C. (1987). Ethnicity, acculturation, and the importance of product attributes. *Psychology and Marketing*, 4(2), 121-134. DOI: 10.1002/mar.4220040205
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed). London: Sage Publications Ltd.

- Fiore, A. M., & Kimle, P. A. (2010). *Understanding aesthetics for the merchandising and design professional* (2nd ed). New York, NY: Fairchild Publications.
- Forney, J. C., Park, E. J., & Brandon, L. (2005). Effects of evaluative criteria on fashion brand extension. *Journal of Fashion Marketing and Management*, 9(2), 156-165. DOI: 10.1108/13612020510599312
- Hatch, K., & Roberts, J. (1985). Use of intrinsic and extrinsic cues to assess textile product quality. *International Journal of Consumer Studies*, 9(4), 341-357. DOI: 10.1111/j.1470-6431.1985.tb00103.x
- Herbig, P., & Yelkur, R. (1997). Differences between Hispanic and Anglo consumer expectations. *Management Decisions*, 35(2), 125-132. DOI: 10.1108/00251749710160287
- Holbrook, M. B. (1986). Aims, concepts, and methods for the representation of individual differences in esthetic responses to design features. *Journal of Consumer Research*, 13(3), 337-347. DOI: 10.1086/209073
- Hsu, H. J., & Burns, L. D. (2002). Clothing evaluative criteria: A cross-national comparison of Taiwanese and United States consumers. *Clothing and Textiles Research Journal*, 20(4), 246-252. DOI: 10.1177/0887302X0202000408
- Humphreys, J.M. (2014). *The Multicultural Economy*. Selig Center for Economic Growth. Retrieved from <http://www.terry.uga.edu/about/centers-institutes/selig/publications>
- Jaramillo, S. (2005, June). What Latinas want: The billion-dollar question marketing executives need answered. *Hispanic Magazine.com*. Retrieved September 8, 2008 from <http://www.hispaniconline.com/magazine/2005/June/Forum/index.html>
- Jenkins, M. C. (1976). Consumer types based on evaluative criteria underlying clothing decisions. *Home Economics Research Journal*, 4(3), 150-162. DOI: 10.1177/1077727X7600400301
- Jin, B., Park, J.Y., & Ryu, J.S. (2010). Comparison of Chinese and Indian consumers' evaluative criteria when selecting jeans. *Journal of Fashion Marketing and Management*, 14(1), 180-194. DOI: 10.1108/13612021011025492.
- Kang, J., & Kim, Y. (1998). Ethnicity and acculturation: Influences on Asian American consumers' purchase decision making for social clothes. *Family and Consumer Sciences Research Journal*, 27(1), 91-117. DOI: 10.1177/1077727X980271004
- Kim, S., & Arthur, L. B. (2003). Asian-American consumers in Hawaii: The effects of ethnic identification on attitudes toward ownership of ethnic apparel. *Clothing and Textiles Research Journal*, 21(1), 8-18. DOI: 10.1177/0887302X0302100102
- Kim, H. Y., Jolly, L., & Kim, Y. K. (2007). Future forces transforming apparel retailing in the United States: An environmental scanning approach. *Clothing and Textiles Research Journal*, 25(4), 307-322. DOI: 10.1177/0887302X07306851
- Kim, Y., & Kang-Park, J. (1995). The shopping patterns of ethnic consumer groups in the United States. *Journal of Shopping Center Research*, 2, 65-89. Retrieved from jrdelisle.com/JSCR/IndArticles/Kim_N1_95.pdf
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Korzenny, F., & Korzenny, B. A. (2005). *Hispanic marketing: A cultural perspective*. Burlington, MA: Elsevier Inc.
- Lamb, J. M., & Kallal, M. J. (1992). A conceptual framework for apparel design. *Clothing and Textiles Research Journal*, 10(2), 42-47. DOI: 10.1177/0887302X9201000207
- Lee, M., & Burns, L. D. (1993). Self consciousness and clothing purchase criteria of Korean and United States college women. *Clothing and Textiles Research Journal*, 11(4), 32-40. DOI: 10.1177/0887302X9301100405

