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Big names and small price tags: an analysis of celebrity endorsement on consumers' perceptions of price, quality, and intent to purchase

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ABSTRACT

This paper investigates if celebrity endorsement offsets the negative effect low prices have on quality perceptions. This research highlights the interactive effect between celebrity endorsement and pricing on purchases (Study 1) and shows that celebrity endorsers' level of expertise improves perceptions of low-priced offerings and increase purchases. Study 2 finds the mediated effect of price on purchase intentions via quality perceptions is moderated by endorser type such that a celebrity improves the quality perceptions of low-priced products. Study 3 shows price-quality perceptions mediate the effect of price on purchase intentions. Results suggest celebrity endorsements are effective in promoting low-priced offerings.

Introduction

Celebrity endorsements have become a standard feature in marketing activation plans, with research finding that they are being used in approximately 20% of advertisements in the United States (Creswell, 2008; Elberse & Verleun, 2012), 15% to 20% in Europe (Bergkvist & Zhou, 2016; Erdogan et al., 2001; Praet, 2008), and 25% to 60% across Asia (Bergkvist & Zhou, 2016; Praet, 2008). One reason for their widespread use is a celebrity's ability to increase consumers' perceptions of a product's quality (Dean, 1999; Ohanian, 1991) which, in turn, increase consumers' intent to purchase (Thompson et al., 2014). In addition, high prices, which also signal product quality (Rao & Monroe, 1989; Saint Clair et al., 2019), often go hand-in-hand with celebrity endorsements as consumers expect higher prices for endorsed products (Fireworker & Friedman, 1977). Based on past research, the effect of high prices as well as celebrity endorsements on consumers' perceptions of quality is well established (Dean, 1999; Ohanian, 1991).

Charging higher prices for an offering is considered premium pricing. This practice, however, is becoming somewhat fluid (Future Foundation/nVision, 2004) as companies are offering both high-end and low-end priced products with asymmetric subjective consumer quality perceptions while still trying to persuade purchase behavior. For example, brands traditionally considered premium, including Tesla and Mercedes, have begun offering more affordable models in their product lines to capture a larger share of the market. Moreover, a growing number of firms are now guaranteeing the lowest prices in the market in direct response to mounting competition (Dutta et al., 2007).

Of interest to the research reported here, an increasing number of celebrity endorsed products are now sold at low prices. For example, the three Kardashian sisters shared a royalty of six percent of the proceeds in exchange for endorsing a Kardashian line of clothing owned by and retailed at Sears (Huddleston, 2020). Shaquille O'Neal's shoe endorsements provide another case in point. At one time, his shoe retailed at Shoe Carnival (and later at Walmart) for 39.99, USD approximately 100 USD less than shoes endorsed by other prominent athletes, including his original shoe, the 170 USD Shaq Attaq by Reebok. Shaquille has also endorsed The General, a provider of low-cost insurance for high-risk drivers, and Carnival Cruises, a value (low-cost) cruise line.

The use of celebrity endorsers for low-priced products raises several questions regarding how such pairings affect consumers' perceptions of price, quality, the price-quality relationship, and, consequently, their purchase intent. For example, if consumers are shopping for a pair of running shoes, they will have a number of options at different price points within their price range. Research on the interplay between price and quality suggests that higher prices are perceived to be

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associated with higher quality products and that consumers' perceptions of price and quality are critical determinants of their willingness to buy an offering (Beneke et al., 2013). Research has also suggested that celebrity endorsements lead to increased perceptions of a product's quality (Ohanian, 1991).

However, what has not been theorized is the mechanism by which celebrity endorsement of low-priced offerings influences consumer purchase intentions via their perceptions of price, quality, and the price-quality relationship. Returning to the example of the consumer shopping for a pair of running shoes, extant theory suggests that a low price will be associated with lower quality products and affect the consumers perceptions of price, perceptions of quality, and price-quality perceptions. However, what if a low-priced shoe was endorsed by sprinter Usain Bolt, the world record holder in the 100 meters, 200 meters, and 4 × 100 meter relay and considered to be the fastest man alive? Would this endorsement increase consumers' price, quality, and price-quality perceptions of the lower-priced shoe? Could these perceptions eclipse those created by a high-priced product with or without a similar endorsement? Would the endorsement of the low-priced product also lead to an increase in willingness to buy? If so, would the use of celebrity endorsements be even more advantageous for marketers of low-priced products and services? Answering these questions is necessary in order to expand theory and practice related to promotional and pricing strategies. As celebrity endorsers are an important and widely used element in marketing and branding communications (Bennett et al., 2018; Bergkvist & Zhou, 2016; Creswell, 2008; Elberse & Verleun, 2012) and because they are increasingly endorsing lower-priced products, an understanding of this phenomenon is necessary.

To address this need, the purpose of this study is to investigate the interaction between celebrity endorsement and low pricing on consumer price, quality, and price-quality perceptions, and subsequent purchase intent. By addressing these issues, this paper attempts to fill two important gaps in this stream of research: 1) the relationship that celebrity endorsement and low prices play on consumers' product price, quality and price-quality perceptions and 2) if the association between the endorsement and low prices ultimately influences purchase intention via price, quality, and price-quality perceptions. This paper is the first to examine these important research questions and, thus, adds valuable contribution to both theory and practice related to the endorsement and pricing literatures.

Theoretically, this paper builds on signaling theory to provide empirical evidence of the role that celebrities play in signaling quality to consumers when the heuristic of a low price is present. Contrary to common practice, this work suggests that celebrity endorsers may be more valuable for low-priced products than their high-priced counterparts. To this end, this research adds to the greater body of knowledge related to the ability of a celebrity endorser to improve perceptions of price, quality, price-quality and, in turn, purchase intentions for low-priced products. For managers, this work provides valuable insight regarding the use of celebrities in marketing and brand activation.

In the next section, we conceptualize celebrity endorsement and provide a review of the literature on signaling theory, followed by hypotheses development. We then conduct three main studies and two replicate studies that leverage multiple approaches, specifically archival data and experiments, to explore the impact of celebrity endorsements on consumers' willingness to buy products in the presence of low versus high pricing. This paper concludes with implications and suggestions for future research.

Theoretical framework

Conceptualizing celebrity endorsements

Traditionally, celebrities are those well known for their accomplishments in sports, society, entertainment, politics, and business (Choi & Rifon, 2007; Erdogan & Drollinger, 2008 McCracken, 1989). These accomplishments result in the celebrity being highly recognizable to mainstream consumers, having a fan base, and receiving media coverage (Patra & Datta, 2010). Celebrity endorsements refer to when a celebrity uses their public recognition to benefit a product or brand (McCracken, 1989). Here, celebrity endorsements are defined in a broad sense and can take on several modes or roles (McCracken, 1989), including the explicit mode, where the celebrity endorser makes a statement (I endorse this product); the implicit mode (I use this product); the imperative mode (you should use this product); the co-present mode (mere appearance with a product); and a range of roles such as that of an expert or a long-term association with a brand or a combination of any of these modes or roles (McCracken, 1989). Of importance to this study, we include in our reference celebrity-branded products, a growing trend in celebrity endorsements. As opposed to merely being endorsers of other companies' brands, celebrity-branded products are those brands that celebrities own or co-own (Keel & Nataraajan, 2012). These endorsements typically integrate the celebrities' public association with the product, often linking their names with the brand's such as Cher's

line of perfumes (McCracken, 1989) or Newman's Own brand by Paul Newman (Keel & Nataraajan, 2012) and, thus, fall within the explicit mode of our broader definition of celebrity endorsements (McCracken, 1989).

