SPOUSAL PURCHASING BEHAVIOR AS AN INFLUENCE ON BRAND EQUITY

Robert D. Green, Lynn University Hui-Chu Chen, TransWorld Institute of Technology

ABSTRACT

A debate has been gaining notice between Wall Street (financial market) and Main Street (consumer market) as to what level the firm's brand equity actually is. Married household purchasing is a large segment of the retail sector and important to brand strategy. Furthermore, a thirty-year trend has been that more husbands are not working and more wives are. This has impacted marital shopping roles and its influence on branding efforts. This is a Main Street (consumer, retail market) study of customer-based brand equity that focuses on married males and females. Using comparative (t-test) and multivariate (regression) analysis of 263 hypermarket shoppers, particular influences are significant to brand equity. Store image, price deal, distribution intensity and purchase experience are important factors to married males and females and females and females and married market shoppers, the results have implications for branding researchers and brand managers.

KEYWORDS: Branding, marketing strategy, household purchase behavior

JEL: M31

INTRODUCTION

Onsumer markets have reached greater competitive intensiveness from such factors as rapid changing technology, increasing levels and methods of marketing communications, fragmented purchase behavior and more recently the declining global economic conditions. These factors coupled with the family structure, specifically, married and single households, are impacting firms as to how business is conducted and how consumers' brand purchase decisions are made (or postponed or not at all made) that is likely to have a lasting effect in the United States and global markets.

The United States consumer markets have experienced a changing socio-demographic characteristic – the family structure – during the past several decades. Since 1970 more women have entered the workforce (U.S. Bureau of the Census, 2000, 2007), and "the proportion of the population made up by married couples with children decreased, and the proportion of single mothers increased, while the median age at first marriage grew over time" (American's Families and Living Arrangements, 2001, p. 1). Total households have almost doubled (now 116 million) and non-married households more than tripled (now 57 million) since 1970 while married households increased by only 31% (now 58 million). Furthermore, there has been a significant increase in the number of working wives. In 1980, there were an average of 8.3 husbands and 5.8 wives employed in every 10 married households. By 2007, fewer husbands (7.9) and more wives (6.5) were working in these households. This higher number of working wives has contributed to an increase of an average household having 1.41 in 1980 to 1.44 in 2007 working spouses (U.S. Bureau of the Census, 2000, 2007). The once viable, growing 2 or more person married household market has now become one with slow growth and the trend of declining number of working husbands and an increase of working wives has influenced household purchased decisions.

As the end of the first decade of the 21st century approaches, businesses worldwide are facing not only the accustomed competitive consumer markets, but also economies that are in a recession. As consumers decrease spending resulting from lower household earned income or even unemployment, and increasing personal debt (Colvin, 2008), retailers during 2008 experienced only a .9% sales increase, the lowest in 50

years (D'Innocenzio, 2009). While retailers are using discounts and other markdown methods as new or seasonal products are introduced and at peak retailing periods (O'Connell and Dodes, 2009), consumer product manufacturers are experiencing a decline in sales resulting from consumers buying down from national brands to private, or store brands (Neal, 2009). Electronics and digital media retailer Circuit City with the second largest market share has liquidated (Bustillo, 2009). Construction material and home improvement retailers are taking investment and cost reduction actions, e.g., Lowe's reducing new store opening by 50%, Home Depot closing its upscale division (Expo Design Centers stores) (Lloyd, 2008). The economic recession impact has spanned all industry sectors from the manufacturers and suppliers to retailers to the consumer.

Branding, on the other hand, has experienced through the 1990s and well into the 2000s enormous growth from consumers' preferences and for increased business financial value. This brand equity has risen to as high as 80% of some firms' financial value, e.g., Nike (Gerzema and Lebar, 2008). As expected, during the economic recession consumers' purchases have been for bargain-priced brands. Consumer product manufacturers with a large product mix are able to minimize revenue loss by having multiple brands in product categories. For example, Procter & Gamble has had a 10% increase for its lower priced Gain detergent while a similar decline for its market leading Tide brand (Byron, 2008). However, retailers, e.g., Target, have not had this advantage, and most of them have experienced a lost customer base to low price competitors, e.g., Wal-Mart (Bustillo and Zimmerman, 2008). The challenge is to recapture the brand preference consumers and their household purchases in the next decade's post-recession market.

The purpose of this research is to establish the consumers' characteristics, retailers' marketing strategy and branding relationship as perceived by married men and women. The objective is to identify and analyze the comparative links between husbands and wives, the marketing mix (product, price, place, promotions) and retail brand equity (brand loyalty, brand awareness, perceived quality, brand association). Furthermore, the study determines the shoppers' (husbands and wives) characteristics, retailers' marketing mix that leads to, or cause, brand equity. This study is to determine: Are there different influences between husband and wife purchase decisions that impact brand equity? What are the personal and shopping characteristics of the husband or wife and the marketing strategies that influence brand equity? The study includes a review of the theoretical and empirical literature, the methodology, data analysis results, and the discussion, conclusions, limitations and future research opportunities.

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

Consumer decision-making progresses through seven steps (model) – need recognition, search for information, pre-purchase evaluation of alternatives, purchase, consumption, post-consumption evaluation and divestment (Blackwell, Miniard and Engel, 2006). Blackwell et al. (2006) identify five environmental influences – family, situation, personal influences, social class and culture – on decision making. Finally, individual consumer differences occur – consumer resources, motivation, knowledge, attitudes, and personality, values and lifestyle – that impact the brand decision-making process (Blackwell et al. 2006).

Household purchasing brings on decision-making roles (Gil, Andrés and Salinas, 2007). In a study of Belgian married households, Davis and Rigaux (1974) theorized that the decision-making roles changes between spouses in each phase (problem recognition, search, decision) of the buying process. The empirical results determined that there were, in fact, changes and established the decisions by automatic, husband-dominated, wife-dominated, and joint (syncratic) roles. Furthermore, these roles have implications to marketing strategy, branding and brand selections. The marketing mix as a strategy has been well established in research and marketing practices (McCarthy, 1960; Kotler and Keller, 2006). Yoo, Donthu and Lee (2000) recognize the marketing mix elements (marketing efforts) as antecedents of

brand equity, and operationalized the retail marketing mix as (1) price, (2) advertising spending, (3) price deals, (4) store image, and (5) distribution intensity.

