

**AN EXPERIMENTAL INVESTIGATION OF THE CONSUMER PERCEPTION  
OF PRODUCTS FEATURED ON COUPONS**

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## **ABSTRACT**

### **An Experimental Investigation of the Consumer Perceptions of Products Featured on Coupons**

**Lisa A. Guimond**

The objective of the paper was to determine whether different characteristics of a coupon can impact consumer perceptions of the brand featured on coupons.

An experiment using a homogeneous group of male subjects in a controlled classroom setting exposed subjects to one of eight coupons, each representing one of eight possible conditions of a combination of two levels of three independent variables tested in a 2 x 2 x 2 experimental design: face value, manner in which the offer was stated, and familiarity with the featured brand. Subjects were asked to respond to a questionnaire measuring perceptions such as psychological value of using the coupon, perceived quality, perceived price, liking for the brand, liking for the offer, intention to use the offer, and perceived risk in using the coupon.

Findings show that the independent variables all have significant impact on consumer perceptions of the brand featured on coupons.

Among them, liking for the coupon and intention to use it increase more dramatically with increases in face value when the brand is familiar. Also, when only the face value was shown, liking and intention increased more with face value for the familiar brand than the unfamiliar one.

Finally, coupon proneness and value consciousness add to the understanding of consumer perceptions. Coupon prone consumers pay less attention to face values, and have more positive perceptions of coupons when only the face values are shown. Highly value conscious consumers, on the other hand, pay attention to the magnitude of the face values.

## Table of Contents

<b>LIST OF EXHIBITS AND FIGURES .....</b>	<b>v</b>
<b>INTRODUCTION .....</b>	<b>1</b>
<b>BACKGROUND.....</b>	<b>2</b>
<b>IMPORTANCE OF THE STUDY .....</b>	<b>5</b>
<b>LITERATURE REVIEW .....</b>	<b>6</b>
<b>WHY CONSUMERS USE COUPONS.....</b>	<b>6</b>
<b>CENTERS OF PAST RESEARCH .....</b>	<b>9</b>
<i>Focus on redemption.....</i>	<i>9</i>
<i>Focus on the redeemer's behaviour .....</i>	<i>11</i>
<i>Focus on the redeemer's attitudes, expectations &amp; perceptions .....</i>	<i>13</i>
<i>Focus on the redeemer's motivation .....</i>	<i>18</i>
<i>Advertising Effects of Coupons.....</i>	<i>19</i>
<i>Loyalty and Perceived Risk .....</i>	<i>21</i>
<b>HYPOTHESES.....</b>	<b>29</b>
<b>MAIN EFFECTS .....</b>	<b>29</b>
<b>INTERACTION EFFECTS.....</b>	<b>34</b>
<b>OTHER HYPOTHESES .....</b>	<b>37</b>

<b>RESEARCH METHODOLOGY .....</b>	<b>43</b>
<i>Experimental design .....</i>	<i>43</i>
<i>Independent variables .....</i>	<i>43</i>
<i>Sampling method, randomization, coupon design.....</i>	<i>45</i>
<i>Measurement items for dependent variables .....</i>	<i>49</i>
<i>Measurement items for manipulation checks.....</i>	<i>55</i>
<i>Measurement items for respondent characteristics .....</i>	<i>56</i>
<b>RESULTS.....</b>	<b>59</b>
<i>Scale Reliability.....</i>	<i>59</i>
<i>Scale classification .....</i>	<i>60</i>
<i>Manipulation checks.....</i>	<i>61</i>
<i>Hypotheses tests.....</i>	<i>64</i>
<b>CONCLUSIONS .....</b>	<b>124</b>
<i>Impact of familiarity with the brand featured on the coupon.....</i>	<i>124</i>
<i>Impact of magnitude of the face value.....</i>	<i>125</i>
<i>Impact of the manner in which the offer is stated.....</i>	<i>129</i>
<i>Other findings.....</i>	<i>131</i>
<b>DISCUSSION OF LIMITATIONS .....</b>	<b>132</b>
<b>MANAGERIAL IMPLICATIONS .....</b>	<b>134</b>
<b>BIBLIOGRAPHY.....</b>	<b>136</b>

## *List of Exhibits and Figures*

Questionnaire administered to students, including variations in treatments	Exhibit 1
Scale Frequency: Coupon proneness	Figure 1
Scale Frequency: Value consciousness	Figure 2
ANOVA interaction graph: Quality by familiarity, face value, offer statement	Figure 3
ANOVA interaction graph: Q29price by familiarity, face value, offer statement	Figure 4
ANOVA interaction graph: Q33price by familiarity, face value, offer statement	Figure 5
ANOVA interaction graph: Intention by familiarity, face value	Figure 6
ANOVA interaction graph: Intention by familiarity, face value, offer statement	Figure 7
ANOVA interaction graph: Liking for the offer by familiariry, face value	Figure 8
ANOVA interaction graph: Liking for the offer by familiariry, face value, offer state.	Figure 9
ANOVA interaction graph: Psych. effect by offer statement, coupon proneness	Figure 10
ANOVA interaction graph: Liking for the offer by value consciousness, face value	Figure 11
ANOVA interaction graph: Intention by value consciousness, face value	Figure 12
Summary table of ANOVAs	Figure 13

## ***Introduction***

Coupons continue to be used by consumer goods manufacturers as an important marketing tactic and sales promotion tool, and are expected to become even more important as price promotion becomes less prevalent with the advent of popular EDLP (Every Day Low Prices).

In the U.S. in 1994, 71% of the population used coupons at least some of the time, and of those who used coupons, 30% were classified as heavy users who reported using a coupon during almost every shopping trip. The average number of coupons used in a month by the average coupon user was 18.7, but heavy users reported using 33.7 coupons per month. (NCH Promotional Services, 1995). While past research has centered around the effect of coupons on incremental sales, and on redeemer profiles and household characteristics, little research has been done on the effects of coupon activity on consumer perception.

This project attempts to identify what effects coupon activity has on consumer perception of the brand featured on coupons. Specifically, it will be determined whether different coupon executions can have an impact on consumer perceptions of the brand featured on the coupon.

## ***Background***

Coupons are an important marketing tactic and sales promotion tool. As opposed to trade price promotions which are not necessarily passed on to consumers in favour of temporarily padding retail margins, coupons are a means of ensuring that a price break reaches the consumer. Manufacturers also use coupons to aid in moving retail inventories, to try to encourage brand trial and brand switching, and to encourage brand loyalty in the face of competitive activity.

It has been shown in some studies that coupons do, in some cases, induce consumers to switch brands and accelerate purchases (Bawa, Kapil & Shoemaker, 1989).

However, the use of coupons by manufacturers has recently been called into question. During the 1980's and early 1990's, manufacturers were engaging in more and more frequent and/or deeper price promotions to compete at retail. According to NCH Promotional Services, Canada's foremost coupon clearing organization, 15.3 billion coupons were distributed in Canada in 1994, 78% of which were retailer in-ads (RIA's), which are coupons included in retailer specific circulars. Of coupons redeemed, the average face value in 1994 was about \$0.68. U.S. coupon distribution trends have been much more pronounced than Canada's. Coupon distribution has increased from 181 billion coupons in 1984 to 310 billion in 1994, a 71% increase in just 10 years. While the bulk of coupon activity has traditionally been among grocery

products, the distribution of coupons for health and beauty products has increased by 270% in the last 10 years.

This trend can be explained at least in part by the aggressive retail price environment. During the early 1990's, the credibility of national-brand prices suffered because of frequent and deep price promotions (Quelch & Harding, 1996), and retailers were learning to play the high-low price game, buying from manufacturers at promotional prices whenever possible. Waiting for manufacturer deals wreaked havoc on trade inventories, which would become bloated during manufacturer deal periods, and deplete during regular pricing periods. This created inefficiencies such as higher inventory costs at some times and opportunity costs due to out-of-stock positions at other times.

This situation was also unfavourable to manufacturers, since trade accounts would learn to anticipate deals. A larger and larger percentage of sales being made during deal periods resulted in lower profits for manufacturers. Manufacturers and retailers reacted to this mutually unfavourable situation by adopting every day low price (EDLP) options, a single low price set for the year, both to avoid losses and to make retailer inventory planning more efficient.

As a result, the popularity of coupon activity among manufacturers has been polarized; coupon activity remains the only way for a manufacturer to ensure that a price break gets to the consumer at the time of purchase (and hence influences their brand decision). However, reducing costly coupon activity would allow

manufacturers to reduce their price (presumably to heighten their price competitiveness) to retailers even further.

The use of coupons by manufacturers is further complicated by the emergence of in-store electronic scan-down activity. As many Canadian retailers have become more sophisticated in their use of scanner technology, they have implemented various types of scanner-based loyalty programs. One variation of such programs involves replacing the coupons normally found in circulars (known as Retailer In-Ads or R.I.A.'s as mentioned earlier) by automatic savings at the cash. Under this system, any consumer who picks up the product during the shopping trip will be entitled to the coupon savings. This involves no coupon clipping for the consumer, and even consumers who would have picked up the product with or without a coupon receive the benefit of the deal.

While manufacturers may have been willing to subsidize the approximate 1% redemption rate on the previous RIA coupon form, footing the bill for a 100% redemption rate on all consumer sales during the feature period is more than many manufacturers bargain for. Furthermore, while the objective of a coupon is to influence brand decisions, to encourage brand loyalty, or at least to make the consumer feel good about having saved by using the manufacturer's coupon, a consumer under the scan-down program can purchase the brand, get the discount, and never be aware that savings on the brand itself were received. In fact, these programs are not coupon programs at all; they are retailer price promotion vehicles subsidized

by manufacturers. While these programs tend to encourage loyalty toward the retailer, they do very little to satisfy marketing objectives for the featured brand.

### ***Importance of the study***

It is of interest to marketers to do whatever possible in executing their coupon programs to ensure they are as efficient as possible. In most mass couponing programs, marketers are unable to target their coupons only to consumers currently using competitive brands. In fact, it has been shown that coupons tend to be used disproportionately highly by current users of the featured brand (Bemmar & Mouchoux, 1991).

In spite of this major pitfall of couponing, marketers will continue to use coupons as a marketing tactic. It therefore would be of extreme interest to the marketing practitioner to know the effect of coupon programs on the consumer's perception of the price, quality, liking for the brand, liking for the offer itself, positive psychological effect, and intention to use the offer.

In terms of its academic significance, the results of this research will add to and complement existing research into an area that is for the most part not widely explored. Furthermore, the study will attempt to measure a construct, psychological effect, which appears in much of the literature on couponing, but which to our knowledge has never been measured.

## ***Literature review***

### **Why consumers use coupons**

In a nutshell, consumers use coupons to save money. Coupons represent a liability to manufacturers in the sense that coupons are, in fact, conditional currency (worth money, on the condition the consumer uses it to purchase the specified product or service).

Shimp and Kavas (1984) surveyed coupon users and identified some important consequences of coupon usage:

- 1) the necessity of purchasing nonpreferred brands to take advantage of offers,
- 2) the time and effort required to seek out and collect coupons, and
- 3) satisfaction gained from the knowledge that one is a “smart shopper”.

That “satisfaction” and “time and effort” described by Shimp & Kavas can be further elaborated.

