

# Developing Marketing Strategies To Increase Brand Equity: The Differences Between Age Groups

Hui-Chu Chen, TransWorld University, Taiwan (R.O.C.)

Robert D. Green, Lynn University, USA

## ABSTRACT

*Retailers are facing challenges from global competitors, aging consumer markets, and households with less income that impact brand equity. This study examines three age groups' (younger, middle, older) marketing strategy perceptions and their brand equity (brand loyalty, brand awareness, perceived quality, brand association). As expected, different strategies influence each age group. Generally, older retailer shoppers have the highest brand equity. The results have certain implications to the marketplace and for further research opportunities.*

**Keywords:** Customer-Based Brand Equity; Marketing Strategy; Customer Age

## INTRODUCTION

Retail stores continue to experience greater competitiveness in the marketplace. During the recent economic recession, household income declined 4.1% (Brackey, Williams, & Maines, 2010). With more retail globalization and consumer technology use, competitors are no longer down the street or across town (Kotler & Keller, 2006). Moreover, retailers are faced with consumers who are older with longer life expectancy and the aging of the baby boomer generation (Karani & Fraccastoro, 2010).

As a result, retailers are challenged in retaining (and attracting new) customers and building brand equity. To retain a customer, a firm spends 20% less than attracting a new one (Wills, 2009), and experiences an increase of 5% for customer retention that contributes 25% to its profit (Reichheld & Sasser, 1990). This retention results in customers buying more frequently and purchasing the retailer's other product offerings (Reichheld & Sasser, 1990) as well as increasing the firm's customer-based brand equity (CBBE), e.g., brand loyalty, awareness, association, perceived quality (Keller, 1993). CBBE is increased "when the customer is aware of the brand and holds some favorable, strong, and unique brand associations in memory" (Keller, 1993, p. 17).

As consumers age, their brand preference increases. While the baby boomers are now entering the older group of shoppers, they also have the greatest disposable income than other age groups (Karani & Fraccastoro, 2010). Nielsen Research reports that one in three households will be headed by someone age 65 or older by 2037 (Ferguson & Brohaugh, 2010). Furthermore, age is an important market segmentation deceptor to determine specific shoppers' characteristics and factors of the market (Lin, 2002). Therefore, the purpose of this study is to examine age groups' perceptions of retailers' marketing strategies (marketing mix) and its influence on customer-based brand equity. Hence, are there significant differences between age groups marketing strategy perceptions and customer-based brand equity? What are the marketing strategies that influence each group's customer-based brand equity? This study includes branding literature review, methodology, findings, implications, and conclusions.

## LITERATURE REVIEW

Brand equity (Aaker, 1991) and customer-based brand equity (Keller, 1993, 1998) are the theoretical basis for this study. Four brand dimensions – brand loyalty, brand awareness, perceived quality, brand association – have

been empirically studied and have established particular findings for some relationships to certain age group, or age groups.

### **Theoretical Framework**

Brand equity is “a set of brand assets and liabilities linked to a brand, its name and symbol that add to or subtract from the value provided by a product or service to a firm and/or to that firm’s customers” (Aaker, 1991, p. 15). French and Smith find that “A powerful brand with high levels of brand equity will have strong and favorable associations overall and some of these will be unique on things important to the consumer” (2010, p. 464). Five dimensions are included in brand equity: brand loyalty, brand awareness, perceived quality, brand association and other propriety brand assets (Aaker, 1991). Keller (1993) developed brand equity as consumer-based brand equity to include a consumer’s perspective. Customer-based brand equity is “the differential effect of brand knowledge on consumer response to the marketing of the brand” (Keller, 1993, p. 1). Brand equity creates value not only for customers but also for firms (Pappu, Quester & Cooksey, 2005). Therefore, the firm will have a competitive advantage when consumers have positive perception toward a brand. Moreover, Keller (1993) indicates that if customers have a preferable brand in their memory when making a purchase decision, the consumer-based brand equity occurs at the same time.

### **Empirical Support**

#### *Brand Loyalty*

Brand loyalty usually measures purchase behavior (Karani & Fraccastoro, 2010). Oliver defines loyalty as “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” (1999, p. 34). Botwinick (1996) used two hypotheses to explain that older people resist switching brands due to avoid suffering bad decision because of their memory may have declined and resist bad decision from occurring. Therefore, repeating the same purchase behavior becomes brand loyalty. Moreover, a boomer consumer blogger, Matt Thornhill, indicates that baby boomers are more interested in an experience that may lead to loyalty (Ferguson & Brohaugh, 2010). The first hypothesis is that:

**H<sub>1</sub>:** Older shoppers have higher brand loyalty.

#### *Brand Awareness*

Brand awareness is “the ability for a buyer to recognize or recall that a brand is a member of a certain product category” (Aaker, 1991, p. 61). Brand awareness relates to the consumers’ memory of the brand while brand image relates to the perception about the brand, which reflects in the customer memory being associated with the brand (Aaker, 1991). Brand awareness is an important aspect for consumer decision making. Moreover, Keller (1998) believes that brand awareness is an important cue because it can increase the likelihood of the brand being part of a consideration set. Brand awareness plays an important role in consumer decision-making (Keller, 1993). One of Hoyer and Brown’s conclusions is that “consumer who are aware of one brand in a choice set tend to sample fewer brands across a series of product trials” (1990, p. 827). Zajonc (1980) suggests that greater liking is lead by familiarity even without the mediation of conscious awareness, which might be from many years of purchasing experiences. Moreover, Smith and Swinyard (1983) states that consumers will form strong brand affect in which they have product trial experience. Therefore, the second hypothesis is that:

**H<sub>2</sub>:** Older shoppers have higher brand awareness.

#### *Perceived Quality*

Perceived quality is “the consumer’s judgment about a product’s overall excellence or superiority” (Zeithaml, 1988, p. 3). Moreover, Monroe and Krishnan defined perceived quality as “the belief in the overall ‘goodness’ of what is received” (1985, p. 214). Moschis (2003) states that older consumers are very quality-oriented

and willing to pay more in order to get a higher quality product or service. Therefore, older consumers choose products based on quality and brand name. Older consumers who face similar conditions late in life are likely to show similar patterns of consumer behavior. Moreover, Lynch (1998) indicated the perception will increase with age, while the perception of demandingness will decrease. Hence, the third hypothesis is that:

**H<sub>3</sub>:** Older shoppers have higher perceived quality.

#### *Brand Association*

Brand association is “anything linked in memory to a brand” (Aaker, 1991, p. 109). With age, associations between stimuli and behaviors are reinforced and information plays more important role in the decision of older adults (Cole, Laurent, Drolet, Ebert, Gutches, Lambert-Pandraud, Mullet, Norton & Peters, 2008). Cole et al. state, “Older adults may be more likely to prefer long-established options” (2008, p. 362). Speed and Thompson (2000) suggest that customers’ attitudes towards a brand increases when the recall awareness and the preferences are shown towards a brand. *Brand recognition* starts at an early *age* with older *age* groups having greater brand awareness (Harradine & Ross, 2004). Therefore, the fourth hypothesis is that:

**H<sub>4</sub>:** Older shoppers have higher brand association.

Therefore, all brand dimensions are significant for older shoppers, hence for total brand equity. In addition to testing these hypotheses, this study will determine the casual relationship of marketing strategy (marketing mix) to customer-based brand equity. Furthermore, this relationship will also include specific demographic, e.g., gender, and shopping, e.g., average purchase amount, characteristics.

## **METHODOLOGY**

The focus for this study is retailer shoppers and their perceptions of the stores’ marketing strategies (mix) as an influence on customer-based brand equity (CBBE). The sample includes Taiwanese shoppers at four competing hypermarket stores. These customers completed a 48-item questionnaire that had three parts.

Shoppers at four hypermarkets – Carrefour, R-T Mart, Costco, Géant – participated in this study. The sample was in proportion to its market share of 35%, 30%, 25% and 10%, respectively. There was a representation of weekday and weekend as well as daytime and evening shoppers. The questionnaire included three parts. First, the questionnaire included the researcher-developed 10-question demographic and shopper characteristics section. Second, a 15-item retail marketing mix instrument developed by Yoo, Donthu and Lee (2000) that was used in their product branding study. The retail marketing mix elements (price, advertising spending, price deals, store image, 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) that was used in their customer-based brand equity (CBBE) study of specialty and department stores. The CBBE dimensions (brand loyalty, brand awareness, perceived quality, brand association) were measured by a 7-point Likert-type scale (1 = Strongly Disagree to 7 = Strongly Agree).

Varimax rotations with Kaiser-Meyer-Olkin criterion (eigenvalue greater than 1.0) were used to examine construct validity and to extract items for the retail marketing mix and customer-based brand equity instruments. Of the 15-item marketing mix instrument, there were 3 items for each of the 5 retail elements (Yoo, Donthu & Lee, 2000). Only one item was regrouped – from distribution intensity to advertising spending. Hence, price includes 3 items, advertising spending 4 items, price deals 3 items, store image 3 items, and distribution intensity 2 items. The 23-item brand equity instrument included 4 brand loyalty items, 4 brand awareness, 5 perceived quality, and 10 brand association (Pappu & Quester, 2006). Two brand awareness items were regrouped to brand loyalty. One brand awareness item became brand association. Lastly, three brand association items were regrouped as brand awareness. Therefore, brand loyalty includes 6 items, brand awareness 4 items, brand association 8 items, and the 5 original perceived quality items remain unchanged. These constructs were tested for reliability using Cronbach’s alpha scores and all easily exceeded the minimum of 0.70 (Hair, Anderson, Tatham, & 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.