Signaling theory

Based on the seminal work of Spence (1973, 2002), signaling theory forms the theoretical underpinning in our paper to explain the relationship between celebrity endorser, high-low pricing, and the perceptions associated with price and quality. Historically used in the economic and managerial sciences, signaling theory was originally employed as a job market tool (Spence, 1973). In the early 1990s, however, it was adopted by marketing scholars as a mechanism for examining a variety of issues, including whether warranties signaled quality (Boulding & Kirmani, 1993), brands signaled market strategies (Erdem & Swait, 1998), and advertising repetition signaled quality (Kirmani, 1997). Many of these studies highlighted the key characteristics of signaling theory – signal, signaler, receiver, and feedback – and the process through which it can or should be implemented.

According to Spence (1973), signals are alterable cues, attributes, and/or actions that transmit information in symmetry from a signaler to the receiver. Signalers are crucial to the signaling process (here the celebrities). These signalers, or celebrities, are considered insiders who possess information about the quality of a product or service that receivers consider beneficial (Connelly et al., 2011). On the other hand, receivers who lack the information possessed by signalers (celebrities) would directly gain from the information received in these signals (Connelly et al., 2011). More specifically in the marketing context, research in this area considers consumers as receivers who stand to benefit from forming judgments and decisions based on the information gained from the signals (Basuroy et al., 2006). For example, customers as receivers use the attractiveness, expertise, and trustworthiness of an information source as signals when making purchase decisions (Spry et al., 2011). In fact, the attractiveness, expertise, and trustworthiness of a source are typical indicators used to assess an endorser's credibility (Ohanian, 1991). Past research (e.g., Aaker & Myers, 1987) has shown that the trustworthiness and expertise of a source are significantly correlated with the source's ability to influence consumers' behavioral tendencies. In other words, the signaler is perceived as credible in the minds of consumers.

Significant to the study reported here, researchers have conclusively established that celebrities can act as persuasive signals because of their credibility and attractiveness as spokespeople (McCracken, 1989). Here, the celebrity's level of expertise or attractiveness, where attractiveness is seen as a form of expertise (i.e., an attractive celebrity may be deemed an expert for beauty products), mediates the signal of quality (Ohanian, 1991; Till & Busler, 2000). In this study, expertise is seen as "the extent to which a communicator is perceived to be a source of valid assertion" (Erdogan, 1999, p. 28) based on the endorser's education or work in the appropriate field (Ohanian, 1991).

Celebrities as persuasive signals have also been researched based on the elaboration likelihood model (Petty & Cacioppo, 1986), a model consistent with arguments presented by signaling theorists that when consumers are apathetic or unwilling to process advertising messaging, the source is used as the signal or heuristic for forming decisions. For example, Kang and Herr (2006) suggest that an endorser's (source) effect can follow three main paths, one of which is taken if the consumer does not have the ability or motivation to process the information (thus, elaboration is low) and the source serves as a simple but credible heuristic. However, can the presence of a celebrity signal quality in the face of incongruent low pricing (versus congruent high pricing)? Signaling theory contends that it can because the celebrity serves as the distinguishing feature that signals quality and offsets any interpretation of price asymmetry (Connelly et al., 2011). As the relationship between price and quality remains an ever relevant and pressing marketing topic, revisiting definitions for both terms is vital to this study. According to Zeithaml (1988), quality is the consumer's perceived impression of the superiority of a product while price is the sacrifice expended in one's pursuit to acquire a product.

Price can serve as a heuristic that helps consumers infer product quality or benefit. Although consumers associate high-priced brands with higher quality, results on the price-quality relationship have been inconsistent in the literature (Monroe, 1973; Rao & Monroe, 1989). A meta-analysis conducted by Rao and Monroe (1989) concludes that the effect of price on the price-quality relationship is moderately large and positive, with the effect of brand name on perceived quality being slightly larger for relatively low-priced, frequently purchased goods. A more recent meta-analysis on the price-quality relationship conducted by Völckner and Hofmann (2007) examining studies after 1989 concludes that the effect of price on perceived quality, while moderately large, has decreased over time.

As consumers become more familiar with certain products, their tendency to infer quality from price decreases (Völckner & Hofmann, 2007). Brucks et al. (2000) posit that the price-quality relationship could

also be influenced by specific dimensions of quality. For example, price can be helpful to infer a dimension of quality such as prestige (Brucks et al., 2000). Unlike price, the role of celebrity endorsements on price perceptions has received limited attention in the literature. To consumers, the price of a product is equated to the selling rate, but price perceptions are the process of making sense of the price itself (Lichtenstein et al., 1988). For example, two consumers can see the same price but formulate different perceptions – one can see the price as high, another as reasonable, and yet a third as inexpensive. Although research has stopped short of examining the relationship between celebrity endorsements and consumers' perceptions of price, quality, and price-quality, it has established signaling theory as fruitful in the exploration of consumers' purchase intentions.

Hypotheses development

The effect of celebrity endorser (level of expertise) and low prices on purchases

Extant literature suggests that higher prices are associated with higher quality (Rao & Monroe, 1989) and that consumers may use a celebrity endorser's level of expertise as a signal of quality for the endorsed product (Dean & Biswas, 2001). Companies are mindful of the importance of using celebrities as spokespersons because consumers expect celebrity endorsements to be associated with high-priced products (Fireworker & Friedman, 1977; Temperley & Tangen, 2006). In fact, there is an underlying impression that consumers expect to pay premium prices for products endorsed by celebrities as firms pass on the expense of acquiring the celebrity to consumers in the form of higher prices (Temperley & Tangen, 2006). However, the role that expertise may play when a celebrity endorses a low-priced product needs further exploration.

We theorize that the celebrity's level of expertise will have a greater effect on purchases for low-priced than for high-priced products as this expertise, in the absence of a high price, is used to a larger extent to signal quality. According to past research, the source characteristics of the most effective endorsers are attractiveness, trustworthiness, and expertise (Ohanian, 1991), with expertise being the strongest of the three (Friedman & Friedman, 1979; Kamins & Gupta, 1994; Till & Busler, 2000). Further, endorser expertise is a signal for product quality, and endorser's expertise has been found to moderate consumers' purchase intention (Rossiter & Percy, 1987). Thus, while both high prices and high levels of endorser expertise signal quality, we expect that when prices are low, a celebrity endorser with a high level of expertise will have a greater effect on consumer purchases than when the endorsed product has a higher price or when a celebrity endorser's level of expertise is low. This prediction is formally stated as follows:

H1: A celebrity endorser's level of expertise moderates the relationship between the price of endorsed products and consumer purchases of endorsed products such that a celebrity endorser with a higher level of expertise will have a greater effect on consumer purchases of low-priced products than for high-priced products.

