

**THE MEDIATING EFFECTS OF PERCEIVED QUALITY
AND RISK ON PURCHASE INTENTIONS BETWEEN
PROTOTYPICAL AND ME-TOO BRANDS**

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THE MEDIATING EFFECTS OF PERCEIVED QUALITY AND RISK ON PURCHASE INTENTIONS BETWEEN PROTOTYPICAL AND ME-TOO BRANDS

ABSTRACT

The study examines brand familiarity, extrinsic attributes, perceived quality and risk for their effects on purchase intentions between prototypical and me-too brands. Since the MP3 player was selected as the product category and the majority of users comprised young adults, a survey was administered to a general student population at three universities in Australia. While perceived equivalent quality had a positive mediating effect on brand familiarity-purchase intentions for the me-too brands, it had a negative mediating effect on extrinsic attributes-purchase intentions for the prototypical brand. Finally, perceived financial/performance, social/physical, time and psychological risks produced negative mediating effects on the perceived equivalent quality-purchase intentions relationship for the prototypical brand, while social/physical risk produced a positive mediating effect for the me-too brands.

INTRODUCTION

In most markets, there exists a prototypical market leader, which because of its competitive advantage makes it more appealing to the majority of consumers (Carpenter and Nakamoto, 1989). Prototypical brand leaders may be better made, conveniently packaged, offer more accessibility and be more responsive to after-sales service. Given the superior status of the leading brand, why should any consumer even consider buying a follower brand?

Me-too follower brands have resulted from the competition's attempts to win market share, ease pressure on profit margins as well as manage and innovate more professionally. Through technology, the competition's response to the prototypical brand is faster, allowing me-too brands to appear soon after the launch of a branded product and shortening the phase in which a unique concept can expect to reap premium prices and high margins (Centaur Communications Limited, 2007a, 2007b).

While research has examined prototypical and me-too brands (e.g., Alpert and Kamins, 1995; Holt, 2002), it falls short in explaining why some people support me-too brands across product categories when concerns such as quality, variety, price and even one's "face" may be compromised (McGinnis and Gentry, 2009). In this study,

we explore perceived quality and risk for their mediating effects on purchase intentions between prototypical and me-too brands. It is our intention to explore the differences in purchase intentions by consumers when considering the Apple iPod (prototypical brand) as opposed to other brands of MP3 players (me-too brands) and to try to evaluate the relevance of these antecedents which help to explain this difference. MP3 players were selected as the product category for their immense popularity. Worldwide MP3 player unit shipments were 200 million in 2007 and are expected to grow to 245 million in 2012 (Ethier, 2008). In the U.S., unit sales for the Apple iPod were estimated at 52 million in 2007, increasing to 56 million in 2008 (Hesseldahl, 2008). In the U.K., MP3 player penetration was 47 per cent of the population in 2008 (Deloitte LLP United Kingdom, 2008).

LITERATURE REVIEW

Brand familiarity reflects the 'share of mind' the consumer ascribes to the particular brand and the extent of a consumer's direct and indirect experience with the brand (Alba and Hutchinson, 1987; Kent and Allen, 1994). It is determined by strength of associations that the brand name evokes in consumer memory and in this way, captures the consumer's brand attitude (Campbell and Keller, 2003).

An extrinsic cue is related to the product; however an extrinsic cue can change without altering the characteristics of the product itself. Generally, consumers rely upon the product's brand, physical appearance, purchase price (Dawar and Parker, 1994; Rao and Monroe, 1989) and country of origin (Fandos and Flavian, 20006; Kim, 2008) to determine product quality.