In a study by Bawa & Shoemaker (1987), the authors recognized that consumers who used coupons did so for either economic and/or psychological incentives. Coupon usage is described as an act that is performed in order to maximize the utility of the household. The coupons provided benefits in the form of dollar savings resulting from the lower prices paid for the products. Bawa, Kapil & Shoemaker (1987) and Cheong (1993) also agreed that consumers derive some

satisfaction or enjoyment from the knowledge that they are “efficient” shoppers. In spite of the consensus that psychological effect is an important construct in coupon research, the best definition of this construct is as offered above. For the purpose of this paper, a definition of psychological effect is offered later in the development of measurement items.

They also broke down the personal cost (the “time and effort”) of using a coupon into “handling” (which is cutting, sorting, and redeeming the coupons) and called the necessity of buying nonpreferred brands “substitution”, which is the cost associated with the coupon requiring the purchase of a less-preferred brand. They found that households with strong brand preferences in a particular product class would experience a large loss in utility from having to substitute to that less preferred brand. Mittal (1994) actually described having to switch brands to take advantage of the coupon offer as “an encumbrance to the enjoyment” one could get out of using a coupon to save money.

In his study of competing coupon promotions, Chiang (1995) observed: “Coupon promotions, unlike other promotional tools such as store-wide price cuts, involve a more complicated consumer self-selection problem. This is because although coupons can reduce paid prices, which in turn can enhance consumer demands for products, to benefit from these savings means consumers have to spend effort first in collecting, sorting, and using them. Thus, not all consumers use coupons nor use them all the time. “To measure coupon impacts, this self-selection

phenomenon should not be ignored.” Put differently, Chiang is saying that not only do coupons lead to increased demand for the featured product, but the featured product leads to demand for the coupon. Demand for the coupon on the individual level, will depend on whether using the coupon maximizes the individual’s utility, whether the benefits outweigh the costs associated to using the coupon.

It is expected that the bulk of all coupons redeemed are used for products that consumers already use. Not only do coupons influence consumer demand for a product by reducing paid prices, but conversely, demand for a product will also influence the decision to use coupons. That is, coupons will only be used if consumers view the benefits from the enhanced purchasing power is greater than the costs (of clipping saving and possibly having to switch brands) associated with coupons (Chiang, 1995). It is for this reason that marketers should concern themselves with consumer’s perception of the value of the coupon offer itself.

## **Centers of past research**

### ***Focus on redemption***

#### ***(To Switch Or Not To Switch, and Accelerated Purchase Responses)***

A great deal of research into couponing has been centered around couponing's effect, as measured by redemption, on incremental sales and whether couponing can influence brand switching.

Short-term gains in sales which appear immediately after coupon distribution appear to be attributed mainly to consumers who switch temporarily from other brands to the coupon-promoted brands (Johnson 1984). Once the coupon offer is retracted, most individuals revert to their pre-promotion choice behaviour (Bawa, Kapil & Shoemaker 1987). Gains in sales can also be the result of consumers buying products in larger quantities than they would normally due to the short expiration of the offer, an activity also known as "pantry loading". In some cases, such as for food products, a coupon offer might actually increase consumption (i.e. family consumes more soft drinks because they are available in the household thanks to the coupon offer). In other cases, while the coupon offer might accelerate purchase, it does not accelerate consumption, as for a personal deodorant; no matter the price, one can only consume a certain quantity. In this case, the sales peak generated from the coupon offer is merely borrowing sales from the future, as it will take the consumer roughly

the same amount of time to consume the product they have purchased, and return to re-purchase when home inventory runs out.

We know that a coupon for a featured brand with high market share tends to redeem at a higher rate because (1) the national brands tend to be used disproportionately highly by the pool of light users of the product category and (2) coupons tend to be used disproportionately highly by current users of the featured brand (Bemmaor & Mouchoux, 1991). It is also highly plausible that because consumers have a greater familiarity with national brands, (which also tend to have high market share) the perceived risk of switching brands in order to use the coupon is minimized.

Given this body of past research, it seems logical to posit that the positive psychological value of using a coupon (i.e. the consumer feels that they are a smart shopper because of having used a coupon) may be higher when the featured brand is a nationally advertised, high share brand with which the consumer is familiar, as opposed to when the coupon is used for a less known brand or store brand.

## ***Focus on the redeemer's behaviour***

### ***(Coupon Proneness)***

We know that some consumers are more apt to use coupons than others. Coupons tend to be used by light category users, switchers and innovators, and less brand loyal consumers (Montgomery, 1971). Furthermore, information about coupon usage in one product class can be used to predict response to coupons in other product classes (Bawa, Kapil & Shoemaker, 1987). It was found that if a consumer uses coupons for one product category, that consumer will also use available coupons for other product categories.

Blattberg et al. (1989) showed that deal proneness (and hence, coupon proneness) is associated to certain demographic and household characteristics, such as number of children and household income. Coupon proneness is distinguishable from value consciousness; coupon proneness can be defined as an “increased propensity to respond to a purchase offer because the form of the purchase offer positively affects purchase evaluations”. In this case, deal prone consumers may “perceive a deal as an end in itself as well as a means to an end”. (Lichtenstein, Netemeyer & Burton, 1990)

Lichtenstein, Netemeyer and Burton (1990) also distinguished coupon users by putting them into the two different classes of coupon prone or value conscious. By applying acquisition-transaction utility theory, they were able to show that consumers

could be not only value conscious, meaning that they would employ a coupon if it improved their utility (or value for the money) but could also be coupon prone.

Henderson (1988) suggests that consumers who operate on the behavioural mechanism of coupon primacy have a predominant “commitment to a coupon” that prevents them from paying attention to factors such as lowest price or best value for the money. Value conscious consumers, on the other hand, tend to be more critical in their assessment of good value, which is a function not only of price but also of quality. Value consciousness can be defined as a concern for paying low prices, subject to some quality constraint.

Coupon prone consumers tended to use coupons as an extrinsic signal of a “good deal” without actually comparing the reduced price of the couponed brand with the prices of other brands. While value conscious consumers were more motivated by the economic incentives, the coupon prone consumers were motivated by psychological incentives (feeling good about using a coupon to save money).

For value conscious consumers, it was found that consumer’s internal reference prices was important in determining their perceived utility. Zeithaml and Graham (1983) said that although the mechanisms by which consumers form internal reference prices are largely unknown, most research is based on the assumption that internal reference prices are derived from (1) experience with the product or (2) readily accessible information from the environment.

***Focus on the redeemer's attitudes, expectations & perceptions***

Marketers have used coupons to influence purchases in the belief that coupons carry a significant degree of psychological effect (users feel they are “getting something extra”), in addition to providing economic incentives for shoppers. In fact, three factors are thought to be at work in reducing the psychological effectiveness of coupon programs:

- There is little novelty in coupons, since every store is distributing them;
- Coupons are available to shoppers almost every week, and
- Every major brand is issuing coupons as a promotional tactic.

Because of these factors, coupon users may be increasingly motivated by economic incentive and decreasingly by the psychological effect of coupon use (Cheong 1993).

By intercepting grocery shoppers departing the store after their shopping trips, Cheong studied the effects of a cents-off coupon on five selected market response variables: price perception of the brand, repeat purchases, total amount spent during store visit, total number of items purchased, and consumer surplus. Consumer surplus was indirectly measured as the difference between the reservation price and the price actually paid, where reservation price was defined as the highest price that the shopper would be willing to pay for the brand.

His goal was to measure the effects of three independent variables: the coupon face value, the consumer's use of a coupon to make the purchase and his frequency of coupon use.

Cheong found that coupon purchases influenced price perception of the brand more than consumer surplus, repeat purchases, total amount spent during store visit, or number of items purchased. He also found that the face value was more important in determining coupon usage on that shopping occasion than whether or not the consumer was a current user of the featured product or whether the consumer used coupons frequently. These results supported Cheong's theory that consumers are motivated most by the economic incentive offered by the coupon.

Cheong concluded that cents-off coupons do not convey psychological effects, since the use of coupons did not appear to result in a consumer buying more items in a shopping trip. Unfortunately, Cheong fails to explain why an increase in the number of items bought during a shopping trip where coupons were used would be an indication of psychological effects. One can only assume that his premise is that when a consumer saves a dollar by using a coupon, psychological effects would be manifested by consumer responding to the savings by using them to buy another item. Intuitively, one would have to assume that the consumer who uses a coupon would "feel just as good" about having saved a dollar without using that saved dollar to buy more items. Cheong also fails to define what he means by psychological effects, or to develop an operational definition that adequately accounts for its meaning (other than

his proposed number of items per shopping trip). Therefore, in spite of the author's conclusion that cents-off coupons do not convey psychological effects, we must nonetheless consider that psychological effects may be an important consequence of coupon usage.

Another question which remains unanswered by this very interesting research is whether the magnitude of the discount offered by the coupon is taken into account by consumers in the formation of their price perceptions.

Cheong found that coupon purchases influenced price perception of the brand. Price expectations are a function of the consumer's past experience with price and readily available price information. Some coupon advertising, such as free standing insert or magazine coupons, simply state the savings in terms of cents off. R.I.A.'s, on the other hand, often state the price to be paid as a result of the coupon ("\$2.99 with coupon"). Price perception may well vary depending on the coupon vehicle, or the way in which the offer is stated.

Standard and well-accepted economic theory of supply and demand models consumer response to price with a downward sloping demand curve. In fact, consumer responses to prices are more complex than that. Kalwani, Yim, Rinne & Sugita's study of price expectations (1990) suggests that consumers form expectations of prices and use them in formulating their response to retail pricing. According to their findings, consumer response depends not only on retail price, but

also on how it compares to reservation price. Customers use the price they expect to pay for a brand on a given purchase occasion as reference in forming price judgments.

Their study showed that consumers tend to use (among other factors) the last few purchase prices as reference, as well as readily available information from the environment. That readily available information includes RIA's in circulars and other advertising information. The authors warned that frequent price promotions tend to lower the consumer's expectations of price for the brand. This is because even though the consumer may be aware that the low price paid is promotional, if that consumer pays the lower price often enough, he/she will become accustomed to paying the lower price. In this case, the promotional price becomes the reference price.

Cheong (1993) showed that this phenomenon doesn't only apply to promotional pricing, but to coupon usage as well. His study showed that coupon usage itself had also contributed to lower perception of price among consumers who had employed them to make a purchase. The results of these two studies suggest that even though the consumer knows that the price he/she is paying is special or promotional, their perception of the price of that product is lowered.

It is widely accepted that price is an important communicator of quality for consumers. The perceived quality-price relationship is related to the compelling desire to minimize risk (Berkman & Gilson, 1986). Hahn et al. (1995) conducted a study of the consumer response to coupon advertising, and how a consumer's negative evaluation of a coupon may adversely affect consumer's evaluation of the

brand. No doubt this is Hahn's underlying premise for assuming that coupons, because of the price discounts they offer, might cause consumers to perceive the brand to be of lower quality.

If this is true, then it might be also true that consumers' perceptions of quality of a brand is inversely related to the magnitude of the face value of the coupons. For example, If a drug store perfume is featured with a coupon for \$15 off the regular price ( $\frac{1}{4}$  its usual retail price), consumers perceive that product to be of lower quality than if the coupon were for only \$5.00 off.

In terms of the affective effects of coupons, the primary focus of past research has been on their direct impact on brand attitudes. Hahn et al (1995) posited that an important mediating construct may be consumers' attitudes toward the coupon itself. Affective reactions to coupons may be important because those reactions or evaluations of the coupon may affect consumer's evaluation of the brand. Also possible, especially with coupons, is the inferred loss of quality of the brand (Hahn, Chang, Kim and Kim, 1995).