Brand equity may be established by two perspectives. First, investors place an intangible value for a firm's worth of which brand equity is a major component. On the other hand, consumers of that firm's products also view its brands as having a level of value to them. The methods are from two very different perspectives, and naturally will not have the same brand equity (value). A recent research study has found an alarming difference between Wall Street (financial markets) and Main Street (consumer markets) with investors placing a much higher value on brand value than consumers (Gerzema and Lebar, 2008). For this study, consumer-based brand equity (CBBE) is the basis and is empirically tested for husbands and wives' value of brands. Therefore, branding includes the consumers' (1) brand loyalty, (2) brand awareness, (3) perceived quality and (4) brand association dimensions (Aaker, 1991; Keller, 1993). Furthermore, branding is applicable to retail brands, e.g., retail and store image, perceived retail brand association, as well as to retail brand equity measurement (Ailawadi and Keller, 2004). For this study, the customer is either a married male or female retail shopper. Hence, this research is within the framework of the husband-wife consumer decision making role (Davis and Rigaux, 1974) and process (Blackwell, et al., 2006), retailers' marketing strategy (McCarthy, 1960) that influence customer-based brand equity (Aaker, 1991; Keller 1993).

Loyalty in the context of branding is "a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior" (Oliver, 1999, p. 34). Brand loyalty is influenced by the value, e.g., low or competitive price, coupons, convenience, that consumers place on a specific product or store which results in continuous purchases. Married consumers are more likely than single shoppers to economize and view price more a determinate of loyalty (Zeithaml, 1985), and wives are more price sensitive and efficient shoppers than husbands are (Strober and Weinberg, 1980). Furthermore, coupons and other short-term price deals increase shopping frequency and purchase decisions (Arndt, 1967) that increases brand loyalty (Jacoby, Szybillo and Berning, 1976). Convenience and time constraints impact repeat purchases. Longer the time between making purchases, the more likely the consumer will not make the same buying decision at the time of the next purchase (Jacoby et al., 1976).

Brand awareness is the "customers' ability to recall and recognize the brand, as reflected by their ability to identify the brand under different conditions linking the brand – the brand name, logo, symbol, and so forth – to certain associations in memory" (Keller, 2003, p. 76). Brand awareness relies on marketing communications and to provide effective retrieval cues from consumers' memory for specific brands (Lynch and Srull, 1982). Married shoppers use information more in purchase decisions than non-married consumers do (Zeithaml, 1985). In married households, product information may be used by one spouse or the other which depends on their particular interests or household roles/responsibilities (Davis and Rigaux, 1974). The product message should be targeted to the user who may, or may not be the purchaser. The spouse who uses the purchase. For example, wives generally have been the spouse to prepare meals and perform housekeeping duties, while husbands tend to decide on less often purchased products, e.g., automobiles, insurance, electronics (Davis and Rigaux, 1974). Furthermore, two working spouse households with greater time constraints would more likely know, or seek information for retail stores with large product assortments to reduce purchase time (one stop shopping). Therefore, product or retailer communications to married households is critical to inform and to build image.

Perceived quality is the "customer's judgment about a product's overall excellence or superiority (that) is (1) different from objective or actual quality, (2) a higher level abstraction rather than a specific attribute of a product, (3) a global assessment that in some cases resembles attitude, and (4) a judgment usually made within a consumer's evoked set" (Zeithaml, 1988, pp. 3 and 4). Consumers' perceived quality might be influenced by "personal product (service) experiences, unique needs, and consumption situations" (Yoo et al., 2000, p. 197). These can be functional and psychological experiences resulting from the brand or store image. For retailers, this would require an interest and effort for store layout, pricing strategies, product offerings and assortment, retail format and service level that meets the expected (perceived) quality by the consumers (Lindquist, 1974-1975). Also for the retailer, these may be more of a challenge targeting the wife consumer than for her husband. For example, females, generally, rate service delivery lower than males (Snipes, Thomson and Oswald, 2006). Besides store image, advertising spending is viewed as an effort to build brands, and has been associated with consumers' perceived quality of brands (Cobb-Walgren, Ruble and Donthu, 1995).

Brand association "consists of all brand-related thoughts, feelings, perceptions, images, experiences, beliefs, attitudes" (Kotler and Keller, 2006, p. 188), and "is anything 'linked' in memory to a brand" (Aaker, 1991, p. 109). By definition, store image is a critical influence on brand association. The psychological attributes of store image, e.g., sense of belonging, feelings, excitement/atmosphere (Lindquist, 1974-1975), are important to brand association. Emotional, e.g., pleasantness, arousal, dominance, and cognitive, e.g., quality and variety of merchandise, value of money, price spending, factors also influence purchase decisions (Donovan, Rossiter, Marcoolyn and Nesdale, 1994). Female "shoppers' emotional states within the store predict actual purchase behavior – not just attitudes or intentions (and) emotional variables (relative) to (in-) store behavior is independent of cognitive variables" (Donovan et al., 1994, p. 291).

TESTABLE HYPOTHESES

Thus, husband and wife shoppers may have differing degrees of brand loyalty, awareness, perceived quality and association that result in varying degrees of customer-based brand equity. From the preceding literature, the following hypotheses are tested for this study.

There is a relationship between value, e.g., price and price deals (Arndt, 1967; Zeithaml, 1985) and distribution intensity, e.g., availability (convenience) (Jacoby et al., 1976) with brand loyalty (Jacoby et al., 1976; Zeithaml, 1985; Oliver, 1999). Therefore,

H₁ Price, price deals, distribution intensity positively, and significantly influence brand loyalty.

From the literature, there is a relationship between price (Zeithaml, 1985), marketing communications, e.g., advertising spending (Lynch and Srull, 1982), price deals (Arndt, 1967), store image (Lindquist, 1974-1975; Yoo et al., 2000) and distribution intensity (Davis and Rigaux, 1974) with brand awareness (Lynch and Srull, 1982; Keller, 2003). Therefore,

H₂ Price, advertising spending, price deals, store image, distribution intensity positively, and significantly influence brand awareness.

Furthermore, there is a relationship between advertising spending (Cobb-Walgren, Ruble and Donthu, 1995), store image (Lindquist, 1974-1975; Snipes, Thomson and Oswald, 2006), distribution intensity (Jacoby et al., 1976) with perceived quality (Zeithaml, 1988; Cobb-Walgren, Ruble and Donthu, 1995; Yoo et al., 2000). Therefore,

H₃ Advertising spending, store image, distribution intensity positively, and significantly influence perceived quality.

There is a relationship between price (Zeithaml, 1985), price deals (Arndt, 1967), store image (Lindquist, 1974-1975; Donovan et al., 1994), distribution intensity (Jacoby et al., 1976) with brand association (Donovan et al., 1994). Therefore,

H₄ Price, price deals, store image, distribution intensity positively, and significantly influence brand association.