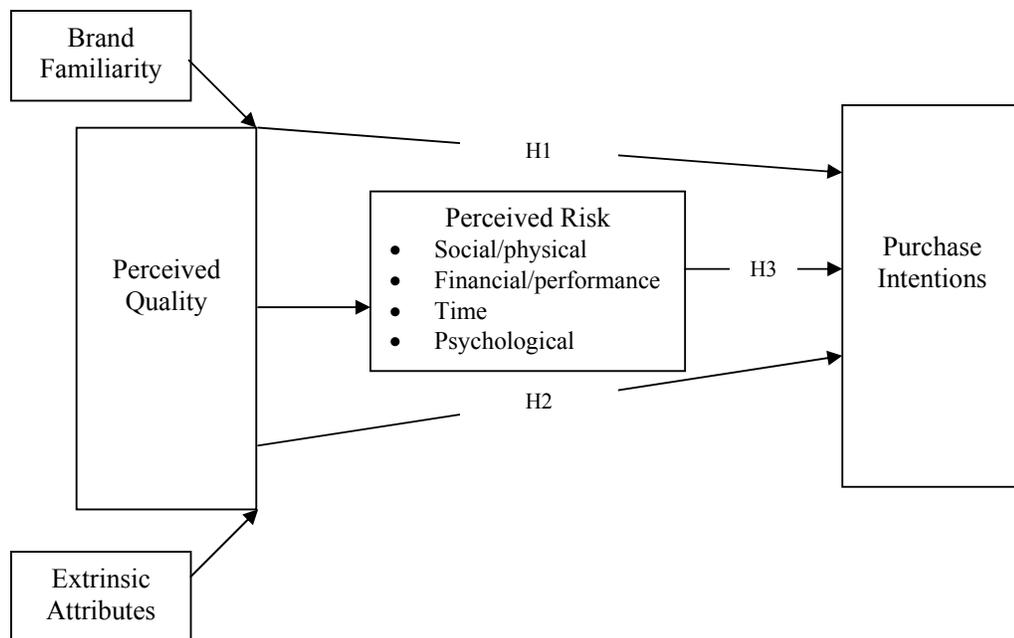
Perceived quality is an attitude that results from the comparison of consumer expectations with the actual performance (Parasuraman et al., 1985). The construct was operationalized as a SERVQUAL measure comprising five dimensions of tangibility, reliability, responsiveness, assurance and empathy.

Risk in consumer behavior is viewed in terms of a potential perceived loss occurring (Peter and Ryan, 1976; Sjoberg, 1980). Six different types of potential loss have been identified that are associated with financial, performance, psychological, social, physical and time outcomes (Cherry and Fraedrich, 2002; Horton, 1976; Mitchell, 1998; Roehl and Fesenmaier, 1992).

Research Model and Hypothesis

The model for the current study was adapted and extended from research conducted by Mieres et al. (2006). While the original study examined national and store brands for their impacts on risk perceptions, the current study focuses on prototypical and me-too brands for their impacts on purchase intentions. The research model can be seen in Figure 1.

Figure 1: The Research Model



It is expected that perceived quality will mediate the relationship between brand familiarity and purchase intentions (Shehryar and Hunt, 2005). When consumers become more familiar with a brand's quality, they are more likely to show a higher propensity to purchase it. Consequently:

H1: Perceived equivalent quality of the MP3 players will mediate the relationship between brand familiarity and intention to purchase an MP3 player.

It is also predicted that perceived quality will mediate the relationship between extrinsic attributes and purchase intentions (Forsythe et al., 1999). Consumers who rely on a brand's extrinsic attributes are less likely to assess the quality of other brands on the market when deciding to purchase the first brand. Therefore:

H2: Perceived equivalent quality of the MP3 players will mediate the relationship between extrinsic attributes and intention to purchase an MP3 player.

Higher perceived quality and lower risk associated with credible brands can increase evaluations of brands (Aaker, 1991; Erdem et al., 2006). Each dimension of perceived financial, performance, psychological, social, physical and time risk is likely to mediate the relationship between perceived quality and purchase intentions. Consequently:

H3: Perceived financial, performance, psychological, social, physical and time risks will mediate the relationship between the perceived equivalent quality of the MP3 players and intention to purchase an MP3 player.

