



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

The Consumer Paradox: Why Bottom-Tier Consumers Are Loyal To Brand Names

Simba Pasirayi
W.P. Carey School of Business
Arizona State University
7231 E. Sonoran Arroyo Mall
Mesa, AZ 85212
spasiray@asu.edu
(Corresponding Author)

Carola Grebitus
Assistant Professor
Morrison School of Agribusiness
W.P. Carey School of Business
Arizona State University
7231 E. Sonoran Arroyo Mall
Mesa, AZ 85212
carola.grebitus@asu.edu

Selected Paper prepared for presentation at the Agricultural & Applied Economics Association's 2016 AAEA Annual Meeting, Boston, MA. July 30-August 2, 2016.

Copyright 2016 by Simba Pasirayi and Carola Grebitus. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

Abstract

Recent studies on private labels find that store brand consumers tend to be middle income, educated, older consumers with large families. Moreover, low-income households that have the same needs as wealthier households do not economize by buying a greater proportion of private-label products. Instead they prefer higher priced national brands even in recessionary times. In this research study we employ the reference group theory to explain this counterintuitive phenomenon. Results show that low-income households are upward comparing, that is, they contrast themselves with high-income households whom they believe are better-off. These comparisons result in preference for national brands. In addition, we find that low income consumers know little about advances in private labels which also explains why they prefer national brands. Last, we find that our results are also consistent in emerging economies.

Key words: private labels, social influence, socioeconomic status

JEL code: D12, C25

Introduction

In the past, private labels were targeted toward low-income households. These households were most likely to buy them as they are price sensitive, and generally have lower disposable income (Starzynski, 1993; Hoch, 1996; Baltas and Doyle, 1998). However, this trend appears to have changed. With the introduction of new types of private label products (new categories), and the improvement in private label quality, different types of consumers are now private label shoppers¹. Admittedly, Kaufman et al. (1997) and Bronnenburg et al. (2015), find that current private label consumers tend to be high to middle-income, educated, and mature with large families. In fact, low-income consumers prefer national brands to private labels, despite the fact that private labels are often a less-expensive option². These findings are somewhat counterintuitive as low-income households, with presumably the same needs as wealthier households, do not economize by buying a greater proportion of private label products, but rather consume more costly national brands. In this study, we seek to determine why low-income households tend not to prefer private labels, seemingly against their own better interests.

An extensive body of empirical work finds that individuals seek to better their social standing through the consumption of products that confer and symbolize status for not only themselves but also close significant others (Eastman et al., 1999; Dion and Arnould, 2011). In particular, prior research confirms that the desire for status is an important force that compels low income consumers to buy expensive brands (Mandel et al. 2006; Griskevicius et al., 2007; Dreze and Nunez, 2009; Rucker and Galinski, 2008, 2009; Sivanathan and Pettit, 2010) in order to satisfy their desire for status. Generally, they consume brands that are designed to be visible

¹ Heraud (2006) finds that affluent households have been the main driver of private label growth as they represent the fastest-growing market segment.

² This is not unique to the USA, e.g., in South African middle-income and high-income households have increased private label consumption, whereas low income groups have reduced consumption (Euromonitor, 2013).

and distinguishable, and can signal wealth in the absence of other indicators (Ackerman et al., 2000; Ordabayeva and Chandon, 2011). However, the majority of prior research primarily focuses on publicly consumed durable products. As a matter of fact, there has been a limited amount of effort to understand how status seeking behavior impacts brand choice in non-durable products such as grocery items that are mostly consumed in private. In this research we seek to address this gap by examining the role of social influences in the consumption of national brands by low-income consumers.

Social influences on consumer behavior in a retail setting are well documented. They play a key role in shaping consumer preferences, for example, interactive social influences, such as being aided by sales assistants or shopping with friends, (Sharma and Levy, 2003; Mangleburg et al 2004; Didem, Inman, and Argo, 2011) impacts not only the amount of money consumers spend on each shopping trip but also the frequency of store visit and overall customer emotions. Similarly, noninteractive social presence, such as the “mere presence” of others who may not be involved nor attempt to engage the other consumer in any way have an effect on consumers’ emotions and self-presentation behaviors (Dahl, Manchanda, and Argo 2001; Argo, Dahl, and Manchanda 2005). Therefore, in this study we account for these social influences in explaining how the desire for status drives low-income consumers’ preferences for national brands.

We investigate these atypical preferences using a series of economic experiments. Here, we attempt to determine which of two potential social influence mechanisms (i.e., aspirational reference groups, or dissociative reference groups) primarily explains why low income individuals prefer national brands to private labels. In addition, we also consider a third explanation in which we explore whether low-income consumers’ are aware of private label

quality advancements and if this impacts their preferences. We conduct our experiments in the US and in South Africa. In addition to the US study we chose to conduct an experiment in the South African market for two main reasons. First, there is a large number of low income consumers, and a substantial proportion prefer national brands. Second, private labels are unpopular, even though most of them are produced by national brand manufactures³ (Beneke, 2009; Van Wyk, 2013).

Our findings show that low income consumers prefer national brands so as to associate themselves with high-income households and to gain social status. In fact, their purchase intentions and willingness to pay for private labels increase when they assume that high income consumers consume private labels. Moreover, they are willing to pay less when they associate private labels with other low income consumers. Last, we also find that lack of information and understanding of private label quality impacts preferences.

Our research contributes to the existing literature by showing that low-income individuals consume national brands out of a concern for social influences. In addition, at a more general level, our study validates the importance of social influence in a grocery retail setting and the presence of status seeking behavior in non-durable products that are consumed in private.