***Focus on the redeemer's motivation***

*(The Role of the Family, or The Theory of Reasoned Action, applied to coupon usage)*

Shimp and Kavas (1984) investigated what they considered to be a rational, systematic, and thoughtful behaviour rather than under the control of some unconscious motive. The authors state “coupon usage behaviour is comparatively paradoxical: in certain respects, it is the most trivial and mundane of behaviours, yet for some consumers, it represents a highly time consuming and involving activity.”

In fact they believed that consumer's intention to use coupons may be determined by their attitudes and perceptions of whether important others (such as one's spouse or children) think that clipping and using coupons is worth the effort.

The authors employed two structural equation models to explain consumer coupon behaviour. They found that coupon use is a form of behaviour in which household dynamics play an important role. Those coupon users who considered their efforts worthwhile and personally rewarding were also found to be likely to perceive that important others supported and favoured their efforts. The authors cite that this perception may be either real or imagined, but if it is real, it may be primarily due to the fact that household members may or may not accept the purchase of the non-preferred brand just to take advantage of coupon savings.

No doubt this theory would be closely related to the idea of psychological value of using a coupon. If psychological value can be defined as “feeling good about using coupons”, then an individual who is encouraged (or perhaps, not discouraged) to use coupons, and who feels that using coupons is personally rewarding, would “feel” better about using coupons if he/she thought that other members of the family unit appreciated it.

While it is not cited in the literature, it is also conceivable that the role of the family in the decision whether or not to use coupons can be related to the “risky shift” phenomenon; using coupons to purchase a non-preferred brands brings about the risk of not liking that brand as much as the preferred brand. The risky shift phenomenon is the theory that joint decision making encourages the group to take riskier decisions because in this way, the failure of a wrong decision can be shared by all members of the group (Assael, 1987). This may be yet another explanation of why the family’s support is important in coupon usage, as it allows the risk of purchasing a non-preferred brand to be spread across all the household individuals who supported that decision.

### *Advertising Effects of Coupons*

In their study of coupon advertising using a panel of Korean housewives, Hahn, Chang, Kim & Kim (1995) concluded that coupon information in a coupon advertising campaign can have a significant impact on consumers for processing

information contained in the main advertisement, evaluating the main advertisement and enhancing purchase intention.

They studied the effect of including a coupon in a print advertisement on brand attitude, attitude toward the brand and attitude toward the coupon. They posited that the inclusion of a promotional offer would provide an incentive to process advertising information more intensely. They further expected coupon advertising to be most effective among loyal consumers of the advertised brand, since they might find the information contained in the advertisement more relevant.

Their study compared responses about attitude toward the ad and brand (from respondents of various levels of brand loyalty) when exposed to either an advertisement with or without a coupon. They found that attitude towards the coupon is correlated to attitudes toward the brand, advertisement and purchase intention only for loyal consumers of competing brands. The possible reason for this is that for consumers loyal to a competing brand, using the coupon may involve more risk (might not like this new product, when the consumer is apparently satisfied with the one he/she is currently loyal to), therefore creating a powerful incentive to read the body of the advertisement for more information. Conversely, it was found that including a coupon in an advertisement may actually have distracted consumers loyal to the advertised brand from processing the advertised information.

These results imply that for competing brand loyal consumers, a carefully executed coupon advertising campaign may affect not only consumer's purchase intention, but also their brand attitude and depth of processing advertised information.

### ***Loyalty and Perceived Risk***

There is an alternate explanation for why this study by Hahn et al.(1995) showed that an ad was most effective on users of competitive brands. As explained by Bultez (1975), consumers tend to be loyal to their favourite brands, so changes in price for the favourite brands tend to have less impact on the sales of those brands. It stands to follow that a coupon advertisement for a favourite brand would have less effect on the intention to use the coupon by current users (and hence loyal users) of the advertised product, as their decision to buy the product is already made and they would have purchased the product with or without the coupon.

On the other hand, a cents-off offer on a competing brand might encourage the consumer to switch to that untried or non-preferred brand, if the face value is high enough. In this case, brand loyalty can be operationalized as Raju, Srinivasan and Lal (1990) have suggested: "the minimum price differential needed before consumers who prefer one brand switch to another brand".

Why are consumers loyal to their favourite brands? As mentioned earlier, consumers likely perceive risk in switching to less known brands. It would be expected that brand loyalty and perceived risk of purchasing a brand other than the brand the consumer is loyal to would be strongly correlated.

There are four main types of risk that could be relevant to coupon usage: financial risk, performance risk, psychological risk and social risk (Assael, 1987). All four kinds of risk can play a part in coupon usage, or more specifically in using a coupon to make the purchase of a non-preferred, unfamiliar or not-yet-tried brand.

Financial risk is the risk that in making a purchase one may not have spent money wisely, or even lose one's money if the product purchased fails. Financial risk tends to be a function of the cost of a product relative to the disposable income of the buyer. Financial risk is larger the more money is involved in the purchase and the longer the consumer will have to live with the decision.

Performance risk is the risk that the product will not do what it was intended to do, and is generally greater when the product is technically complex or when health and safety are involved. For example, a consumer might be reticent to switch brands of deodorant if there is a perceived risk that the new brand might not combat body odor, in which case there is also a psychosocial risk involved.

Psychosocial risk is the risk that a product choice might not conform to his or her self-image (e.g., a suit does not look quite right, the car I'm driving reminds me of the one my parents drive).

Finally, social risk is the risk that a purchase may not meet the standards of an important reference group. Visible items, such as cars and clothing, and items designed to enhance social attractiveness (cosmetics, mouthwash or personal deodorant) are particularly subject to social risk.

Each one of these kinds of risk will of course be mediated by the individual consumer's ability to bear risk (their level of risk aversion).

Although they may not be fully aware of them, consumers develop strategies of risk reduction, as classified by Bauer (1960):

1. **Brand Loyalty:** buying only a certain brand that we are familiar with.
2. **Buying only the nationally advertised brand.** Consumers may feel that if a brand is not exposed to the consumer through frequent advertising messages, it is somehow inferior, although this is often not the case.
3. **Buying only the cheapest brand.** While quality might not measure up to the national brand, the consumer can rest assured that he/she is limiting possible financial losses.
4. **Buying only the most expensive brand.** Some consumers who perceive high risk in their choice select the highest price brand, under the assumption that if it is priced the highest, it must be the best one.

5. **Buying only a small quantity of the product.** According to this strategy, risk in any choice is minimized by purchasing the least amount of the brand, therefore limiting one's risk of financial loss or bad performance. This is the reason that sampling in small quantities or making trial sizes available in store at the time of launch of product is a popular practice among both consumers and consumer packaged goods marketers.
6. **Buying only products with a plain and functional design.** Although consumers are generally not happy with totally "spartan" products, there is sometimes an underlying assumption that product "frills" are unnecessary and add to the expense.

Based on the above literature review, it would seem that the body of research surrounding the consumer behaviour aspects of coupon usage are as yet incomplete, and there is much opportunity to build upon the knowledge of this area.

For example, there has been no mention of whether the psychological effects of using a coupon (feeling good or proud that one has saved money or been a smart shopper) are different for familiar as opposed to unfamiliar brands. It is also unknown if different ways of stating a coupon offer (stating the savings amount versus stating the final price to be paid) has an impact on perceived price of the product, or on the psychological effects using a coupon might convey.

Further to Cheung's research which showed that coupons had an impact on price perception more than consumer surplus or other variables, it is still unknown whether coupons lead to lowered price perception, or whether a coupon could directly lead to lower quality perceptions.

Therefore, three independent variables are of particular interest in further research: the magnitude of the face value, the manner in which the offer is stated, and familiarity with the brand.

*Face Value (Magnitude of the deal):*

Face Value is a variable often manipulated by marketers, and the one decision which impacts the marketing costs of a program most. It is obvious that there is a positive direct relationship between face value and the level of consumer interest in using the coupon. However, it is not known what impact face value has on the consumer's perception of price, whether face value magnitude can affect his or her perception of the brand featured.

*Offer Statement:*

The manner in which the offer is stated is of importance only in the RIA format, as FSI's and ad-pad coupons are national and cannot state a retail price. Generally, there are two ways to state the offer. One is simply to state only the face value, for example "Save \$0.50". Another is to state both the face value, and the price to be paid with coupon, such as "With coupon, Save \$0.50, and pay only \$2.79".

The latter manner of stating offers in-ad is becoming more and more prevalent among retailers. It is of interest to ascertain what, if any, differences in consumer response are elicited by each of these manners of stating the offer. One would assume that if only the savings are stated in the advertisement, the consumer must rely on his or her previously formed expectation of price to determine the quality of the deal and the end price that is expected to be paid. If both the savings and the price to be paid are stated, then it is possible that the stated promotional price may figure in the

consumer's price expectations for future purchases. In other words, it is possible that advertising the price to be paid after the coupon may actually be reducing consumer's perception of price for the advertised brand. This is an unfavourable situation for the marketer; reducing the consumer's expectation of price for a brand can result in future losses of market share as the deal is retracted and the brand returns to regular retail price. This problem would be further compounded when the magnitude of the face value is high and both the face value and the price to be paid are shown on the coupon.

### *Familiarity With the Brand*

Familiarity with the brand is recognized throughout the literature review as an important independent variable. Familiarity with the product featured on coupons is not a variable that is usually manipulated by marketers; just the opposite, in real situations it is an uncontrolled variable. The marketer must launch a new product, and it is unknown by consumers at the time of launch. That means that to take advantage of the coupon, some consumers would have to buy an unknown brand.

A study by Mittal (1994) described having to switch brands to take advantage of a coupon offer as an "encumbrance" to coupon enjoyment. He found that brand encumbrance, having to buy a less preferred brand, curbed coupon use directly. Some research by NCH (1995) has shown that higher face values are required to entice consumers to switch brands.

It is of interest to know if quality perception of unknown brands can be affected by changes in the coupon offer in the same manner as quality perception for National brands? Intuitively, one might think that because the consumer may have little knowledge of the quality of the product, and that price is often used by the consumer as a signal of quality, that the level of the deal, or the explicit knowledge of its regular price, may affect his or her perception of quality. Since using price as a signal of quality is, as mentioned earlier, a strategy to minimize risk in the face of a lack of information about the product manipulating the brand so as to expose subjects to brands with which they have low or high familiarity should yield interesting results.

## *Hypotheses*

### **Main Effects**

**H<sub>1</sub>: The degree of positive psychological effect of using coupons will be greater for higher face value coupons, greater for familiar brands than unfamiliar brands, and greater when the coupon states only the face value, and not the price.**

While many researchers have discussed the concept of psychological value, none have measured it, and none have hypothesized whether the magnitude of a coupon face value would affect the degree to which a consumer “feels good” about using a coupon. Will a consumer feel much better about using a \$1.00 coupon than using a \$0.40 coupon, or will the knowledge that one has done one’s bit to save money (regardless of the amount) generate roughly the same degree of psychological effect?

Familiarity with the brand is expected to have a positive main effect on all of the independent variables. This is related to the idea that the costs of using a coupon involve having to switch brands to use a coupon, and a consumer is likely to be less leery of switching if they were already aware of the brand than if they had never heard of it, and especially if it is their usual brand.