Finally, all predictor variables of price (Zeithaml, 1985), advertising spending (Lynch and Srull, 1982), price deals (Arndt, 1967), store image (Lindquist, 1974-1975; Snipes, Thomson and Oswald, 2006), distribution intensity (Jacoby et al., 1976) have a relationship to brand equity (Zeithaml, 1988; Aaker, 1991; Keller, 1993, 2003; Cobb-Walgren, Ruble and Donthu, 1995; Oliver, 1999). Therefore,

H₅ Price, advertising spending, price deals, store image, distribution intensity positively, and significantly influence brand equity.

In addition, we are proposing certain shoppers' characteristics (e.g., age, education, occupation, income) and select shopping experiences (e.g., purchase amount, prior purchase experience, shopping frequency, retail store) that could further explain differences in husband and wife brand equity. Therefore, this study examines shopper and shopping characteristics, marketing strategies as perceived by the consumer and customer-based brand equity.

DATA AND METHODOLOGY

During 2008 and into 2009, the global economy has experienced the most severe recession since the Great Depression of the 1930s. This has caused retail stores to close, chains to consolidate or to go out of business (Bustillo, 2009; Rohwedder, 2009). At the same time, retail shoppers have become more price sensitive by reducing purchases and/or switching to low-price mass market merchandisers (Bustillo and Zimmerman, 2008). Furthermore, there has been a trend of slow growth in married households and an increase in wives being employed (U.S. Bureau of the Census, 2000, 2007). The current competitive retail environment provides an opportunity to investigate and find factors that lead to increasing brand equity from adult household members – husbands and wives. Consumer products and retailers may target this segment to gain greater success in a post-recession market. Moreover, global retailers, e.g., Wal-Mart, Carrefour, Tesco, continue to expand with new store openings in long-term growth markets, e.g., China (Fong, 2009).

Data were collected in a major Taiwan city at four major mega-retailers, or hypermarkets. The sample design was proportionate as to the respective estimated market share – Carrefour (35%), R-T Mart (30%), Costco (25%) and Géant (10%) – and across shopping times of weekdays and weekends, as well as daytime and evening periods. The questionnaire included three parts. First, the researcher developed a 9-question shopper demographic profile and shopping characteristics section. Second, a 15-item retail marketing mix instrument developed by Yoo, Donthu and Lee (2000) was used in their product branding study. The retail marketing mix elements (price, advertising spending, price deals, store image and distribution intensity) were measured by a 5-point Likert-type scale (1 = Strongly Disagree to 5 = Strongly Agree). Third, a 23-item instrument developed by Pappu and Quester (2006) was used in their customer-based brand equity (CBBE) (brand loyalty, brand awareness, perceived quality and brand association) study of specialty and department stores. This CBBE section items were measured by a 7-point Likert-type scale (1 = Strongly Disagree to 7 = Strongly Agree).

The sample includes 263 participants with near equal representation of husbands (n=132) and wives (n=131). See Table 1. About two-thirds of the males and 78% of the females were between the ages of

Characteristics	Husband Shopper		Wife Shopper		Total	
	No.	%	No.	%	No.	%
Total	132	50.2	131	49.8	263	100.0
Age						
18-24	2	1.5	1	.8	3	1.1
25-34	36	27.3	49	37.4	85	32.3
35-44	52	39.4	53	40.5	105	40.0
45-54	23	17.4	18	13.7	41	15.6
55 and Older	19	14.4	10	7.6	29	11.0
Educational Level						
College Graduate Degree	5	3.8	7	5.3	12	4.6
College Undergraduate Degree	37	28.0	59	45.0	96	36.5
Attended College (No Degree)	7	5.3	3	2.3	10	3.8
High School Graduate	66	50.0	52	39.7	118	44.9
Less Than High School Graduate	17	12.9	10	7.7	27	10.2
Occupation						
Corporate Executive & Manager	5	3.8	12	9.2	17	6.5
Administrative Personnel	13	9.8	9	6.9	22	8.4
Sales, Technician, Clerical	75	56.9	50	38.0	125	47.5
Skilled Labor	10	7.5	48	36.7	58	22.0
Unskilled Labor	29	22.0	12	9.2	41	15.6
Income (Monthly)*						
US\$640 or Less	26	19.7	5	3.8	31	11.8
US\$641-\$1,120	48	36.4	16	12.2	64	24.3
US\$1,121-\$1,600	26	19.7	67	51.1	93	35.4
US\$1,601-\$2,080	9	6.8	25	19.1	34	12.9
US\$2,081-\$2,560	10	7.6	9	6.9	19	7.2
US\$2,561 or More	13	9.8	9	6.9	22	8.4
Avg. Purchase Amount (Per Visit)*						
US\$16.00 or Less	11	8.3	12	9.2	23	8.7
US\$16.01-\$48.00	39	29.5	39	29.7	78	29.7
US\$48.01-\$80.00	41	31.1	30	22.9	71	27.0
US\$80.01-\$112.00	19	14.4	17	13.0	36	13.7
US\$112.01-\$144.00	12	9.1	20	15.3	32	12.2
US\$144.01 or More	10	7.6	13	9.9	23	8.7
Purchase Experience						
Not Purchased at This Hypermarket	12	9.1	12	9.2	24	9.1
Purchased at This Hypermarket	120	90.9	119	90.8	239	90.9
Hypermarket Shopping Frequency						
Less Than Once Per Week	87	65.9	94	71.8	181	68.8
1 to 3 Times Per Week	38	28.8	27	20.6	65	24.7
4 or More Times Per week	7	5.3	10	7.6	17	6.5
Shopper By Hypermarket						
Carrefour	44	33.3	45	34.3	89	33.8
RT-Mart	34	25.8	42	32.1	76	28.9
Costco	35	26.5	33	25.2	68	25.9
Géant	19	14.4	11	8.4	30	11.4

This table depicts the husbands and wives demographic profile and shopping habits. Both number and percentage within each characteristic is presented that assists in not only knowing the sample but also to understand the results and findings for the study. It is noted that * indicates 1 NT (Taiwan Dollar) = US\$.032 at time of survey.

25 and 44 years. The men were less educated (50% high school and 32% college graduates) as compared to women (40% high school and 45% college graduates). Almost 65% of the husbands and 75% of the wives were employed in sales, clerical, technician and skilled labor positions, but the females earned higher incomes (84% over US\$1,120 per month as compared to 44% for males). The majority of husbands (60%) and wives (53%) purchased between US\$16.00 and US\$80.00 per shopping visit, and had similar shopping frequency and were generally repeat customers (91%) to that hypermarket.

