A Modern Investigation of Status Consumption

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BACKGROUND & INTRODUCTION

In The Theory of the Leisure Class, Thorstein Veblen (1899) was the first to discuss the idea of “conspicuous consumption” – the acquisition and display of expensive items to suggest wealth and/or attract attention to one's wealth. Also known as “status consumption,” the idea of consumption as a means to outwardly demonstrate wealth is a topic examined by professionals in the fields of psychology, sociology, marketing, and economics, to name a few. In a modern setting, status consumption has been defined by relevant literature to be any consumption with the intent of showing off wealth to others when the good is publicly consumed – ranging from applying an expensive lipstick in public to driving an expensive car.

An incredible variety of literature is found in a number of academic fields to support this notion of conspicuous consumption, first popularized by Veblen’s work. Roger Mason (1998) describes conspicuous consumption as “a form of consumer behaviour which increasingly could no longer be dismissed as trivial but with which [economists] felt instinctively uneasy.” Mihaly Csikszentmihalyi and Eugene Rochberg-Halton (1981) describe status consumption as a “form of power that consists of respect, consideration, and envy from others that represents the souls of a culture.” Modern evidence of status consumption trends is also widely available in current literature. The average square footage of a North American home has increased by 50% in the last thirty years (Deacon, 2002), and the modern prom has become a host for conspicuous consumption with an average cost of over $1,000 per couple spent on limousines, hotel suites, formal wear, etc. (Farrell, 2004). Studies have gone so far as to explain that the modern American male, in an attempt to regain his past image of masculinity, turns to
Conspicuous consumption (Berrett, 1997), and that adolescent girls turn to smoking in an effort to conspicuously consume as well (Wearing, 2000). Conspicuous consumption has also been investigated internationally. In terms of the Korean population, research has shown that adolescents still have a significant tendency toward conspicuous consumption, with the strongest variable being materialism (Kim, 1998). Finally, according to the Economist, while Chinese consumers are still more price-conscious than Japanese consumers, conspicuous consumption has increased significantly in China over the last few years (2004). Conspicuous consumption has even been linked to other proven traits – Mowen (2004) shows that conspicuous consumption and competitiveness are positively associated.

There are many modern theorists who pose different ideas as to how and why conspicuous consumption occurs. Some theorists describe relative consumption effects, in which a person’s satisfaction with his or her consumption depends on how much others are consuming (Samuelson, 2004). Others point to bandwagon effect (purchasing a good because others are purchasing that good) and the snob effect (avoiding a popular good to maintain apparent individualism) as signals of status, and thus as signals of conspicuous consumption (Corneo & Jeanne, 1997). Materialism, reference group, and even education have been associated with conspicuous consumption (Wong, 1997; Schor, 1998).

One particularly interesting idea, relatively new to popular economics, is the concept that there are two measurable types of utility gained from the use of any product or service: utilitarian, which is the utility directly provided to the user, and conspicuous, which is the utility provided to the user as a result of being seen consuming the product.
or service (Basmann, Molina, & Slottje, 1988). This concept greatly reinforces the idea of conspicuous consumption, because it implies that conspicuous consumption actually provides measurable utility to conspicuous consumers, rather than just being a means to the end of appearing wealthy.

While the field of conspicuous consumption research is apparently booming, two particular pieces of literature stood out as particularly relevant to the topic at hand. The first, Robert Frank’s 1999 book *Luxury Fever*, provides a great deal of theoretical insight to the field of conspicuous consumption. The second is an article published in 1998 by Angela Chao and Juliet Schor, entitled “Empirical tests of status consumption: Evidence from women’s cosmetics,” which provides an excellent empirical methodology for measuring status consumption within particular types of products (e.g., women’s cosmetics).