Consumers will feel significantly more positive psychological effects from using a coupon that states only the cents-off than for coupons that state both the face value and the cents-off. The rationale for this is that stating face value focuses only on savings. Stating both the face value and the price to be paid reminds the consumer that he/she is still spending money on the product on feature.

**H<sub>2</sub>: Liking for the featured brand will be greater, the more familiar it is.**

Consumers are known to prefer brands with which they are familiar. Liking for the brand is not expected to vary with the magnitude of the face value or the manner in which the offer is stated.

**H<sub>3</sub>: Liking for the coupon offer itself will be greater for familiar brands than for unfamiliar brands, and greater for higher face values.**

The reason for liking for the offer being greater with well-known brands is Nationally advertised brands also have a higher market share, which implies that the chances that a given consumer has tried the product or knows someone who uses the product is greater than for a little known brand, therefore increasing the consumer's experience with and/or information about the brand. A consumer would likely prefer to receive an offer for a brand which he/she already uses, as it would not require the consumer to undertake any switching behaviour.

This hypothesis will also confirm the fact that the liking for the coupon will vary with the magnitude of the coupon face value.

**H<sub>4</sub>: Perception of price of the coupon advertised brand will be more positive for familiar brands, less positive as the magnitude of the coupon face value increases, and less positive when the offer states both the face value and the price.**

In this case, a more positive price perception it to be interpreted as agreement that prices are relatively higher, the product is relatively expensive.

Hinged on the idea that consumers like familiar brands better than less familiar brands, and might be willing to either pay more for them or believe that they are of better quality, it is expected that, in general, consumers will evaluate price of more familiar brands in a less positive light, assuming that they are more expensive than less familiar brands.

The expectation that price perception will be more positive as face values increase is founded on the premise that large face values may diminish a consumer's expectations of price. This is related to price expectations theory which suggests that a consumer's expectation of price is formed by a consumer's last few purchase experiences, coupled with any readily available information from the environment as it pertains to price. It is contended here that merely advertising the coupon face value will figure into a consumer's perception of regular price he/she expects to pay for the product.

It is also expected that perception of price will be less positive when both the face value and price to be paid are shown in the advertisement, as the price to be paid may then become part of the consumer's internal reference price for the product. In other words, consumers may use the provided price after coupon discount as their reference price for future purchases of the brand.

**H<sub>5</sub>: Perception of quality will be greater for familiar brands, and perception of quality will decrease as the coupon face value increases.**

As the consumer has been exposed to available information about a familiar brand, it would be expected that a consumer would have fewer doubts as to its quality. If the consumer is familiar with the brand, he/she may have enough information to judge the quality of the product without using price as an indicator.

Much research has shown that consumers, especially in the face of a lack of information about a brand, will use price as a surrogate measure of quality when making brand purchase decisions. An example of this is carpet purchases. Differences in quality of various carpet brands are not obvious to the eye or the touch, and a consumer might rely on the price range in comparison to other brands to judge whether that particular carpet is better or not. The question here is whether coupon face values are also a communicator of quality.

**H<sub>6</sub>: Intention to use the coupon will be greater, the more familiar the brand, and greater the greater the magnitude of the coupon face value.**

For the same reasons as psychological effect and liking for the offer, consumers' intention to use the offer will be greater for familiar brands, as they are less likely to involve the switching costs to an unknown, untried brand. It is also expected that face value will strongly influence a consumer's intention to use a coupon offer, as a coupon offer is, after all, an economic incentive to buy a product, and that incentive is higher, the higher the face value.

**H<sub>7</sub>: Perceived risk will be lower for familiar brands than for unfamiliar brands.**

The reason for this is that consumers generally have more information about well-known, National brands, through mass advertising, therefore increasing their level of comfort with that brand. Furthermore, nationally advertised brands also have a higher market share, which implies that the chances that a given consumer has tried the product or knows someone who uses the product is greater than for a little known brand, therefore increasing the consumer's experience with and information about the brand.

## **Interaction Effects**

**H<sub>8a</sub>: Perception of quality of the advertised brand will decrease as the magnitude of the coupon face value increases, more so when the brand is less familiar.**

It is expected here that if there is an effect of face values on perceived quality, that the variance of perceived quality from low to high face values will be dependent on whether or not the brand is well known. If the consumer is familiar with the brand, he or she may have enough information to judge the quality of the product without using price as an indicator of quality.

**H<sub>8b</sub>: Perception of quality of the advertised brand will decrease as the magnitude of the coupon face value increases, more so when both the face value and the price to be paid are shown.**

It is expected here that if there is an effect of face values on perceived quality, that the variance of perceived quality from low to high face values will have a significant interaction with the manner in which the offer is stated. It is expected that the effects of the high face value on perception of quality will be further compounded if the final price to be paid (which is lowest when the face value is highest) is also shown on the coupon. To confirm this hypothesis would mean that consumers, in using price as a reference to quality, would be choosing to use the feature price (the sale price) and not the regular price as their indication of quality.

**H<sub>9</sub>: Perception of price of the coupon advertised brand will become less positive as the magnitude of the coupon face value increases, more so when the final price after coupon discount is stated on the coupon.**

This hypothesis is founded on the premise that large face values may diminish a consumer's price expectation, particularly when both the face value and the amount to be paid with coupon are stated on the coupon offer. When the coupon states the final price to be paid on the coupon (after the face value discount), that price may come to figure in the consumer's most recent experience with the price for that product, hence influencing their price expectations at the time of next purchase.

When shown, the price to be paid after discount is lowest at the highest face values, making price expectations less positive at higher face values.

**H<sub>10</sub>: The intention to use the coupon to purchase the featured brand will be greater, the greater the coupon face value, but significantly more so for familiar brands than for unfamiliar brands.**

As coupons are an economic incentive, it is expected that face value will be the most important influencer of intention. In spite of this, this hypothesis implies that even with varying levels of coupon savings, the subject's familiarity with the brand will still be important in the assessment of the intention to use the coupon.

This would be an important finding for the marketing practitioner, since it may provide an indication of the relative face values to be used for high share (and hence high familiarity) and low share (low familiarity) brands.

**H<sub>11</sub>: The liking for the offer will be greater, the greater the coupon face value, but significantly more so for familiar brands than for unfamiliar brands.**

Liking for the offer is expected to behave in much the same way as intention to use the offer, since it is hard to imagine having a high intention to use the offer without also having a high liking for the offer.

Consumers will like coupon offers if the savings are good, but they will like it even more if they are familiar with the featured brand, for the same reasons as those listed in previous hypotheses and also because the greater the familiarity of the brand, the lower the costs of switching because the brand may have already been tried in the past.

## **Other Hypotheses**

Hypotheses H<sub>1</sub> to H<sub>11</sub> dealt exclusively with the effects of the independent variables. However, the richness of understanding of consumer perceptions can be further improved by looking at the mediating effects of risk, and the effects of value consciousness and coupon proneness, which are characteristics of the individual and treated here as additional independent variables.

**H<sub>12</sub>: There is a strong inverse correlation between the dependent variables (psychological value, liking for the brand, liking for the offer, perception of price, perception of quality and intention to use the offer) and degree of perceived risk associated with the featured product.**

As more risk is associated with an unfamiliar brand versus a familiar brand, risk can be interpreted as a mediating factor between familiarity and the dependent variables. Psychological effect, liking for the brand itself, liking for the offer, perception of price, perception of quality and intention to use the coupon may all be greater for a brand for which familiarity is higher because there is also a lower degree of risk associated to the featured product.

The risk of switching products in order to take advantage of a coupon offer will be higher with unfamiliar brands. Perceived risk is expected to explain in part

why lower familiarity leads to negative evaluations of the dependent variables mentioned here.

**H<sub>13a</sub>: The degree of positive psychological effect of using a coupon consumers experience will be greater, the greater the magnitude of the coupon face value, and this response will not vary depending on the degree of coupon proneness.**

Based on the researcher's descriptions of coupon-prone and value conscious consumers, coupon-prone consumers reactions in terms of psychological effects would not be expected to vary with coupon face value, as they tend to evaluate the coupon without taking other factors into account (brand, quality, and the regular price of the product). In other words, highly coupon prone consumers would not value a high face value any differently than an individual who is not highly coupon prone.

**H<sub>13b</sub>: The degree of positive psychological effect of using a coupon consumers experience will be greater, the greater the magnitude of the coupon face value, more so for more value conscious subjects.**

This hypothesis is related to the work by Henderson (1988). Henderson's research implied that it is the economic and psychological incentives are separate - and that highly value conscious consumers are motivated by economic savings. If this is true, then highly value conscious consumers should exhibit a greater degree of positive psychological effect the higher the face value of the coupon.

**H<sub>14a</sub>: For coupon prone consumers, the degree of positive psychological effect of using a coupon consumers experience will be greater when the offer states only the face value than when it states both the face value and the price to be paid.**

While value conscious consumers are probably much more aware of regular prices and of the value that given face values offer, the coupon prone consumer on the other hand, focuses in on the face value alone.

For that reason, it is hypothesized that for coupon prone consumers, showing the final price to be paid may actually reduce the degree of psychological effect felt in using the coupon, by reminding these subjects that they will have to “spend to save”.

**H<sub>14b</sub>: For value conscious consumers, the degree of positive psychological effect of using a coupon consumers experience will not vary with the manner in which the offer is stated.**

As mentioned in the discussion of H<sub>14a</sub>, value conscious consumers are probably much more aware of regular prices and of the value that given face values offer. For this reason, the additional information of including price in the coupon will probably not affect this consumer’s degree of positive psychological effect of using the coupon offer.

The reminder of the final price to be paid is probably less of a surprise to the value conscious consumer, therefore not negatively affecting how “good they feel” about taking advantage of the offer.

**H<sub>15a</sub>: Liking for the coupon advertisement itself will be greater, the greater the magnitude of the coupon face value, but not more so for more highly coupon prone subjects.**

To confirm this hypothesis would add to the body of research which describes a coupon-prone consumer as a consumer who has a “commitment” to the coupon, often ignoring other factors, such as whether using the coupon is really good value for the money, compared to prices or quality of other brands. It is of interest to know whether for a highly coupon prone consumer good coupon offers actually make that individual have a greater liking for the offer than for low coupon prone consumers.

It is expected that the highly coupon prone consumers’ evaluation of liking for the coupon offer as it varies with face value would not be different than low coupon prone consumers.

**H<sub>15b</sub>: Liking for the coupon advertisement itself will be greater, the greater the magnitude of the coupon face value, but more so for more highly value conscious subjects.**

The reason for this hypothesis is that while higher coupon values in general will lead to greater liking for the coupon offer, liking for the offer will vary more greatly depending on the subject’s degree of value consciousness. As value conscious consumers by definition spend more effort in determining the worth of the coupon offer, as opposed to highly coupon prone consumers, who tend to exhibit “coupon

primacy”, a commitment to the coupon regardless of whether the coupon is actually offering superior value. As the coupon prone consumer would rationalize the wisdom of using the coupon to make the purchase of the brand, it would be expected that highly value conscious subjects’ liking for the offer would increase with the coupon face value.

**H<sub>16a</sub>: For coupon prone subjects, the intention to use the coupon to purchase the featured brand will not vary significantly with the coupon face value.**

This is hypothesized because coupon prone consumers tend to evaluate coupon offers without consideration for the magnitude of the deal, or the absolute value that the savings provide. Just the opposite, these consumers tend to exhibit a “commitment to the coupon”. This hypothesis will tell us whether for these consumers, coupon value has a significant impact on their intention to use the coupon.