The effect of a celebrity and low prices on purchase intention mediated via price perceptions

Consumer perceptions of price are important drivers of product choice (Jacoby et al., 1985). Price perception is defined as "the process by which consumers translate prices into meaningful cognitions" (Lichtenstein et al., 1988). As stated previously, although consumers may encounter the same price (e.g., 149 USD), some may consider that price as high while others may consider it low (Lichtenstein et al., 1988). According to adaptation level theory, price perceptions are influenced by the actual price of the product and the individual's reference price (Monroe, 1973). Prices set below an individual's reference price are considered low or relatively inexpensive, and prices above the reference point are seen as high or relatively expensive (Janiszewski & Lichtenstein, 1999). Consumers form reference prices for almost everything, and if a product or service is priced outside their latitude of acceptance, they will not hold favorable price perceptions. In this case, a price point that is too low would infer negative connotations about the product (i.e., cheap or low quality). Price perceptions are not made in isolation and could be influenced by situational and promotional factors such as the presence of a celebrity. Typically, celebrities have been associated with endorsing high-priced products, and the celebrity cue in such situations would alleviate any negative price perceptions (e.g., the price being too high) as high prices are seen as the norm for celebrity endorsed products. In the case of a celebrity endorser promoting a low-priced product, consumers can equally evaluate the celebrity cue positively, thus improving their price perceptions of the low-priced product and, consequently, impacting their purchase intention. Moreover, scholarly work suggests that celebrities are more persuasive than non-celebrity spokespersons (Erdogan, 1999). Thus, we propose the following:

H2: Compared to non-celebrity endorsers, celebrity endorsers are more effective at improving price perceptions of low-priced vs. high-priced products and, in turn, increase consumer purchase intentions of such products.

The effect of celebrity endorsement and low prices on purchase intention mediated via quality perceptions

In a recent study, celebrity endorsers were reported to be more economically valuable to firms than non-celebrity endorsers because they yielded higher product demand (Chung et al., 2013). In fact, researchers have argued that celebrity endorsers often motivated positive outcomes such as increased consumer purchase intentions (Erdogan, 1999) and sales (Chung et al., 2013). Despite these benefits, a key concern when using celebrity endorsers is that consumers may fail to notice certain critical aspects of the brand because they are focusing primarily on the celebrity (Rossiter & Percy, 1987). This suggests that celebrities can help overshadow negative quality aspects of the product. Source characteristics such as the likability of the endorser and attractiveness yield positive source effects, including positive consumer perceptions of product quality (Ohanian, 1991). This demonstrates a carryover effect whereby meanings ascribed to the celebrity are transferred to products through an associative process where the celebrity signals greater value to the product itself (Bergkvist, 2017; Louie et al., 2001). Signaling theory infers that when celebrities lend their image to products, consumers are expected to see less of the product and more of the celebrity's image. In other words, the achievements and public image of the celebrity are transferred to the endorsed product. This indicates that consumers may use celebrity endorsers as a heuristic to form positive perceptions about a product's quality that offset the negative perceptions typically associated with low-priced products. This suggests that for low-priced products, consumer evaluations of quality may improve as a result of a celebrity endorsement, consequently increasing consumers' purchase intentions. High prices already signal high quality; as a result, an endorser will only reinforce but will not substantially increase the quality perceptions of the endorsed product. Thus, we hypothesize the following:

H3: Compared to non-celebrity endorsers, celebrity endorsers are more effective at improving quality perceptions of low-priced vs. high-priced products and, in turn, increase consumer purchase intentions of these products.

The effect of celebrity endorsement and low prices on purchase intention mediated via price- quality perceptions

Researchers have found that consumers' price-quality perceptions vary significantly in their subjective and relative assessment of price and quality because many find it challenging to infer only the quality of a product (Darke & Chung, 2005; Lichtenstein & Burton, 1989). For many shoppers, price cues are perceived positively because of an assumption that the cost of the product is positively related to its quality (Erickson & Johansson, 1985). Consequently, consumers are willing to pay higher prices because of the additional production costs associated with higher perceptions of the product's quality (Lichtenstein et al., 1993). That being said, price-quality perception is defined "as the generalized belief across product categories that the level of the price cue is related positively to the quality level of the product" (Lichtenstein et al., 1993, p. 236). In other words, you get what you pay for. Although related, price perceptions and price-quality perceptions are different constructs. When consumers see price-related information, they immediately judge the price based on their past experiences or reference points as low, high, or reasonable regardless of any additional cues that may be helpful in inferring the quality of a product or service. Price-quality perceptions are based on the relationship between the price and the quality of a product. Many consumers believe that there is a trade-off between price and quality such that the higher the price, the better the quality (Lichtenstein et al., 1993).

In advertisements with celebrity endorsers, the presence of the celebrity can signal to consumers that what they are getting for the price is reflective of who and what that celebrity stands for rather than how the product is priced. Studies have found that consumers' perception of celebrities is transferred to brands (McCracken, 1989; Roy, 2018), suggesting that for low-priced products, the presence of a celebrity allows consumers to rationalize a favorable price-quality perception: an impression is formed that what they are getting for what is being paid adequately reflects the value of the celebrity, again increasing purchase intention. Thus, we hypothesize the following:

H4: Compared to non-celebrity endorsers, celebrity endorsers are more effective at improving the price-quality perceptions of low-priced products vs. high-priced products and, in turn, increase consumer purchase intentions of these products.

Our conceptual model is shown in Figure 1. Three studies and two replicate studies test our hypothesized

relationships. Using archival data from a retail footwear context, Study 1 tests Hypothesis 1 by exploring the impact of celebrity endorsers' level of expertise and product price on consumers' actual purchases. Study 2 and its replication test Hypotheses 2 and 3 by examining the effects of price perceptions (H2) and quality perceptions (H3) on consumers' purchase intentions. Using two contexts, intangible and tangible products, Study 2 and its replication examine how the interaction between endorser (celebrity vs. non-celebrity) and price (low vs. high) affects consumer price and quality perceptions as the underlying mechanisms for determining consumer purchase intentions. Finally, using an experimental design in a retail good context, Study 3 and its replication examine the mediating effect of price-quality perceptions on the interaction between endorser (celebrity vs. non-celebrity) and price (low vs. high) on consumers' purchase intention.

Study 1: the effect of celebrity endorser's level of expertise and prices on purchases

Method

The goal of Study 1 was to investigate the moderating effect between a celebrity endorser's level of expertise and price on consumer purchases of endorsed products, specifically athletic shoes. With more than 83 USD billion in sales, the United States hosts the largest footwear market in the world, with athletic footwear being the most purchased category with 70% of men (who represent approximately 25% of total sales) as the purchasers (Mintel Reports, 2018). Sports celebrity (professional athlete) endorsements of athletic shoes are typical in this category. While several sports celebrities have shoe contracts, the focus of this study was on those with a signature shoe, defined as one named after the sports celebrity who endorses it (i.e., Michael Jordan's Air Jordan) or one marketed as made for that particular endorser (i.e., Shaquille O'Neal's Dunkman). Basketball has more signature shoes than any other sport. These shoes are purchased more frequently by consumers for fashion and/or leisure attire than for athletic use.

