The Effects of Price on Brand Extension Evaluations: The Moderating Role of Extension Similarity

Valerie A. Taylor and William O. Bearden

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The Effects of Price on Brand Extension Evaluations: The Moderating Role of Extension Similarity

Valerie A. Taylor
University of Tennessee at Chattanooga

William O. Bearden
University of South Carolina

This research explores the effects of price information on brand extension evaluations across different levels of similarity. Brand extension similarity is proposed as a moderator of the effects of price on brand extension perceived quality, perceived value, and purchase intentions. Specifically, price is hypothesized to have a larger positive impact on perceived quality evaluations of dissimilar extensions, but a larger negative impact on perceived value and purchase intentions for similar extensions. Results indicate that a high-price introductory strategy used to suggest a high-quality product will likely be more effective for dissimilar extensions than similar extensions. The results of this research suggest a number of implications for new product pricing. Directions for subsequent research are offered as well.

Brand extension strategies are widely employed because of beliefs that they build and communicate strong brand positioning, enhance awareness and quality associations, and increase the probability of trial by lessening new product risk for consumers. Research has shown that the strategy can have a positive impact on market share (Smith and Park 1992; Sullivan 1992), stock market return (Lane and Jacobson 1995), and advertising efficiency (Smith 1992; Smith and Park 1992). Furthermore, brand extensions can be used to take advantage of marketplace growth opportunities (Dawar and Anderson 1994; Lane 2000) and to exploit positive brand equity (Keller 1993; Kumar and Ganesh 1995; C. S. Park and Srinivasan 1994; Shocker, Srivastava, and Ruekert 1994), all at a cost lower than that required to successfully introduce a new brand. In studying consumer perceptions of brand extensions, researchers have investigated the determinants of consumers' brand extension evaluations, focusing largely on brand affect (Aaker and Keller 1990) and brand extension similarity to the core brand (Aaker and Keller 1990; Boush and Loken 1991; C. W. Park, Milberg, and Lawson 1991).

Brand extension similarity to the core brand has been conceptualized in numerous ways (Keller and Aaker 1992; C. W. Park et al. 1991). For example, Smith and Park (1992) discussed both supply-side and demand-side effects of similarity. Supply-side similarity effects result from synergies between existing product offerings and new products in terms of firm characteristics, such as channels of distribution, sales systems, and expertise. The demand-side effects of similarity relate to consumer perceptions of new brand extensions. Aaker and Keller (1990) considered similarity in terms of whether the core and extension products are substitute or complementary products, whether they have common manufacturing processes, or whether they require the same expertise in manufacturing. Others have considered similarity in terms of the number of product features shared between the core brand and the extension (Keller and Aaker 1992).

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Recently, research has focused on extending the similarity construct past the existing focus on feature similarity and common functions. Broader bases of similarity include those such as relatedness (Herr, Farquhar, and Fazio 1996), concept consistency (C. W. Park et al. 1991), and associations shared between the extension and core brand (Broniarczyk and Alba 1994).

A frequently cited finding concerning brand extensions is that consumer evaluations are more favorable when the similarity between the extension and the core brand is high (Aaker and Keller 1990; Boush and Loken 1991; C. W. Park et al. 1991). Yet, the idea that brand extensions should not necessarily be limited to similar product categories is supported by other recent brand extension research (e.g., Dawar and Anderson 1994; Keller and Aaker 1992; Lane 2000; Morrin 1999; Smith and Park 1992). Academic researchers (e.g., Dawar 1996; Dawar and Anderson 1994; Klink and Smith 2001; Smith and Andrews 1995; Wänke, Bless, and Schwarz 1998) and marketing practitioners (Hawn 1998) alike have recognized that marketers are often motivated to either extend brands to seemingly dissimilar categories (cf. Keller 1993; Lane 2000; McCarthy, Heath, and Milberg 2001; C. W. Park and Srinivasan 1994; Sheth and Sisodia 1999; Shocker et al. 1994) or to introduce extensions that have attributes that are inconsistent with the image of the core brand (Klink and Smith 2001; Roedder John, Loken, and Joiner 1998). Recognizing this motivation to stretch brands, researchers have recently investigated how the introduction of less similar extensions might be strategically managed to enhance the probability of success. For instance, researchers have shown that brand extensions introduced in an ordered fashion (from closest to farthest from the core brand) can lead to perceptions of greater coherence of the brand image and enhanced purchase intentions for the extension than an unordered brand extension strategy (Dawar and Anderson 1994). Wänke et al. (1998) demonstrated how belief transfer between a core brand and an extension could be influenced by contextual information (i.e., relation of extension name to prior brand model names) other than feature similarity. More recent research by Lane (2000) suggested that responses to incongruent brand extensions were more favorable when ads for the extension were exposed repeatedly. Others have researched issues such as how a subbranding strategy (i.e., the use of a new brand name in conjunction with a family brand name) may improve evaluations of extension fit over a pure brand extension strategy (Milberg, Park, and McCarthy 1997), how perceptions of certainty may mediate the effect of fit on extension evaluations (Smith and Andrews 1995), and how perceptions of core brand breadth influence fit evaluations of new brand extensions (Dawar 1996).