Frank explains that while not all spending is tremendous – “a five-thousand dollar grill” or “barstools covered in the foreskin of a sperm whale” – spending has gone up significantly in the last few decades (e.g., the average price of a new car has increased more than 75% from ten years previous). Frank also makes a note of the fact that whether or not people mean to do so, they are influenced by those around them (their “reference groups,” in the literature), and that influence can be seen in much of modern (American) consumption. He notes that despite recent movements away from status consumption – called “downshifting” by participants – status consumption is still very much alive. He also details some important historical examples of status consumption as precursors to the trends seen today, including the Vanderbilt family’s 1895 Biltmore Estate in Asheville, North Carolina, which remains the largest American house ever built
with 250 rooms. One of Frank’s most compelling arguments for status consumption is the current trend toward ultra-luxurious consumption – including the Patek Philippe wristwatch (marketed not as a good, but rather an heirloom), various vehicles (Porsche had a one-year waiting list for the Boxster in 1999), vacations (hotels at $5,000/night in Aspen), boats, appliances, cosmetic surgery, and especially homes. Finally, Frank notes that while luxury consumption exists in many other nations (notably Japan and Russia), America definitely leads the pack.

The paper by Chao and Schor (1998) is of particular interest for the present research. They begin by asking a fairly simple question: Does consumer demand depend entirely on the quality of the goods in question, or do interpersonal influences have a role in modern consumer behavior? Citing Smith, Veblen, and Keynes, they explain that while many economists have highlighted the role of social comparison in consumer behavior, little work has been done to empirically test this idea.

Chao and Schor thought that they could find a way to empirically test the idea of status consumption by examining consumption behavior in the field of women’s cosmetics. They formed two hypotheses:

1. The correlation between price and intrinsic quality is lower with products where status consumption is occurring than with products where no status consumption is occurring.
2. There is more purchasing of higher-priced brands with products where status consumption is occurring than with products where no status consumption is occurring.

They also rephrased these two hypotheses to highlight the primary goal of the study:

1a. The correlation between price and intrinsic quality varies negatively with social visibility.
2a. The likelihood of purchasing expensive brands varies positively with social visibility.
The authors explain that if these two hypotheses are supported by empirical data, then there is a strong case for the existence of status consumption.

The authors explained two main reasons for the selection of women’s cosmetics as a field in which to test for status consumption. First, relevant literature highlighted a lack of intrinsic product quality and importance of marketing for women’s cosmetics. Second, data availability limited their options for fields to examine, and there was available data in the field of women’s cosmetics.

Chao and Schor used two main sources of data in their study. The first data source was the Mediamark Research, Inc., annual survey, 1989-1991, from which they obtained brand-buying patterns and socio-economic / demographic information on consumers. The other data source was Consumer Reports, from which they obtained price and product quality for each brand in question. They authors matched the data sets by product and year to come up with different brands that could be used in the study. In the end, the authors used mascara, lipstick, eyeshadow, and facial cleanser, over varying numbers of brands for each product (5 facial cleansers, 16 mascaras, 18 eyeshadows, and 22 lipsticks). Next, the authors used a panel of female Harvard students to rate the four products in terms of visibility. The students ended up rating the products as lipstick, mascara, eyeshadow, and facial cleanser, from most publicly visible to least publicly visible (the operational definition of “publicly visible” was “the level of social visibility in the usage of the four products”).

Consumer Reports data showed that for lipstick, no real intrinsic differences existed between inexpensive lipstick (e.g., Flame Glow) and very expensive lipstick (e.g., Chanel). However, regression results showed evidence in support of Hypothesis 1: the
most highly visible good (lipstick) had a zero price/quality correlation, while the least visible product (facial cleanser) had a positive correlation between price and quality. Thus, the authors determined that women demanded more quality with the non-visible product.

To test Hypothesis 2, the authors investigated whether or not the percentage of women buying expensive (top three) brands increased with the visibility of the product. They found this to be the case, and thus, accepted Hypothesis 2. The authors also explained that if status consumption was occurring, the coefficient on price should decrease monotonically as visibility falls – which they also found to be the case. The authors concluded by explaining that their regressions provided strong support for the existence of status buying in women’s cosmetics products.

RESEARCH DESIGN

Overview

The goal of the present study is to investigate status consumption in modern consumer behavior across a wide variety of products and brands. This goal is tested using the same hypotheses as Chao and Schor:

(1) The correlation between price and intrinsic quality is lower with products where status consumption is occurring than with products where no status consumption is occurring.
(2) There is more purchasing of higher-priced brands with products where status consumption is occurring than with products where no status consumption is occurring.