Of the total shoppers (N=435), 218 (50.2%) were young (18 to 34 years old), 132 (30.3%) were middle age (35 to 44) and 85 (19.5%) were older (45 and older). While there were slightly more males (n = 219) than females (n = 216), most of the participants were married (n = 263). The majority of the shoppers had either a high school (n = 166) or undergraduate college (n = 164) degree. Almost one-half of the respondents were employed in sales, technician or clerical (n = 206) positions. The majority had a monthly income of \$641 to \$1,120 (n = 123) or \$1,121 to \$1,600 (n = 141), and their average store purchase amount per visit was \$16.01 to \$48.00 (n = 156) or \$48.01 to \$80.00 (n = 108). The vast majority had prior shopping experience at that hypermarket (n = 395). Most of the participants shopped at the hypermarket less than once a week (n = 297). See Table 1 for specific shopper characteristics details.

**Table 1: Hypermarket Shopper Characteristics by Age Group**

Characteristics	Younger Shopper		Middle Age Shopper		Older Shopper		Total	
	No.	%	No.	%	No.	%	No.	%
<b>Total</b>	218	50.2	132	30.3	85	19.5	435	100.0
<b>Gender</b>								
Male	98	45.0	69	52.3	52	61.2	219	50.3
Female	120	55.0	63	47.7	33	38.8	216	49.7
<b>Marital Status</b>								
Single	128	58.7	21	15.9	2	2.4	151	34.7
Married	88	40.4	105	79.5	70	82.3	263	60.5
Divorced	2	0.9	3	2.3	6	7.1	11	2.5
Widowed	0	0.0	3	2.3	7	8.2	10	2.3
<b>Educational Level</b>								
College Graduate Degree	11	5.0	10	7.6	5	5.9	26	6.0
College Undergraduate Degree	101	46.3	48	36.4	15	17.6	164	37.7
Attended College (No Degree)	31	14.2	4	3.0	2	2.4	37	8.5
High School Graduate	66	30.3	62	46.9	38	44.6	166	38.1
Less Than High School Graduate	9	4.2	8	6.1	25	29.5	42	9.7
<b>Occupation</b>								
Corporate Executive & Manager	13	6.0	7	5.3	12	14.1	32	7.4
Administrative Personnel	11	5.0	9	6.8	10	11.8	30	6.9
Sales, Technician, Clerical	98	45.0	77	58.3	31	36.5	206	47.3
Skilled Labor	53	24.3	24	18.2	10	11.7	87	20.0
Unskilled Labor	43	19.7	15	11.4	22	25.9	80	18.4
<b>Income (Monthly)*</b>								
US\$640 or Less	48	22.0	8	6.1	16	18.8	72	16.6
US\$641-\$1,120	67	30.7	44	33.3	12	14.1	123	28.3
US\$1,121-\$1,600	78	35.8	48	36.4	15	17.6	141	32.4
US\$1,601-\$2,080	20	9.2	17	12.9	8	9.4	45	10.3
US\$2,081-\$2,560	4	1.8	11	8.3	14	16.5	29	6.7
US\$2,561 or More	1	0.5	4	3.0	20	23.6	25	5.7
<b>Avg. Purchase Amount (Per Visit)*</b>								
US\$16.00 or Less	33	15.1	11	8.3	12	14.1	56	12.9
US\$16.01-\$48.00	97	44.7	39	29.5	20	23.6	156	35.8
US\$48.01-\$80.00	44	20.0	49	37.2	15	17.6	108	24.8
US\$80.01-\$112.00	21	9.6	17	12.9	14	16.5	52	12.0
US\$112.01-\$144.00	13	6.0	10	7.6	16	18.8	39	9.0
US\$144.01 or More	10	4.6	6	4.5	8	9.4	24	5.5
<b>Purchase Experience</b>								
Not Purchased at This Hypermarket	17	7.8	19	14.4	4	4.7	40	9.2
Purchased at This Hypermarket	201	92.2	113	85.6	81	95.3	395	90.8
<b>Hypermarket Shopping Frequency</b>								
Less Than Once Per Week	139	63.8	88	66.7	70	82.3	297	68.3
1 to 3 Times Per Week	62	28.4	38	28.8	10	11.8	110	25.3
4 or More Times Per week	17	7.8	6	4.5	5	5.9	28	6.4
<b>Shopper By Hypermarket</b>								
Carrefour	82	37.6	43	32.6	30	35.3	155	35.6
RT-Mart	73	33.5	37	28.0	16	18.8	126	29.0
Costco	47	21.6	33	25.0	29	34.1	109	25.1
Géant	16	7.3	19	14.4	10	11.8	45	10.3