The remainder of this article is organized as follows: In the next section we develop our research framework and formulate hypotheses on how social influence mechanisms (aspirational reference groups, and dissociative reference groups), and the lack of private label information explain why low income consumers spurn private labels. In the subsequent section we describe how private label preferences among low income consumers vary between hedonic and utilitarian product categories. In the third section, we explain the design and execution of our

³ South Africa is also culturally different from the US or other western markets which may impact private label preferences differently.

experiment which we use to test our hypotheses. Last, we discuss the results, formulate conclusions and offer managerial implications.

Research Framework

The influence of reference groups on consumers' attitudes, aspirations, goals, opinions, and, ultimately, purchase decisions is well documented in marketing literature. For example, reference groups determine attribute importance (Batra, Homer, and Kahle, 2001), the likelihood of purchase (Whittler and Spira, 2002), actual purchases (Bearden and Etzel, 1982; Childers and Rao, 1992), willingness to pay (Ferraro, Bettman and Chartrand, 2009) and brand perceptions (Escalas and Bettman, 2003). By and large, consumers' purchase intentions are affected by three types of reference groups: membership groups, aspirational groups, and dissociative (or negative) groups.

Membership reference groups are those that an individual not only belongs to, but also agrees with the group's identity and shares the same attitudes, norms, and behaviors (Turner, 1991). Aspirational reference groups refer to positive groups that an individual aspires to be member of, but to which they do not belong (Englis and Solomon, 1995), whereas dissociative reference groups are groups that an individual shuns and does not want to be associated with (Englis and Solomon 1995; Turner 1991). Next, we discuss how aspirational and dissociative reference groups impact private label preferences.

Aspirational Reference Groups

Aspirational reference groups exert influence over an individual's behavior and ultimately their consumption decisions. Moreover, they can provide inspiration and motivational thoughts of self-improvement for out-group members (Taylor and Lobel, 1989; Aspinwall and Taylor, 1993;

Zeelenberg and Pieters, 2011). In this study we propose that low-income households are often upward comparing, that is, they aspire to be like high-income households whom they believe are better-off. Subsequently, these comparisons motivate them to desire brands that they believe high-income households consume.

Mostly, upward comparisons by low income individuals evoke status seeking behavior (Sivanathan and Pettit, 2010). Prior research finds that low income individuals spend a disproportionate amount of their income on status-laden brands. Granted that, income which is a common marker of status, is not apparent to others, low income consumers speciously signal their wealth by consuming brands that are a surrogate for income, such as expensive luxury and status-laden brands (Banerjee and Duflo, 2007; Han et al. 2010; Nunes, et al. 2011). As a matter of fact their need for social status is positively correlated with conspicuous consumption, as they purchase brands to signal social status rather than for their inherent objective or subjective value. In addition, low income individuals see conspicuous consumption as a relief from their circumstance in that people who do not know them will infer their social status based on their consumption patterns (Belk, et al 2012; Ordabayeva and Chandon, 2011).

Generally, national brands are perceived as high status brands, whereas private labels are perceived as low status brands due to their high inherent social risk. For example, Dobbstein, (2007) finds that to avoid the stigma of poverty, low-income consumers are more likely to serve guests national brands, and Williams, (2002) finds that consumers prefer to buy national brands as gifts for others. As a result, status-insecure low-income households may consume national brands to attenuate social risk. Evidently, when low-income households compare themselves with high-income households it triggers them to seek high-status brands which essentially discourages private label consumption.

Dissociative Reference Groups

The desire to avoid dissociative reference groups' influences consumer preferences and purchase intent. Generally, consumers select brands because they desire to identify with or be like the typical brand user (Escalas and Bettman 2003, 2005). Therefore, self-presentation concerns often result in consumers shunning brands or products linked to a dissociative reference group. For example, White and Dahl (2006), show that males are less motivated to select, a product associated with a dissociative reference group (i.e., females) than a neutral product. Moreover, they find that products and brands associated with dissociative reference groups have a larger effect on consumers' negative self-brand connections, choices and purchase intentions.

In a related study Berger and Heath (2007) find that consumers purposely select brands that deviate from member group norms in order to avoid signaling undesired characteristics about themselves. They also find that consumers are more likely to buy healthier products when risky products are associated with dissociative groups, and that consumers are ready to dissociate themselves from their own membership reference groups when they became aware of negative information about their group. Evidently, reference groups not only influence brand choice but also consumer attitudes towards certain brands, thus, particular symbolic meanings associated with brands which are congruent with an image of a dissociative group results in consumers negatively evaluating those brands.

The foundations of dissociative reference groups lie in nonconformity behavior (Packer, 2008; Packer and Chasteen, 2010). Nonconformity behavior, is conduct that is inconsistent with group norms. It is often related directly with normative insusceptibility to interpersonal influence and may be considered a manifestation of social influence that stems from differences between the needs of the group and the individual (Bearden, Netemeyer and Teel, 1989). Bellezza, Gino

and Keinan (2014) find that nonconforming behavior can also signal higher status to other consumers. Specifically, they find that nonconformity carries with it a social cost of being ostracized which often results in observers deducing that nonconforming individuals are powerful as they are prepared to risk their social standing. Moreover, nonconformity gives visible evidence that these individuals have high levels of autonomy and control, in that regard it acts as a specific form of conspicuous consumption that can lead to inferences of higher status. Therefore, low income households may shun private labels in order to dissociate themselves from their peers and in the process gain social standing.

Lack of Private Label Knowledge

Current research finds that compared to informed consumers, low-information consumers systematically make costly decisions because they do not understand the choice environment. For example, low-information consumers have limited knowledge of price distributions, therefore are more likely to shop at random stores where prices maybe higher (Stiglitz, 1977; Jain and Srivastava, 2000). Moreover, low-information consumers have a positive cost for searching for the lowest-price store, which leads them to observe only a single price prior to purchasing. And by not searching all available information concerning a specific product or brand, they often end up overpaying (Brynjolfsson and Smith, 2000).