However, our study is different from that of Chao and Schor in a number of ways. For example, we are investigating a much wider variety of products and brands (eight product types and thirty-four individual brands). We are also using a very different method of determining what is, or is not, a “status product” or “status brand” (using a survey...
concerning consumer opinion of product and brand status, as opposed to a survey rating social visibility). We feel that each difference between our study and that of Chao and Schor adds not only an element of distinction, but also an improvement to the design of the study overall.

We first established an operational definition of “status” in order to break up product and brand categories into separate groups. For our study, “status” is the characteristic of a product or brand that makes it desirable, beyond its standard utilitarian value. This definition revolves around the idea that each product or brand has two separate components of utility: utilitarian value, or the product’s inner quality, and conspicuous value, or the product’s “status.” Products labeled as “high status” are products that, when used or consumed in the presence of others, make others think more positively of the user. Products labeled as “low status,” then, are all other products – including products that leave spectators ambivalent, products that make others think less of the user, and products that are not used in front of others.

Given our operational definition of status, we then moved on to select a variety of products to fit into a number of categories. We created four theoretical categories, as follows: high price and high status (HPHS), high price and low status (HPLS), low price and high status (LPHS), and low price and low status (LPLS). For the purposes of our study, low price was defined as “less than $100” and high price was defined as “more than $100.” Next, we selected two types of products to go into each of the four categories, resulting in eight product types in total:

- HPHS = {luxury cars, luggage}
- HPLS = {economy cars, home CD players}
- LPHS = {milk chocolates, champagnes}
- LPLS = {sunscreens, car batteries}
We then proceeded to select four specific brands to be evaluated from each product type (we selected one additional brand for each of luxury and economy cars), resulting in a total of thirty-four brands being evaluated:

- **Luxury Cars**: {Lexus GS 300, Jaguar S-Type, Lincoln Town Car, Cadillac Deville, Volvo S80}
- **Luggage**: {Atlantic, American Tourister, Samsonite, JC Penney’s}
- **Economy Cars**: {Chevy Cavalier, Toyota Corolla, Ford Focus, Ford Escort ZX2, Chevy Metro}
- **Home CD Players**: {Sony, Technics, JVC, Pioneer}
- **Milk Chocolates**: {Godiva, Cadbury, Fanny May, Hershey’s}
- **Champagnes**: {Moet, Korbel, Cooks, Andre}
- **Sunscreens**: {Coppertone Sport, Banana Boat, Panama Jack, Bain de Soleil}
- **Car Batteries**: {Sears Diehard, AC Delco, Exide, Interstate}

Each brand was selected as part of a product type, and each product type was selected in order to complete the price-status categories. However, there were other considerations used when selecting products and brands for the study.

We also had to consider data sources when selecting products and brands for the study. In order to accurately test our hypotheses, we needed a variety of information, including price, quality, market share, and consumer perception of status for each product. We used *Consumer Reports*, published by an independent, nonprofit consumer advocacy organization, for price and quality data for all of our products. We used market research data published by *Mediamark Market Research, Inc.*, in order to determine “consumer share” (the proportion of consumers who buy at least one of each product or brand in a given year) for each product and brand, except for Luxury and Economy cars, where we used manufacturer-published volumetric data for these product types and brands. We had to select product types and brands based on the availability of data from these sources.

**SURVEY CREATION & DEVELOPMENT**

**Pilot Study Method**

In order to obtain data pertaining to consumer opinion of the status associated with specific product types and brands, we created an online pilot survey and administered the
measure to a panel of undergraduate, graduate, and law students at Case Western Reserve University. The survey consisted of five questions, repeated for each of the eight product types (which were presented in a randomized order):

1. I feel people form positive opinions of others they see using this product.
2. It is important to users of this product that others see them using it.
3. People pay more attention to others who use this product.
4. People usually think that users of this product are wealthy.
5. Using this product in public makes others feel more respected.