Collectively, this growing body of research suggests that marketers can proactively manage the introduction of incongruent or dissimilar brand extensions to enhance consumer acceptance. Consequently, understanding how different marketing actions may affect consumer perception of the extension limits of a brand and in turn extension evaluations remains an important area of inquiry (cf. Gürhan-Canli and Maheswaran 1998; Klink and Smith 2001). To add to this literature, the present research examines the effects of brand extension pricing on consumer brand extension evaluations across different levels of brand extension similarity. Similarity is broadly conceptualized here and goes beyond shared attributes and physical features to include conceptual bases of similarity like Herr, Farquhar, and Fazio's (1996) notion of relatedness and Broniarczyk and Alba's (1994) brand associations. In the following sections of the article, hypotheses regarding the effects of price on brand extension perceived quality evaluations, perceived value, and purchase intentions are developed. An experimental study then tests these hypotheses. Subsequently, results are reported and the implications of the findings are discussed.

PRICE EFFECTS AND BRAND EXTENSION EVALUATIONS

Generally, when consumers evaluate new products, they have limited experience or knowledge about the new offering. The extant price-perceived quality research shows that in such situations when objective information available about the new product is low, price is likely to be used as a cue to quality (Dodds, Monroe, and Grewal 1991; Rao and Monroe 1988; Tellis and Gaeth 1990). However, for brand extensions, a judgment about extension similarity likely affects the amount of information that is perceived to be relevant, or diagnostic, to the task of evaluating the extension (Ahluwalia and Gürhan-Canli 2000). In Feldman and Lynch's (1988) framework of inputs, an input is used in a judgment to the degree that its relative diagnosticity and accessibility in memory are high. The diagnosticity of an input refers to the degree to which that input is perceived to help make a related judgment (cf. Feldman and Lynch 1988:424; Herr, Kardes, and Kim 1991). Therefore, as information becomes more relevant to a certain judgment, the diagnosticity of that information increases.

In the context of brand extensions, when an extension is judged to be conceptually similar or related to the core brand, perceptions and associations about the core brand have a high degree of relevance to the extension and therefore should be perceived as diagnostic of the extension offer. Consequently, consumers likely make use of this diagnostic information in a subsequent evaluation of extension quality and may transfer relevant associations from the core brand to the extension in the perceived quality evaluation (Keller and Aaker 1992, 1993). Perceived quality, as defined by Zeithaml (1988), represents

a *judgment about the global excellence or superiority of a product offering*. Thus, when a similar extension is considered, additional extrinsic quality cue information, such as price, is less likely to affect perceived quality extension evaluations because information perceived to be more diagnostic in the judgment (i.e., the core brand associations) has been recognized. Conversely, when faced with an extension that is judged to be dissimilar or less related to the core brand, core brand associations have less relevance to the extension and, therefore, should be perceived as less diagnostic of extension quality. Since core brand associations are perceived to be less diagnostic, additional quality cues, such as price, are more likely to be perceived as diagnostic and enter into the quality judgment. Nonetheless, although core brand associations are perceived to be less diagnostic, they still may enter into the perceived quality judgment. In the case of dissimilar extensions, then, additional cues to quality, such as price, should affect the perceived quality judgment along with relevant core brand associations.

A consequence of the difference in the proposed processing of cue information between similar and dissimilar extensions is that price information should have a larger positive impact on the perceived quality evaluation of dissimilar extensions than similar extensions. An important implication that follows is that the price-quality inference aspects of pricing strategies are potentially more useful for dissimilar extensions than for similar extensions. That is, the impact of high-price positioning information on evaluations of similar extensions may prove ineffective in suggesting high quality to consumers. This interaction is formally hypothesized as follows:

Hypothesis 1: Price and extension similarity will interact such that price information will have a larger positive influence on perceived quality evaluations of dissimilar extensions than on evaluations of similar extensions.

The result of the hypothesized difference in processing of price information between similar and dissimilar extensions is also likely to influence other outcome variables, such as perceived value and purchase intentions (cf. Buchanan, Simmons, and Bickart 1999; Dodds et al. 1991; Grewal, Monroe, and Krishnan 1998; Teas and Agarwal 2000). Whereas perceived quality evaluation represents a judgment about the global excellence or superiority of a product offering (Zeithaml 1988), *perceived value is conceptualized as a trade-off between perceived quality and monetary sacrifice* and can be theoretically described as the ratio of perceived quality:perceived price (Dodds et al. 1991; Grewal et al. 1998; Monroe and Krishnan 1985; Zeithaml 1988). This conceptualization of perceived value represents a global evaluation of long-term worth and is composed of the buyer's perceived net gain from the acquisition incorporating inputs of perceived price and perceived quality. Moreover, although perceived quality serves as an input in the perceived value judgment, the two concepts differ substantially as the former represents perceptions regarding product superiority, while the latter represents perceptions of the worth of the product offer in terms of what is sacrificed compared to what is acquired (Grewal et al. 1998; Monroe and Krishnan 1985; Zeithaml 1988). While research indicates that perceived quality is a positive function of perceived price, perceived value is assumed to be a negative function of perceived price and also a positive function of perceived quality (Dodds et al. 1991; Monroe and Krishnan 1985). In turn, *purchase intentions, which represent a consumer's willingness to buy*, are also influenced by perceived value. Research supports a positive relationship between perceived value and purchase intentions, suggesting that price has a negative impact on perceived value and purchase intentions (Dodds et al. 1991; Grewal et al. 1998; Monroe and Krishnan 1985).