Archival data from October 2006-September 2007 men's basketball signature shoe unit sales and retail price were collected. This time frame was selected because it hosted a record number of athlete-endorsed signature shoes that sold at low price points below 60.00 USD (the Dunkman, the Starbury, the Big Ben, the Wade 3, and the Spree Spinners). In addition, as basketball shoes are launched in October each year, a month prior to the start of the NBA season, this time frame allowed for one full year of shoe sales across a variety of price points. The data were collected from Sportsonesource scanner sales

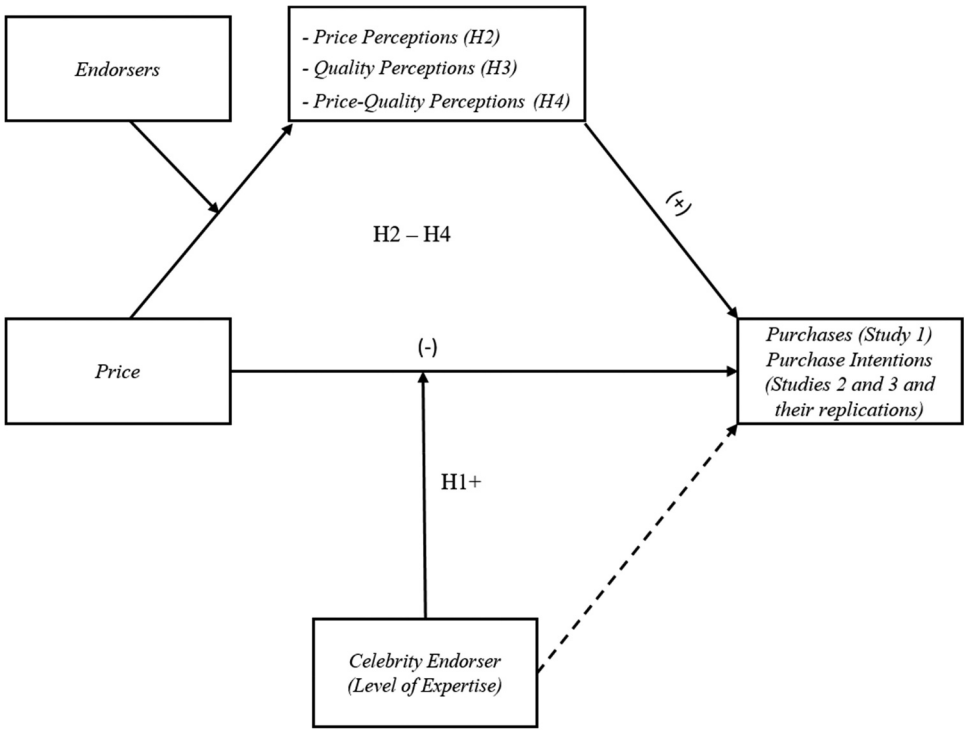


Figure 1. Proposed model of price, endorsement, consumer perceptions, and pirchases. Consumer Perceptions:Price Perceptions (H2: Study 2 and replication)Quality Perceptions (H3: Study 2 and replication)Price – Quality Perceptions (H4: Study 3 and replication)→ Tested unhypothesized relationship.

data, which included information from 15,000 retail sites, representing all major shoe retailers except for the value market shoes. Data were also collected from the Mintel Oxygen Athletic Footwear Report, which includes popular press articles about unit shoe sales and retail data on shoe prices reflecting all signature athletic shoes sales in the marketplace. Of note, Walmart sales were not included in this data set because the retailer did not sell signature shoes during this time period.

Measurement and sample description

Celebrity expertise can be measured in several ways (see Ohanian, 1990, 1991) including superstardom. Superstars refer to a relatively small number of experts who dominate the activities they engage in and, as a result, earn enormous amounts of money (Rosen, 1981). For example, there are, on average, only 494 NBA (professional basketball) players in the United States, with the few who dominate in terms of talent and rewards being considered superstars. Therefore, celebrity expertise should be measured by what separates superstars from other less-accomplished players. To this end, years in the league or number of championships won would not serve as adequate individual measures of a superstar's expertise: a player can have a long professional career and never be a starter or may have been on teams that won championships in which they did not regularly play or contribute.

Additionally, a superstar may have never won a championship or because of injury, may have had a relatively short career. For the purpose of this study, each basketball superstar's expertise was calculated as the ratio of the number of times the player was voted to be a member of the NBA All-Star Team, a designation of superstardom given by fans, coaches, and other players, divided by the number of years of league play. The ratio ranged from. 18 to 1.00, with lower ratios indicating less expertise and higher ratios indicating more. Actual product unit sales were used to reflect consumers' purchases of each athletic shoe. Product prices were captured based on the retail prices obtained from the Universal Product Code from scanner data.

Because of the highly skewed number of Nike's Air Jordans sold that year (more than 2 million), this shoe was omitted as an outlier from the dataset resulting in data for 732,000 pairs of shoes endorsed by 18 athletes, with sales price ranging from 14.99 USD to 159.00 USD per model (see Table 1 for brand descriptive statistics and Table 2 for the correlation matrix).

Analyses

To test Hypothesis 1, hierarchical ordinary least squares (OLS) regression and analysis of variance was performed in SPSS v24. Conducting hierarchical OLS was important because it enabled us to statistically explain the amount of variance accounted for by each predictor variable and the moderator on product sales. For the moderation analyses, price (PR) was grouped so that the differences between the means depended on the grouping of the moderator variable. Low prices were athletic shoes priced at 60 USD or less, while high prices were those priced above 60. USD Sixty dollars or less was considered low based on Running Shoes Guru's (2020) recent report that athletic shoes purchased for around 60 USD were considered economical in pricing. Estimated marginal means were used to capture celebrity star power (SP) as an indicator of the endorser's level of expertise. A multiplicative term between price and celebrity expertise (PR × SP) was created to run the moderation analyses. Each independent variable was first entered into the SPSS analyses followed by the product term.

Table 1. October 2006 – September 2007 athlete endorsed shoe brand sales (Study 1).

Shoe	Sports Celebrity	Units Sold	Units x 1000	Brand	Average Sale Price	Star Power	Jordan Sub Brand	Championships
Nike Zoom Kobe III	Kobe Bryant	25,640	26	0	129	0.91	0	3
Nike Zoom Lebron V	LeBron James	92,853	93	0	127	1.00	0	0
Nike Jordan CP	Chris Paul	48,551	49	0	103	0.67	1	0
Nike Jordan Melo M4	Carmelo Anthony	46,515	47	0	124	0.25	1	0
Nike Air Penny Max	Penny Hardaway	35,081	35	0	139	0.31	0	0
Nike Shox VC 5	Scotty Pippen	24,868	25	0	159	0.70	0	6
Adidas TS Lightspeed T-Mac	Tracy McGrady	12,000	12	1	69	0.70	0	0
Adidas TS Lightspeed KG	Kevin Garnett	23,230	23	1	95	0.92	0	1
Adidas TS Lightspeed Chauncey	Chauncy Billups	31,340	31	1	92	0.50	0	1
Adidas TS Lightspeed Duncan	Tim Duncan	91,728	92	1	94	0.90	0	4
Adidas TS Lightspeed Howard	Dwight Howard	15,490	15	1	94	0.50	0	0
Adidas TS Gilbert Arenas	Gilbert Arenas	17,000	17	1	59	0.50	0	0
Dunkman (Payless Exclusive)	Shaquel Oneal	202,780	203	2	40	1.00	0	4
Big Ben (Steven and Berry's)	Ben Wallace	16,841	17	3	15	0.36	0	1
Starbury II (Steven and Berry's)	Stephon Marbury	35,832	36	3	15	0.18	0	0
Reebok Answer XI	Allen Iverson	27,000	27	4	70	1.00	0	0
Converse Wade 3	Dwayne Wade	15,000	15	5	49	0.75	0	1
Spree's Sinnahz by Dada	Latrell Sprewell	3000	3	6	69	0.27	0	0

Table 2. Correlation matrices for Studies 1, 2, and 3.