Upon completion of this portion of the survey, the participant was randomly directed to one of eight pages, each containing all the specific brands for one product type (also presented in a randomized order - e.g., all of the Sunscreen brands, or all of the Luxury Car brands, etc.), where the same five questions were asked for each specific brand. For each of the five questions, participants selected an answer from a nine-point Likert scale, ranging from “Strongly Disagree,” to “Disagree,” to “Neutral,” to “Agree,” to “Strongly Agree” (with intermediate options between each labeled option). There was also a “No Opinion” option, in case a participant did not feel comfortable answering a specific question for a given product type or brand. Participants were then asked to answer a few short demographic questions, and were thanked for their time.

Pilot Study Analysis

Using data collected from the pilot study ($N = 47$, male / female, etc.) we analyzed our five questions using simple standard deviation and correlation measures, with the goal of eliminating unnecessary questions from our final survey (e.g., if one question didn’t correlate well, etc.). However, it turned out that only two of our questions (Questions 2 and 4) measured status – at least in some respect – and we had to find a significantly different set of questions to use.
Intermediate Study Method

Looking for new questions to use, we turned to the Status Consumption Scale measure developed by Eastman, Goldsmith, and Flynn (1999), which consists of five questions used to measure self-ratings of status consumption behavior. They were:

1. I would buy a product just because it has status.
2. I am interested in new products with status.
3. I would pay more for a product if it had status.
4. The status of a product is irrelevant to me (negatively worded).
5. A product is more valuable to me if it has some snob appeal.

However, these questions were designed to measure a different element of status – an individual rating of status-consumption tendencies – and as a result, we had to select specific questions (Questions 1, 3, and 5), and change the wording such that the questions were geared toward specific brands rather than toward behavior self-ratings. We also included the best-performing questions from our pilot study; our new questions were:

1. Other people buy this brand just because it has status.
2. It is important to users of this brand that other people see them using it.
3. Other people pay more for this brand because it has status.
4. People usually think users of this brand are wealthy.
5. This brand is more valuable to other people because it has some snob appeal.

Finally, we found that we would need to include more brands (from Consumer Reports) for each product category, and that we should do away with the product category questions entirely, as they were unlikely to yield any valid results. Additionally, the inclusion of questions about product categories seemed to confuse participants and add uncertainty to results. Thus, our new and revised (“secondary pilot”) study was different from our original pilot study in that: (1) there were no questions about product categories; (2) we revised the questions used for the study; and (3) we added numerous additional brands for each category. It is important to note that Consumer Reports offered many more brands than did Mediamark, our market research data source; however, it was only
important for the sources to match for our second hypothesis, and we thought that the inclusion of these additional brands would facilitate a more powerful and robust analysis for our first hypothesis.

The final design of the intermediate study was such that participants (solicited from the same Case student panel) were randomized to one of two pages: “CD Players” or “Luggage.” Then, participants answered the five revised questions for each individual brand presented (randomly) on that page. Finally, participants answered some demographic questions, and were again thanked for their time.

Intermediate Study Analysis

Using data collected from this revised intermediate survey \((N = 52)\), we again analyzed the validity of our questions. This time, we found that our questions were significantly better, as determined through extensive factor analysis and correlation measures. However, as our goal was to eliminate unnecessary questions and also to shorten the survey overall, we determined which question was the least effective at measuring status – as it happened, Question 5 – and removed it from the survey.

Final Study Method

After removing Question 5, our questions for the national (final) survey were:

1. Other people buy this brand just because it has status.
2. It is important to users of this brand that other people see them using it.
3. Other people pay more for this brand because it has status.
4. People usually think users of this brand are wealthy.

These questions were then presented for every brand available in Consumer Reports, across all eight of the original product categories (i.e., if a participant was randomized to the “Milk Chocolates” page, he / she would see those four questions for every brand Consumer Reports included in their milk chocolate ratings). After answering these
questions, the participant would be asked to answer some standard demographics
questions, and would be thanked for his / her time.