Because extension similarity is expected to affect the perceived diagnosticity of price information and consequently the degree to which price information has an impact on the perceived quality judgment of the extension (i.e., Hypothesis 1), subsequent perceptions of value and purchase intentions are also likely to be moderated by extension similarity. For dissimilar extensions, as predicted by Hypothesis 1, price information is expected to positively affect perceived quality. Given that perceived value is conceptualized as a trade-off between perceived quality and perceived price, as price increases, for dissimilar extensions, both perceptions of quality and price are expected to increase. Consequently, as price increases, the conceptual trade-off leading to perceived value should be largely unchanged since the perceptions of both quality and price increased.[1] Therefore, for dissimilar extensions, perceptions of value should remain relatively unchanged as price increases. As extant research supports a positive relationship between perceived value and purchase intentions, purchase intentions should remain unchanged for dissimilar extensions as price increases as well.

Perceived value and purchase intentions of similar extensions are expected to be influenced by price information. For similar extensions, as price increases, the perceived price component in the conceptual perceived value trade-off should increase per the given level of quality. The perceived quality component in the trade-off is expected to remain relatively unchanged because price information is less likely to affect perceived quality evaluations of similar extensions (cf. Hypothesis 1). Therefore, for similar extensions, because perceived value is inversely related to price, perceived value and purchase intentions should decrease as price increases. The following hypotheses summarize these expectations:

Hypothesis 2: Price and extension similarity will interact such that price information will have a larger negative influence on perceived value for similar extensions than dissimilar extensions.

Hypothesis 3: Price and extension similarity will interact such that price information will have a larger negative influence on purchase intentions for similar extensions than dissimilar extensions.

METHOD

Overview and Design

The study was a 2 (brand extension similarity) × 2 (brand extension price) × 2 (core brand quality) between-subjects design. Brand extension similarity was manipulated at two levels, similar and dissimilar. The brand extension product category was held constant between the similar and dissimilar extensions, and similarity was manipuated by varying the core product categories (cf. Morrin 1999). The price of the brand extension was manipulated at two levels, low and high price. Four price-absent control conditions were also included as part of the experimental design to allow for additional tests of the hypotheses as the low-price and high-price conditions could be compared with no-price conditions (cf. Olson 1977). The price manipulation was developed following a check of marketplace clock radio prices. Prices at large national retailers (i.e., Wal-Mart, Best Buy, and Service Merchandise) ranged from $9.98 to $129.94. The price stimuli (i.e., $9.39 and 59.97) were selected to be representative of clock radio prices found in the marketplace. While the third factor, core brand quality, was not of direct theoretical interest, brand names were needed to create a realistic brand extension context. As such, nonfictitious brand names were used to enhance the ecological validity of the study, and two levels of core brand quality (high and moderate) were selected to enhance generalizability (cf. Klink and Smith 2001; Winer 1999).

Pretests

A pretest ($N = 45$) was conducted to identify product categories and brands that met the requirements of the similarity manipulation. Constraints were that the brands and product category be relevant to most consumers and that the category be one in which quality and prices vary within the marketplace (cf. Monroe and Krishnan 1985). Consistent with these criteria, clock radios were eventually chosen as the brand extension product category (cf. Milberg et al. 1997). Pretest participants were first presented with a number of durable product brands across several product categories and asked to indicate how dissimilar or similar an extension would be if introduced from one of the mentioned brands. Subsequently, pretest participants were also asked to rate the quality of a series of brand names within several categories, as well as their familiarity with the brands, using a series of 9-point scales. Based on the pretest results, wrist watches were chosen as the core product category for the similar (SIM) extension, while cameras were selected for the dissimilar (DIS) extension ($X_{SIM} = 6.73$ vs. $X_{DIS} = 3.40$; $t_{43} = 9.11$, $p < .01$) (cf. Milberg et al. 1997). The watch brand names selected for the similar extensions were Casio and Timex (i.e., the moderate-quality [MQ] and high-quality [HQ] core brands, respectively) ($X_{MQ} = 6.10$ vs. $X_{HQ} = 7.38$; $t_{38} = 5.74$, $p < .01$). The camera brand names selected for the dissimilar extensions were Polaroid and Canon (i.e., the moderate- and high-quality core brands, respectively) ($X_{MQ} = 6.51$ vs. $X_{HQ} = 7.68$; $t_{40} = 5.06$, $p < .01$). These brand names were also chosen, in part, because pretest participants judged the brand names to be similar with respect to familiarity.