Study 1	Variables	Purchases +	Price	Celebrity Expertise	
	Purchases+		−.470**	.527**	
	Price			−.200**	
	Celebrity Expertise				
Study 2		Purchase Intention	Price Perceptions	Quality Perceptions	
	Purchase Intention		.532**	.738**	
	Price Perceptions			.393**	
	Quality Perceptions				
Study 2 Replication		Purchase Intention	Price Perceptions	Quality Perceptions	
	Purchase Intention		.470**	.622**	
	Price Perceptions			0.032	
	Quality Perceptions				
Study 3		Purchase Intention	Price Perceptions	Quality Perceptions	Price-Quality Perceptions
	Purchase Intention		.702**	.604**	.500**
	Price Perceptions			.263**	.404**
	Quality Perceptions				.368**
	Price-Quality Perceptions				
Study 3 Replication		Purchase Intention	Price Perceptions	Quality Perceptions	Price-Quality Perceptions
	Purchase Intention		.568**	.571**	.531**
	Price Perceptions			0.074	.427**
	Quality Perceptions				.493**
	Price-Quality Perceptions				

**p <.005.
+Denotes actual units sold.

Results

The results show that price negatively affects purchases (β = −.336, p <.001); that is, higher prices reduce purchase behavior. Further, the results show that a celebrity endorser's level of expertise increases purchase behavior (β = .396, p <.001); that is, higher levels of celebrity expertise increase consumer purchases. Further, the interaction between price and endorser expertise on purchases was significant (β = −.491, p < .001). In further evaluating the incremental F-test, the results show that the higher-order interactive effects model produced a significant increase in the amount of variance explained ($F_{3,\ 731,996}$ = 270, 932; p < .001) with an R^2 of .526, thus supporting H1. As shown in Figure 2, follow-up analyses revealed significant differences across all conditions (all p's < .05). Specifically, lower-priced products endorsed by celebrity athletes with higher levels of expertise resulted in most consumer purchases (M = 157.90), followed by higher priced products endorsed by celebrity athletes with higher expertise (M = 78.36), and high-priced products endorsed by celebrity athletes with lower levels of expertise (M = 60.31). Low-priced products endorsed by celebrity athletes with lower levels of expertise (M = 23.55) exhibited the fewest consumer purchases.

Discussion

Results from Study 1 suggest that as shoe price increases, the effect of product endorser's expertise on product

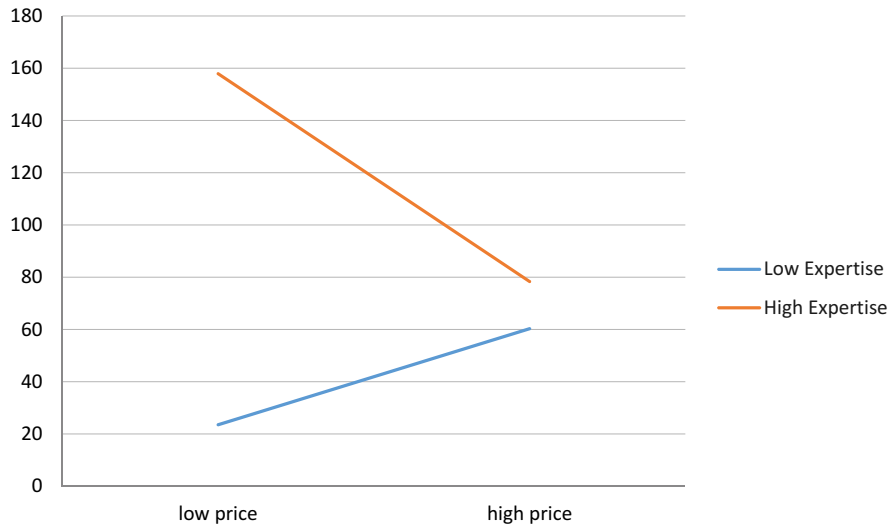


Figure 2. Study 1: effect of expertise and price on actual sales.

sales decreases. In sum, celebrity endorsement, based on the endorser's level of expertise, is more important for a low-priced product than a high-priced one, thus supporting Hypothesis 1. However, the absence of quality perception and price perception information in the archival data requires a follow-up study to evaluate the quality signaling potential of celebrity endorsers for low- versus high-priced products. While Study 1 explores the effects of a celebrity endorser's level of expertise and product pricing on purchases, it does not explore the role of a celebrity endorser relative to a non-celebrity endorser, the focus of Study 2.

Study 2: the role of celebrity endorsements and mediating effects of price perceptions and quality perceptions

Study design

The goal of Study 2, which was to test Hypotheses 2 and 3, differs from Study 1 as it accounts for consumers' price and quality perceptions. In addition, it also compares the effectiveness of celebrity to non-celebrity endorsers while Study 1 focused on the relative star power or expertise of celebrities. This study was conducted during tax season with the onset of advertisements for federal income tax preparation services. To this end, marketing communications that featured prices for tax services as well as consumers' experiences made tax services and their pricing salient. Therefore, a tax service was selected as the focus of this study. A 2 (endorser: celebrity vs. non-celebrity) x 2 (price: low vs. high) between-subjects design was used. In the celebrity condition, Dwayne "the Rock" Johnson was featured in the ad stimuli. A movie star and former wrestler and football player, he was selected because he was considered both the highest paid actor and most popular celebrity in the world at the time the study was conducted (Clark, 2018). In the low-price condition, the service was priced at 60, USD while in the high-price condition, the service was priced at 250 USD (see Figure 3 for the study stimuli).

Participants and procedure

Participants for this study were recruited through Amazon Mechanical Turk (MTurk). A total of 201 participants completed the experiment; however, 24 failed one or more attention or manipulation checks and were removed from the analyses, reducing the final sample to 177 participants (50% female; 67.2% Caucasian, 9.6% African American, 6.8% Hispanic, 11.9% Asian, 4.5% other), with an average age of 37.

At the beginning of the experiment, participants were randomly presented with one of four advertisements for a tax preparation service. They were instructed to spend a minute examining the ad, after which they would be asked to evaluate it.

To improve data quality, two attention checks were included, one about the price of the service and a second asked if the advertisement featured an endorser and, if so, who. Screening questions associated with attentiveness were also asked (i.e., Please choose "agree" in the response category). It was important to include attention checks because failure to do so increases error and reduces the power of the experiment. Following the suggestions of Kees et al. (2017a), only respondents registered as United States residents could take the survey, and options were selected in the software to prevent participants from taking the survey multiple times. These attention checks, along with the geographic and single survey restrictions, help ensure the reliability and validity of the data obtained here. They also ensure that the quality of the data is equal to, if not higher than,



Figure 3. Study 2 stimuli.

other panel or student-generated data (see Kees et al., 2017a, 2017b). Finally, participants answered questions asking for demographic information including age, gender, and income.

Measures

Consumer purchase intention was measured using three items, adapted to fit our study context, from Baker and Churchill's (1977) purchase intention scale. The items are as follows: "I would like to try the tax service featured in the ad;" "I would consider the tax service featured in the ad," and "I would actively seek out this tax service in order to purchase it," anchored by "Strongly Disagree" to "Strongly Agree" (7-point Likert scale). The scale demonstrated high reliability at .954. Price perceptions were measured using three items adapted from Voss et al.'s (1998) price perception scale: 1) a price I find to be reasonable, 2) a price I find to be expensive (reverse-coded item), and 3) a price I would be pleased to pay for this service. The scale reliability as measured by Cronbach's alpha was .828. Quality perceptions were measured using a two-item, 7-point bipolar scale (Adaval & Monroe, 2002): "Please indicate your opinion about the tax service featured in the ad" ("extremely high quality/extremely low quality," "very unreliable/very reliable"). Its reliability was .930. The correlations among the study constructs can be seen in Table 2.

Manipulation checks

Most participants correctly identified the endorser featured in the ad, with 99% of the participants in the celebrity condition correctly identifying the Rock and 94% of the participants in the non-celebrity condition correctly choosing "other" ($\chi 2$ (1) = 3.965, p <.046). Ninety-four percent of participants in the low-price condition correctly identified the price vs. 91% percent of those in the high price condition. Participants who failed the manipulation checks were removed from the analyses.