Each product category broke down into a varying number of brands, as Consumer
Reports reported on a different number of brands for each category:

<table>
<thead>
<tr>
<th>Car Batteries</th>
<th>Sunscreens</th>
<th>CD Players</th>
<th>Milk Chocolates</th>
<th>Luggage</th>
<th>Champagnes</th>
<th>Economy Cars</th>
<th>Luxury Cars</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Delco</td>
<td>American Fare</td>
<td>JVC</td>
<td>Godiva</td>
<td>American Tourister</td>
<td>Andre</td>
<td>VW Jetta</td>
<td>BMW 528i</td>
</tr>
<tr>
<td>Champion</td>
<td>No-Ad</td>
<td>Kenwood</td>
<td>Ghirardelli</td>
<td>Andiamo</td>
<td>Cook's</td>
<td>Chevy Prizm</td>
<td>Audi A6</td>
</tr>
<tr>
<td>Duralast</td>
<td>Banana Boat</td>
<td>Pioneer</td>
<td>Teuscher</td>
<td>Atlantic</td>
<td>Korbel</td>
<td>Daewoo Nubira</td>
<td>Acura 3.2TL</td>
</tr>
<tr>
<td>Everstart</td>
<td>Coppertone</td>
<td>Sony</td>
<td>Estee</td>
<td>Delsey</td>
<td>Moet &amp; Chandon</td>
<td>Hyundai Elantra</td>
<td>Cadillac Catera</td>
</tr>
<tr>
<td>Exide</td>
<td>Equate</td>
<td>Technics</td>
<td>Cadbury</td>
<td>h Studio</td>
<td>Mumm</td>
<td>Ford Escort</td>
<td>Infiniti I30</td>
</tr>
<tr>
<td>Interstate</td>
<td>Hawaiian Tropic</td>
<td>Yamaha</td>
<td>Dove</td>
<td>Jaguar</td>
<td>Perrier-Jouet</td>
<td>Kia Sephia</td>
<td>M-B C280</td>
</tr>
<tr>
<td>Motorcraft</td>
<td>Bain de Soleil</td>
<td>Fannie May</td>
<td>JC Penney</td>
<td>Taittinger</td>
<td>Mazda Protegé</td>
<td>Lincoln LS</td>
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<tr>
<td>NAPA</td>
<td>Panama Jack</td>
<td>Master's Choice</td>
<td>Pathfinder</td>
<td>Totts</td>
<td>Mitsubishi Mirage</td>
<td>Lincoln Town Car</td>
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<tr>
<td>Sears</td>
<td>Rite-Aid</td>
<td>Newman's Own</td>
<td>Samsonite</td>
<td>Veuve Clicquot</td>
<td>Saturn SL2</td>
<td>Saab 9-5</td>
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<tr>
<td>Walgreens</td>
<td></td>
<td>Sarotti</td>
<td>Travelpro</td>
<td></td>
<td>Pontiac Sunfire</td>
<td>Mitsubishi Diamante</td>
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<tr>
<td></td>
<td></td>
<td>Hershey's US Luggage</td>
<td></td>
<td></td>
<td>Suzuki Esteem</td>
<td>Lexus GS300</td>
<td></td>
</tr>
<tr>
<td>Nestle</td>
<td></td>
<td>Toyota Corolla</td>
<td></td>
<td></td>
<td>Chevy Cavalier</td>
<td>Volvo S80</td>
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</table>

Final Study Analysis

The final survey was distributed to a national sample ($N = 621$) using the
StudyReponse solicitation system, which sends out a predetermined number of
solicitation emails to volunteer survey participants, directing them to the measure. Of the
621 people who completed the informed consent (e.g., started taking the survey), a total
of $N = 521$ actually completed the entire survey (i.e., finished demographics questions).
The final sample consisted of 215 men, 302 women, and 4 people who declined to
indicate gender; ages ranged from 18 to 79, with an average age of 34.8 years.

As participants were randomized to one of eight “mini-surveys,” each had a
different approximate sample size. Car batteries were evaluated by 56 people, CD
players by 62 people, champagnes by 75 people, milk chocolates by 63 people, economy cars by 54 people, luggage by 69 people, luxury cars by 75 people, and sunscreens by 76 people.