**H<sub>16b</sub>: For value conscious subjects, the intention to use the coupon to purchase the featured brand will be greater, the greater the coupon face value.**

This is the opposite premise from H<sub>15</sub>. Because value conscious consumers are most concerned with the value that a coupon can offer, it stands to follow that the highly value conscious subject’s intention to use the coupon will grow with the magnitude of the face value offered.

**H<sub>17</sub>: A subject's positive evaluation of the coupon offer itself can have an impact on their positive evaluation of the brand featured on coupon.**

Hahn et al's (1995) discussion of consumer attitudes towards coupons included the ideas that affective reactions (in this case liking for the coupon advertisement) may be important because those evaluation of the coupon may affect the consumer's evaluation of the brand.

This would be useful for the marketing practioner to know; if liking for the offer is shown to affect liking for the brand, marketers could apply more effort into appealing coupon executions, both from a creative and face value standpoint.

**H<sub>18</sub>: The subject's actual choice of brands will be positively correlated with the brand to which he was exposed in the coupon advertisement.**

It will be of interest to determine whether the brand the respondent was exposed to for the duration of the time needed to fill out the questionnaire (about 10 - 15 minutes) will have any impact on his choice of brands when given a choice.

## *Research methodology*

### *Experimental design*

The chosen research design was a field experiment where 2 levels of three independent variables were examined, resulting in a 2x2x2 design. As suggested in the literature review, the three independent variables are the magnitude of the face value, the manner in which the offer is stated, and familiarity with the brand featured on coupons.

2 X 2 X 2 research design					
		Unfamiliar brand		Familiar brand	
		Face value only	Face value, regular price and price paid	Face value only	Face value, regular price and price paid
Low Value					
High Value					

### *Independent variables*

**Face value:** The face values that varied for manipulation were \$.40 and \$1.00, which represent deals of approximately 10% and 20% respectively, and could be considered by consumers to be a small deal (\$.40) and a hot deal (\$1.00). According to NCH (1995), the average face value of a coupon in 1994 was \$0.65, so \$1.00 in comparison would be considered to be a high value.

**Offer statement:** The offer statement will be manipulated by showing subjects the same retailer In-Ad deal, one showing only the face value, and the other showing the face value, the regular price and the price to be paid if the coupon were to be used.

**Familiar and unfamiliar brand:** The product category chosen was a frequently purchased personal care product, for which two different brands were identified, one being highly familiar (Gillette Sensor), the other relatively new to the Canadian market, and therefore much less familiar (Gillette CustomPlus). CustomPlus disposable blades, which usually retail for a pack of ten blades at around \$4.50-\$5.50, has a small market share (under 4% of all blades sold) and no advertising other than free-standing inserts and retailer-in ad coupons. CustomPlus is expected to be a good example of a relatively unknown, unfamiliar brand.

For a nationally known, familiar brand, Sensor was used. The Sensor brand was launched in 1990 with a splashy advertising campaign and has been supported heavily with television and print advertising (with different executions for product variations to both men and women) ever since. Sensor brand blade consumer sales account for about 20% of all blades sold and 50% of all permanent system blades sold. Sensor also has a retail price of about \$4.50-\$5.50 for a pack of 5 blades. Both of these products feature the name "Gillette" prominently in their name and packaging. As consumers would likely be familiar with the name Gillette, it was

necessary to remove the name Gillette from the CustomPlus packaging to in order to ensure that a variance in familiarity between the two exists.

The resulting cell design, incorporating the two levels of each variable, was as follows:

<b>2 X 2 X 2 research design</b>					
		<b>Unfamiliar brand: a 10-pack of CustomPlus blades</b>		<b>Familiar Brand: a 5-pack of Sensor blades</b>	
		<b>Retailer In-Ad Face value only</b>	<b>Retailer In-Ad Face value, regular price and price paid</b>	<b>Retailer In-Ad Face value only</b>	<b>Retailer In-Ad Face value, regular price and price paid</b>
<b>Low Value \$0.40</b>					
<b>High Value \$1.00</b>					

***Sampling method, randomization, coupon design***

A homogeneous group of Concordia students was administered the questionnaire (exhibit 1), and one of the eight coupon treatments as described in the 2 x 2 x 2 research design shown above. Because males and females tend to have differing levels of involvement with the blades & razors category, only the responses from the more highly involved group, males, was analyzed for this experiment.

The colour coupons representing each of the 8 conditions were designed to resemble retailer-in-ad type coupons. Design of the coupons did not vary between treatments, except with regard to the package illustration of either Gillette Sensor or

CustomPlus, either \$0.40 or \$1.00, or whether the regular and feature price was included along with the face value of the coupon.

As the research design involved 8 different cells, at least 160 responses were required to meet a minimum of 20 subjects per cell. In order to avoid order or group bias, students within each classroom were randomly assigned the questionnaires containing each of the various experimental conditions. This method required that the questionnaires be numbered in order to identify their associated treatment, so they were numbered from 121 through 128, so as to not give subjects the clue that they had received a particular version of the questionnaire, as they might deduce from numbering them 1 through 8.

Once they completed the questionnaire, subjects were offered a choice of either a pack of Sensor 5's or CustomPlus 10's, and informed that each had the same retail value. Subjects were asked to leave their completed questionnaire in front of the box (whether it be Sensor or CustomPlus) from which they picked their product. This allowed their choice to be recorded. The purpose of this exercise was to see if the brand that the subjects were exposed to in their coupon treatment might have any effect on their choice of free sample.

### *The dependent variables*

The questionnaire measured the impact of changing the coupon advertisement on:

- Psychological effect of using the coupon
- Liking for the brand advertised
- Liking for the advertisement itself
- Price perception
- Perception of quality of the product
- Intention to respond to the coupon offer
- Perceived risk in using the coupon to make the purchase

Perceived risk was measured with the expectation that risk itself may be an important mediating factor in explaining the levels of other dependent variables. Perceived risk is the product of two separate aspects of risk. Measurement items were designed to determine each subject's perceived probability of the negative consequences occurring, and also their perception of the severity of the negative consequences if they did occur. The product of these two measures is taken as perceived risk (probability x consequence). This is important because although a consumer might perceive the probability of a blade giving them a poor shave to be high, they may also perceive that consequence to be minor, and not worth a lot of effort or money to avoid. Conversely, the respondent may perceive the consequence of cutting oneself with a blade to be extremely bad, but the probability of it happening

to be remote. Hence, this measure of risk weights the probability and consequence for a meaningful measurement of risk.

In addition to measuring these dependent variables, measures of coupon proneness and value consciousness were also collected. Coupon proneness and value consciousness, as described earlier in the literature review, are characteristics of individual consumers which tend to be consistent across product categories. In other words, if a consumer is coupon prone, or deal responsive, that consumer's behaviour will tend to be consistent, regardless of whether the product being featured on deal is orange juice or razor blades. The purpose of measuring the degree of each subject's coupon proneness and value consciousness is to use these measures as further independent variables which might be useful in explaining variations in the dependent variables, as was earlier described in the presentation of hypotheses.

### *Measurement items for dependent variables*

#### *Psychological effect of using the coupon*

In order to develop measurement items, it was necessary to have a conceptual definition of psychological effect as it pertains to coupon usage. For the purposes of this paper, the definition of psychological effects will be any positive affective reaction to the act of clipping, saving and using coupons.

In order to measure this, 7 items were developed. Subjects were asked to respond to the following statements on a 7-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree”.

1. If I were to use this coupon to make the purchase of this brand, I'd feel very good about it.
2. A person who would use this coupon to buy the brand would be a very smart shopper.
3. Once I decide I'm going to purchase this brand, using a coupon to buy it is just an added “bonus”.
4. If I used this coupon to save money on the brand, I'd probably treat myself to another item I wanted in the store.
5. I'd be very pleased if a family member saved money by using the coupon for this brand.
6. Going out of one's way to clip, save, and use this coupon seems a little foolish. (-)
7. I would get excited if I was able to save money on this brand by merely clipping and saving this coupon.

*Liking for the coupon-advertised brand*

For this measure, again, subjects were asked to respond to the following statements on a 7-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree”.

1. This product is unique.
2. I like the packaging for this product.
3. I would like to try this product.
4. If all the brands were the same price, this is the one I’d choose.
5. This brand would definitely satisfy my needs.

Further to these, an additional item, on a 7-point rating scale, was developed:

	Like very much	Like	Like somewhat	Neither like nor dislike	Dislike somewhat	Dislike	Dislike very much
6. What is your overall liking for the featured brand?							

*Liking for the coupon offer itself*

To measure liking for the coupon offer, subjects were asked to respond to the following statements on a 7-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree”.

1. This coupon offer is attractive.
2. This offer would motivate me to buy the advertised product.
3. This coupon offer makes no difference to my intention to buy (or not to buy) the brand.(-)
4. With the coupon offer, this product will be less expensive than most brands.
5. This coupon offer is a good opportunity to save money.
6. This is a pretty good offer for the advertised product.

*Price perception of the coupon-advertised brand*

Again, subjects were asked to respond to the following statements on a 7-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree”.

1. When regularly priced, this product is more expensive than most brands.
2. I can get this product at a low price without a coupon offer. (-)
3. Thanks to this coupon offer, I could get this brand at a much lower price than other regularly priced brands. (-)
4. This brand is only affordable if there is a coupon offer or it's on sale.
5. Even with a coupon, this product is expensive.

*Perception of quality of the coupon-advertised brand*

Subjects were asked to respond to the following statements on a 7-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree”.

1. This product is of high quality.
2. This product is well made.
3. This brand is always good value for the money.
4. This brand will perform extremely well.

*Intention to respond to the coupon offer*

Subjects were asked to respond to the following statements on a 7-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree”.

1. If I received this coupon offer, I would definitely use it to buy the advertised brand.
2. Anybody should want to use this coupon to buy the brand.

The following item also measures intention to respond to the offer:

Please indicate on the scale provided from extremely likely (1) to extremely unlikely (7)	1 Extremely likely	2	3	4	5	6	7 Extremely unlikely
3. How likely would you be to use this coupon? (-)							

*Perception of negative consequences associated to purchase*

Subjects were asked to respond to the following statements on a 7-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree”.

1. If I bought this brand and it didn’t perform very well, it would be awful.
2. When you get a pack of blades, it’s not a big deal if you make a mistake.<sup>1</sup> (-)
3. If I bought this brand and it didn’t do as good a job as my regular brand, I would feel very upset.
4. The cost of blades is too high to experiment - I think that it’s better to stick with what you know is a good product.

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<sup>1</sup> Laurent and Kapferer, *Journal of Marketing Research*, February 1985, p44.

*Perception of probability of risk in buying the product*

Subjects were asked to respond to the following statements on a 7-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree”.

1. I don't think a consumer would be disappointed with the performance of this product.(-)
2. When you purchase a pack of blades, it's hard to make a bad choice.(-)
3. There is no risk that this brand won't be as good as any other brand on the market (-)
4. I don't believe there is much difference in the performance of the different brands in this product category.(-)

***Measurement items for manipulation checks***

***Familiarity with the brand***

Subjects were asked to respond to the following statements on a 7-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree”.

1. I was aware of the brand
2. I have seen this brand advertised.
3. This is one of the best known brands in its product category.

Please check the box which best describes your experience with the brand advertised:

	(1) Never tried	(2) Tried once or twice	(3) Use on occasion	(4) Use about half the time	(5) Use most of the time	(6) Only use this brand
4.						