Results

Hypothesis 2 argued that compared to non-celebrity endorsers, celebrity endorsers are more effective at improving the price perceptions of low-priced vs. high-priced products and, in turn, increase consumer purchase intentions of such products. To test this hypothesis, we conducted a moderated mediation using the bootstrapping method in the PROCESS macro (Hayes, 2017) Model 7 with 5,000 bootstrap samples. The index of moderated mediation was not significant (Confidence Interval (CI): −.535, .632). Price perceptions, however, mediated the relationship between price on purchase intentions (b = .639, SE = .073, p < .001, 95% CI (.494, .788)). Given the indirect effect of price perceptions on the relationship between price and purchase intention, follow-up ANOVA analyses were conducted. These analyses indicated a significant main effect of price (M_{low} = 4.56, M_{high} = 3.41; $F_{1,173}$ = 25.33, p <.000) such that participants in the low-price conditions perceived the price of the service featured in the ad more reasonable compared to participants in the high-price conditions. However, there was no main effect of endorser type on price perceptions (F1,173 = .004, p > .951). The interaction between price and endorser type was not significant (F1,173 = .003, p >.955). These analyses offer partial support for H2: while price perceptions mediate the effect of price on purchase intentions, celebrity endorsement does not moderate this effect.

PROCESS macro, Model 7 with 5,000 bootstrap samples, was used to test H3, which hypothesized that compared to non-celebrity endorsers, celebrity endorsers are more effective at improving quality perceptions of low-priced vs. high-priced products and, in turn, increase consumer purchase intentions of such products. As predicted, the index of moderated mediation was significant (95% CI: .055, 1.612), thus supporting H3. To further analyze these results, a follow-up ANOVA was performed on quality perceptions including endorser and price type. A significant two-way interaction between endorser type and price type was found ($F_{1,173}$ = 4.393, p < .038), with results showing when the price is low, a celebrity endorser positively impacts consumer quality perceptions (M_{cel} = 3.89 vs. $M_{non\text{-}cel}$ = 3.13; p <.027), but when the price is high, quality perceptions for a product endorsed by a celebrity are not significantly different from the perceptions for a high-priced product endorsed by a non-celebrity (M_{cel} = 3.47 vs. $M_{non\text{-}cel}$ = 3.70; p >. 481). In short, celebrity endorsers were found to be effective at increasing the quality perceptions of low-priced products, leading to increased purchase intentions. Figure 4 shows the interactive effect between endorser type and price on quality perceptions.

To improve the generalizability of these findings, we replicated the study using a different product category, a smart TV, and a different endorser, actor Ryan Reynolds. Smart TVs were chosen as the product in the ad because of their widespread appeal: since their introduction into the US market, close to 70% of US households have at least one smart TV (Tankovska, 2020). Ryan Reynolds was selected as the celebrity because of his popularity and fit with the product. A non-celebrity with similar characteristics was used in the non-celebrity condition. We collected

a total of 472 responses from Amazon Mechanical Turk (51.1% females; 67.3% between 18 and 44 years old). After removing those participants who failed attention and manipulation checks, the final sample was reduced to 377. Appendix A shows the study stimuli (See Figure A1). Results from the replicated study support H2 that price perceptions mediate the relationship between price and purchase intentions with celebrity endorsement moderating the effect of this relationship (b = −.705, SE = .197; 95% CI (−1.096, −.333)). These findings demonstrate that celebrity endorsers were found to be effective at increasing the price perceptions of low-priced products, thus increasing consumers' purchase intentions (See Figure A2). Interestingly, the replications fully support H2 while the main study only partially supports H2. This difference could perhaps be ascribed to the compatibility/fit between the celebrity and endorsed product. H3 was again supported as indicated by the 95% CI not including zero (b = −.476, SE = .239, 95% CI(−.943, −.001)). Figure A3 illustrates the interactive effect between price and endorser type on quality perceptions.

Discussion

These results suggest three important insights. First, they are consistent with the theoretical argument and findings from Study 1 in that when a celebrity endorses low-priced products, consumers' interest in purchasing the service increases. Building on Study 1, Study 2 demonstrates a possible mechanism driving this effect, namely, that this effect may be due to price perceptions or quality perceptions as well as the type of endorser featured in the ad. Third, these results suggest that pairing a celebrity endorser with a high-price service may not necessarily justify the cost of the endorsement, perhaps because consumers may be skeptical that they can obtain certain high-priced services that a celebrity enjoys. For example, while consumers may believe they can drink the high-priced vodka a celebrity buys, they may not be able to hire the professional services of a celebrity's hairdresser (i.e., the services of celebrity hairstylist John Frieda). Indeed, consumer products endorsed by these service providers (i.e., the John Frieda hair products) may be the closest experience that consumers can obtain. To this end, celebrity endorsers may not be effective for such high-priced services, and their use may result in a hook effect. However, pairing a celebrity endorser with low-priced services appears to offset the negative perceptions associated with low price and instead increases consumers' quality perceptions of the service.

Study 3: the effect of a celebrity endorsement and low prices on purchase intention mediated via price-quality perceptions

Study design

The goal of Study 3 was to test H4, which examines the mediating effect of price-quality perception on consumer purchase intention while controlling for the interaction of the endorser and product price. A 2 (endorser: celebrity vs. non-celebrity) x 2 (price: low vs. high) between-subjects design was used to test this hypothesis. In the celebrity condition, Roger Federer was featured in an ad for a smart fitness watch. Federer was selected because he was considered one of the highest paid athlete endorsers in the world at the time the study was conducted (Smith, 2019) and because his expertise in sports corresponded with and was appropriate for the product category. In the non-celebrity condition, a non-celebrity male figure was

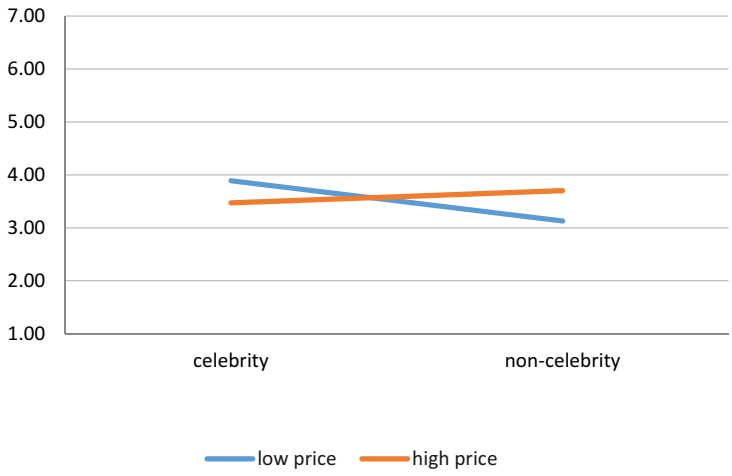


Figure 4. Study 2 effect of endorser and price on quality perceptions.

selected for the ad stimuli. Smart watches were chosen because at the time of the study, several products from the category were consistently featured on Amazon.com's list of best-selling electronics, indicating consumer familiarity with this category. The fitness watch was priced at 49 USD in the low-price condition and 249 USD in the high-price condition. The stimuli used in Study 3 can be seen in Figure 5.