- Lopez, M.H., Gonzalez-Barrera, A., & Patten, E. (2013). Closing the digital divide: Latinos and technology adoption. Retrieved from <http://www.pewhispanic.org/2013/03/07/ii-internet-use-3/>
- Luna, D., & Gupta, S. F. (2001). An integrative framework for cross-cultural consumer behavior. *International Marketing Review*, 18(1), 45-69. DOI: 10.1108/02651330110381998
- Marín, G., & Marín, B. V. (1991). *Research with Hispanic populations*. Newbury Park, CA: Sage Publications.
- May-Plumlee, T., & Little, T. J. (2006). Proactive product development integrating consumer requirements. *International Journal of Clothing Science and Technology*, 18(1), 53-66. DOI: 10.1108/09556220610637512
- Morganosky, M. (1984). Aesthetic and utilitarian qualities of clothing: Use of multidimensional clothing value model. *Family and Consumer Science Research Journal*, 13(1), 12-20. DOI: 10.1177/1077727X8401300103
- Morganosky, M. (1987). Aesthetic, function, and fashion consumer values: Relationships to other values and demographics. *Clothing and Textiles Research Journal*, 6(1), 15-19. DOI: 10.1177/0887302X8700600103
- Pasarell, I. (1995). *Hispanic women: Lifestyles and apparel shopping patterns* (Unpublished doctoral dissertation). Florida State University, Tallahassee, FL.
- Pires, G. D., & Stanton, P. J. (2005). *Ethnic marketing: Accepting the challenge of cultural diversity*. Hong Kong: C&C Offset Printing Co. Ltd.
- Rajagopalan, R., & Heitmeyer, J. (2005). Ethnicity and consumer choice: A study of consumer levels of involvement in Indian ethnic apparel and contemporary American clothing. *Journal of Fashion Marketing and Management*, 9(1), 83-105. DOI: 10.1108/13612020510586424
- Sanchez, M. R. (2002). *A comparison of mall shopping behavior between Hispanic-Americans and Anglo-Americans* (Unpublished master's thesis). University of North Texas, Denton, TX.
- Seock, Y. & Hathcote, J.M. (2010). A cross-cultural comparison of Hispanic American and white American adolescents' use of reference agents for apparel shopping. *Family and Consumer Sciences Research Journal*, 39(1), 45-56. DOI: 10.1111/j.1552-3934.2010.02044.x
- Shephard, A.J., Kinley, T.R., & Josiam, B.M. (2014). Fashion leadership, shopping enjoyment, and gender: Hispanic versus Caucasian consumers' shopping preferences. *Journal of Retailing and Consumer Services*, 21(3), 277-283. DOI: 10.1016/j.jretconser.2014.02.006
- Sproles, G. B. (1979). *Fashion: Consumer behavior toward dress*. Minneapolis, MN: Burgess Publishing Company.
- Stemm, F.A E. (1980). *Clothing attitudes and evaluative criteria used by employed women differing in feminine role orientation and work orientation: Emphasis on the single-again adult* (Unpublished doctoral dissertation). The Ohio State University, Columbus, OH.
- Szybillo, G., & Jacoby, J. (1974). Intrinsic versus extrinsic cues as determinants of perceived product quality. *Journal of Applied Psychology*, 59(1), 74-78. DOI: 10.1037/h0035796
- U.S. Census Bureau. (2014). Projections of the population by sex, Hispanic origin, and race for the United States: 2015 to 2060. In *2014 national population projections: summary tables*. Retrieved from <http://www.census.gov/population/projections/data/national/2014/summarytables.html>
- Williams (2002). Social class influences on purchase evaluation criteria. *Journal of Consumer Marketing*, 19(3), 249-276. DOI: 10.1108/07363760210426067

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Williams, T. G., & Slama, M. E. (1995). Market mavens' purchase decision evaluative criteria: Implications for brand and store promotion efforts. *Journal of Consumer Marketing*, 12(3), 4-21.

Yoo, S. (2003). Design elements and consumer characteristics relating to design preferences of working females. *Clothing and Textiles Research Journal*, 21(2), 49-62. DOI: 10.1177/0887302X0302100201

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