Note: \* indicates 1 NT (Taiwan Dollar) = US\$.032 at time of survey

## FINDINGS

To determine the significant differences ( $p < 0.05$ ) between young, middle age, and older shoppers, analysis of variance (ANOVA) with post hoc tests (Scheffé method) were completed for the five marketing mix elements, total marketing mix (unweighted average of the five elements), the four brand equity dimensions, and total brand equity (unweighted average of the four dimensions). The results were that there were significant differences in three marketing mix elements, and three brand equity dimensions as well as total brand equity for the three age groups. First, post hoc tests found middle age shoppers had significantly higher mean score than older ones for price. Second, older shoppers had significantly higher mean scores for price deals and store image than middle age shoppers. Third, older shoppers had significantly higher mean scores than middle age shoppers for brand awareness and total brand equity. Fourth, older shoppers had significantly higher mean scores than younger for perceived quality. Fifth, older shoppers have a significantly higher mean score than younger and middle age for brand association. See Table 2. However, while not significant the only other variable that young shoppers had a greater mean score (more favorable) than either of the other two income groups was advertising spending. Furthermore, while not significant the older shoppers have more favorable perceptions (higher mean scores) of distribution intensity, total marketing mix, and brand loyalty than the other two age groups.

Table 2: Age Groups' Comparisons for Marketing Mix and Brand Equity

Elements/Dimensions	Mean For Younger Shoppers	Mean For Middle Age Shoppers	Mean For Older Shoppers
<b>Marketing Mix Elements<sup>1</sup></b>			
Price	2.8364	2.9798*	2.6902*
Advertising Spending	3.0356	2.8352	2.9147
Price Deal	3.2737	3.1540*	3.3882*
Store Image	3.1667	3.1364*	3.3725*
Distribution Intensity	3.2615	3.2045	3.4235
Total Marketing Mix	3.0269	2.9545	3.0729
<b>Brand Equity Dimensions<sup>2</sup></b>			
Brand Loyalty	3.9931	3.9482	4.1882
Brand Awareness	5.0218	4.8314*	5.2176*
Perceived Quality	4.2000*	4.2697	4.5294*
Brand Association	4.6095*	4.5559*	5.0044*
Total Brand Equity	4.4314	4.3831*	4.7253*

Note: <sup>1</sup> and <sup>2</sup> 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. \* indicates significances of  $\leq 0.05$ .

Pearson correlation coefficient examined the bivariate relationships between 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. However, the three bivariate correlations that exceeded .700 were related to the brand equity dimensions of brand loyalty, perceived quality and brand association. Of particular interest, price is significant ( $p < 0.05$ ) and negatively correlated with all other variables. Specifically, as price decreases, each CBBE dimension increases, hence higher brand equity. The only other negative correlation is between advertising spending and perceived quality, but not significant ( $p < 0.05$ ). The remaining three dimensions related to advertising spending ranged from .094 to .132. Price deal, store image and distribution intensity correlations with each brand equity dimension are significant ( $p < 0.05$ ), positive, and reasonable strong ranging from .448 to .500, .447 to .686, and .447 to .500, respectively. Between the marketing mix elements (independent variables), the correlations ranged from .005 to .466.

**Table 3: Bivariate Correlations for Marketing Mix and Brand Equity**

<b>Elements/ Dimensions</b>	Price	Advertising Spending	Price Deal	Store Image	Distribution Intensity	Brand Loyalty	Brand Awareness	Perceived Quality	Brand Association
Price	1.000								
Advertising Spending	-.005	1.000							
Price Deal	-.461*	.199*	1.000						
Store Image	-.157*	-.075	.413*	1.000					
Distribution Intensity	-.175*	.280*	.390*	.466*	1.000				
Brand Loyalty	-.215*	.094**	.452*	.555*	.489*	1.000			
Brand Awareness	-.262*	.124*	.448*	.447*	.447*	.661*	1.000		
Perceived Quality	-.254*	-.075	.455*	.686*	.479*	.788*	.622*	1.000	
Brand Association	-.322*	.132*	.500*	.524*	.500*	.716*	.695*	.754*	1.000

Note: \* and \*\* indicate significances at < 0.01 and < 0.05 (differences) levels, respectively