Measures

The dependent variables—perceived extension quality, perceived value, and purchase intentions—are shown in the Appendix. Perceived extension quality items were similar to those used by Broniarczyk and Alba (1994) and Keller and Aaker (1992). Measures of perceived value and purchase intentions were adapted from those used by Buchanan et al. (1999), Dodds et al. (1991), and Grewal et al. (1998). Manipulation checks included a perceived similarity measure that was the average of four 9-point scales asking participants to rate the overall similarity of the brand extension to the core brand product as *dissimilar-similar, a bad fit for the company-good fit for the company*, *not logical-very logical*, *not appropriate-very appropriate* (cf. Boush and Loken 1991; Broniarczyk and Alba 1994). A measure of the degree that the price of the extension was perceived as low or high and a measure of the perceived quality of the core brand (assessed as the average of the same items used to measure perceived quality of the brand extensions) were also included as manipulation checks. Finally, a 9-point measure of core brand familiarity was included and was later considered as a covariate to examine the robustness of subsequent results.

Procedure

To enhance the experimental realism of the study, participants were told that the objective of the study was to aid in the development of a new product testing service to be used in commercial market research (cf. Keller and Aaker 1992). The target brand extension was presented in a descriptive paragraph discussing the product, and a scanned picture of the brand extension product was provided. Participants then worked through the dependent measures, a series of manipulation check measures, and the brand familiarity question.

Student interviewers who received course credit for their participation as part of a marketing research class project collected the data. Guidelines for respondent eligibility were provided to ensure a varied sample and to exclude participation by family members (cf. Mick 1996). Interviewers were required to obtain responses from both genders and one from each of three age-groups: 18 to 24, 25 to 30, and older than 30. The surveys were accompanied by a cover letter explaining the purpose of the research and instructions regarding how to respond using the scale items. Each respondent's first name and telephone number were also obtained at the end of each survey and used in random checks to verify that the data were collected as reported. Fifty-one percent of the study participants were female and the median age category was above 30.

RESULTS

Preliminary Analyses

The final usable sample consisted of 285 participants, with cell sizes ranging from 23 to 24.[2] The intercorrelations of the nine measurement items (i.e., four perceived quality items, three perceived value items, and two purchase intention items) designed to measure the same construct were moderate to high (i.e., intercorre- lations within items for each construct range from .60 to .93). Also, correlations of same-construct items were higher than the correlations of different-construct items, providing preliminary evidence of discriminant validity. The items were further evaluated using confirmatory factor analysis. First, a three-factor correlated model resulted in a chi-square statistic of 116.41 ($df = 24$, $p < .01$). The Goodness-of-Fit Index (GFI), the Adjusted Goodness-of-Fit Index (AGFI), and the Relative Goodness-of-Fit Index (RGFI) were .92, .85, and .94, respectively. The Rescaled Noncentrality Index (RNI) was .96, and the Tucker-Lewis Index (TLI) was .94. A comparison of the fit statistics to the suggested cutoff values suggests that the model fits the data well (cf. Sharma 1996). All construct indicators were significant ($p < .01$), and the construct reliabilities were as follows: perceived quality, .91; perceived value, .94; and purchase intention, .96.

Two tests of construct discriminant validity were conducted. First, the shared variance estimate for each construct was calculated (perceived quality, .72; perceived value, .84; and purchase intention, .91) and compared to the square of the phi coefficient representing the correlation between pairs of constructs (Fornell and Larcker 1981). The phi estimates were as follows: perceived quality and perceived value, .11; perceived quality and purchase intention, .28; and perceived value and purchase intention, .43. As such, each of the shared variance estimates exceeded the square of the corresponding phi coefficient. Second, chi-square statistics for the two-construct correlated model and the corresponding unidimensional model were obtained, and then chi-square difference tests were performed (cf. Bagozzi 1980). Evidence of discriminant validity among the three constructs was provided as each of the two-factor correlated models provided a significant improvement in model fit over the corresponding unidimensional model (i.e., the smallest of the chi-square difference statistics with one degree of freedom was 209.7). In the subsequent analyses, indicators of each construct were averaged to form three operational dependent measures.

Manipulation Checks

One-way analyses of variance were conducted to assess the impact of the similarity manipulation ($F_{1, 281} = 95.61$, $p < .01$), the price manipulation ($F_{1, 187} = 391.79$, $p < .01$), and the two core brand quality levels ($F_{1, 280} = 103.61$, $p < .01$). Analyses of the means of the manipulation check measures indicated that the manipulations were perceived as intended. First, the dissimilar (i.e., camera to clock radio) and similar (i.e., watch to clock radio) extensions differed as expected with respect to similarity ($X_{DIS} = 4.82$ vs. $X_{SIM} = 6.39$; $t_{281} = 9.78$, $p < .01$). The prices of the extensions were perceived as expected (price: $X_{LP} = 2.42$ vs. $X_{HP} = 7.26$; $t_{187} = 19.79$, $p < .01$). Finally, the moderate quality core brands (i.e., Polaroid and Casio) and the higher quality core brands (i.e., Canon and Timex) also differed as intended (brand name evaluation: $X_{MQ} = 5.66$ vs. $X_{HQ} = 7.11$; $t_{280} = 10.18$, $p < .01$).