OTHER DATA SOURCES

In order to conduct an analysis of price-quality correlation or market share (in relation to status), we needed to first obtain data on price, quality, and market share for each of our products and brands. We tried to select product categories and brands that were measured by both *Consumer Reports* and *Mediamark*, but we found that the two sources did not measure enough products and brands (mutually) for our desired goal. Thus, we decided to use *Consumer Reports* for a wider variety of products to test Hypothesis 1, and *Mediamark* for a smaller group – a subset, even – of products with which we could test Hypothesis 2.

*Consumer Reports* provided price and quality data for all products and brands evaluated in our study. *Mediamark* provided all market share data used in our study, with the exception of economy cars and luxury cars. For these categories, we referred to annual reports from relevant car manufacturers, using annual sales of specific models for a more accurate measure of consumption prevalence.

RESULTS

Factor analyses, run for all questions on all brands within selected product categories, consistently showed a single Eigenvalue greater than 1.000. Factor loads were, with very little exception, above 0.700. As Question 1 (“Others buy this brand just because it has status”) loaded highest, we took it as our proxy for status. Thus, *brand status* (e.g., Cadillac Catera) was determined by taking the mean Q1 response for all
participants, and category status (e.g., Luxury Cars) was determined by taking the mean of all brand status results.

Before running any analyses, we also needed to recode our price data. As some categories (e.g., luxury cars) had much larger prices than other categories (e.g., car batteries), we needed to find some way to “normalize” those prices – otherwise, we could never expect any type of valid price-quality correlation to result. To accomplish this task, we examined each category individually, and normalized the prices to a common level. We took the lowest-priced brand in each category and set its “recoded price” equal to 100. Then, we recoded each other brand in the respective categories by making an equivalent percentage increase on our base price of 100. For example, original prices of $25, $50, and $60 would have been recoded to prices of $100, $200, and $240, respectively. This was the last transformation we needed to make in order to begin our analyses of the data.

Hypothesis 1: Price-quality Correlation varies Negatively with Status

We tested our first hypothesis (regarding price-quality correlation and status) by ranking each product category based on status (see Appendix A, Part I) and examining price-quality correlations for each. Based on our original hypothesis, we expected that high-status categories would show little and / or statistically insignificant price-quality correlations, and that low-status categories would show strong and statistically significant price-quality correlations.

We started by ordering the categories based on status, using the three highest- and lowest-status categories and leaving out the two middle-status categories. However, we found results that were contrary to our hypothesis (see Appendix A, Part II). It seems that while high-status goods (champagnes, CD players, and luxury cars) have a seemingly
positive price-quality correlation and low-status goods (economy cars, sunscreens, and milk chocolates) have a seemingly negative (essentially zero) price-quality correlation, both high- and low-status goods lack any statistically significant price-quality correlation whatsoever.

For the sake of comprehensiveness, we ran a second test using all eight categories, four highest- and four lowest-status (see Appendix A, Part III). We again found disappointing results, as neither low- nor high-status goods demonstrated any type of statistically significant price-quality correlation.

Interesting to note is that when price-quality correlation is calculated for all goods, regardless of status or category, we find a slightly positive and statistically significant result (see Appendix A, Part II).

**Hypothesis 2: Purchase more higher-priced brands with status than without**

We tested our second hypothesis using data on market share, price, quality, and status. Our regression held market share as the dependent variable, with price (recoded), quality, status, price-status interaction, price-quality interaction, and price-squared as our independent variables. We computed and included these last three interaction and squared variables to help clarify any confusion in our data or results.

Our regression results (see Appendix A, Part IV) show that recoded price, price-status interaction, price-squared, and price-quality interaction all have a nearly zero effect, and none of these effects were statistically significant. Quality and status both had statistically significant effects; however, while status had a positive and somewhat strong effect on market share, quality seemed to have a relatively unimportant and, if anything, slightly negative effect on market share.
CONCLUSIONS

Our factor analyses showed high agreement and load between all of our questions, suggesting that our questions were all measuring the same construct and, to some degree, measuring that construct well. In an ideal situation, we would have done further question refinement and analysis, but for the purposes of this project, a factor load greater than 0.7 was completely acceptable, and allowed us to move on with our analysis. Q1 had the highest factor load of all questions, and any other analysis would require taking the mean of a mean without considering the validity of each question individually. Thus, we accepted using Q1 as a proxy for status in our analyses.