In most cases low-information consumers are often low income individuals. This is because low income consumers attain lower levels of education which may result in limited understanding of not only prices but also product attributes. For example, low income households have been shown to have lower financial literacy which may result in a lower propensity to engage in strategies that allow them to navigate markets and save money (Agarwal

et al, 2010; Delaney and Doyle, 2012). Therefore, it is highly likely that low income households have little information and understanding of private labels, in general, or advancements in relative private label quality.

On the other hand, because of higher educational attainment high-income individuals are more likely to know more about private labels. In fact, Bronnenburg et al. (2015) find that highly educated consumers “experts” in a certain category are more likely to buy the private labels while lowly-educated consumers “novices” are more likely to buy national brands of an otherwise homogenous product. Therefore, this asymmetry in information about private labels may result in low income consumers preferring private labels.

The Moderating Role of Product Categories.

Consumer choices are also driven by hedonic and utilitarian considerations (Holbrook and Hirschman, 1982). The hedonic dimension results from sensations derived from the experience of using products. Thus, hedonic products are those that provide gratification from sensory attributes such as tastes, sounds, aromas, tactile sensations and visual images, which are much more subjectively than objectively oriented⁴. The second dimension, the utilitarian dimension results from functions performed by products, for example, utilitarian products are those whose consumption is more cognitively focused and fulfill a functional or practical tasks⁵ (Dhar and Wertenbroch, 2000). This product classification can influence consumers’ choices between private labels and national brands.

Low income consumers may prefer to buy more national brands in the utilitarian product category as opposed to the hedonic product category mainly because the level of risk

⁴ Examples of hedonic products include ice-cream, ketchup, yogurt and soft drinks.

⁵ Examples include toilet paper, paper towels, bottled water and laundry detergent.

(uncertainty regarding the efficacy of a brand) may be higher in utilitarian products. In general, low income consumers are risk averse as they may not be in a financial position to make poor purchase decisions by buying a product that is not effective (Batra and Sinha 2000; Agarwal and Teas, 2001). Therefore, low income households can only afford to make mistakes in the hedonic product category where costs may be inconsequential. For example, the costs incurred in consuming private label ice cream which does not taste quite as good as national brands are far less than those incurred from using private label laundry detergent that may not be as effective as the national brand alternatives.

Economic Experiment

The main goal of this experiment is to determine which of the social influences (aspirational reference groups and dissociative reference groups) explains why low income household avoid private labels. We also consider the general lack of knowledge about private label products as a competing explanation. Our secondary goal is to substantiate that low income consumers' prefer national brands to private labels.

We start by examining whether low-income households view high-income as an aspirational reference group and how this impacts their brand choices. Second, we investigate whether low-income households consider other low-income households as a dissociative reference group, and if this influences their evaluations and choice of private labels. Third, we examine whether low-income households' rejection of private labels is due to insufficient information about private label advancements. Last, we assess whether product category (utilitarian versus hedonic) impacts private label preferences.

In order to identify what products and brands to use in our study we conduct a pretest. The pretest aids in determining what brands consumers regard as either high status or low status and products they consider hedonic and utilitarian. Following Mandel (2006), we ask 120 MTurk participants to rate brands from various product categories on a 7-point scale that ranges from one (*very low status*) to seven (*very high status*). In addition, we ask the participants to classify products as either hedonic or utilitarian goods using Batra and Ahtola's (1990) eight-item semantic differential scale. We test 23 products that past research suggest vary in terms of being perceived as hedonic or utilitarian (Ratchford, 1987). For each product category we test the status of both national brands and private labels. We find that yogurt loads heavily on the hedonic factors⁶. Whereas, laundry detergent loaded heavily on the utilitarian factors⁷. Subsequently, we use these products and six brands (three national brands and three private labels), that are rated are either high status (for national brands) or low status (for private labels).^{8 9}

Sample description

We conduct two studies, one in the US and one in South Africa. For the US study participants were drawn from households representative of the general US consumer population. We recruited 250 low income participants from the Phoenix, Arizona metropolitan area (annual household income less than \$40,000). The ages of the participants ranged from 23 to 56 (mean

⁶ Pleasant/unpleasant, agreeable/disagreeable, happy/sad

⁷ Valuable/worthless, helpful/unhelpful, agreeable/disagreeable

⁸ US (Laundry detergent brands – Gain, Tide, Great Value, and Kroger Home Sense, Yogurt brands – Chobani, Oikos, Kroger, and Great Value).

⁹ South Africa (Laundry detergent brands – Surf, Omo, PnP and Ritebrand, Yogurt brands – Clover, Nutriday, PnP and Woolworths).

38.5, median 20). 62% were female and 38% were male. The average household size was 2.7 persons and most had at least graduated from high school (see Table 1).

For the South African study we recruited participants through a marketing research company (Acentric). In total 244 low income participants (annual household income less than \$15,000) from the Johannesburg metropolitan area were recruited. The ages of the participants ranged from 18 to 76 (mean 36.75, median 33). 67% were female and 32% male. The average household size was 3.63 persons and most had more than 12.9 years of education (see Table 2).

Tables 1 and 2 about here.