***Perceived difference in the magnitude of the face values: \$0.40 vs. \$1.00***

Subjects were asked to respond to the following statements on a 7-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree”.

1. For this brand, a \$0.40 coupon makes it worth as much effort to use the coupon as a \$1.00 coupon.(-)
2. The savings amount offered on this coupon is very good.
3. The savings on this coupon isn't really worth the effort of clipping and saving it.(-)

## *Measurement items for respondent characteristics*

### *Consumer attitudes towards coupons*

The following measures the subjects' attitudes toward coupon usage. As both value conscious and coupon-prone consumers tend to use coupons, different items are used to capture each. Coupon proneness and value consciousness are measured in this study using the measures developed by Lichtenstein, Netemeyer & Burton (1990). According to the researchers, reliability estimates were 0.88 and 0.80 for coupon proneness and value consciousness respectively.

Subjects were asked to respond to the following statements on a 7-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree".

### *Coupon Proneness*

1. Redeeming coupons makes me feel good.
2. I enjoy clipping coupons out of newspapers.
3. When I use coupons, I feel that I am getting a good deal.
4. I enjoy using coupons, regardless of the amount that I save by doing so.
5. I have favourite brands, but most of the time, I buy the brand I have a coupon for.
6. I am more likely to buy a brand for which I have a coupon.
7. Coupons often cause me to buy products I normally would not buy.
8. Beyond the money I save, redeeming coupons gives me a sense of joy.

*In their study of coupon-prone consumers, Bawa, Kapil & Shoemaker (1987) based their categorizations of coupon-prone and non coupon-prone consumers on consumer panel diary data. Instead of asking the subjects questions to determine which they were, each consumer's coupon-proneness was determined solely by the number of coupons they had self-reportedly used. The authors definition of coupon-proneness encompassed both coupon-prone and value-conscious consumers.*

*Value Consciousness:*

Subjects were asked to respond to the following statements on a 7-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree".

1. I am very concerned about low prices, but I am equally concerned about product quality.
2. When grocery shopping, I compare the prices of different brands to be sure I get the best value for the money.
3. When purchasing a product, I always try to maximize the quality I get for the money I spend.
4. When I buy products, I like to be sure that I'm getting my money's worth.
5. I generally shop around for lower prices on products, but they still must meet certain quality requirements before I'll buy them.
6. When I shop, I usually compare the "price per kg" information for brands I normally buy.<sup>2</sup>

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<sup>2</sup>Lichtenstein et al.'s item states price per ounce. This item has been modified to Kg for use in Canada.

7. I always check prices at the grocery store to be sure I get the best value for the money I spend.

In addition to these measurements, actual coupon usage and demographic information (age, sex, living situation including number of persons living in the household, and household income) was also collected.

## ***Results***

### ***Scale Reliability***

Analysis of scale reliability was conducted on all scales used in the questionnaire.

Scales for coupon proneness and value consciousness were taken from Lichtenstein's research, and yielded a healthy Cronbach's Alpha of 0.85 and 0.78 respectively. Scales measuring familiarity with the brand (4 items at 0.87 reliability), liking for the featured brand (6 items at 0.84), liking for the coupon offer (6 items at 0.70), perception of quality (4 items at 0.90) and intention to use the offer (3 items at 0.64) all had respectable levels of reliability as measurement scales.

The scales for psychological value were purified to remove one item, "Once I decide I'm going to purchase this brand, using a coupon to buy it is just an added bonus", to arrive at a Cronbach's alpha of 0.66 with 6 items.

Perception of risk, which is a product of the probability of negative consequences multiplied by the seriousness of the consequence, is used in the analysis to follow in spite of a relatively weak Cronbach's alpha at 0.55.

Finally, the scale for perception of price, which contained 6 items originally, could be purified at best down to a scale reliability of 0.43 with 4 items remaining.

For the purposes of further analysis, any hypotheses relating to price perception were examined on an item by item basis only.

### ***Scale classification***

In order to conduct the analysis of variance in testing the hypotheses, any item scales for the independent variables which were measured on a 7-point Likert scale from “strongly disagree” to “strongly agree”, had to be re-coded into a dichotomy: low and high. Since the three main independent variables of high or low familiarity the brand, face value, and manner in which the offer is stated had only two levels, only coupon proneness and value consciousness, which are analyzed like independent variables later on in the analysis, needed to be dichotomized.

While it is appropriate to use the midpoint of these scales as an objective dividing rod between the low and high conditions, because the responses to certain questions were not always evenly distributed across the range, a median split was also examined.

It was found that for coupon proneness, using the midpoint and the median method would yield roughly the same results (for graph of scale frequencies, see figure 1). In other words, the mid-point and median splits occurred at roughly the same point in the rating scale. However, the decision of which method to use for value consciousness could yield different results depending on the method of choice.

For example, for the value consciousness scale, only 6.3% of subjects would qualify as low on that scale according to the mid-point cut off method (see figure 2 for graph of scale frequency). The reason for this is likely that measurement items may have been too strongly worded, compounded by the fact that most subjects often respond differently than they really behave, and are not likely to admit (even to themselves, maybe) that they are not value conscious consumers.

In light of this, a median split is chosen for future analysis, bearing in mind through the interpretation that the results are based on relative measures. In other words, **relatively** low value consciousness, as opposed to low value consciousness for example. This is important to note, because using the median method, a number of individuals who's composite score for value consciousness exceeds 3.5 out of 7.0 will be classified as relatively low value conscious, in spite have having scored themselves above the midpoint on average.

### ***Manipulation checks***

As mentioned earlier, there were three independent variables in this study, requiring three different manipulations for the experiment. The first was low familiarity brand versus high familiarity brand, operationalized using Gillette Sensor as the high familiarity brand and CustomPlus as the low familiarity brand. The second was low face value (\$0.40) versus high face value (\$1.00). The third independent variable was the manner in which the offer was stated (showing only the coupon face

value, versus showing the face value, the regular price and the price to be paid after the face value discount).

While no manipulation check of the manner in which the offer was stated is deemed necessary, it is quite important that the subjects exposed to the different treatments did in fact have differing levels of familiarity for the two chosen brands, and that they perceived \$0.40 to be different in terms of magnitude from \$1.00 face value.

The questionnaire included questions for the check of manipulations against familiarity and face value.

Whereas familiarity with the brands is concerned, the variance of familiarity depending on the brand shown was highly significant ( $P=0.000$ ), with means quite polarized. The mean score of familiarity on a seven-point scale for Gillette Sensor was 5.60, while the familiarity with CustomPlus registered at 2.78. Therefore, it can be concluded that using Gillette Sensor for the high familiarity condition and CustomPlus for the low familiarity condition is acceptable.

Measurement items were also developed to measure perceived difference in the face values between the \$0.40 face values and the \$1.00 face values.

Responses to the questions “The savings amount offered on this coupon is very good” and “The savings on this coupon isn’t really worth the effort of clipping and saving it (-)” were significantly different depending on the exposure to a \$0.40

and a \$1.00 condition ( $P= 0.000$  and  $P=0.04$  respectively). Mean responses to “The savings amount offered on this coupon is very good” were 3.31 for those exposed to the \$0.40 coupon, and 4.96 for those exposed to the \$1.00 coupon. Mean responses to “The savings on this coupon isn’t really worth the effort of clipping and saving it (-)” were 3.9 for those exposed to the \$0.40 coupon, and 4.67 for those exposed to the \$1.00 coupon.

### *Hypotheses tests*

The majority of the hypotheses were tested using analysis of variance (ANOVA) to examine the relationships between the variables.

### *Main Effects*

**H<sub>1</sub>: The degree of positive psychological effect of using coupons will be greater for higher face value coupons, greater for familiar brands than unfamiliar brands, and greater when the coupon states only the face value, and not the price.**

\*\*\* CELL MEANS \*\*\*

PSYVALUE		
BY BRAND		
FACEVALU		
FNLPRICE		
TOTAL POPULATION		
	3.71	
	( 160)	
BRAND		
	1	2
	3.77	3.66
	( 80)	( 80)
FACEVALU		
	1	2
	3.45	3.98
	( 80)	( 80)
FNLPRICE		
	1	2
	3.81	3.62
	( 80)	( 80)

\* \* \* A N A L Y S I S O F V A R I A N C E \* \* \*

PSYVALUE  
BY BRAND  
FACEVALU  
FNLPRICE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
<b>Main Effects</b>	<b>13.068</b>	<b>3</b>	<b>4.356</b>	<b>4.311</b>	<b>.006</b>
BRAND	.480	1	.480	.475	.492
FACEVALU	11.008	1	11.008	10.894	.001
FNLPRICE	1.580	1	1.580	1.564	.213
<b>2-way Interactions</b>	<b>.845</b>	<b>3</b>	<b>.282</b>	<b>.279</b>	<b>.841</b>
BRAND FACEVALU	.089	1	.089	.088	.767
BRAND FNLPRICE	.752	1	.752	.744	.390
FACEVALU FNLPRICE	.005	1	.005	.005	.944
<b>3-way Interactions</b>	<b>1.219</b>	<b>1</b>	<b>1.219</b>	<b>1.207</b>	<b>.274</b>
BRAND FACEVALU FNLPRICE	1.219	1	1.219	1.207	.274
<b>Explained</b>	<b>15.132</b>	<b>7</b>	<b>2.162</b>	<b>2.140</b>	<b>.043</b>
<b>Residual</b>	<b>153.580</b>	<b>152</b>	<b>1.010</b>		
<b>Total</b>	<b>168.713</b>	<b>159</b>	<b>1.061</b>		

This hypothesis is partially supported by the data. Of the three independent variables, only face value had significant main effects on psychological effect ( $F=10.894$ ,  $P=0.001$ ). The greater the face value, the more positive the psychological effect of using the coupon.

The degree of familiarity with the brand and the manner in which the offer is stated had no significant effects on the psychological effect of using the coupon, with  $P=0.492$  and  $P=0.213$  respectively. This means that in general, whether the brand is familiar or not, and whether a coupon features the regular and final price to be paid after discount or not do not all by themselves influence the subject's degree of psychological value of using the coupon.

The Hay's' Omega squared statistic was used to determine the strength of the association of the dependent and independent variables:

$$\omega^2 = \frac{SSB - (K-1) * MSW}{SST + MSW}$$

Where:

SSB = Sum of squares between

MSW = Mean squares within

SST= Sum of squares total

K= number of groups per variable

This statistic was computed for the relationship between face value and psychological effect of using the coupon, and the strength of the relationship as measured by  $\omega^2$  is 0.058. This indicates that although psychological effect of using a coupon does vary significantly with face value, it serves to explain only a small part of the variation of psychological effect.