To determine the relationship of shopper demographics and characteristics and the hypermarkets' marketing mix/strategy, and customer-based brand equity, multiple regression models (forward stepwise) were tested for the three age groups. Each age group's analysis includes an equation for the four brand equity dimensions and brand equity (unweighted average of the four dimensions) as dependent variables. Therefore, each age group has multiple regression equation for brand loyalty (Panel A), brand awareness (Panel B), perceived quality (Panel C), brand association (Panel D) and brand equity (Panel E). Independent variables tested are shopper demographics and characteristics (nine variables) and marketing mix/strategy (five variables), or 14 predictors for the brand dimensions and brand equity. Shopper demographics and characteristics are gender, marital status, age, education, occupation, average purchase amount per shopping visit, prior visit to the hypermarket, shopping frequency at the hypermarket, and the hypermarket name. Furthermore, marketing mix, or strategy includes price, advertising spending, price deals, store image and distribution intensity. The independent variable is included in the model only if it is significant at or less than 0.05. The results are presented in Table 4 (young shoppers), Table 5 (middle age shoppers) and Table 6 (older shoppers).

For young shoppers, the explained variance (adjusted R<sup>2</sup>) for the five equations ranged from a low of 32.9% for brand loyalty to a high of 53.6% for perceived quality, and 46.8% for brand awareness, 40.3% for brand association and 49.6% for brand equity. See Table 4. With the exception of price, all significant predictor variables have positive relationships to the dependent variables. Store image, price deal and distribution intensity were the only three marketing mix elements that were included in all equations. Prior purchase experience was the only demographic and shopping characteristics variable in four of the five models. Logic would indicate that young shoppers with greater likelihood of having lower income would be price sensitive, e.g., price included with an inverse relationship. Price was in three of the five models, and price deal, such as one-time or short-term price discounts (coupons, rebates), was in all models. See Table 4, Panels A, B, C, D, and E.

The explained variance for middle age shoppers ranged from 61.1% for brand loyalty to 75.2% for brand equity, and 61.6% for brand awareness, 65.0% for perceived quality and 66.2% for brand association. With the exception of hypermarket (coded as 1 = Carrefour, 2 = RT-Mart, 3 = Costco, 4 = Géant), all significant predictor variables had positive relationships. Of the marketing mix variables, store image and distribution intensity were in each regression model. Of the demographic and shopping characteristic variables, purchase experience was in four of the five equations. See Table 5, Panels A, B, C, D, and E.

For older shoppers, the explained variance ranged from 38.5% for brand association to 46.3% for brand equity, and 41.2% for brand loyalty, 42.3% for brand awareness and 44.7% for perceived quality. With the

exception of hypermarket, advertising spending and price, all significant predictor variables have positive relationships to the dependent variables. Of the marketing mix elements, store image was included in the most equation but for only in four of the five models. Of the demographic and shopper characteristic variables, purchase experience was in all of the regression models. See Table 6, Panels A, B, C, D, and E.

The comparative results (ANOVAs) provide the results for the hypotheses testing. H<sub>1</sub> (brand loyalty) is not supported with no significant differences between the three age groups. However, older shoppers did have the highest mean score for brand loyalty. H<sub>2</sub> (brand awareness) is partially supported. Older shoppers had significantly higher brand awareness than middle age customers but not younger. H<sub>3</sub> (perceived quality) is partially supported. Older shoppers had significantly higher perceived quality mean score than younger ones but not middle age customers. H<sub>4</sub> (brand association) is supported. Older customers had significantly higher brand association than younger and middle age shoppers. While not hypothesized, older shoppers had significantly higher brand equity than younger and middle age customers.

**IMPLICATIONS**

The study findings determined significant differences between young, middle age and older shoppers’ perception of the hypermarkets’ marketing strategies (marketing mix) and their retail store brand equity. Furthermore, the study found specific demographic and shopper characteristics and marketing mix elements that significantly influence each brand dimension and customer-based brand equity. First, using ANOVA with post hoc tests (Scheffé method) older shoppers were found to have much higher brand equity than the other two age groups. Of the five measures (brand loyalty, brand awareness, perceived quality, brand association, brand equity), older customers had higher mean scores (more brand equity) for each one. Of these five, customer loyalty was the only one that did not have any significant difference. See Table 2. Moreover, older shoppers had higher mean scores for three of the five marketing mix elements (price deal, store image, distribution intensity) and total marketing mix with price deal and store image having significant differences.