Experimental design

Our experiment has four between-subjects conditions: aspirational (or positive) reference group, dissociative (or negative) reference group, lack of private label knowledge and a control. In the aspirational reference group condition, the participants read an article infused with statistics describing the preferences of high income households. For example, the article includes statements such as: “studies show that 85% of high-income households consume the most private labels”. In the dissociative reference group condition, respondents read an article similar to the one read by respondents in the aspirational reference group with only difference being that the statistics describe the preferences of low income households. For example, the article includes statements such as: “studies show that 85% of low-income households consume the most private labels”. In the lack of private label knowledge condition, participants read an article describing how private labels’ objective quality has improved and is now close to, if not equal to or greater than, the objective quality of comparable national brands. The article also highlights that some private labels are produced by the same manufacturers who make leading national brands. Last, in the control condition, participants read an ostensibly unrelated news article. In this case, they

read an article mundanely describing the game of cricket. The experimental set-up in the South African study is a direct replication of the previous experiment, albeit with a different manipulation in the control group where participants read an article about how the NFL was founded.

Thereafter, we administered a stated-choice experiment (Louviere and Woodworth 1983; Louviere, Hensher and Swait 2000). We asked the participants to make repeated choices from 12 choice sets between two private labels, two national labels alternatives and the none-of-these option (NONE) in both the hedonic and utilitarian product categories. The inclusion of the NONE option is principal practice in choice experiments (e.g., Louviere et al., 2000). The products varied by price, and brand. We selected these attributes because all are likely to be important determinants of consumer choice, given that consumers are typically price conscious and brand has been shown to be a significant driver of purchase decisions (Ailawadi and Keller, 2004; Kumar and Steenkamp, 2007). Importantly, each participant evaluated the same choice sets but the order for the choice sets varied. Figure 1 shows an example of the selection provided for two of the choice sets in both the US and South African studies.

Figure 1 about here.

In addition, we ask the participants to quantify their purchase intentions for each of the products. We also measure participants' perceived childhood socioeconomic status (childhood SES) and their current socioeconomic status (current SES). We use these measures to validate the link between a person's socioeconomic status and private label consumption. Both measures were established by Griskevicius, Delton, et al., (2011) and Griskevicius, Ackerman, et al., (2013). To determine childhood SES, we ask participants to respond to the following with three statements on a 9-point scale from one, *strongly disagree*, to nine, *strongly agree*: "My

family usually had enough money for things when I was growing up,” “I grew up in a relatively wealthy neighborhood,” and “I felt relatively wealthy compared to the other kids in my school.” To determine current SES, participants had to respond in a similar fashion to three other items. “I have enough money to buy things I want,” “I don’t need to worry too much about paying my bills,” and “I don’t think I’ll have to worry about money too much in the future.”

Econometric Model

To determine which of our hypotheses best explains why low income individuals reject private labels, we estimate a random parameter logit model. This model is standard in discrete choice modelling framework because it assumes consumers relate each option in a choice set according to a utility criteria and select the option that gives them the highest utility (Train, 1985; McFadden, 1986). Moreover, it fully accommodates unobserved household heterogeneity by letting the parameters vary randomly, therefore accounting for the repeated nature of the choices made. The random parameter logit probability can be derived from utility-maximizing behavior (Train, 1985; McFadden, 1986). Meeting the requirements of repeated choices in the experiment the participant faces a choice among the alternatives in choice set j on each choice occasion. The utility the participant i obtains from alternative j in choice situation t is:

$$U_{ijt} = V_{ijt} + \varepsilon_{ijt} \quad (1)$$

where:

$$\begin{aligned} V_{ij} = & \beta_1 Price_{ij} + \beta_2 Brand1_{ij} + \beta_3 Brand2_{ij} + \beta_3 Brand3_{ij} + \beta_4 Brand4_{ij} + \eta_1 C * Price_{ij} \\ & + \eta_2 T_{1i} * Price_{ij} + \eta_3 T_{2i} * Price_{ij} + \eta_4 T_{3i} * Price_{ij} + \rho_1 C * Brand1_{ij} + \rho_2 T_{1i} * Brand1_{ij} \\ & + \rho_3 T_{2i} * Brand1_{ij} + \rho_4 T_{3i} * Brand1_{ij} + \phi_1 C * Brand2_{ij} + \phi_2 T_{1ij} * Brand2_{ij} + \phi_3 T_{2ij} * Brand2_{ij} \\ & + \phi_4 T_{3ij} * Brand2_{ij} + \alpha_1 C * Brand3_{ij} + \alpha_2 T_{1ij} * Brand3_{ij} + \alpha_3 T_{2ij} * Brand3_{ij} + \alpha_4 T_{3ij} * Brand3_{ij} \\ & + \gamma_1 C * Brand4_{ij} + \gamma_2 T_{1ij} * Brand4_{ij} + \gamma_3 T_{2ij} * Brand4_{ij} + \gamma_4 T_{3ij} * Brand4_{ij} + \theta_1 SES * Brand1_{ij} \end{aligned}$$

$$\begin{aligned}
& +\theta_2SES_{1ij} * Brand2_{ij} + \theta_3SES_{2ij} * Brand3_{ij} + \theta_4SES * Brand4_{ij} + \tau_1CSES * Brand1_{ij} \\
& +\tau_1CSES * Brand2_{ij} + \tau_1CSES * Brand3_{ij} + \tau_1CSES * Brand4_{ij} + \varepsilon_{ijt} \quad (2)
\end{aligned}$$

where $price_{ij}$ represents the price of alternative j (A, B, C or D) in choice situation t . Brands 1 to 4 are brand alternative-specific constants. To test the effectiveness of aspirational reference groups (T_2), dissociative reference groups (T_3), and the lack of private label knowledge (T_1) in and private label preferences relative to the control treatment (C), we include the interactions of treatment dummy variables with the brand alternative-specific constants attributes and treatment dummy variables with price respectively. Last, to determine how behavior varies with socioeconomic status, we also include interaction effects between brand specific constants and the socioeconomic status variables (both childhood and adult). The results of our models are presented in the next section.