To examine construct validity, varimax rotations with Kaiser-Meyer-Olkin criterion (eigenvalue greater than 1.0) were used to extract items for the retail marketing mix and customer-based brand equity instruments. Of the 15-item marketing mix instrument, there are three items for price, four items for

advertising spending, three items for price deals, three items for store image, and two items for distribution intensity. The 23-item brand equity instrument includes six items for brand loyalty, four items for brand awareness, eight items for brand association, and the five items for perceived quality. Each construct and the totals for the marketing mix and brand equity were the mean of the items or constructs (not weighted). For these constructs, Cronbach's alpha reliability scores all easily exceeded the minimum of 0.70 (Hair, Anderson, Tatham, and Black, 1998) with a range for retail marketing mix elements from 0.751 to 0.912 and for customer-based brand equity dimensions from 0.843 to 0.942.

RESULTS

In this comparative, causal study of influences on customer-based brand equity (CBBE), several factors are revealed. The study design is for two purposes. First is a comparison between married men and women for the five retail marketing mix elements (price, advertising spending, price deals, store image, and distribution intensity) and the four CBBE dimensions (brand loyalty, brand awareness, perceived quality and brand association). T-tests (husbands, wives) were performed that include significantly different (p < 0.05) and similarity (p > 0.70) criterion to determine these contrasts. The sample (N=263) and each of the two sample subsets (n=132 and n=131) exceed the 50 respondent minimum for mean comparison analysis (Hair et al., 1998). Second is the determination of which influences and their strengths leads to and explains husbands and wives' brand equity using multiple regression analysis. Regression equations for independent variables of 8 shoppers' characteristics (age, education, occupation, income, purchase amount, prior purchase experience, shopping frequency, retail store) and 5 retail marketing mix elements and the dependent variables (4 CBBE dimensions and total brand equity) were used with alpha 0.05 criteria. The sample (N=263) is greater than the required 154 participants minimum for regression modeling, N \geq 50 + 8m, where m is the number of predictors (Green, 1991) and within sensitivity tolerance (Hair et al., 1998).

The results comparing these two groups of shoppers find one significant difference (p < 0.05) in which husbands feel their hypermarkets have higher prices than wives do. See Table 2. Husbands and wives have similar views (p > 0.70) of their store image. Of the marketing mix elements, men had only one higher mean score (price). Females, on the other hand, feel that their stores have higher advertising spending, more price deals, better store image, offer more products (distribution intensity) and higher overall total marketing mix score. Both spouses had their highest mean scores for distribution intensity, but husbands had the lowest mean scores for advertising spending while wives for price. However, the brand equity comparison results were more balanced. The t-tests show no significant differences between married men and women. However, two of the four dimensions (brand loyalty and brand awareness) results were similar (p > 0.70). Although not significant (in differences or similarities), husbands were slightly more loyal to their stores and viewed them as having higher perceived quality. Furthermore, wives had more awareness and greater association with their stores, as well as higher mean score for total brand equity. Both spouses had the highest mean scores for brand awareness and the lowest for brand loyalty.

To examine bivariate relationships, a Pearson correlation coefficient was performed for the independent variables of the marketing mix elements (price, advertising spending, price deals, store image, and distribution intensity) and the dependent variables of the brand equity dimensions (brand loyalty, brand awareness, perceived quality and brand association). The results are shown in Table 3. No findings exceed .800, indicating acceptable levels of correlation. Of particular interest, price is negatively correlated with all other variables. Specifically, as price increases, each CBBE dimension decreases, hence lower brand equity. The only other negative correlation is between advertising spending and perceived quality. Price deal, store image and distribution intensity correlations with each dimension are consistent and reasonable strong ranging from .494 to .564, .483 to .741, and .459 to .519, respectively.

Elements/Dimensions	Mean For	Mean For	Mean Differences	
	Husband Shopper	Wife Shopper		
Marketing Mix Elements ¹				
Price	2.980	2.794	0.186*	
Advertising Spending	2.909	2.952	0.043	
Price Deal	3.210	3.295	0.085	
Store Image	3.194	3.214	0.020**	
Distribution Intensity	3.246	3.309	0.063	
Total Marketing Mix	3.007	3.031	0.024	
Brand Equity Dimensions ²				
Brand Loyalty	4.076	4.043	0.033**	
Brand Awareness	5.017	5.025	0.008**	
Perceived Quality	4.336	4.257	0.079	
Brand Association	4.607	4.782	0.175	
Total Brand Equity	4.481	4.517	0.036**	

Table 2 : Husband-Wife Shopping Comparisons for Marketing Mix and Brand Equity

This table presents the t-Test results of married men and women comparative mean scores by each marketing mix element and brand equity dimension. ¹ and ² indicate marketing mix elements measured by a 5-point Likert-type scale and brand equity dimensions measured by a 7-point Likert-type scale, respectively. * and ** indicate significances of < 0.05 (differences) and > 0.70 (similarities), respectively.

The 13 independent variables, 8 shoppers' characteristics and 5 retail marketing mix, were further tested using several stepwise (forward) regressions to explain the relationship in creating husband (Table 4) or wife (Table 5) brand equity. Basically, the first major run was for husbands' (1) brand loyalty, (2) brand awareness, (3) perceived quality, (4) brand association and (5) brand equity (total, or all four brand dimensions). See Table 4 for these results. The explained variance for the five equations ranges from 45.3% (brand association) to 58.3% (perceived quality). All variables are significant (p < 0.05).

However, two of the marketing mix elements – store image and price deals – are major factors in creating higher husbands' brand equity. Store image is the strongest predictor in four of the five equations as found from the standardized coefficients. Brand awareness is second, logically following purchase experience (having prior shopping visit to that hypermarket). Price deal is included in four of the five equations and the second strongest (standardized coefficient) in three of the four in which it appears. In addition, distribution intensity, an important value offering of hypermarkets, is in three of the five equations, including brand equity. These multivariate results (Table 4) are consistent with, and supported by, those found in the bivariate findings (Table 3), e.g., comparison of store image, price deals and distribution intensity to the four brand dimensions.