Methodology

Since the MP3 player was selected as the product category and on average, people in the group aged 14 to 20 years listen to over three hours of music per day (Eggemann et al., 2002), the sample was drawn to reflect the demographic characteristics of a general student population in terms of age and gender. Consequently, a pen and paper survey was administered to undergraduate and postgraduate students at three universities in metropolitan Perth in Western Australia between October 2008 and January 2009.

Perceived risk for the Apple iPod (prototypical brand) and the other brands of MP3 players (me-too brands) were measured by 20 items respectively (e.g., I am afraid that an Apple iPod / another brand of MP3 player would negatively affect what others think of me). *Brand familiarity* with the MP3 players was measured by 13 items (e.g., I am quite familiar with MP3 player brands other than the Apple iPod). *Extrinsic attributes* of MP3 players that determine quality was measured by seven items (e.g.,

The more expensive the MP3 player, the better the quality). *Perceived equivalent quality* between the MP3 players was measured by four items (e.g., There is not much difference in terms of quality between the Apple iPod brand and the other brands). *Purchase intentions* for the Apple iPod (prototypical brand) and the other brands of MP3 players (me-too brands) were measured by four items respectively (e.g., I will purchase an Apple iPod / another brand of MP3 player the next time I need an MP3 player). These scale items were selected from Laroche et al. (2004) and Mieres et al. (2006) for their reliability in buying situations ($\alpha \geq 0.83$), anchored by strongly disagree (1) to strongly agree (7) and adapted to ensure relevance to the current study. Finally, *demographics* were measured by seven questions related to gender, age, marital status, occupation, home ownership, education and income.

Since perceived risk and perceived quality are identified as formative constructs, items measuring the respective two constructs were summed to create composites, as suggested by Jarvis et al. (2003). The error for each formative construct was then set to 0.15 times the variance of the item, as suggested by Jöreskog and Sörbom (1993). Brand familiarity and extrinsic attributes are identified as reflective constructs with more than three items. The items for each reflective construct were combined using a partial disaggregation approach to minimize measurement error problems (Bagozzi and Heatherton, 1994). Partial disaggregation is accomplished by randomly aggregating items that relate to a given construct into two or three composite measures so all of the items related to the latent variable correspond in the same way to that latent variable; thus any combination of the items should yield the same model fit (Dabholkar et al., 1997).

RESULTS

Of the 362 surveys that were administered, 4 percent deemed to be unusable due to erroneous reporting, were eliminated from the study. This resulted in 348 usable surveys. Age and gender characteristics were representative of the general student population in Australia.

First, the 48 items related to the purchase intentions of the Apple iPod (prototypical brand) were factor analyzed. This process was iteratively conducted until 13 items were eliminated and there was minimal cross-loading with communalities over 0.5,

suggesting all factors were independently structured (Hair et al., 2006). The final solution, explaining 67 percent of the variance identified brand familiarity, extrinsic attributes, perceived quality, perceived social/physical risk, perceived financial/performance risk, perceived time risk, perceived psychological risk and purchase intentions.

Then, the 48 items related to the purchase intentions of the other brands of MP3 players (me-too brands) were factor analyzed. Again, this process was iteratively conducted until 14 items were eliminated. The final solution, also explaining 67 percent of the variance identified brand familiarity, extrinsic attributes, perceived quality, perceived social/physical risk, perceived financial/performance risk, perceived time risk and purchase intentions.

Confirmatory factor analysis tested the measurement properties of the eight constructs related to the Apple iPod (prototypical brand) and the seven constructs related to the other brands of MP3 players (me-too brands). Items with high modification index values due to correlated error terms and low loadings were omitted (Jöreskog and Sörbom, 1993). As a result, six items were deleted from the measures related to the Apple iPod (prototypical brand), leaving 29 items, and seven items were deleted from the measures related to the other brands of MP3 players (me-too brands), leaving 27 items.

Next, path analysis examined the model's hypotheses. As expected, the perceived equivalent quality of the MP3 players produced a positive mediating effect on brand familiarity and purchase intentions for the other brands of MP3 players (me-too brands) ($b = 0.55$, $p \leq 0.001$), supporting H1. This suggested that respondents were *more* likely to purchase the me-too brands once they were more familiar with the quality of the MP3 players on the market. Such mediating effects were not observed for the Apple iPod (prototypical brand), which did not support H1.