**Table 4: Regression Models for Younger Shoppers’ Brand Equity**

<b>Panel A: Brand Loyalty Dimension</b>					
R <sup>2</sup> = .342		Adjusted R <sup>2</sup> = .329		Standard Error = .98685 F = 27.617	
Significant F = .000					
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T
(Constant)	-.574	.456			
Store Image	.468	.112	.262	4.189	.000
Price Deal	.479	.101	.277	4.729	.000
Distribution Intensity	.344	.086	.244	3.982	.000
Marital Status	.279	.131	.119	2.132	.034

  

<b>Panel B: Brand Awareness Dimension</b>					
R <sup>2</sup> = .478		Adjusted R <sup>2</sup> = .468		Standard Error = .80550 F = 48.793	
Significant F = .000					
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T
(Constant)	-.047	.388			
Purchase Experience	2.105	.204	.512	10.313	.000
Price Deal	.392	.083	.248	4.742	.000
Distribution Intensity	.274	.070	.212	3.891	.000
Store Image	.300	.091	.183	3.283	.001

**Panel C: Perceived Quality Dimension**

R<sup>2</sup> = .548      Adjusted R<sup>2</sup> = .536      Standard Error = .72497      F = 42.715      Significant F = .000

Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T
(Constant)	-.002	.501			
Store Image	.670	.087	.425	7.738	.000
Price Deal	.213	.086	.139	2.472	.000
Distribution Intensity	.337	.067	.271	5.039	.000
Hypermarket	.225	.056	.199	3.978	.000
Price	-.211	.080	-.142	-2.635	.009
Purchase Experience	.474	.184	.120	2.570	.011

**Panel D: Brand Association Dimension**

R<sup>2</sup> = .419      Adjusted R<sup>2</sup> = .403      Standard Error = .78704      F = 25.389      Significant F = .000

Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T
(Constant)	1.274	.541			
Store Image	.424	.089	.281	4.744	.000
Price Deal	.253	.093	.173	2.715	.000
Distribution Intensity	.314	.070	.264	4.518	.000
Purchase Experience	.771	.200	.204	3.863	.000
Price	-.248	.087	-.174	-2.855	.005
Gender	.240	.108	.117	2.226	.027

**Table E: Brand Equity**

R<sup>2</sup> = .508      Adjusted R<sup>2</sup> = .496      Standard Error = .67968      F = 43.771      Significant F = .000

Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T
(Constant)	.686	.465			
Store Image	.486	.077	.343	6.309	.000
Price Deal	.293	.080	.214	3.648	.000
Distribution Intensity	.314	.060	.280	5.248	.000
Purchase Experience	.844	.172	.237	4.900	.000
Price	-.197	.075	-.147	-2.625	.009

**Table 5: Regression Models for Middle Age Shoppers' Brand Equity**

**Panel A: Brand Loyalty Dimension**

R<sup>2</sup> = .620      Adjusted R<sup>2</sup> = .611      Standard Error = .82984      F = 69.608      Significant F = .000

Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T
(Constant)	-1.230	.367			
Store Image	1.004	.126	.530	7.986	.000
Distribution Intensity	.463	.103	.295	4.493	.000
Purchase Experience	.640	.210	.169	3.050	.003

**Panel B: Brand Awareness Dimension**

R<sup>2</sup> = .631      Adjusted R<sup>2</sup> = .616      Standard Error = .72209      F = 43.004      Significant F = .000

Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T
(Constant)	.794	.402			
Store Image	.594	.111	.358	5.344	.000
Purchase Experience	.947	.189	.286	5.003	.000
Distribution Intensity	.430	.094	.314	4.569	.000
Hypermarket	-.160	.066	-.145	-2.414	.017
Shopping Frequency	.245	.115	.121	2.135	.035



<b>Panel C: Perceived Quality Dimension</b>					
R <sup>2</sup> = .656		Adjusted R <sup>2</sup> = .650		Standard Error = .65764 F = 122.784 Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T
(Constant)	.030	.277			
Store Image	1.024	.099	.647	10.385	.000
Distribution Intensity	.321	.082	.245	3.935	.000

  

<b>Panel D: Brand Association Dimension</b>					
R <sup>2</sup> = .672		Adjusted R <sup>2</sup> = .662		Standard Error = .60912 F = 65.075 Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T
(Constant)	.096	.291			
Distribution Intensity	.424	.087	.344	4.885	.000
Store Image	.464	.094	.311	4.912	.000
Purchase Experience	.634	.155	.213	4.085	.000
Price Deal	.350	.103	.231	3.405	.001

  

<b>Panel E: Brand Equity</b>					
R <sup>2</sup> = .762		Adjusted R <sup>2</sup> = .752		Standard Error = .52562 F = 80.588 Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T
(Constant)	-.524	.264			
Store Image	.690	.083	.459	8.277	.000
Distribution Intensity	.366	.076	.294	4.841	.000
Purchase Experience	.604	.134	.201	4.495	.000
Price Deal	.256	.091	.168	2.813	.006
Shopping Frequency	.180	.084	.098	2.130	.035