Elements/	Price ¹	Advertising	Price	Store	Distribution	Brand	Brand	Perceived	Brand
Dimensions		Spending ¹	Deal ¹	Image ¹	Intensity ¹	Loyalty ²	Awareness ²	Quality ²	Association ²
Price	1.000								
Advertising	036	1.000							
Spending									
Price	488**	.234**	1.000						
Deal									
Store	169**	053	.441**	1.000					
Image									
Distribution	237**	.313**	.445**	.446**	1.000				
Intensity									
Brand	240**	.116*	.506**	.596**	.519**	1.000			
Loyalty									
Brand	268**	.172**	.496**	.483**	.459**	.661**	1.000		
Awareness									
Perceived	278**	060	.494**	.741**	.492**	.786**	.598**	1.000	
Quality									
Brand	335**	.161**	.564**	.564**	.486**	.698**	.674**	.742**	1.000
Association									

Table 3 : Husband-Wife Shopping Correlations for Marketing Mix and Brand Equity

This table shows the Pearson correlation coefficient bivariate relationships for the marketing mix elements and brand equity dimensions. * and ** indicate significances of < 0.01 and < 0.05 (differences) levels, respectively.

Panel A: Brand Loyalty	v Only					
$R^2 = 481$	Adjusted $R^2 = 461$	Standard $Frror = 8$	F = 23.376	Significant F = 000		
Variable	Regression	Standard	Standardized	Signific	Significant	
variable	Coefficient	Error	Coefficient	Т	Т	
(Constant)	-1.142	.499		-	-	
Store Image	677	137	366	4 929	000	
Price Deal	.443	.125	.259	3.534	.001	
Shopping Frequency	499	138	247	3 615	000	
Purchase Experience	606	274	147	2 211	029	
Purchase Amount	125	.271	141	2.067	041	
1 dividov i miodiliv				2.007	.011	
Panel B: Brand Awaren	ness Only					
$R^2 = .543$	Adjusted $R^2 = .525$	Standard Error =	72735 F = 29.957	Signific	ant F = .000	
Variable	Regression	Standard	Standardized		Significant	
	Coefficient	Error	Coefficient	Т	Т	
(Constant)	2.152	.545				
Purchase Experience	1.586	.230	.434	6.899	.000	
Store Image	.514	.108	.313	4.738	.000	
Distribution	.226	.089	.175	2.530	.013	
Intensity						
Hypermarket	142	.063	144	-2.252	.026	
Price	214	.098	137	-2.178	.031	
Panel C: Perceived Qua	lity Only					
$R^2 = .602$	Adjusted $R^2 = .583$	Standard Error = .6	53587 F = 31.577	Signific	ant F = .000	
Variable	Regression	Standard	Standardized	т	Significant T	
(Constant)	222	404	Coefficient	1	1	
Store Image	686	101	448	6 784	000	
Distribution	320	083	265	3 876	000	
Intensity	.520	.005	.200	5.070	.000	
Advertising Spend	- 296	070	- 262	-4 257	000	
Price Deal	293	.070	207	2 954	004	
Purchase Amount	116	.055	159	2.531	008	
Occupation	097	.045	144	2.007	016	
Occupation	.077	.0+0.	.177	2.440	.010	
Panel D: Brand Associa	tion Only					
$R^2 = .470$	Adjusted $R^2 = .453$	Standard Error = .7	F = 28.150	Signific	ant F = .000	
	¥					
Variable	Regression	Standard	Standardized		Significant	
	Coefficient	Error	Coefficient	Т	Т	
(Constant)	1.728	.573				
Store Image	564	114	365	4 950	000	
Price Deal	371	117	259	3 170	002	
Purchase Experience	736	230	213	3 198	002	
Price	- 263	106	- 179	-2 479	014	
Thee	205	.100	179	-2.77)	.014	
Panel E: Brand Equity						
$R^2 = 590$	Adjusted $R^2 = 577$	Standard $Frror = 4$	F = 45.670	Signific	ant $F = 0.00$	
Variable	Regression	Standard	Standardized	Signific	Significant	
	Coefficient	Error	Coefficient	Т	T	
(Constant)	.203	.321				
Store Image	.605	.093	.424	6.526	.000	
Price Deal	.350	.093	.265	3.776	.000	
Purchase Experience	.734	.187	.231	3.930	.000	
Distribution	.170	.075	.151	2.264	.025	
Intensity						

Table 4: Regression Models for Husband Shoppers Brand Equity

This table shows the (forward) stepwise multiple regression results for husband by each brand dimension and for brand equity (all dimensions).

Table 5: Regression Models for Wife Shoppers Brand Equity

Panel A: Brand Loyalty (Dnly				
$R^2 = .563$	Adjusted $R^2 = .549$	Standard Error = .8	F = 40.538	Significa	nt F = .000
Variable	Regression	Standard	Standardized	T	Significant
	Coefficient	Error	Coefficient	T	Т
(Constant)	-1.271	.466	254	5 3 4 5	
Distribution Intensity	.527	.099	.374	5.345	.000
Store Image	.559	.120	.332	4.648	.000
Price Deal	.390	.129	.205	3.024	.003
Purchase Experience	.541	.261	.123	2.072	.040
Panal R. Brand Awarana	se Only				
I anci D. Di anu Awarene.	ss Only				
$R^2 = .541$	Adjusted $R^2 = .526$	Standard Error = .7	F = 37.126	Significa	nt F = .000
Variable	Regression	Standard	Standardized		Significant
, and to	Coefficient	Error	Coefficient	Т	Т
(Constant)	- 045	427	coontrol	•	
Purchase Experience	1 470	230	374	6 1 4 3	000
Price Deal	457	118	269	3 871	000
Store Image	375	.110	249	3 403	.000
Distribution Intensity	309	.110	245	3 413	.001
Distribution intensity	.507	.070	.275	5.715	.001
Panel C: Perceived Quali	ty Only				
$R^2 = .670$	Adjusted $R^2 = .665$	Standard Error = .6	55078 F = 130.211	Significa	nt F = .000
Variable	Regression	Standard	Standardized		Significant
	Coefficient	Error	Coefficient	Т	Т
(Constant)	247	.316			
Store Image	1.062	.084	.714	12.646	.000
Price Deal	.331	.095	.197	3.485	.001
Panel D: Brand Association	on Only				
$R^2 = .599$	Adjusted $R^2 = .586$	Standard Error = .6	55154 F = 46.980	Significa	nt F = .000
Variable	Regression	Standard	Standardized		Significant
variable	Coefficient	Error	Coefficient	Т	T
(Constant)	.085	.355			
Store Image	.430	.092	.321	4.685	.000
Price Deal	.444	.098	.293	4.519	.000
Distribution Intensity	.318	.075	.283	4.229	.000
Purchase Experience	.880	.199	.252	4.419	.000
L. L					
Panel E: Brand Equity					
$R^2 = .703$	Adjusted $R^2 = .694$	Standard Error = .5	55926 F = 74.632	Significa	nt F = .000
Variable	Regression	Standard	Standardized		Significant
	Coefficient	Error	Coefficient	Т	T
(Constant)	- 439	305		-	-
Store Image	577	079	431	7 327	000
Distribution Intensity	333	065	297	5 160	.000
Price Deal	304	084	261	4 673	000
Purchase Experience	.771	.171	.221	4.511	.000
r					

This table shows the (forward) stepwise multiple regression results for wife by brand loyalty (Panel A), Brand Awareness (Panel B), Perceived Quality (Panel C), brand association (Panel D) and brand equity (all dimensions) (Panel E). Each independent variable is shown by loading from the stepwise method with regression and standardized coefficients and the respective significance.