Further, the perceived equivalent quality of the MP3 players produced the predicted negative mediating effect on extrinsic attributes and purchase intentions for the Apple iPod (prototypical brand) ($b = -0.28$, $p \leq 0.05$), supporting H2. This suggested that respondents were *less* likely to purchase the Apple iPod once their reliance on

external cues for brand quality was low. Such mediating effects were not observed for the other brands of MP3 players (me-too brands), which did not support H2.

Finally, as hypothesized, perceived social/physical, financial/performance, time and psychological risks produced mediating effects on the perceived equivalent quality of the MP3 players and purchase intentions for the Apple iPod (prototypical brand), supporting H3. Perceived social/physical produced mediating effects for both the Apple iPod (prototypical brand) and the other brands of MP3 players (me-too brands), also supporting H3. However, this effect was negative for the Apple iPod, with respondents perceiving more risk and being *less* likely to purchase the Apple iPod once they were more familiar with the quality of the MP3 players on the market ($b = -.12, p \leq .05$). Conversely, this effect was positive for the me-too brands of MP3 players, with respondents perceiving less risk and being *more* likely to purchase the me-too brands ($b = .14, p \leq .05$). This suggested respondents encountered more pressure when deciding to buy the Apple iPod.

DISCUSSION AND LIMITATIONS

The majority of the hypotheses were supported. While perceived equivalent quality had a positive mediating effect on the brand familiarity-purchase intentions relationship for the me-too brands, it had a negative mediating effect on the extrinsic attributes-purchase intentions relationship for the prototypical brand. This highlights the need for the me-too brands to get consumers familiarized with their value-for-money options since brand familiarization can motivate consumer interest in these me-too brands. Aggressive competition from the me-too brands may be the reason why unit sales for the Apple iPod are expected to tumble by 12 percent to about 48 million in 2009 (Hesseldahl, 2008). Conversely, it is imperative for the Apple iPod to emphasize its tangible cues in its marketing campaigns since extrinsic attributes appear to motivate consumers to purchase the prototypical brand.

Perceived social/physical, financial/performance, time and psychological risks produced mediating effects on the perceived equivalent quality of the MP3 players and purchase intentions for the Apple iPod. Since consumers seem to perceive more risk when paying premium prices for premium brands like the Apple iPod, such

prototypical brands may need to consider the implications of guarantees and extended warranties to allay the risks perceived by consumers.

The current research was limited by its sample size and geographic distribution. Respondents constituted 348 undergraduate and postgraduate students from three universities in metropolitan Western Australia. While young people comprise a key demographic for MP3 players, the current study did not take into account the perceptions of young working professionals and students at non-university and non-tertiary institutions. For the model to have general and cross-cultural applicability, it requires larger samples to be collected across countries (e.g., Mikhailitchenko et al., 2008).

From the research, it is apparent that savvy consumers are looking for value-for-money, no-frills options in their purchase of MP3 players. Conversely, loyal Apple iPod users place great importance on the external cues of its premium brand, price, packaging and features. If the Apple iPod intends to maintain its competitive edge of being an innovator (Hesseldahl, 2008), it needs to research, identify and develop more creative extrinsic attributes that appeal to its loyal customer base. It is also crucial that the Apple iPod investigates consumer perceptions of risk related to the purchase of the brand. Understanding why consumers perceive higher financial, performance, psychological, social, physical and time risks when purchasing the market leader, can help the Apple iPod address such concerns and maintain its presence in the market.

Finally, while MP3 players are purchased at extended intervals, it may be interesting for future research to focus on prototypical and me-too brands in product categories that are purchased regularly such as street fashion. With such fast-moving consumer goods, consumers gain substantial brand experience and brand familiarity to help them make assessments of brand quality and risk frequently. This may offer researchers more insights into how the antecedents operate on everyday purchase intentions.

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