Results

In this section, we first provide a summary of our experimental data before evaluating several different specifications of our regression models.

US Study

We summarize the experimental data in tables 3 and 4 below. On average, the experimental subjects purchase intentions were higher for national brands as compared to private labels ($M = 6.6$ vs. 2.2), $p < 0.001$). Across the treatment conditions we find that the average purchase intentions for private labels vary considerably. Generally, purchase intentions were highest for subjects in the aspirational reference group ($M = 6.6$), followed by the dissociative reference group condition ($M = 5.33$) the lack of information condition ($M = 4.82$), and last the control condition ($M = 3.79$) (see Table 3).

National brand purchase intentions follow a similar path. On average purchase intentions are highest in the control condition ($M = 7.77$), and lowest in the lack of knowledge condition ($M = 5.25$) (see Table 4). We also find that on average the participants' show greater purchase intentions for both private labels and national brands in hedonic product categories as opposed to utilitarian product categories. Next we describe the results from our econometric models.

Insert Tables 3 and 4 here

Econometric Results

We start by examining the treatment' effects on private label price sensitivities in the hedonic product category (Model 1). Foremost, we find that relative to the control condition, the aspirational reference treatment and the lack of knowledge treatment increase price sensitivity, whereas the dissociative reference group treatment decreases price sensitivity. Following that we examine the treatment effects on private label preferences. Our results show that the preferences of each treatment group are significantly different from the control group. Specifically, private label preferences of experimental subjects in the aspirational reference group were significantly higher than for those in the control. Consistent with our first hypothesis this implies that low income consumers are upward comparing, and that they consider higher income household to be aspirational reference groups. We also find that the preferences of the experimental subjects within the dissociative reference group were significantly lower than the control group suggesting that low income consumers also dissociate from other low income consumers by consuming more national brands. Last, our results show that subjects in the lack of private label knowledge treatment also have private label preferences that are significantly higher than those in the control condition. In fact, the subjects in this condition have the highest preferences of all treatments (see Table 5).

Next, we assessed how consumers' socioeconomic status (childhood SES and current SES) influences private label purchase preferences. We find that there is no main effect between childhood SES and private label preferences. On the other hand, we find a positive significant relationship between current SES and private label purchase preferences. This validates that when consumers' socioeconomic status increases they are more likely to consume private labels (see Table 5).

We then evaluate the effect of product category on private label preferences by examining the treatment' effects on private label price sensitivities in the utilitarian product category (Model 2). Our results show that relative to the control condition, the aspirational reference treatment and the lack of knowledge treatment increase price sensitivity, on the other hand the dissociative reference group treatment decreases price sensitivity. We also we examine the treatment effects on private label preferences. Here we find that the preferences of each treatment group are significantly different from the control group. Specifically, private label preferences of experimental subjects in the aspirational reference group were notably higher than for those in the control. In agreement with our first hypothesis with this implies that low income consumers are upward comparing, and that they consider higher income household to be aspirational reference groups. Further, we find that the preferences of the experimental subjects within the dissociative reference group were notably lower than the control group suggesting that low income consumers also dissociate from other low income consumers by consuming more national brands. Our results also highlight that subjects in the lack of private label knowledge treatment also have private label preferences that are significantly higher than those in the control condition. As a matter of fact, the subjects in this condition have the highest preferences among all treatments (see Table 5).

In terms of consumers' socioeconomic status (childhood SES and current SES), our results show that there is a positive significant relationship between current SES and private label purchase preferences. Last, in agreement with our fourth hypothesis we find that preferences are higher for hedonic products as opposed to utilitarian products.

Insert Tables 5 here

South African Study

We summarize the experimental data in tables 6 and 7 below. Our results show that, the experimental subjects purchase intentions were higher for national brands as compared to private labels ($M = 8.86$ vs. 4.33), $p < 0.001$). As in the US study, our results show that across the treatment conditions the average purchase intentions for private labels vary extensively. Mostly, purchase intentions were highest for subjects in the aspirational reference group ($M = 8.85$), followed by the dissociative reference group condition ($M = 8.82$) the lack of information condition ($M = 4.57$), and last the control condition ($M = 4.33$) (see Table 7).

Insert Tables 6 and 7 here

Econometric Results

Similar to the US study we find that on average, the subjects rated private labels as low status brands and national brands as high status brands. Our results for the hedonic product category (Model 3) show that relative to the control condition, the aspirational reference treatment and the lack of knowledge treatment increase price sensitivity, however, the dissociative reference group treatment decreases price sensitivity. When it came to private label preferences the participants' preferences within the treatments were also significantly different from the control group. Specifically, the private label preferences of subjects in the aspirational reference and lack of private label knowledge conditions are higher than for those in the control condition. These

results are not only consistent with hypothesis 1 and 3 but they are also qualitatively similar to our findings in the US market. We also find that private label preferences are higher for hedonic products as opposed to utilitarian products. Furthermore, we find that there a main effect between current SES and private label purchase intentions. However, we find no significant relationship between childhood SES and private label preferences (see Table 8).

Once more, similar to the US study we find that on average, the subjects' private label preferences in the utilitarian product category vary across the treatments (Model 4). Specifically, the preferences of each treatment group are significantly different from the control group. Private label preferences of experimental subjects in the aspirational reference group were markedly greater than for those in the control. Moreover, we find that the preferences of the experimental subjects within the dissociative reference group were notably lower than the control group implying that low income consumers in the South African market also dissociate from other low income consumers by consuming national brands. We also find that that subjects in the lack of private label knowledge treatment have private label preferences that are significantly higher than those in the control condition (see Table 8).