The second major multiple regression run was for wives' (1) brand loyalty, (2) brand awareness, (3) perceived quality, (4) brand association and (5) (total) brand equity. See Table 5 for these results. The explained variance for the five equations ranges from 52.6% (brand awareness) to 69.4% (brand equity). All variables are significant (p < 0.05). Three variables – store image, price deal, and distribution intensity – are primary predictors for wives' brand equity. Store image is included in all equations and has the highest standardized coefficient (strength) in three regression models, including brand equity and first of only two for perceived quality. Price deal, too, is included in all five equations, and the second strongest of only two variables for perceived quality. Distribution intensity is a predictor in four of the five models, including the strongest predictor for brand loyalty. The wife brand equity regression results (Table 5), as they were for husbands, are supported by the Pearson correlation coefficient results (Table 3).

In summary, the comparison between husband and wife brand equity is consistent from the regression results. The explained variances are similar but all are higher for wives as compared to husbands for each brand dimension and total brand equity. Besides the importance of the independent retail marketing mix, store image, price deal and distribution intensity variables, purchase experience is included in four equations for each spouse. As shown in Table 6, husband brand equity has 10 out of the 13 predictors in at least one equation, while wife brand equity has only four (store image, price deal, distribution, distribution intensity, purchase experience). Perceived quality has particularly interesting results. Wives perceived quality could be explained with an R^2 of 66.5% by only two independent variables – store image and price deal. On the other hand, husbands' perceived quality could be explained with an R^2 of 58.3% by six independent variables – store image, price deal and four others. In addition, married males were the only one with inverse relationships (coefficients). Price was inversely related to brand awareness and brand association, hypermarket to brand awareness and advertising spending to perceived quality.

Brand Dimensions	Husband		Wife		
Brand Loyalty	Explained Variance 46.1%	Significant Factors Store Image Price Deal Shopping Frequency Purchase Experience Purchase Amount	Explained Variance 54.9%	Significant Factors Distribution Intensity Store Image Price Deal Purchase Experience	
Brand Awareness	52.5%	Purchase Experience Store Image Distribution Intensity Hypermarket* Price*	52.6%	Purchase Experience Price Deal Store Image Distribution Intensity	
Perceived Quality	58.3%	Store Image Distribution Intensity Advertising Spend* Price Deal Purchase Amount Occupation	66.5%	Store Image Price Deal	
Brand Association	45.3%	Store Image Price Deal Purchase Experience Price*	58.6%	Store Image Price Deal Distribution Intensity Purchase Experience	
Brand Equity	57.7%	Store Image Price Deal Purchase Experience Distribution Intensity	69.4%	Store Image Distribution Intensity Price Deal Purchase Experience	

 Table 6 : Regression Models Summary for Husband-Wife Shoppers Brand Equity

This table shows the (forward) stepwise multiple regression results summary for husband and wife brand equity. It is noted that * indicates inverse (-) relationship to the brand dimension.

DISCUSSION

The results of the comparative mean scores (t-tests) between husband and wife consumers revealed minimal significant differences (only price) but several with similarities for the marketing mix (store image) and brand (loyalty, awareness, equity). Furthermore, the retail marketing mix significantly predicted in part or all of the brand dimensions and the brand equity. However, for married male shoppers price (awareness, association) and advertising spending (perceived quality) were negatively related. In addition, all regression equations have R^2 of at least 45% and a significance of less than 0.05.

Hypothesis 1 predicts price, price deals and distribution intensity significantly influences brand loyalty. Price deal appears for both spouses, but price does not for either one. Distribution, however, was the strongest for the married females, but not an influence for husbands. On the other hand, price was anticipated to be included, but was not a significant influence. This could be a result of the sample of only a hypermarket retail format with well-established low prices for the type of product offerings. Store image is a major cause of brand loyalty that was not hypothesized. Generally, H_1 is supported. Furthermore, shopping characteristics were found to influence brand loyalty, and the other dimensions and brand equity. These are expected results. For example, prior research establishes that the more frequently made purchases, the greater likelihood of making the same buying decision in future purchases (Jacoby et al., 1976). In addition, with about 90% of the survey participants having shopped at that hypermarket before (purchase experience), the married spouse would logically be satisfied, or have some degree of loyalty to return.

Hypothesis 2 states price, advertising spending, price deals, store image and distribution intensity significantly influence brand awareness. Store image and distribution intensity are included for both spouses but advertising spending was not for either one. Price deal was a strong predictor for wives, but not at all for husbands. Price was included for married men. However, it was inversely related as was the hypermarket shopping characteristic. This can be explained in that husbands feel their hypermarket is expensive, hence the negative relationship for both variables. Therefore, H_2 is supported. As expected, purchase experience was the strongest predictor for brand awareness.

Hypothesis 3 predicts advertising spending, store image and distribution intensity significantly influence perceived quality. Store image is clearly the most important influence since it was the strongest for both spouses. Distribution intensity and advertising spending only appeared for husbands. However, advertising spending was inversely related, indicating highly ineffective hypermarket perceived quality messages to the targeted married male audience. H_3 is supported. However, price deal is surprisingly a key brand strategy for hypermarkets. Price deal is the second of only two predictors for wives and the fourth strongest for husbands.

Hypothesis 4 states price, price deals, store image and distribution intensity significantly influence brand association. Store image and price deals have the two strongest influences on brand association for both spouses. While distribution intensity only influences married female shoppers, price only influences male shoppers. Again, price is inversely related for husbands, as it is for brand awareness. Therefore, H_4 is supported. Purchase experience is a positive, significant predictor for brand association. Hypothesis 5 predicts price, advertising spending, price deals, store image and distribution intensity significantly influences brand equity. Store image is the strongest predictor for both spouses. Price deals and distribution intensity too are significant, positive influences for brand equity. However, price and advertising are not for either spouse. H5 is supported. Furthermore, purchase experience is a significant, positive influence for brand equity.