Second, using multiple regression models (forward stepwise) specific demographic and shopper characteristics and marketing mix elements significantly influences each age category’s brand dimension and brand equity. These results are summarized and presented in Table 7. For brand loyalty, store image and distribution intensity were significant and positive predictors for all age groups, while purchase experience appeared for only middle age and older shoppers. However, price deal and marital status (coded as 1 = single, 2 = married, 3 = divorced, 4 = widowed) were significant and positive for only young shoppers. Therefore, brand strategies for younger shoppers should focus on more price deals, e.g., coupons, rebates, and targeting the currently married and had been married market segment to increase loyalty. On the other hand, shopping frequency and education (coded as 1 = college graduate degree to 5 = not a high school graduate) were unique to older shoppers’ loyalty. Hence, a hypermarket should motivate more store visits and less educated shoppers to increase older shoppers’ loyalty.

For brand awareness, purchase experience and store image were significant and positive influences for the three age groups. Distribution intensity influenced young and middle age shoppers, and shopping frequency had a positive relationship and hypermarket (coded as 1 = Carrefour, 2 = RT-Mart, 3 = Costco, 4 = Géant) had an inverse relationship for middle and older customers. Again, price deal was a unique predictor for young shoppers. For perceived quality, store image was the only common predictor for the three age groups. However, distribution intensity was significant for young and middle age categories, and purchase experience had a positive influence on young and older groups’ perceived quality. Price deal and hypermarket were unique and had positive influences, and price had an inverse relationship for young shoppers, while advertising spending had a negative influence for older shoppers. For these dimensions, the results are clear in that price-related strategy, e.g., lower prices, more coupons, would be effective for young shoppers, and less advertising spending for older customers would increase brand awareness and perceived quality.

**Table 6: Regression Models for Older Shoppers' Brand Equity**

<b>Panel A: Brand Loyalty Dimension</b>					
$R^2 = .447$	Adjusted $R^2 = .412$	Standard Error = .95468	F = 12.773	Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T
(Constant)	-1.603	.784			
Store Image	.703	.191	.350	3.681	.000
Distribution Intensity	.384	.135	.268	2.851	.006
Shopping Frequency	.433	.194	.191	2.233	.028
Education	.148	.065	.192	2.273	.026
Purchase Experience	1.019	.495	.174	2.057	.043

  

<b>Panel B: Brand Awareness Dimension</b>					
$R^2 = .451$	Adjusted $R^2 = .423$	Standard Error = .81168	F = 16.419	Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T
(Constant)	1.375	.674			
Store Image	.701	.146	.407	4.792	.000
Purchase Experience	1.654	.434	.330	3.810	.000
Hypermarket	-.230	.088	-.229	-2.625	.010
Shopping Frequency	.334	.166	.171	2.010	.048

  

<b>Panel C: Perceived Quality Dimension</b>					
$R^2 = .467$	Adjusted $R^2 = .447$	Standard Error = .67963	F = 23.673	Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T
(Constant)	1.267	.568			
Store Image	.876	.120	.594	7.292	.000
Purchase Experience	.985	.351	.230	2.803	.006
Advertise Spending	-.216	.091	-.196	-2.391	.019

  

<b>Panel D: Brand Association Dimension</b>					
$R^2 = .414$	Adjusted $R^2 = .385$	Standard Error = .70630	F = 14.148	Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T
(Constant)	2.597	.781			
Price Deal	.473	.145	.312	3.273	.002
Purchase Experience	1.094	.384	.259	2.847	.006
Purchase Amount	.175	.054	.307	3.225	.002
Price	-.303	.136	-.225	-2.234	.028

  

<b>Panel E: Brand Equity</b>					
$R^2 = .482$	Adjusted $R^2 = .463$	Standard Error = .65318	F = 25.148	Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T
(Constant)	.459	.501			
Store Image	.654	.129	.455	5.086	.000
Purchase Experience	1.347	.336	.322	4.011	.000
Distribution Intensity	.227	.092	.221	2.463	.016