In further tests, several anomalies occurred in a complete $2 \times 2 \times 2$ analysis of variance (ANOVA) on the manipulation check measures. Fortunately, the relative sizes of these anomalies in the complete manipulation check analyses were substantially smaller than the observed main effects for the three independent variables on their corresponding manipulation check measures. As discussed by Perdue and Summers (1986:323), the critical consideration is that the size of the main effect being checked in the analysis is larger than the cumulative size of any crossover effects. Furthermore, these modest effects are also consistent with prior research and/or make the following hypothesis tests more conservative. To begin, the first of these effects involved a significant main effect for brand name on the similarity manipulation check ($F_{1, 177} = 7.30$, $p < .01$). A follow-up contrast revealed that extensions from the high-quality core brands were perceived to be more similar to the core brand than extensions from the moderate-quality core brands ($X_{MQ} = 5.18$ vs. $X_{HQ} = 5.72$; $t_{185} = 2.37$, $p < .01$). This finding is consistent with Keller and Aaker's (1992) conclusion that high-quality brands may be extended further away from the core brand than

TABLE 1
Cell Sizes, Means, and Standard Deviations

		Moderate-Quality Core Brand			*High-Quality Core Brand*		
		Low Price	*High Price*	*No Price*	*Low Price*	*High Price*	*No Price*
Cell sizes	Dissimilar	23	23	24	24	23	24
	Similar	24	24	24	24	24	24
PQ	Dissimilar	5.03 (1.25)	5.96 (1.14)	5.82 (1.29)	5.62 (1.45)	6.86 (1.02)	5.85 (1.29)
	Similar	5.86 (1.10)	6.30 (1.21)	6.19 (1.20)	6.21 (1.41)	6.60 (1.09)	6.89 (0.88)
PV	Dissimilar	5.62 (2.28)	4.29 (2.22)		6.56 (2.17)	5.19 (1.90)	
	Similar	6.39 (2.09)	5.08 (1.99)		6.97 (2.12)	3.67 (2.03)	
PI	Dissimilar	3.35 (1.87)	2.76 (2.02)	4.33 (1.97)	3.96 (2.20)	3.28 (1.96)	4.06 (1.67)
	Similar	4.31 (1.91)	3.60 (1.62)	4.17 (1.86)	5.15 (2.68)	3.25 (2.10)	3.52 (2.00)

NOTE: PQ = perceived quality; PV = perceived value; PI = purchase intentions.

TABLE 2
Analysis of Variance (ANOVA) Results

	MANOVA			*ANOVA* (F-*values*)			
Effect	*Wilks's* Λ	df	F-*Value*	df	*Perceived Quality*	*Perceived Value*	*Purchase Intentions*
Similarity (S)	.96	3	2.27	1	3.97*	0.07	4.91*
Brand (B)	.95	3	3.33*	1	9.36**	0.47	1.79
Price (P)	.69	3	26.08**	1	18.13**	34.77**	9.35**
S × B	.97	3	1.83	1	1.76	4.69*	0.42
S × P	.97	3	1.70	1	4.07*	2.15	1.33
B × P	.98	3	1.27	1	0.29	2.46	0.73
S × B × P	.99	3	0.83	1	0.41	2.25	0.81
Residual		174		176			

*$p < .05$. **$p < .01$.

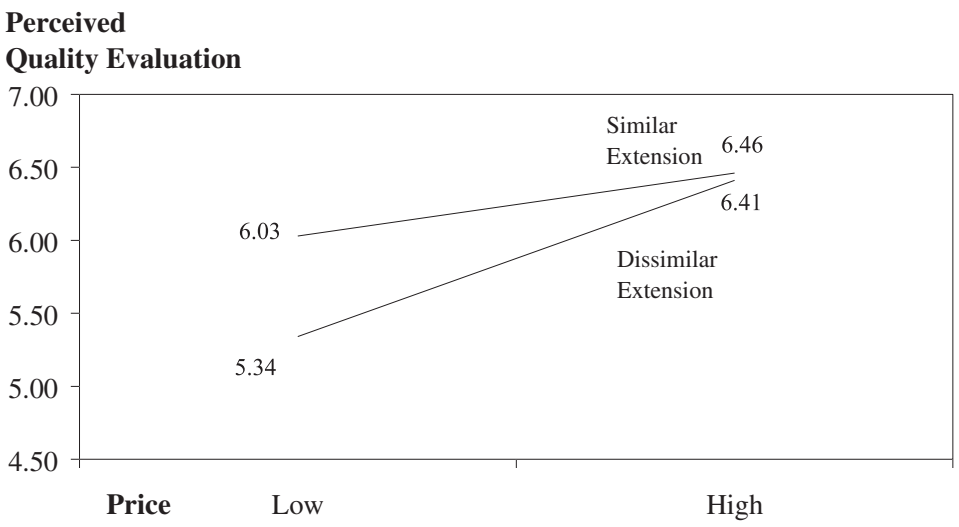
average-quality brands. There was also a main effect of similarity ($F_{1, 177} = 9.76$, $p < .01$) on the brand quality check. Follow-up contrasts revealed that the core brands for the dissimilar product category (i.e., Cannon and Polaroid) were evaluated more favorably than the core brands for the similar product category (i.e., Timex and Casio) ($X_{DIS} = 6.62$ vs. $X_{SIM} = 6.09$; $t_{184} = 2.57$, $p < .01$), which is consistent with the marketplace value of most cameras versus most watches. Finally, there was a modest similarity-by-price interaction on the similarity check measure ($F_{1, 177} = 3.60$, $p = .059$). More important, follow-up analysis revealed no difference in similarity ratings between the two price conditions for either the dissimilar ($X_{LP} = 4.57$ vs. $X_{HP} = 4.96$; $t_{90} = 1.21$) or similar extensions ($X_{LP} = 6.32$ vs. $X_{HP} = 5.93$; $t_{93} = 1.43$). In addition, when a separate similarity check item that considered similarity at the category level ["In terms of overall product similarity, how similar do you consider *clock radios* and *watches* (*cameras*)?"] was considered in a three-factor ANOVA, the only significant effect was a main effect of similarity on the similarity check measure.