Several important findings with brand strategy implications have become apparent from this study. First, store image was a significant, positive influence for all brand dimensions and brand equity for husbands

and wives. In addition, purchase experience also was an influence for all brand dimensions and brand equity except for perceived quality. Therefore, it can be inferred that store image is an important driver for married shoppers' retention and repeat purchases. Second, price deal is a significant, positive influence for all brand dimensions and brand equity except for husbands' brand awareness. At the same time, price only appeared as a significant, negative influence for husbands' brand awareness and association. Hence, given the retail format of hypermarkets with large product assortments and the competitive prices for the product offerings, price is not necessarily a driver for hypermarket customerbased brand equity.

Third, studies have shown that married women are more price sensitive and economizer shoppers than husbands are (Zeithaml, 1985). Furthermore, in their traditional role, wives have been the primary shopper for household needs and products that would be offered at hypermarkets. However, in this study husbands, not wives, were more price sensitive with opinions (survey responses) that their hypermarket has higher prices (inverse relationship) for two brand dimensions (awareness, association), while price was not a factor for married women. This could be caused by the recent trend of fewer husbands working and more wives are (U.S. Bureau of the Census, 2000, 2007) that might prevent them with enough time for shopping, and when they do shop, they are not sensitive to price considerations. On the other hand, not working husbands do have time to shop and to better know competitive pricing and household shopping budgets.

The purpose for this study was to determine answers for two questions. First, are there different influences between husband and wife purchase decisions that impact brand equity? Price is the only significant difference (p < 0.05) between husband and wife shoppers. Married men clearly felt that their hypermarket was more expensive than women were. However, there were similarities (p > 0.70) between husbands and wives in their view of store image and their brand loyalty, brand awareness and brand equity. Therefore, there are many more similarities than differences between married male and female shoppers. Second, what are the personal and shopping characteristics of the husband or wife and the marketing strategies that influence brand equity? Only four factors (store image, price deal, distribution intensity, purchase experience) strongly influenced married females' brand dimensions and brand equity. While these same four factors also strongly influenced married males' brand dimensions and brand equity, there were additional ones, e.g., price (inverse), advertising spending (inverse), hypermarket (inverse), purchase amount, shopping frequency, occupation. For husband and wife consumers, they were all significant and with relatively high explained variance (R^2 ranges from 45.3% to 69.4%). Hence, store image, price deal, distribution intensity and purchase experience are key factors in building husband and wife brand equity.

CONCLUSIONS

This study was to determine shopper characteristics and the retail marketing mix influence to predict brand equity. The general business media often associates brand equity with the financial markets (Wall Street) while no, or little consideration by them for the value placed on brands by consumers (Gerzema and Lebar, 2008), or customer-based brand equity (Keller, 1993). With lifestyle changes occurring worldwide with employment status, stay-at-home dads, househusbands and other factors (American's Families and Living Arrangements, 2001, shopping behaviors and purchase decisions have changed too (Blackwell, et al., 2006). Using a comparative (married men and women) and causal (shopper characteristics and retail marketing mix) design for relationships to brand equity (four dimensions and total), 263 hypermarket shoppers were surveyed in a major Taiwan city. In the comparison study, no significant differences were found but two of the four dimensions (brand loyalty and brand awareness) and (total) brand equity results were similar (p > 0.70). For the causal results, husband brand equity has 10 out of the 13 predictors in at least one equation with R-squares ranging from 45.3% to 57.7%.

other hand, wife brand dimensions and brand equity have only four (store image, price deal, distribution, distribution intensity) with R-squares from 52.6% to 69.4%.

While this study has advanced the understanding of branding and with indications of validity (e.g., high Cronbach's alpha reliability scores and the consistent, expected appearance of shopping experience and price generally not being an influence by hypermarket shoppers), there are certain limitations. First, generalization of the results beyond Taiwan or within that Asian region should be done with caution. Furthermore, the sample was solely from hypermarkets and no inclusion of other types of mega-retailer formats, e.g., office supplies (e.g., Office Depot, Staples), home improvement (e.g., Home Depot, Lowe's). Second, research has shown shopping and purchasing differences between housewives and working wives (Strober and Weinberg, 1980; Zeithaml, 1985). This study did not ask respondents if they were employed. However, indications are that they were, e.g., 131 married females reporting a working occupation and varying levels of income, thus having housewife exclusion sample. The same exclusion is also for married males. Third, family is an important economic unit and important to retailers to The nature of household purchase decisions does not understand household consumer behavior. necessarily mean the decider, user and buyer are the same (Davis and Rigaux, 1974; Gil, Andrés and Salinas, 2007). For this study, it is assumed that the study's participant was the same, in that he/she were shopping at the hypermarket by their choice rather than acting in a "purchasing agent" role.

This study provides the basis for several future research opportunities. For example, a similar research design with sample(s) from different global region(s), e.g., North America, South America, Europe, Middle East, where hypermarkets are common would make findings more generalizable. Alternatively, a similar designed study for different types of mega-retailer stores would offer comparisons. In addition, a study with a balance of working and not working husbands and wives would further an understanding of branding in the nontraditional married households. Furthermore, a study that differentiates between the decider, user and buyer that actually influences customer-based brand equity could be more revealing in its findings. Lastly, this is a cross-sectional study. To capture shifts and trends, e.g., husband and wife employment status, a longitudinal study would be highly beneficial to branding researchers and brand managers.

Brand equity has become a huge component of a firm's financial value. This worth is debatable between Wall Street and Main Street as to what level the firm's brand equity actually is. This study is based on Main Street, customer-based brand equity, that appears to be more conservative, or lower brand equity value (Gerzema and Lebar, 2008), and has found store image, price deal, distribution intensity and purchase experience as primary drivers for spousal purchasing behavior in married households.