In terms of consumers' socioeconomic status (childhood SES and current SES), we find that that there is a positive significant relationship between current SES and private label purchase preferences. Finally, in agreement with our fourth hypothesis our results point out that preferences are higher for hedonic products as opposed to utilitarian products.

Insert Table 8 here

Discussion

The presented research focuses on explaining why low income consumers prefer national brands over private labels. Using results from two studies, in two different countries, we provide different explanations and processes for why, social influences together with other factors, may result in low income individuals opting for more national brands. In addition, the fact that our results are consistent in two different countries (US and South Africa) that not only differ in the retailing environment but also socioeconomic conditions proves the robustness of our findings.

Together our studies provide convergent evidence that socioeconomic status is directly related to private label preferences. Generally, consumers' preference for private labels increase with their socioeconomic status suggesting that low income consumers may prefer national brands for other reasons. Several lines of evidence lead to this conclusion.

First, we find that low income individuals are upward comparing and that these comparisons result in them desiring products associated with higher income individuals. In both the US and South African markets low income consumers readily associate national brands with high status and private labels with low status suggesting that they believe high-income individuals consume national brands. Moreover, low income consumers' purchase intentions and willingness to pay for private labels increase when they learn that high-income consumers actually consume private labels. Evidently, low income consumers' choice between private labels and national brands is influenced by high-income consumers.

Second, low income consumers buy national brands to dissociate from other low income consumers. However we only find evidence for this result in the US market and not the South African market. This may be due to the fact that there is a large proportion of low income consumers in South Africa hence group identification maybe stronger. Whereas in the US where

there are fewer low income consumers the desire to dissociate maybe greater. Nonetheless, this result and the fact that low income consumers preferences for national brands are by the desire to associate with high income households highlights the role of social influences in non-durable product categories where the consumption is in private.

Last, we also find that low income consumers prefer national brands because they do not have enough information regarding private labels in general and quality advancements of private labels. Consumer knowledge, therefore, plays, an important role in the formation of private label preferences and as knowledge increases so too do private label preferences.

Managerial Implications

Knowledge gained from this study research can be exploited for developing targeting strategies by private labels marketers. Private label managers should continue to target high-income consumers, since they appear to be purchasing private labels. Importantly the study confirms that, low income consumers purchase national brands in order to “keep up appearances”, therefore it is imperative for private label managers to find ways to make their private labels aspirational for low-income people. They can do this by informing low-income households that high-incomes actually buy private labels and not the national brands as they assume. In addition, private labels marketers may also consider attracting low-income consumers by educating them about private labels quality and making them aware of the actual demographics of private brand consumers. This targeting would not only increase private label market share but can also increase overall consumer welfare.

As with most research, this research is also subject to limitations despite its contribution to some interesting findings. The primary limitation of this research is that it does not distinguish

between private and publicly consumed goods, potentially limiting the generalizability to other product classes, therefore this is an area that future studies can look at. Future studies may also look at how low-income households' choice of store labels can be influenced by an imagined presence or action of a social presence (i.e., another person or group of people).

References

- Argo, Jennifer J., Darren W. Dahl, and Rajesh V. Manchanda (2005), "The Influence of a Mere Social Presence in a Retail Context," *Journal of Consumer Research*, 32 (2), 207–12.
- Argo, Jennifer J. and Kelley Main (2008), "Stigma by Association in Coupon Redemption: Looking Cheap Because of Others," *Journal of Consumer Research*, 35 (December), 559–72.
- Baltas, G. and Doyle, P. (1998) "An Empirical Analysis of Private Brand Demand Recognizing Heterogeneous Preferences and Choice Dynamics". *Journal of the Operational Research Society* 49: 8, 790-798.
- Banerjee, A and Duflo, E. (2007). "The Economic Lives of the Poor," *Journal of Economic Perspectives*, 21 (1), 141-167.
- Bellezza Silvia, Keinan Anat, Gino Francesca (2013), "The Red Sneakers Effect: Inferring Status from Signals of Nonconformity", *J. Consumer. Res.*, 41 (1) (2014), pp. 35–54.
- Beneke, Justin (2009). "Consumer Perception of Private Label Brands within the Retail Grocery Sector of South Africa". *African Journal of Business Management* 4(2):203-220.
- Bronnenberg B., Dubé P., Gentzkow M., Shapiro J., (2015). "Do Pharmacists Buy Bayer? Informed Shoppers and the Brand Premium?" *The Quarterly Journal of Economics* (2015) 130 (4): 1669-1726.
- Childers, Terry L. and Akshay R. Rao (1992), "The Influence of Familial and Peer-Based Reference Groups on Consumer Decisions," *Journal of Consumer Research*, 19 (September), 98–211.
- Griskevicius, V., Ackerman, J. A., Cantu, S. M., Delton, A. W., & Robertson, T. E., Simpson, J. A., Thomson, M. E., & Tybur, J. M. "When the Economy Falters Do People Spend or Save? Responses to Resource Scarcity Depend on Childhood Environments." *Psychological Science* (2013).
- Kaufman, P, MacDonald, J, Lutz, S, and Smallwood, D. (1997) "Do the Poor Pay More for Food? Item Selection and Price Differences Affect Low-Income Household Food Costs" *Food*

and Rural Economics Division, Economic Research Service, U.S. Department of Agriculture. Agricultural Economic Report No. 759.

Lockwood P. and Kunda Ziva, (1997). "Superstars and Me: Predicting the Impact of Role Models on the Self." *Journal of Personality and Social Psychology*, Vol. 73, No. 1, 91-103

Mandel, Naomi, Petia K. Petrova, and Robert B. Cialdini (2006), "Images of Success and the Preference for Luxury Brands," *Journal of Consumer Psychology*, 16, 57–69.