Hypothesis 1

Our price-quality correlations were statistically significant, and our results – ignoring the necessity for statistical significance – were still contrary to our hypothesis. Low-status goods, which theoretically should have more quality per dollar of price, have an almost zero price-quality correlation (slightly negative, in fact), while high-status goods have a somewhat positive price-quality correlation. All of these results lead to our inherent inability to make any solid conclusions regarding Hypothesis 1.

Hypothesis 2

Our results for Hypothesis 2 are, in every respect, very interesting. We see that price and all of its derivatives – interactions and squared variables alike – have absolutely no statistical significance, and also have a very minimized effect in terms of impact on market share. Similarly, we see that quality, while unarguably significant in a statistical sense, has a nearly zero effect on market share, and is actually negative – in other words, the only effect quality could have on market share is to decrease it.
Conversely, we see that status has both a positive and statistically significant effect on market share. In other words, we have found that an increase in the status of a brand of product is highly related to an increase in market share for that brand of product.

**DISCUSSION & FUTURE RESEARCH**

We have found that our questions all seem to measure some single construct, and that those questions seem to be measuring that construct in a similar way (we assume the construct to be “status”). We have also found that our first question, *Q1: “Others buy this brand just because it has status”* seems to be the best individual measure of what we are trying to piece apart.

**Hypothesis 1**

In terms of our first hypothesis – that price-quality correlation and status vary negatively – our results are quite inconclusive. Through our two analyses, we have shown that price-quality correlation is completely unreliable in a statistical sense. Additionally, we have shown that even if that correlation was statistically significant, the strength and direction of our correlations is also contrary to what we expected. Due to the nature of our results, we simply cannot make any valid assertions regarding our first hypothesis.

**Hypothesis 2**

Considering our second hypothesis – that the likelihood of purchasing a particular brand varies positively with its status – we have found very encouraging results. It seems that price and quality either have inconclusive or statistically minimal effects on market share, while status seems to have a positive, statistically significant effect on market
share. Thus, it seems that our second hypothesis has been shown to be true, based on our data and methods.

Future Research

There are many possible reasons as to why we obtained the results we did. Despite very meticulous and time-consuming work, it is possible that some angle was missed throughout the design and exercise of our work. However, there are other equally-reasonable possibilities, especially regarding our questions and product selection.

First, our survey questions. We are able to explain that our questions all seem to be measuring the same construct, and we can also explain why we think that construct is status. However, it is possible that status means something different to any person asked, and that said difference is so significant that it cannot be measured through an online survey. Similarly, given that our questions seem fairly similar, participants may have come up with some general ranking of the “status” for each brand they viewed and answered all questions for that brand similarly, regardless of the possibility of answering differently based on individual questions. This, in turn, could be why all of our questions seemed to load so well.

Next, our product selection. While selecting products – models, brands, categories, and the like – we were somewhat limited by data availability. We were hesitant to select any product or brand that Consumer Reports didn’t evaluate, as we wanted to have one centralized source of data for the price and quality of goods in our study. We were further limited in our product selection by the availability of market research data (obtained through Mediamark) for products and brands used in our study. By the time we eliminated those product categories that were impossible to use, given the
nature of our data requirements, our eight product categories were almost the only eight we could have used. This lack of mobility in product selection might also help explain our inconclusive results: do car batteries really have any valid status component? Could what participants consider “status” really just be “name recognition” (e.g., Sears Diehard versus Exide car batteries). The same questions could be asked of other product categories and other brands within those categories.

For future research, we would highlight the necessity of developing a measured construct for status – specifically, what the different elements of status are, and how they can effectively be measured. We have made some progress in terms of investigating some aspects of status, as well as some of the relationship between status and market share; however, there is much more work to be done.