REFERENCES

Aaker, David A. (1991). Managing Brand Equity. New York: The Free Press

Ailawadi, Kusum L. and Kevin Lane Keller (2004). "Understanding Retail Branding: Conceptual Insights and Research Priorities," *Journal of Retailing*, vol. 80(4), p. 331-342

"American's Families and Living Arrangements" (2001, June). U.S. Department of Commerce Washington, DC: Government Printing Office

Arndt, Johan (1967). "Role of Product-Related Conversations in the Diffusion of a New Product," *Journal of Marketing Research*, vol. 4(August), p. 291-295

Blackwell, Roger D., Paul W. Miniard and James F. Engel (2006). *Consumer Behavior* (10th Ed.). Mason, OH: Thomson South-Western

Bustillo, Miguel (2009). "Retailer Circuit City to Liquidate," *Wall Street Journal*, (January 17-18), p. B1, B5

Bustillo, Miguel and Ann Zimmerman (2008). "Wal-Mart Defies Retail Slowdown," *Wall Street Journal*, (November 14), p. A1, A11

Byron, Ellen (2008). "At the Supermarket Checkout, Frugality Trumps Brand Loyalty," *Wall Street Journal*, (November 6), p. D1, D5

Cobb-Walgren, Cathy J., Cynthia A. Ruble, and Naveen Donthu (1995). "Brand Equity, Brand Preference, and Purchase Intent," *Journal of Advertising*, vol. 24(3), p. 25-40

Colvin, Geoff (2008). "The Next Credit Crunch," Fortune, (September 1), p. 30

Davis, Harry L. and Benny P. Rigaux (1974). "Perception of Marital Roles in Decision Processes," *Journal of Consumer Research*, vol. 1(June), p. 51-62

D'Innocenzio, Anne (2009). "Retail Year Slowest Since '69," Palm Beach Post, (February 6), p. 6B

Donovan, Robert J., John R. Rossiter, Gilian Marcoolyn, and Andrew Nesdale (1994). "Store Atmosphere and Purchasing Behavior," *Journal of Retailing*, vol. 70(3), p. 283-294

Fong, Mei (2009). "Retailers Still Expanding in China," Wall Street Journal, (January 22), p. B1, B5

Gerzema, John and Ed Lebar (2008). The Brand Bubble. San Francisco: Jossey-Bass

Gil, R. Bravo, E. Fraj Andrés and E. Martínez Salinas (2007). "Family as a Source of Consumer-Based Brand Equity," *Journal of Product & Brand Management*, vol. 16(3), p. 188-199

Green, Samuel B. (1991). "How Many Subjects Does It Take to Do a Regression Analysis?," *Multivariate Behavioral Research*, vol. 26(3), p. 499-510

Hair, Jr., Joseph F., Rolph E. Anderson, Ronald L Tatham, and William C. Black (1998). *Multivariate Data Analysis* (5th edition). Upper Saddle River, NJ: Prentice Hall

Jacoby, Jacob, George J. Szybillo and Carol Kohn Berning (1976). "Time and Consumer Behavior: An Interdisciplinary Overview," *Journal of Consumer Research*, vol. 2(March), p. 320-339

Keller, Kevin Lane (1993). "Conceptualizing, Measuring, and Managing Customer-Based Brand Equity," *Journal of Marketing*, vol. 57(1), p. 1-22

Keller, Kevin Lane (2003). *Strategic Brand Management* (2nd edition). Upper Saddle River, NJ: Prentice Hall

Kotler, Philip and Kevin Lane Keller (2006). *Marketing Management* (12th edition). Upper Saddle River, NJ: Prentice Hall

Lloyd, Mary Ellen (2008). "Lowe's is Expected to Cut Store Growth in Tough Times," *Wall Street Journal*, (September 22), p. B3

Lindquist, Jay D. (1974-1975). "Meaning of Image," Journal of Retailing, vol. 50(4), p. 29-38

Lynch, Jr., John G. and Thomas K. Srull (1982). "Memory and Attention Factors in Consumer Choice: Concepts and Research Methods," *Journal of Consumer Research*, vol. 9(June), p. 18-37

McCarthy, E. Jerome (1960). Basic Marketing. Homewood, IL: Richard D. Irwin

Neal, Molly (2009). "Unilever's Weak Defense," Wall Street Journal, (February 6), p. C12

O'Connell, Vanessa and Rachel Dodes (2009). "Saks Upends Luxury Market with Strategy to Slash Prices," *Wall Street Journal*, (February 9), p. A1, A16

Oliver, Richard L. (1999). "Whence Consumer Loyalty," *Journal of Marketing*, vol. 63(Special Issue), p. 33-44

Pappu, Ravi and Ray W. Cooksey (2006). "A Consumer-Based Method for Retail Equity Measurement: Results of an Empirical Study," *Journal of Retailing and Consumer Services*, vol. 13(4), p. 317-329

Rohwedder, Cecilie (2009). "Carrefour Braces for More Global Retail Weakness," *Wall Street Journal*, (January 19), p. B1

Snipes, Robin L., Neal F. Thomson, and Sharon L. Oswald (2006). "Gender Bias in Customer Evaluation of Service Quality: An Empirical Investigation," *Journal of Services Marketing*, vol. 20(4), p. 274-284

Strober, Myra H. and Charles B. Weinberg (1980). "Strategies Used by Working and Nonworking Wives to Reduce Time Pressures," *Journal of Consumer Research*, vol. 6(March), p. 338-348

U.S. Bureau of the Census (2000). *Statistical Abstract of the United States*. Washington, DC: Government Printing Office

U.S. Bureau of the Census (2007). *Statistical Abstract of the United States*. Washington, DC: Government Printing Office

Yoo, Boonghee, Naveen Donthu, and Sungho Lee (2000). "An Examination of Selected Marketing Mix Elements and Brand Equity," *Journal of the Academy of Marketing Science*, vol. 28(2), p. 195-211

Zeithaml, Valarie A. (1985). "The New Demographics and Market Fragmentation," *Journal of Marketing*, vol. 49(Summer), p. 64-75

Zeithaml, Valarie A. (1988). "Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence," *Journal of Marketing*, vol. 52(July), p. 2-22

ACKNOWLEDGEMENTS

We are grateful, first, for the most helpful suggestions and comments by the reviewers of this article and to the editor of the journal that improved this study and, second but of equal importance, of our respective colleges and universities for their continued encouragement and support of our scholarly development and the advancement of knowledge.

BIOGRAPHY

Robert D. Green, D.B.A., is Professor of Marketing in the College of Business and Management at Lynn University, Boca Raton, Florida (USA). He has held faculty positions in the U.S. (Indiana State University) and internationally (United Arab Emirates and Ecuador). Dr. Green has had articles in *International Journal of Management and Marketing Research, Journal of Business & Entrepreneurship, Global Business and Finance Review*, and more than 40 other referred publications.

Hui-Chu Chen, Ph.D., is Assistant Professor in the College of Business Administration at TransWorld Institute of Technology, Yulin, Taiwan (R.O.C.). Prior to entering academe, Dr. Chen had a successful business career in Taiwan. She holds a Doctor of Philosophy (Corporate and Organizational Management) degree from Lynn University (USA). She has published in the *International Journal of Management and Marketing Research* and other referred publications. Dr. Chen has research interests in brand management and management strategies.