Participants and procedure

Participants in the study were recruited from Amazon Mechanical Turk (MTurk). A total of 318 respondents participated in the study; after removing those who failed attention and manipulation checks, the final sample was reduced to 181 respondents (55% female; 76.1% Caucasian, 8.3% African American, 10% Asian, 5.5% Other). Approximately 50% of the participants were in the 18–34 age range. At the beginning of the experiment, participants were randomly assigned to one of the four experimental ad conditions. They were then presented with the ad for a fitness watch and instructed to spend a few minutes looking at it as they would be asked to subsequently evaluate it. As with the two previous studies, attention and manipulation checks were included (i.e., identifying if there was a product endorser in the ad, who the endorser was, correctly identifying the price of the product featured, and selecting a specific response for their answer – e.g., "choose agree here").

Measures

Price-quality perceptions were measured using Darke and Chung's (2005) price as a quality indicator three-item Likert scale, anchored by "Strongly disagree/ Strongly agree": 1) Price is a good indication of the product's quality, 2) Price is a reliable indication of the product's quality, and 3) The price reflects the true quality of the product (scale reliability: .956). Consumer purchase intention was measured adapting the following items from Baker and Churchill's purchase intention scale (1977): 1) I would like to try this fitness tracker, 2) I would buy this fitness tracker if I happened to see it in a store, and 3) I would actively seek out this fitness tracker in order to purchase it (items anchored by "Strongly Disagree"/ "Strongly Agree"). The scale reliability was .953. All questions for both scales were anchored on 7-points.

Manipulation checks

Most participants correctly identified the price of the product featured in the advertisement (79.6% in the high price and 78.8% in the low price). The endorser manipulation asked, "Who was the person you saw in the ad," with the majority of participants correctly identifying the celebrity and non-celebrity (95.8% in the celebrity and 55.6% in the non-celebrity condition, respectively). All participants who failed a manipulation check were excluded from the analyses.

Results

Hypothesis 4 argued that compared to non-celebrity endorsers, celebrity endorsers are more effective at improving the price-quality perceptions of low-priced products vs. high-priced products and, in turn, increase consumer purchase intentions of these products. To test H4, we conducted a moderated mediation in PROCESS Model 7 with 5,000 bootstrap samples, where the proposed mediator was price-quality perceptions. The index of

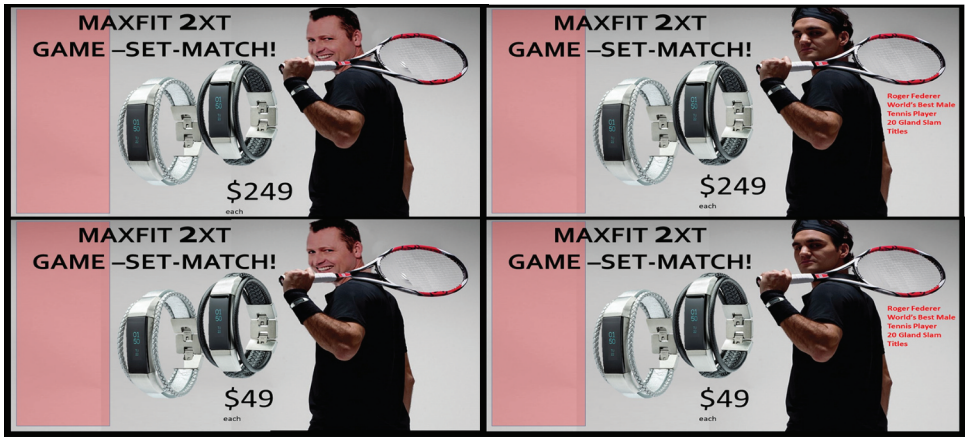


Figure 5. Study 3 stimuli.

moderated mediation was not significant as indicated by the 95% CI containing zero (−.352, 1.141). The mediation effect of price-quality perceptions on the effect of price on purchase intentions, however, was supported (b = 1.10, SE = .079; $p < .001$, 95% CI(.945, 1.255)), thus offering partial support for H4. The results indicate that a low price improves consumers' price-quality perceptions and, in turn, increases consumer purchase intention. To more fully understand this effect, we conducted an ANOVA on the price-quality relationship including endorser and price type. There was a significant main effect of endorser type such that a celebrity endorsement is associated with higher price-quality perceptions compared to the price-quality perceptions associated with a non-celebrity endorsement (M_{cel} = 4.69, $M_{non\text{-}cel}$ = 4.27, F1,177 = 4.013, p <.047). The effect of price on price-quality perceptions was also significant (M_{high} = 4.38, M_{low} = 4.70, F1,177 = 4.21, $p < .042$).

To support the generalizability of our findings, we replicated this study using a different product category, headphones, with a different endorser, music artist Lady Gaga. She was used here because she was ranked among Gen Z and Millennials' top 17 favorite celebrities

(YPulse, 2019) and because her expertise in music corresponded with and was appropriate for the product category. In the non-celebrity condition, a non-celebrity female was selected for the ad stimuli. Headphones were selected because at the time of the study, they were consistently featured among Amazon.com's list of best-selling electronics, indicating consumer familiarity with this category.

Appendix B provides the stimuli used in the study (See Figure B1). Participants were recruited from Amazon Mechanical Turk, with a total of 732 respondents taking part in the experiment. Ninety-three failed either an attention or a manipulation check reducing the final sample to 639 (52.4% female; 43.5% between 18 and 34 years old). The proposed moderated mediation in H4 was again partially supported. Price-quality perceptions mediated the effect of price on purchase intentions (b = .667, SE = .044, p <.001; 95% CI (.580,.754)); however, this effect was not moderated by endorser type as indicated by the confidence interval containing zero (95% CI: −.104, .212). An ANOVA analysis of price-quality perceptions including price and endorser type showed a main effect of price (M_{low} = 4.83, M_{high} = 4.32; F1,635 = 18.557, $p < .001$), results consistent with Study 3, but no effect of endorser type was found ($p > .646$).

Discussion

Results from Study 3 and its replication offer partial support for Hypothesis 4, which predicted that compared to non-celebrity endorsers, celebrity endorsers are more effective at improving the price-quality perceptions of low-priced products vs. high-priced products and, in turn, increase consumer purchase intentions of these products. Overall, these two studies provide evidence for the mediating mechanism of price-quality perceptions on consumer purchase intentions. Specifically, our findings suggest that when presented with a low-priced product irrespective of endorser type (but accompanied by an endorser), consumers exhibit stronger price-quality perceptions about the product, increasing their intentions to purchase the product. This is in line with past research finding which has suggested "that consumers tend to use price as an indication of quality unless no additional assurances of quality are provided" (Darke & Chung, 2005, p. 36).

General discussion

While the effect of price as an indicator of quality and the effectiveness of celebrity endorsement on sales have been established in the marketing literature, to our knowledge research to date has not examined the interactive effects of high/low pricing and celebrity endorsers. Furthermore, research on the effectiveness of celebrity endorsers on consumer attitude toward advertisement has been heavily investigated by marketing researchers (Dean, 1999; Ohanian, 1991), but many of these studies have not included the degree of the celebrity's expertise relative to high/low pricing. Thus, the effect of celebrity endorsements and low pricing on price, quality, and price-quality perceptions, and purchase intentions is underexplored.