**Table 7: Regression Models Summary for Younger-Middle Age-Older Shoppers' Brand Equity**

Brand Dimensions	Younger Shopper		Middle Age Shopper		Older Shopper	
	Explained Variance	Significant Influences	Explained Variance	Significant Influences	Explained Variance	Significant Influences
Brand Loyalty	32.9%	Store Image Price Deal Distribution Intensity Marital Status	61.1%	Store Image Distribution Intensity Purchase Experience	41.2%	Store Image Distribution Intensity Shopping Frequency Education Purchase Experience
Brand Awareness	46.8%	Purchase Experience Price Deal Distribution Intensity Store Image	61.6%	Store Image Purchase Experience Distribution Intensity Hypermarket* Shopping Frequency	42.3%	Store Image Purchase Experience Hypermarket* Shopping Frequency
Perceived Quality	53.6%	Store Image Price Deal Distribution Intensity Hypermarket Price* Purchase Experience	65.0%	Store Image Distribution Intensity	44.7%	Store Image Purchase Experience Advertise Spending*
Brand Association	40.3%	Store Image Price Deal Distribution Intensity Purchase Experience Price* Gender	66.2%	Distribution Intensity Store Image Purchase Experience Price Deal	38.5%	Price Deal Purchase Experience Purchase Amount Price*
Brand Equity	49.6%	Store Image Price Deal Distribution Intensity Purchase Experience Price*	75.2%	Store Image Distribution Intensity Purchase Experience Price Deal Shopping Frequency	46.3%	Store Image Purchase Experience Distribution Intensity

Note: \* indicates inverse (-) relationship to the brand dimension

For brand association, price deal and purchase experience were significant predictors for the three age groups. Store image and distribution intensity were positive influences for young and middle age shoppers, and price had an inverse relationship for young and older customers. Gender (1 = male, 2 = female) was a unique predictor for young shoppers, and purchase amount had a positive relationship only for older customers. For brand equity, store image, distribution intensity and purchase experience were common significant predictors for the three age categories. Price deal had a positive influence for young and middle age shoppers. Price was unique and had an inverse relationship for young customers, and shopping frequency had a positive influence on middle age shoppers' brand equity. A branding strategy for young shoppers for these measures is centered again on price-related marketing activities, e.g., low price, more coupons.

Older shoppers clearly had higher brand equity (highest mean score for the five measures) between the three age groups. See Table 2. Important influences on older customers' brand equity were purchase experience (in all equations) and store image (in four of the five equations). See Table 7. Hence, brand strategies should focus on older shopper retention, more so than it would for younger shoppers. Younger shoppers, the group with the second highest mean scores for brand equity, are greatly influenced by store image, distribution intensity, price deal (all in the five models) and price with an inverse relationship (in three models). Therefore, price-related strategies, e.g., low price, more coupons, are important to increasing young shoppers' brand equity. Middle age shoppers had the lowest brand equity (mean scores). This group had similar influences on their brand equity as both younger and older shoppers did. For example, store image and distribution intensity were in all five equation, as they were for

younger shoppers. On the other hand, purchase experience was in four of the five models for middle age group, while purchase experience was in all five equations for older shoppers. Therefore, marketing strategies to increase these influences for middle age customers would also increase brand equity for either young or older shoppers.

## CONCLUSIONS

This study determined differences between three age groups' marketing strategy perceptions and customer-based brand equity. While older shoppers had higher brand equity, middle age customers had the least brand equity. The statistical results show similarities in factors that influence each group's brand equity. Store image, distribution intensity and purchase experience were common for all three groups (brand equity equations). However, there were significant differences. Younger shoppers were more price sensitive with the positive influence of price deals and the inverse relationship of price. The middle age customers were somewhat price sensitive with a positive relationship of price deals, which could influence retail store shopping frequency. Older shoppers appear not to be price sensitive with no significant relationship of price or price deals on brand equity. This could be the result of older shoppers having more disposable income (Karani & Fraccastoro, 2010) and their greater ability to purchase. More importantly, as the huge number of baby boomer generation enters the older shopping group, this provides retailers an opportunity to target this price-insensitive segment as a growth market.

While this study has advanced a better understanding of the influences on brand equity by three consumer age groups, there are limitations. First, this study was in one city, in one country and global region. Therefore, the results are not generalizable. Second, the study was limited to three age groups. Middle age shoppers' results were not as revealing as the other two groups, e.g., role of price and price deals for younger shoppers. These limitations provide future research opportunities to better explain and understand shoppers' ages and brand equity. For example, similar studies should be in other countries and global regions. Furthermore, middle age shoppers could be further classified as younger and older middle age shoppers. This basis would maybe better identify similarities and differences, if any, between the middle age shoppers and the younger and older shoppers.

## AUTHOR INFORMATION

**Hui-Chu Chen**, TransWorld University, Assistant Professor, College of Business Administration, TransWorld University, 1221 Jen-Nan Rd., Dou-Liu City, Yulin County 640, Taiwan (R.O.C.). Telephone: 05-537-0988, E-mail: denise@twu.edu.tw

**Robert D. Green**, Lynn University, Professor of Marketing, College of Business and Management, Lynn University, 3601 North Military Trail, Boca Raton, Florida 33431 USA. Telephone: 561/237-7812, Fax: 561/237-7014, E-mail: rgreen@lynn.edu. Corresponding author

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NOTES