Richardson, P (1994) "Extrinsic and Intrinsic Cue Effects on Perceptions of Store Brand Quality", *Journal of Marketing*, 58(4), pp. 28-36.

Richardson, P., Dick, A., Jain, A.K., (1994). "Extrinsic and Intrinsic Cue Effects on Perceptions of Store Brand Quality." *Journal of Marketing* 58 (4), 28-36.

Richins, M. (1991). "Social Comparison and the Idealized Images of Advertising." *Journal of Consumer Research*, 18, 71-83

Rucker, Derek D. and Adam D. Galinsky (2008), "Desire to Acquire: Powerlessness and Compensatory Consumption," *Journal of Consumer Research*, 35, 257–67.

Sethuraman, Raj and Catherine Cole (1999), "Factors Influencing the Price Premiums that Consumers Pay for National Brands over Store Brands?" *Journal of Product and Brand Management*, 8 (4), 340-3.

Train, McFadden J, (1978) "The Goods Leisure Tradeoff and Disaggregate Work Trip Mode Choice Models" *Transportation Research*, Vol. 12, No. 5, 349-353, February 1978.

Van Wyk, Michael (2013). "Growth of Private labels Create More Competition in South Africa'. My Private label". N.P. mypbrand.com.

Ven, N. van de, Zeelenberg, M., and Pieters, R. (2011). "The Envy Premium in Product Evaluation." *Journal of Consumer Research*, 37 (6), 984-998.

Table 1: Summary of Experimental Data (US).						
	Units	Mean	Std. Dev.	Min	Max	Obs.
Individual Characteristics						
Age	Years	38.5	12.47	17	70	250
Male	%	38	–	–	–	250
Female	%	62	–	–	–	250
Education	Years	18.8	1.25	5	19	250

Table 2: Summary of Experimental Data (South Africa).						
	Units	Mean	Std. Dev.	Min	Max	Obs.
Individual characteristics						
Age	Years	36.75	12.92	18	76	244
Male	%	32	0.48	–	–	244
Female	%	67	0.48	–	–	244
Education	Years	12.9	1.25	8	15	244

Figure 1 Example Choice Sets

Please select your most preferred option



PnP
R9.95



Danone
R8.95



Clover
R9.95



Woolworths
R10.95



None of these



Please select your most preferred option



Great Value
\$7.95



Gain
\$8.95



Tide
\$8.95



Kroger Home Sense
\$7.95



None of these



Income	\$,000	28	2.38	1.5	40	250
Household size	#	2.70	0.54	1	6	250
Socioeconomic Status						250
Childhood SES	Scale	4.71	1.65	1	8.33	250
Current SES	Scale	3.92	0.8	1	7.6	250
Purchase Intentions						
Private labels	Scale	2.2	0.88	1	9	250
National brands	Scale	6.6	1.94	1	9	250

	Purchase Intentions			
	Hedonic		Utilitarian	
	Mean	Std.	Mean	Std.
National Brands Control	8.5	1.34	7.77	0.87
National Brands Treatment 1	4.71	2.1	4.98	0.71
National Brands Treatment 2	6.89	0.87	6.95	2.31
National Brands Treatment 3	6.19	3.4	4.66	0.12
Private Labels Control	3.67	0.8	2.57	0.47
Private Labels Treatment 1	4.33	0.74	6.34	1.96
Private Labels Treatment 2	6.66	1.64	7.47	3.74
Private Labels Treatment 3	5.33	0.8	3.24	1.74
<i>* Treatment 1 = Lack of private label knowledge</i>				
<i>* Treatment 2 = Aspirational reference group</i>				
<i>* Treatment 3 = Dissociative reference group</i>				

Table 5. Random Coefficient Logit Estimates (US).				
	Model 1 (Hedonic)		Model 2 (Utilitarian)	
Mean Parameters				
Price	-1.936**	(0.601)	-1.383*	(1.407)
Brand 1	4.137	(1.052)	3.395	(0.536)
Brand 2	5.354	(1.141)	3.899	(2.186)
Brand 3	4.824*	(0.11)	5.34*	(0.93)
Brand 4	4.168*	(0.324)	4.191*	(0.257)
Standard Deviation Parameters				
Price × Control	-1.572*	(0.372)	-0.655*	(0.075)
Price × Treatment 1	-0.131	(0.651)	-0.703	(0.867)
Price × Treatment 2	-1.16**	(0.536)	-0.127**	(2.493)
Price × Treatment 3	-0.848*	(0.657)	-0.504*	(0.242)
Brand 1 × Control	1.06***	(2.362)	1.195***	(0.331)
Brand 1 × Treatment 1	1.483	(0.247)	1.62	(0.819)
Brand 1 × Treatment 2	1.813*	(0.864)	1.169*	(0.013)
Brand 1 × Treatment 3	1.951*	(0.966)	1.56*	(0.203)
Brand 2 × Control	3.029**	(0.745)	1.122**	(0.511)
Brand 2 × Treatment 1	3.979**	(0.124)	3.131**	(0.184)
Brand 2 × Treatment 2	1.926*	(0.996)	3.575*	(1.305)
Brand 2 × Treatment 3	1.295**	(2.854)	0.043**	(0.763)
Brand 3 × Control	1.342**	(0.554)	1.234**	(0.314)
Brand 3 × Treatment 1	0.672*	(0.638)	1.064*	(0.758)
Brand 3 × Treatment 2	0.217**	(0.785)	1.04**	(0.345)
Brand 3 × Treatment 3	1.725***	(0.962)	0.951***	(0.412)
Brand 4 × Control	4.419***	(1.477)	1.109***	(0.374)
Brand 4 × Treatment 1	5.622**	(1.812)	1.595**	(0.372)
Brand 4 × Treatment 2	4.567*	(1.385)	1.305*	(1.723)
Brand 4 × Treatment 3	3.784**	(2.805)	1.128**	(1.659)
Private Labels × SES	0.667*	(0.634)	1.946**	(0.486)
National Brand × SES	0.025	(0.546)	1.824**	(0.869)
Private Labels × CSES	0.929	(0.668)	1.815	(0.696)
National Brand × CSES	0.335*	(0.235)	1.877**	(1.779)
LLF	-5468.089		-1964.907	
Chi-square	789.258		4259.006	
¹ Robust standard errors are reported in parentheses				
* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$				
* <i>Treatment 1 = Lack of private label knowledge</i>				
* <i>Treatment 2 = Aspirational Reference Group</i>				
* <i>Treatment 3 = Dissociative reference group</i>				
* <i>Brands 1 and 2 are National Brands. Brands 3 and 4 are Private Labels</i>				