Tests of Hypotheses

Mean evaluation scores and cell sizes are reported in Table 1. And, as shown in Table 2, a $2 \times 2 \times 2$ multivariate analysis of variance (MANOVA) test was first used to examine the three correlated dependent variables across the experimental groups (cf. Hayes 1981). Overall, significant main effects were observed for price (Wilks's $\Lambda = .69$, $F = 26.08$, $p < .01$) and core brand quality (Wilks's $\Lambda = .95$, $F = 3.33$, $p < .05$). Examination of the effects for the individual dependent variables reveals a more complex pattern of results. These results are presented next, first for perceived quality and then for perceived value and purchase intentions.

Perceived quality evaluation results. ANOVA results for the perceived quality measure revealed a significant main effect for similarity ($F_{1, 176} = 3.97$, $p < .05$); a significant main effect for price ($F_{1, 176} = 18.13$, $p < .01$); a significant main effect for brand quality ($F_{1, 176} = 9.36$, $p < .01$); and, as predicted in Hypothesis 1, a significant similarity-by-price interaction ($F_{1, 176} = 4.07$, $p < .05$). Hypothesis 1 was further explored by directly comparing experimental group means (i.e., low-price to the high-price conditions) within each similarity level. Follow-up comparisons revealed that price significantly affected perceived quality evaluations of the dissimilar extensions ($X_{DIS\text{-}LP} = 5.34$ vs. $X_{DIS\text{-}HP} = 6.41$; $F_{1, 91} = 16.49$, partial $\eta^2 = .15$, $p < .01$) but did not have a significant impact on perceived quality evaluations for the similar extensions ($X_{SIM\text{-}LP} = 6.03$ vs. $X_{SIM\text{-}HP} =$

FIGURE 1
Similarity and Price Interaction on Perceived Extension Quality



6.46; $F_{1, 91} = 2.89$, partial $\eta^2 = .03$). This significant price-by-similarity interaction is presented in Figure 1. To rule out differences in brand familiarity as an alternative explanation for the significant interaction, an analysis using brand familiarity as a covariate was performed. First, using perceived quality of the extension as the dependent variable, covariate-by-independent-variable interaction tests revealed no significant interactions. More important, when core brand familiarity was controlled for as a covariate, results revealed that the effects on perceived quality held. Therefore, differences in brand familiarity do not appear to be an explanation for the observed price effect. Consequently, the predicted effects for perceived quality evaluations between the dissimilar and similar extensions (i.e., Hypothesis 1) were supported.

Contrasts using the price-absent control groups were conducted to further explore price effects on perceived quality evaluations. First, the impact of high price on perceived quality was compared between the dissimilar and similar extensions. Results indicate that perceived quality evaluations of the high-price dissimilar extensions were significantly enhanced compared with perceived quality evaluations of the dissimilar no-price control extension ($X_{\text{DIS-HP}} = 6.41$ vs. $X_{\text{DIS-NP}} = 5.84$; $F_{1, 92} = 6.31$, partial $\eta^2 = .064$, $p = .01$). However, for the similar extension, there was no enhancing effect of a high price on perceived quality, as evaluations of the high-priced similar extensions were not significantly different from evaluations of the no-price similar control extension ($X_{\text{SIM-HP}} = 6.46$ vs. $X_{\text{SIM-NP}} = 6.54$; $F_{1, 92} = .12$, partial $\eta^2 = .001$). Next, the impact of low price on perceived quality (versus the price-absent control group) was compared between the dissimilar and similar extensions. Results showed that the low-price information significantly attenuated perceived quality evaluations of both the dissimilar and similar extensions when these evaluations were compared with evaluations of those in the no-price control group ($X_{\text{DIS-LP}} = 5.34$ vs. $X_{\text{DIS-NP}} = 5.84$, $F_{1, 93} = 4.09$, partial $\eta^2 = .04$, $p = .05$; $X_{\text{SIM-LP}} = 6.03$ vs. $X_{\text{SIM-NP}} = 6.54$, $F_{1, 93} = 4.33$, partial $\eta^2 = .04$, $p < .05$). Thus, these control group comparison results provide additional support for Hypothesis 1, as they show that a high price when associated with the dissimilar extensions significantly enhanced perceived quality evaluations. Yet, no such effect was observed when a high price was paired with the similar extensions. As such, these results suggest that a high price cue to quality may have a greater impact in the perceived quality judgment of dissimilar than similar extensions.