ACKNOWLEDGEMENTS

We would like to thank Dr. Robert Slonim and Dr. Mari Rege in the Case Western Reserve University Department of Economics for their help with this research. They provided initial guidance that helped our research find its eventual direction.

We thank the Case Western Reserve University Institutional Review Board members and staff for their consideration and time in reviewing our research. We also thank Dr. Jeffrey Stanton and Ms. Carissa Smith of Syracuse University’s StudyResponse program, without the help of whom we could not have conducted our national survey.

SPSS 13.0 was used to perform the majority of our data analysis, and was also used to create the tables and charts included in Appendix A, Parts IV – VI. Minitab 14 and Stata 8 were also used to perform limited routine analysis of some data.
**APPENDIX A – Tables, Charts, & Graphs**

**Part I: Product Categories divided by Status Rankings**

<table>
<thead>
<tr>
<th>Status</th>
<th>Low</th>
<th>Middle</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economy Cars</td>
<td>(4.38)</td>
<td>Luggages (5.09)</td>
<td>Champagnes (5.15)</td>
</tr>
<tr>
<td>Sunscreens</td>
<td>(4.94)</td>
<td>Car Batteries (5.14)</td>
<td>CD Players (5.44)</td>
</tr>
<tr>
<td>Milk Chocolates</td>
<td>(5.00)</td>
<td></td>
<td>Luxury Cars (6.39)</td>
</tr>
</tbody>
</table>

**Part II: Price-Quality Correlation per Status Rank (top 3, bottom 3)**

<table>
<thead>
<tr>
<th>Status</th>
<th>Price-Quality Correlation</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (N = 49)</td>
<td>-0.099</td>
<td>0.500 (P &gt; 0.10)</td>
</tr>
<tr>
<td>High (N = 36)</td>
<td>0.149</td>
<td>0.384 (P &gt; 0.10)</td>
</tr>
<tr>
<td>All Goods (N = 133)</td>
<td>0.170</td>
<td>0.050 (P = 0.05)</td>
</tr>
</tbody>
</table>

**Part III: Price-Quality Correlation per Status Rank (top 4, bottom 4)**

<table>
<thead>
<tr>
<th>Status</th>
<th>Price-Quality Correlation</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (N = 74)</td>
<td>0.167</td>
<td>0.155 (P &gt; 0.10)</td>
</tr>
<tr>
<td>High (N = 59)</td>
<td>0.193</td>
<td>0.144 (P &gt; 0.10)</td>
</tr>
</tbody>
</table>

**Part IV: Regression of Market Share on Price, Status, Quality, and Interactions**

**ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>192.511</td>
<td>6</td>
<td>32.085</td>
<td>3.589</td>
<td>.004a</td>
</tr>
<tr>
<td>Residual</td>
<td>643.721</td>
<td>72</td>
<td>8.941</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>836.232</td>
<td>78</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), price-quality, status, quality, price-squared, price-status, price

b. Dependent Variable: market share

**Coefficients**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Constant)</td>
<td>-7.362</td>
<td>5.896</td>
<td>-1.249</td>
</tr>
<tr>
<td></td>
<td>price</td>
<td>-7.8E-005</td>
<td>.031</td>
<td>-0.008</td>
</tr>
<tr>
<td></td>
<td>status</td>
<td>2.735</td>
<td>1.075</td>
<td>.585</td>
</tr>
<tr>
<td></td>
<td>price-status</td>
<td>-.002</td>
<td>.005</td>
<td>-1.118</td>
</tr>
<tr>
<td></td>
<td>price-squared</td>
<td>-3.1E-007</td>
<td>.000</td>
<td>-0.088</td>
</tr>
<tr>
<td></td>
<td>quality</td>
<td>-.064</td>
<td>.036</td>
<td>-.413</td>
</tr>
<tr>
<td></td>
<td>price-quality</td>
<td>.000</td>
<td>.000</td>
<td>1.145</td>
</tr>
</tbody>
</table>

a. Dependent Variable: market share
APPENDIX B – Works Cited


Stata Release 8. 2003. College Station, TX: Stata Corp.