Table 6: Summary of Experimental Data (South Africa).

Income	ZAR,000	11,97	284	875	49,752	244
Household size	#	3.63	1.72	0	9	244
Socioeconomic Status						244
Childhood SES	Scale	4.33	0.71	1	7.33	244
Current SES	Scale	3.86	0.06	1	5.33	244
Purchase Intentions						244
Private labels	Scale	5.36	0.24	1	9	244
National brands	Scale	8.86	0.98	1	9	244
Willingness to pay						244
Private labels	ZAR	8.84	2.47	0	14.23	244
National brands	ZAR	12.74	1.23	0	28.58	244

Table 7: Summary of Experimental Data (South Africa).

	Purchase Intension			
	Hedonic		Utilitarian	
	Mean	Std. Dev.	Mean	Std. Dev
National Brands Control	8.85	2.16	9.23	13.27
National Brands Treatment 1	8.80	2.58	8.55	12.44
National Brands Treatment 2	8.82	2.54	9.00	12.63
National Brands Treatment 3	8.82	2.38	8.84	12.07
Private Labels Control	7.62	2.34	5.16	7.95
Private Labels Treatment 1	7.75	2.93	7.16	11.70
Private Labels Treatment 2	7.73	2.65	6.50	9.70
Private Labels Treatment 3	7.73	2.40	6.66	9.38
<i>* Treatment 1 = Lack of private label knowledge</i>				
<i>* Treatment 2 = Aspirational reference group</i>				
<i>* Treatment 3 = Dissociative reference group</i>				

Table 8. Random Coefficient Logit Estimates (South Africa).				
	Model 3 (Hedonic)		Model 4 (Utilitarian)	
Mean Parameters				
Price	-1.496**	(0.798)	-1.39*	(2.941)
Brand 1	4.483	(1.862)	3.491	(0.603)
Brand 2	5.83*	(2.435)	2.975*	(1.306)
Brand 3	4.585**	(0.784)	2.303**	(0.597)
Brand 4	3.401*	(0.758)	3.524*	(0.212)
Standard Deviation Parameter				
Price × Control	-0.45	(0.291)	-1.812*	(0.052)
Price × Treatment 1	-1.199*	(0.612)	-0.524*	(0.902)
Price × Treatment 2	-0.268	(0.990)	-0.918*	(2.526)
Price × Treatment 3	-1.427*	(0.088)	-0.966**	(0.815)
Brand 1 × Control	2.094	(1.997)	1.405 *	(0.502)
Brand 1 × Treatment 1	1.759	(0.162)	1.156 *	(0.002)
Brand 1 × Treatment 2	2.816	(0.284)	1.793 8	(0.291)
Brand 1 × Treatment 3	1.669*	(0.245)	1.364*	(0.042)
Brand 2 × Control	2.397	(0.742)	2.836 *	(0.716)
Brand 2 × Treatment 1	2.631**	(0.951)	3.814**	(0.913)
Brand 2 × Treatment 2	1.214***	(0.515)	1.667***	(1.338)
Brand 2 × Treatment 3	2.777**	(2.97)	3.673**	(0.873)
Brand 3 × Control	3.217*	(0.909)	1.386***	(0.165)
Brand 3 × Treatment 1	3.993	(0.223)	3.246	(0.842)
Brand 3 × Treatment 2	3.649**	(0.872)	4.984**	(0.834)
Brand 3 × Treatment 3	0.071***	(0.665)	1.325***	(0.065)
Brand 4 × Control	1.532*	(1.001)	1.629**	(0.503)
Brand 4 × Treatment 1	2.279***	(1.247)	1.954***	(0.422)
Brand 4 × Treatment 2	2.489**	(2.883)	1.471**	(2.991)
Brand 4 × Treatment 3	1.236***	(2.434)	1.988***	(2.776)
Private Labels × SES	0.527**	(0.199)	4.306	(0.867)
National Brand × SES	0.894***	(0.033)	3.518	(0.415)
Private Labels × CSES	0.032*	(0.791)	3.195	(0.091)
National Brand × CSES	1.582*	(1.8)	3.219*	(0.031)
LLF	-6357.077		-20625.907	-4568.089
Chi-square	587.258		5477.006	524.258
¹ Robust standard errors are reported in parentheses				
* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$				
* <i>Treatment 1 = Lack of private label knowledge</i>				
* <i>Treatment 2 = Aspirational reference group</i>				
* <i>Treatment 3 = Dissociative reference group</i>				
* <i>Brands 1 and 2 are National Brands. Brands 3 and 4 are Private Labels</i>				