**H<sub>2</sub>: Liking for the featured brand will be greater, the more familiar it is.**

\*\*\* CELL MEANS \*\*\*

```

LIKEBRND
BY BRAND
FACEVALU
FNLPRICE

TOTAL POPULATION

    4.25
  ( 160)

BRAND
    1      2

    5.08    3.42
  (  80) (  80)

FACEVALU
    1      2

    4.23    4.27
  (  80) (  80)

FNLPRICE
    1      2

    4.29    4.21
  (  80) (  80)

```

\*\*\* ANALYSIS OF VARIANCE \*\*\*

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LIKEBRND
BY BRAND
FACEVALU
FNLPRICE

Source of Variation          Sum of      Mean      Signif
                             Squares    Square    F      of F
Main Effects
BRAND                       111.096     3       37.032  32.871 .000
FACEVALU                      .078     1         .078   .069   .793
FNLPRICE                       .240     1         .240   .213   .645

2-way Interactions
BRAND  FACEVALU                .484     1         .484   .430   .513
BRAND  FNLPRICE                .002     1         .002   .002   .968
FACEVALU FNLPRICE              .009     1         .009   .008   .929

3-way Interactions
BRAND  FACEVALU FNLPRICE        .930     1         .930   .826   .365
                             .930     1         .930   .826   .365