Perceived value and purchase intentions. Results pertaining to perceived value and purchase intensions are also presented in Tables 1 and 2. Although the similarity-by-price interaction did not emerge in the ANOVAS on either perceived value or purchase intensions, follow-up contrasts supported both Hypotheses 2 and 3. Specifically, contrast results support Hypothesis 2 as there was a larger negative effect of price on perceived value of similar extensions ($X_{\text{SIM-LP}} = 6.68$ vs. $X_{\text{SIM-HP}} = 4.38$; $F_{1, 94} = 28.70$, partial $\eta^2 = .23$, $p < .001$) than dissimilar extensions ($X_{\text{DIS-LP}} = 6.09$ vs. $X_{\text{DIS-HP}} = 4.72$; $F_{1, 89} = 9.12$, partial $\eta^2 = .09$, $p < .01$). Similarly, follow-up contrasts showed support for Hypothesis 3 as there was also a larger negative effect of price on purchase intentions of similar extensions ($X_{\text{SIM-LP}} = 4.73$ vs. $X_{\text{SIM-HP}} = 3.43$; $F_{1, 94} = 9.10$, partial $\eta^2 = .09$, $p < .01$) than dissimilar extensions ($X_{\text{DIS-LP}} = 3.66$ vs. $X_{\text{DIS-HP}} = 3.02$; $F_{1, 91} = 2.33$, partial $\eta^2 = .025$, $p > .10$).

In addition, ANOVA results showed a significant main effect for price on both perceived value ($F_{1, 176} = 34.77$, $p < .01$) and purchase intentions ($F_{1, 176} = 9.35$, $p < .01$), as well as a significant main effect for similarity on purchase intentions ($F_{1, 176} = 4.91$, $p < .05$). As expected, follow-up contrasts showed that the low price produced perceptions of value and purchase intentions that were significantly higher than those produced by the high price (perceived value, $X_{LP} = 6.39$ vs. $X_{HP} = 4.54$, $t_{185} = 5.91$, $p < .01$; purchase intentions, $X_{LP} = 4.20$ vs. $X_{HP} = 3.23$, $t_{187} = 3.19$, $p < .01$). Also, purchase intentions were higher for the similar extension than for the dissimilar extension ($X_{DIS} = 3.34$ vs. $X_{SIM} = 4.08$, $t_{187} = 2.38$, $p < .05$). Results also showed a significant similarity-by-brand-quality interaction ($F_{1, 176} = 4.69$, $p < .05$) on perceived value. Follow-up contrasts showed that for the extensions from moderate-quality core brands, the similar extension was perceived to be a better value than the dissimilar extension ($X_{SIM\text{-}MQ} = 5.74$ vs. $X_{DIS\text{-}MQ} = 4.96$; $t_{92} = 1.70$, $p < .05$ [two-tailed]). In contrast, for extensions from the high-quality core brands, there was no difference in value perceptions between the dissimilar and similar extensions ($X_{SIM\text{-}HQ} = 5.92$ vs. $X_{DIS\text{-}HQ} = 5.32$, $t_{91} = 1.20$). This finding suggests that in some cases, value perceptions may be higher for similar extensions than dissimilar extensions and is consistent with Keller and Aaker's (1992) conclusion that high-quality brands may be extended further away from the core brand than average-quality brands.

DISCUSSION

The focus of this article has centered on the perceptual effects of brand extension pricing on consumer's brand extension evaluations, across different levels of brand extension similarity. The hypotheses investigated similarity as a moderator of the effects of price on brand extension perceived quality, perceived value, and purchase intentions. Specifically, price was hypothesized to have a greater positive impact on perceived quality evaluations of dissimilar extensions (cf. Hypothesis 1), but a larger negative impact on perceived value and purchase intentions for similar extensions (cf. Hypotheses 2 and 3). These predictions were investigated by examining the impact of price on brand extension evaluations across different levels of brand extension similarity. Results showed that the effect of price on brand extension perceived quality evaluations was larger for dissimilar than similar brand extensions as predicted in the first hypothesis. Furthermore, analyses using the no-price control groups showed that a high introductory price had a positive impact on perceived quality evaluations for dissimilar extensions but not similar extensions.

Although the predicted similarity-by-price interaction on perceived value and purchase intentions did not emerge in the ANOVAs as such, additional contrast analyses provided support for Hypotheses 2 and 3 as price had a larger negative effect on perceived value and purchase intentions of similar extensions than dissimilar extensions. The most likely explanation for the lack of a significant similarity-by-price interaction in the ANOVA on perceived value and/or purchase intentions stems from the relatively large price manipulation. That is, in the perceived value trade-off between perceived quality and perceived price, for dissimilar extensions, as price increased, the impact of the price information on the perceived price component was greater than the impact on the perceived quality component.