Drawing on signaling theory (Spence, 1973, 2002), this paper finds that celebrity endorsers act as highly effective signals in communicating both positive pricing and quality messaging a firm's low pricing strategy. Across three studies and two replications, one using archival data and the remaining four using experiments, we find evidence that a celebrity endorsement can influence consumers' perceptions associated with low prices. Specifically, Study 1 finds that celebrities' expertise as it

relates to their endorsements are important predictors of purchases for low-priced products. In Study 2 and its replication, which examined Hypothesis Two, we find that the impact of the celebrity endorser on price perceptions of low-priced products is dependent on the congruence between the celebrity and the product category. The main study tested this relationship in the services context, the results suggest that the effect of celebrity endorsers on price perceptions does not motivate the purchase intention of low-priced offerings. However, this was not the case in the replicated study contextualized with a celebrity matched with a tangible and conspicuous goods context. Specifically, we find that the celebrity endorser in this situation increases the price perceptions of low-priced products and ultimately results in increased purchase intentions. This study extends previous work regarding celebrity and product congruence (Kamins & Gupta, 1994; Till & Busler, 2000) by adding the concept that when such congruence is present, the celebrity can be impactful in the presence of low prices. In Study 2 (both the main study and the replication), we find support for Hypothesis Three, the results indicating that the impact of celebrities offsets the low-quality perceptions associated with low prices, in turn, motivating purchase intentions. In other words, celebrity endorsements improve quality perceptions of low-priced products, a finding that contradicts the results from extant research (Temperley & Tangen, 2006) and consumer sentiments which often contend that celebrity endorsements are significantly related to high priced products. In Study 3, which examined Hypothesis Four, we find that celebrity endorsers as well as low-priced products increase consumer's price-quality perceptions. However, the interaction of this relationship is not significant.

Our findings suggest an alternative pricing strategy where celebrities are used to endorse low-priced goods as powerful signals for product quality. We offer empirical evidence to demonstrate that although consumers are willing to buy low-priced products, they envision such products to be a "steal" since quality perceptions are high based on the signaling power of the celebrity. It appears that in these instances, a low-priced product is seen as being of high quality purely on the basis of the celebrity who now signals quality for the product. This finding has important implications for the current and future marketing of low-priced products.

Theoretical implications

Prior research in the area of celebrity endorsements has focused on congruence among the endorser and product category (Kamins & Gupta, 1994), the source characteristics of endorsers (Aaker & Myers, 1987), the meaning endorsers add to products (McCracken, 1989), and the relationships consumers hold with endorsers (Bennett et al., 2018). Previously, little, if any attention, has been given to the effects of celebrity endorsements of low-priced products. For example, do celebrities offer a signal of quality in the absence of a high price? And, if so, does this increase consumer perceptions of pricing and purchase intentions? This paper addresses these questions and in doing so contributes to two streams of marketing research, studies on both pricing and product endorsement.

The primary contribution of this research is the light it sheds on the relationship between high/low pricing and the effectiveness of celebrity endorsers for promoting low-priced products rather than high-priced products. Across three studies and two replications, we find evidence suggesting that when products are priced low, celebrity endorsement may have a greater effect on purchase intentions than when products are priced high. Specifically, we find that celebrity endorsers improve quality perceptions associated with low-priced products. Results from the replicated study (Ryan Reynolds study) also reveal that celebrity endorsement can increase price perceptions of low-priced products, consequently leading to increased consumer intent to purchase the endorsed product. Importantly, this research bridges the gap between the celebrity endorsement and pricing literatures. Notably, it also offers signaling theory as an appropriate foundation for integrating these two streams of research and helps provide a more complete understanding of the effect and uses of celebrity endorsers.

Managerial implications

The power of celebrities to offset the low quality perceptions associated with low prices has important managerial implications. The use of celebrity endorsers has allowed marketing managers to capture consumers' attention. Further, endorsements provide products and brands with valuable borrowed equity from the endorser. As such, they are common, especially among high-end offerings regardless of the product category. Indeed, such products enjoy prestige pricing or economies of scale that allow for investments in celebrity spokespersons. However, we find that celebrity endorsers may not necessarily increase quality perceptions beyond those already signaled by high prices, and, therefore, pairing a celebrity with a high-priced product may not necessarily justify the expense. Yet, such endorsers could potentially have a much bigger impact on the sale of low-priced goods or services, and, therefore, companies

should consider celebrity endorsement for low-priced offerings an effective promotional tool.

Managers of low-priced products have to succeed at building relevant positioning of their products and brands in the minds of their target market. These managers typically shy away from celebrity endorsements because of the cost or out of habit, suggesting that such marketing tools are not viable for the low-priced tier. However, they would benefit from understanding the effect that celebrity endorsers of low-priced products have on consumers' perceptions of the product's price, quality, and their purchase intentions. This paper finds that the interaction of a celebrity with a low-priced product increases consumers' perceptions of the product's price and quality, leading to an intent to purchase. Integrating such findings has several meaningful implications for managers. For example, these findings are useful for managers who target such populations as value-minded consumers, i.e., those who seek to obtain high-quality products at low prices. Here, the celebrity endorser's ability to signal quality and increase price perceptions in spite of low price should help products and brands achieve a value proposition.

In addition, brands that host a number of celebrities, each endorsing products at higher prices, may find it useful to leverage the equity of some of these assets at a lower price to attract additional consumers. Since celebrities are used to leveraging their equity or cultural meanings that signal status, class, gender, age, personality, and lifestyle (McCracken, 1989), the findings presented in this paper suggest that practitioners can also add these attributes to low-priced products via the use of celebrities. In these contexts, the celebrity endorser may provide the low-priced product a relevant point of differentiation, separating it from other low-priced offerings. Additionally, the presence of a celebrity endorser makes product quality and performance claims more credible even at low prices.

Limitations and future research

Although this research offers important theoretical and managerial implications, it has several limitations. Two of the goods used here, sneakers and a fitness watch, are hedonic products associated with expressing one's identity and lifestyle. The other two, a smart TV and headphones, while more utilitarian in their nature, could also be considered hedonic to an extent. Therefore, our findings may have limited generalizability. Future research should examine if the interactive effects of price and product endorsement extend to goods that are more utilitarian in nature (e.g., refrigerators, grills, among others). Dwayne "the Rock" Johnson, although an actor, is still considered a professional wrestler. While utilizing other mainstream celebrities such as former First Lady Michelle Obama or musical artist Taylor Swift could yield different results, researchers may run the risk of appearing politically controversial. An interesting extension of this research would be to explore whether more mainstream female endorsers, such as actress Jennifer Aniston, can offset the effect of low pricing across good- and service-based products to the same degree as a male endorser (e.g., actor Jon Hamm).

Furthermore, research on celebrity endorsement and low pricing has yet to explore the role of celebrity co-endorsement (two celebrities endorsing a product at the same time). It may be worthwhile to explore whether female and male celebrity co-endorsers such as musical artists Jay-Z and Beyoncé are as impactful in influencing purchase intention for low-priced products as a single celebrity endorser. In addition, as mentioned in the introduction of the paper, several high-end or prestigious brands have introduced lower-priced versions of their products. In this context of prestige brands, future research should investigate the role a celebrity endorser plays on perceptions of price and quality. Furthermore, research on celebrity endorsers has often focused on the interplay between celebrity and product or brand congruence and incongruence. Here, our investigation focuses on the effect of celebrities' expertise and whether it corresponds to the product or brand. While congruence was a factor in two of the three studies conducted for this research (i.e., athletes with athletic shoes or a fitness watch), congruence was not the focus of the paper. Future research could examine the interplay between celebrity and product congruence and low price as it relates to consumers' perceptions of price, quality, and purchase intentions. In conclusion, all studies in this manuscript showcase the importance of celebrity endorsement on consumer purchase behavior when it comes to low-priced products.

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