Implications and Conclusions

The findings of this research are most relevant to manufacturers of well-known products following an "exploit brand equity" strategy (Dawar and Anderson 1994; Kumar and Ganesh 1995; Lane 2000; Morrin 1999; C. S. Park and Srinivasan 1994; Sheth and Sisodia 1999), which may be motivated by the objective of generating successful new product introductions. Results from the present research showed that high-price information contributed to the perceived quality evaluation of dissimilar extensions but not similar extensions. In addition, contrast results suggested that price had a larger negative impact on perceived value and purchase intentions of similar extensions than dissimilar extensions. These findings are important because they suggest that a high-price introductory strategy will likely be more effective in enhancing perceived quality evaluations for dissimilar extensions than similar extensions and that dissimilar extensions may be less sensitive to the negative impact of high-price information on perceived value and purchase intentions than similar extensions. Consequently, the present research suggests that manufacturers attempting to leverage brand name and grow brand equity might find that following a high-price positioning strategy leads to quality inferences and results in more favorable evaluations. One implication then of this research is that managers may be able to use price information to promote more favorable perceived evaluations for dissimilar extensions.

Limitations and Directions for Future Research

The results of the study reported here should be generalized with caution as they are based on the study of one consumer product category and, hence, the findings may not generalize to other product categories. Furthermore, the caveats associated with experiments and the use of convenience samples are appropriate. Moreover, participants were asked to evaluate new products on the basis of new product concept information that was provided in paragraph form (cf. Keller and Aaker 1992; Wänke et al. 1998). Consequently, the limited information environ-

ment restricts generalization of the results. Also, this research did not consider all bases of extension similarity, and findings are not expected to generalize to supply-side similarity in particular (Smith and Park 1992) as that type of similarity results from synergies between the core and extension in terms of firm characteristics, such as channels of distribution, sales systems, and expertise rather than consumer perception of the extension offer. Finally, although this research did not consider brand concept consistency directly (Park et al. 1991), the research findings may be most applicable to functional brand concepts.

As suggested by Klink and Smith (2001), future research might also explore the impact of similarity on brand extension evaluations when additional quality cues other than price, such as advertising intensity (cf. Kirmani 1990; Kirmani and Rao 2000; Kirmani and Wright 1989), and store name (cf. Dodds et al. 1991), are provided. Such research might also extend Lane's (2000) findings by incorporating price information along with other content into advertising that is delivered longitudinally. Finally, future research might reinvestigate the perceived value and purchase intentions interaction predictions by incorporating additional price levels.

APPENDIX
Measures[a]

Perceived quality items
I believe that the clock radio will be: (*low quality-high quality*)
I believe that the clock radio will be: (*bad-good*)
I believe that the clock radio will be: (*inferior-superior*)
I believe that the clock radio will be: (*worse than most brands-better than most brands*)
Perceived value items
Overall, I think the clock radio will be a good value for the money. (*agree-disagree*)
If I buy the clock radio when it becomes available, I will be getting my money's worth. (*agree-disagree*)
If I buy the clock radio when it becomes available, I will be getting a good clock radio for a reasonable price. (*agree-disagree*)
Purchase intention items
My likelihood of purchasing the new clock radio when it becomes available is: (*very low-very high*).
The probability that I would buy the clock radio when it becomes available is: (*very low-very high*).

a. 9-point scales.

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NOTES

1. This conceptualization assumes an increase in perceived quality approximately commensurate with the increase in perceived price.

2. A total of 336 adults participated in the experiment. Using procedures similar to those used by Raghubir and Corfman (1999:218) and Kirmani (1990:165), participants who provided inconsistent manipulation check responses ($n = 51$) were deleted from the analyses. Responses were considered to be inconsistent when the dissimilar extension or moderate-quality core brand were rated as either similar or high quality (eight or nine) or when the similar or high-quality core brand were rated as dissimilar or lower quality (one or two).

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ABOUT THE AUTHORS

Valerie A. Taylor is an assistant professor of marketing in the College of Business Administration at the University of Tennessee at Chattanooga. She received her Ph.D. from the University of South Carolina. Her research interests include product branding strategies, and consumer perception and use of quality cues and signals, and health communication issues. Her research has been published in *Advances in Consumer Research* and *American Marketing Association Educator's Proceedings*. Her teaching interests include marketing communications, marketing strategy, consumer behavior, and marketing research. She has also held positions in the telecommunications industry.

William O. Bearden is the Bank of America Chaired Professor of Marketing in the Darla Moore School of Business at the University of South Carolina. He is on the editorial review boards of the *Journal of Marketing Research*, the *Journal of Consumer Research* (*JCR*), the *Journal of Marketing*, the *Journal of Retailing*, and the *Marketing Education Review* and is currently serving as an associate editor for *JCR*. He has published frequently in the *Journal of Marketing Research* and *JCR*, and has a number of publications in other marketing and consumer research journals. His teaching and research interests include consumer behavior, marketing research, and the evaluation of marketing promotions.