Explained                    112.521     7       16.074  14.268 .000

Residual                     171.241    152        1.127

Total                        283.762    159        1.785

```

This hypothesis is supported by the data. Of the three independent variables, only the brand (which was either familiar or unfamiliar) had significant main effects on liking for the brand ( $F=98.331$ ,  $P=0.000$ ).

The strength of the association as measured by Hays'  $\omega^2$  is 0.385, and indicates that not only are the effects significant, but that they are also quite strongly associated.

**H<sub>3</sub>: Liking for the coupon offer itself will be greater for familiar brands than for unfamiliar brands, and greater for higher face values.**

\*\*\* CELL MEANS \*\*\*

LIKEOFFR  
BY BRAND  
FACEVALU  
FNLPRICE

TOTAL POPULATION

4.03	
( 160)	

BRAND

1	2
4.09	3.97
( 80)	( 80)

FACEVALU

1	2
3.63	4.43
( 80)	( 80)

FNLPRICE

1	2
4.06	4.00
( 80)	( 80)

\*\*\* ANALYSIS OF VARIANCE \*\*\*

LIKEOFFR  
BY BRAND  
FACEVALU  
FNLPRICE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
<b>Main Effects</b>	<b>26.294</b>	<b>3</b>	<b>8.765</b>	<b>10.177</b>	<b>.000</b>
BRAND	.504	1	.504	.586	.445
FACEVALU	25.613	1	25.613	29.740	.000
FNLPRICE	.177	1	.177	.205	.651
<b>2-way Interactions</b>	<b>5.769</b>	<b>3</b>	<b>1.923</b>	<b>2.233</b>	<b>.087</b>
BRAND FACEVALU	5.507	1	5.507	6.394	.012
BRAND FNLPRICE	.083	1	.083	.097	.756
FACEVALU FNLPRICE	.179	1	.179	.208	.649
<b>3-way Interactions</b>	<b>4.573</b>	<b>1</b>	<b>4.573</b>	<b>5.310</b>	<b>.023</b>
BRAND FACEVALU FNLPRICE	4.573	1	4.573	5.310	.023
Explained	36.637	7	5.234	6.077	.000
Residual	130.909	152	.861		
Total	167.545	159	1.054		

This hypothesis is partially supported by the data. While familiarity with the brand has no significant effects on liking for the coupon offer ( $F=0.586$ ,  $P=0.445$ ), liking for the coupon offer does vary significantly with the magnitude of the coupon face value ( $F=29.740$ ,  $P=0.000$ ).

Intuitively, one would believe that since a coupon is primarily an economic incentive to purchase the product, that face value would serve to explain a great deal of the variance on liking for the coupon advertisement. The strength of the relationship as measured by  $\omega^2$  is 0.188. This indicates a fairly strong association between liking for the offer and the magnitude of face value, but also that it explains only a part of the variation on liking for the brand.

**H<sub>4</sub>: Perception of price of the coupon advertised brand will be more positive for familiar brands, less positive as the magnitude of the coupon face value increases, and less positive when the offer states both the face value and the price.**

\*\*\* CELL MEANS \*\*\*

Q29PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

TOTAL POPULATION

	4.46	
( 160)		

BRAND

	1	2
	5.23	3.69
( 80) ( 80)		

FACEVALU

	1	2
	4.48	4.43
( 80) ( 80)		

FNLPRICE

	1	2
	4.64	4.27
( 80) ( 80)		

\*\*\* ANALYSIS OF VARIANCE \*\*\*

Q29PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
<b>Main Effects</b>	<b>100.281</b>	<b>3</b>	<b>33.427</b>	<b>18.167</b>	<b>.000</b>
BRAND	94.556	1	94.556	51.390	.000
FACEVALU	.100	1	.100	.054	.816
FNLPRICE	5.625	1	5.625	3.057	.082
<b>2-way Interactions</b>	<b>2.431</b>	<b>3</b>	<b>.810</b>	<b>.440</b>	<b>.724</b>
BRAND FACEVALU	.100	1	.100	.054	.816
BRAND FNLPRICE	2.025	1	2.025	1.101	.296
FACEVALU FNLPRICE	.306	1	.306	.166	.684
<b>3-way Interactions</b>	<b>13.806</b>	<b>1</b>	<b>13.806</b>	<b>7.504</b>	<b>.007</b>
BRAND FACEVALU FNLPRICE	13.806	1	13.806	7.504	.007
<b>Explained</b>	<b>116.519</b>	<b>7</b>	<b>16.646</b>	<b>9.047</b>	<b>.000</b>
<b>Residual</b>	<b>279.675</b>	<b>152</b>	<b>1.840</b>		
<b>Total</b>	<b>396.194</b>	<b>159</b>	<b>2.492</b>		

\* \* \* C E L L M E A N S \* \* \*

Q33PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

TOTAL POPULATION

4.03  
( 160)

BRAND

1	2
4.21	3.84
( 80)	( 80)

FACEVALU

1	2
3.94	4.11
( 80)	( 80)

FNLPRICE

1	2
4.11	3.94
( 80)	( 80)

\* \* \* A N A L Y S I S O F V A R I A N C E \* \* \*

Q33PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
<b>Main Effects</b>	<b>8.075</b>	<b>3</b>	<b>2.692</b>	<b>1.018</b>	<b>.387</b>
BRAND	5.625	1	5.625	2.127	.147
FACEVALU	1.225	1	1.225	.463	.497
FNLPRICE	1.225	1	1.225	.463	.497
<b>2-way Interactions</b>	<b>10.800</b>	<b>3</b>	<b>3.600</b>	<b>1.361</b>	<b>.257</b>
BRAND FACEVALU	.400	1	.400	.151	.698
BRAND FNLPRICE	10.000	1	10.000	3.781	.054
FACEVALU FNLPRICE	.400	1	.400	.151	.698
<b>3-way Interactions</b>	<b>9.025</b>	<b>1</b>	<b>9.025</b>	<b>3.412</b>	<b>.067</b>
BRAND FACEVALU FNLPRICE	9.025	1	9.025	3.412	.067
<b>Explained</b>	<b>27.900</b>	<b>7</b>	<b>3.986</b>	<b>1.507</b>	<b>.169</b>
<b>Residual</b>	<b>402.000</b>	<b>152</b>	<b>2.645</b>		
<b>Total</b>	<b>429.900</b>	<b>159</b>	<b>2.704</b>		

\* \* \* C E L L M E A N S \* \* \*

Q39PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

TOTAL POPULATION

3.46  
( 160)

BRAND

1            2

3.54          3.39  
( 80)    ( 80)

FACEVALU

1            2

3.28          3.65  
( 80)    ( 80)

FNLPRICE

1            2

3.45          3.48  
( 80)    ( 80)

\* \* \* A N A L Y S I S O F V A R I A N C E \* \* \*

Q39PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	6.550	3	2.183	.805	.493
BRAND	.900	1	.900	.332	.565
FACEVALU	5.625	1	5.625	2.074	.152
FNLPRICE	.025	1	.025	.009	.924
2-way Interactions	14.525	3	4.842	1.785	.152
BRAND    FACEVALU	6.400	1	6.400	2.359	.127
BRAND    FNLPRICE	.900	1	.900	.332	.565
FACEVALU FNLPRICE	7.225	1	7.225	2.664	.105
3-way Interactions	.400	1	.400	.147	.702
BRAND    FACEVALU FNLPRICE	.400	1	.400	.147	.702
Explained	21.475	7	3.068	1.131	.347
Residual	412.300	152	2.713		
Total	433.775	159	2.728		

\* \* \* C E L L M E A N S \* \* \*

Q45PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

TOTAL POPULATION

3.68  
( 160)

BRAND

1	2
4.02	3.34
( 80)	( 80)

FACEVALU

1	2
4.09	3.27
( 80)	( 80)

FNLPRICE

1	2
3.85	3.51
( 80)	( 80)

\* \* \* A N A L Y S I S O F V A R I A N C E \* \* \*

Q45PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	49.807	3	16.602	8.542	.000
BRAND	18.701	1	18.701	9.622	.002
FACEVALU	26.651	1	26.651	13.712	.000
FNLPRICE	4.456	1	4.456	2.292	.132
2-way Interactions	6.869	3	2.290	1.178	.320
BRAND FACEVALU	.798	1	.798	.411	.523
BRAND FNLPRICE	2.678	1	2.678	1.378	.242
FACEVALU FNLPRICE	3.393	1	3.393	1.746	.188
3-way Interactions	.541	1	.541	.278	.599
BRAND FACEVALU FNLPRICE	.541	1	.541	.278	.599
Explained	57.216	7	8.174	4.206	.000
Residual	295.426	152	1.944		
Total	352.642	159	2.218		

\* \* \* C E L L M E A N S \* \* \*

Q51PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

TOTAL POPULATION

4.15  
( 160)

BRAND

1	2
4.19 ( 80)	4.11 ( 80)

FACEVALU

1	2
4.52 ( 80)	3.78 ( 80)

FNLPRICE

1	2
3.99 ( 80)	4.31 ( 80)

\* \* \* A N A L Y S I S O F V A R I A N C E \* \* \*

Q51PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	26.835	3	8.945	3.810	.011
BRAND	.218	1	.218	.093	.761
FACEVALU	22.425	1	22.425	9.552	.002
FNLPRICE	4.193	1	4.193	1.786	.183
2-way Interactions	4.325	3	1.442	.614	.607
BRAND FACEVALU	.028	1	.028	.012	.914
BRAND FNLPRICE	.105	1	.105	.045	.833
FACEVALU FNLPRICE	4.193	1	4.193	1.786	.183
3-way Interactions	.390	1	.390	.166	.684
BRAND FACEVALU FNLPRICE	.390	1	.390	.166	.684
Explained	31.550	7	4.507	1.920	.070
Residual	356.830	152	2.348		
Total	388.380	159	2.443		

Of the five items in the questionnaire meant to measure perception of price, two support the hypothesis that perception of price is more positive depending on the brand shown. Answers to the question “When regularly priced, this product is more expensive than most brands” and “Even with this coupon, this brand is expensive” varied significantly ( $F=51.39$ ,  $P=0.000$  and  $F=9.622$ ,  $P=0.002$  respectively) depending on whether the subjects were shown Sensor (the familiar brand) or CustomPlus (the unfamiliar brand). Perception of price was consistently more positive, interpreted as higher priced or more expensive, the more familiar the brand.

Perception of price was also found to vary significantly with face value for two of the five measurement items. Perception of price was found to be less positive, the greater the magnitude of the face value shown for the items “Even with this coupon, this brand is expensive” and “Thanks to this coupon offer, I could get this brand at a much lower price than other regularly priced brands” ( $F=15.712$ ,  $P=0.000$  and  $F=9.522$ ,  $P=0.002$  respectively).

Finally, perception of price was found to vary ( $F=3.057$ ,  $P=0.082$ ) with the manner in which the offer is stated for only one of the 5 measurement items, “When regularly priced, this product is more expensive than most brands”. As only one item confirmed the hypothesis, and the level of significance is not very high, it is arguable whether this hypothesis is supported at all.

An explanation for this is that when the manner in which the offer is stated included only the face value and not the final price to be paid, subjects were forced to guess at pricing, and invariably chose prices that were either higher or lower than the actual price. Since this particular group of subjects had little experience with household shopping, their price responses varied widely.

It is likely that these results, while internally valid, might be different if the group studied were the principle household shoppers, or if the chosen product category were frequently purchased by the group.

**H<sub>3</sub>: Perception of quality will be greater for familiar brands, and perception of quality will decrease as the coupon face value increases.**

\*\*\* CELL MEANS \*\*\*

QUALITY  
BY BRAND  
FACEVALU  
FNLPRICE

TOTAL POPULATION

4.63  
( 160)

BRAND

1 2

5.41 3.85  
( 80) ( 80)

FACEVALU

1 2

4.65 4.62  
( 80) ( 80)

FNLPRICE

1 2

4.68 4.58  
( 80) ( 80)

\*\*\* ANALYSIS OF VARIANCE \*\*\*

QUALITY  
BY BRAND  
FACEVALU  
FNLPRICE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	97.465	3	32.488	23.858	.000
BRAND	97.032	1	97.032	71.258	.000
FACEVALU	.042	1	.042	.031	.860
FNLPRICE	.390	1	.390	.286	.593
2-way Interactions	3.595	3	1.198	.880	.453
BRAND FACEVALU	.010	1	.010	.007	.933
BRAND FNLPRICE	.207	1	.207	.152	.697
FACEVALU FNLPRICE	3.379	1	3.379	2.481	.117
3-way Interactions	4.523	1	4.523	3.321	.070
BRAND FACEVALU FNLPRICE	4.523	1	4.523	3.321	.070
Explained	105.582	7	15.083	11.077	.000
Residual	206.979	152	1.362		
Total	312.561	159	1.966		

Perception of quality was found to vary significantly ( $F=71.258$ ,  $P=0.000$ ) with the familiarity of the brand. When subjects were shown the coupon advertisement for the more familiar brand (Sensor), their quality mean score was 5.41. When shown the less familiar brand (CustomPlus), the mean score was only 3.85.

The strength of the relationship, as measured by Hays'  $\omega^2$  is 0.305, indicating that brand familiarity serves to explain a large part of the variation on perception of quality of the brand featured on the coupon.

This hypothesis that face value has main effects on perception of quality is not supported. There was no significant variance (at  $P= 0.86$ ) in the perception of quality of the featured brand depending on the face value of the coupon. Face value alone is not a communicator of product quality for these subjects.

**H<sub>6</sub>: Intention to use the coupon will be greater, the more familiar the brand, and greater the greater the magnitude of the coupon face value.**

\*\*\* CELL MEANS \*\*\*

INTENT  
BY BRAND  
FACEVALU  
FNLPRICE

TOTAL POPULATION

3.72  
( 160)

BRAND

1	2
3.95	3.49
( 80)	( 80)

FACEVALU

1	2
3.40	4.04
( 80)	( 80)

FNLPRICE

1	2
3.74	3.70
( 80)	( 80)

\*\*\* ANALYSIS OF VARIANCE \*\*\*

INTENT  
BY BRAND  
FACEVALU  
FNLPRICE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	24.567	3	8.189	4.628	.004
BRAND	8.311	1	8.311	4.697	.032
FACEVALU	16.171	1	16.171	9.139	.003
FNLPRICE	.084	1	.084	.047	.828
2-way Interactions	8.122	3	2.707	1.530	.209
BRAND FACEVALU	7.715	1	7.715	4.360	.038
BRAND FNLPRICE	.251	1	.251	.142	.707
FACEVALU FNLPRICE	.156	1	.156	.088	.767
3-way Interactions	7.084	1	7.084	4.004	.047
BRAND FACEVALU FNLPRICE	7.084	1	7.084	4.004	.047
Explained	39.772	7	5.682	3.211	.003
Residual	268.950	152	1.769		
Total	308.722	159	1.942		

This hypothesis is supported by the data. Intention to use the coupon offer varies significantly with the familiarity with the brand ( $F=4.697$ ,  $P=0.032$ ) and the magnitude of the face value ( $F=9.139$ ,  $P=0.003$ ). Intention to use the coupon increases the greater the familiarity with the brand, and the greater the face value.

In spite of the fact that these variations are significant, the relationships between intention to use the coupon and these two independent variables are quite weak. As measured by  $\omega^2$ , the strength of the relationships are only 0.021 for familiarity with the brand, and 0.046 for the magnitude of the face value.

**H<sub>7</sub>: Perceived risk will be lower for familiar brands than for unfamiliar brands.**

\*\*\* CELL MEANS \*\*\*

RISK  
BY BRAND  
FACEVALU  
FNLPRICE

TOTAL POPULATION

19.54  
( 160)

BRAND

	1	2
	18.04	21.05
	( 80)	( 80)

FACEVALU

	1	2
	20.53	18.56
	( 80)	( 80)

FNLPRICE

	1	2
	18.90	20.18
	( 80)	( 80)

\*\*\* ANALYSIS OF VARIANCE \*\*\*

RISK  
BY BRAND  
FACEVALU  
FNLPRICE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	583.221	3	194.407	2.936	.035
BRAND	363.082	1	363.082	5.483	.020
FACEVALU	154.891	1	154.891	2.339	.128
FNLPRICE	65.248	1	65.248	.985	.322
2-way Interactions	37.236	3	12.412	.187	.905
BRAND FACEVALU	.802	1	.802	.012	.913
BRAND FNLPRICE	8.315	1	8.315	.126	.724
FACEVALU FNLPRICE	28.119	1	28.119	.425	.516
3-way Interactions	63.977	1	63.977	.966	.327
BRAND FACEVALU FNLPRICE	63.977	1	63.977	.966	.327
Explained	684.435	7	97.776	1.477	.180
Residual	10065.003	152	66.217		
Total	10749.437	159	67.607		

The hypothesis was supported ( $F=5.483$ ,  $P= 0.020$ ), confirming that when the subjects were more familiar with the brand, their perception of risk is lower than when they are less familiar with the brand.

When shown the more familiar brand (Sensor), the mean score of perception of risk was 18.04. When shown the low familiarity brand (CustomPlus), mean risk scores were 21.05.

*Interaction Effects*

**H<sub>8a</sub>: Perception of quality of the advertised brand will decrease as the magnitude of the coupon face value increases, more so when the brand is less familiar.**

\*\*\* CELL MEANS \*\*\*

QUALITY BY BRAND FACEVALU FNLPRICE			
TOTAL POPULATION			
	4.63		
	( 160)		
FACEVALU			
	1	2	
BRAND			
1	5.44	5.39	
	( 40)	( 40)	
2	3.86	3.85	
	( 40)	( 40)	

\*\*\* ANALYSIS OF VARIANCE \*\*\*

QUALITY BY BRAND FACEVALU FNLPRICE					
Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
<b>Main Effects</b>	<b>97.465</b>	<b>3</b>	<b>32.488</b>	<b>23.858</b>	<b>.000</b>
BRAND	97.032	1	97.032	71.258	.000
FACEVALU	.042	1	.042	.031	.860
FNLPRICE	.390	1	.390	.286	.593
<b>2-way Interactions</b>	<b>3.595</b>	<b>3</b>	<b>1.198</b>	<b>.880</b>	<b>.453</b>
BRAND FACEVALU	.010	1	.010	.007	.933
BRAND FNLPRICE	.207	1	.207	.152	.697
FACEVALU FNLPRICE	3.379	1	3.379	2.481	.117
<b>3-way Interactions</b>	<b>4.523</b>	<b>1</b>	<b>4.523</b>	<b>3.321</b>	<b>.070</b>
BRAND FACEVALU FNLPRICE	4.523	1	4.523	3.321	.070
<b>Explained</b>	<b>105.582</b>	<b>7</b>	<b>15.083</b>	<b>11.077</b>	<b>.000</b>
<b>Residual</b>	<b>206.979</b>	<b>152</b>	<b>1.362</b>		
<b>Total</b>	<b>312.561</b>	<b>159</b>	<b>1.966</b>		

There are no significant interaction effects ( $F=0.007$ ,  $P=0.933$ ) of face value with familiarity with the brand on perception of quality. There are no main effects of face value on perception of quality, and that evaluation does not vary based on familiarity with the brand.

A limitation of this result is that price is often taken as a quality cue when it is relative to other brands. In this situation, the subject was not offered a comparative brand with which to form a reference for comparison. Again, this problem arises from the subject's general lack of information in general about prices for the category.

**H<sub>8b</sub>: Perception of quality of the advertised brand will decrease as the magnitude of the coupon face value increases, more so when both the face value and the price to be paid are shown.**

\*\*\* CELL MEANS \*\*\*

QUALITY  
BY BRAND  
FACEVALU  
FNLPRICE

TOTAL POPULATION

4.63  
( 160)

		FNLPRICE	
		1	2
FACEVALU	1	4.84 ( 40)	4.45 ( 40)
	2	4.52 ( 40)	4.71 ( 40)

		FNLPRICE = 1	
		FACEVALU	
		1	2
BRAND	1	5.76 ( 20)	5.09 ( 20)
	2	3.93 ( 20)	3.95 ( 20)

		FNLPRICE = 2	
		FACEVALU	
		1	2
BRAND	1	5.11 ( 20)	5.69 ( 20)
	2	3.80 ( 20)	3.74 ( 20)

\* \* \* A N A L Y S I S O F V A R I A N C E \* \* \*

QUALITY  
BY BRAND  
FACEVALU  
FNLPRICE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
<b>Main Effects</b>	<b>97.465</b>	<b>3</b>	<b>32.488</b>	<b>23.858</b>	<b>.000</b>
BRAND	97.032	1	97.032	71.258	.000
FACEVALU	.042	1	.042	.031	.860
FNLPRICE	.390	1	.390	.286	.593
<b>2-way Interactions</b>	<b>3.595</b>	<b>3</b>	<b>1.198</b>	<b>.880</b>	<b>.453</b>
BRAND FACEVALU	.010	1	.010	.007	.933
BRAND FNLPRICE	.207	1	.207	.152	.697
FACEVALU FNLPRICE	3.379	1	3.379	2.481	.117
<b>3-way Interactions</b>	<b>4.523</b>	<b>1</b>	<b>4.523</b>	<b>3.321</b>	<b>.070</b>
BRAND FACEVALU FNLPRICE	4.523	1	4.523	3.321	.070
<b>Explained</b>	<b>105.582</b>	<b>7</b>	<b>15.083</b>	<b>11.077</b>	<b>.000</b>
<b>Residual</b>	<b>206.979</b>	<b>152</b>	<b>1.362</b>		
<b>Total</b>	<b>312.561</b>	<b>159</b>	<b>1.966</b>		

It was expected that the effects of the high face value on perception of quality would be further compounded if the final price to be paid (which is lowest when the face value is highest) is also shown on the coupon. However, this interaction between face value and manner in which the offer is stated was not significant ( $F=2.481$ ,  $P=0.117$ ).

There was, however, a significant three way interaction of all three independent variables, brand familiarity, face value, and manner in which the offer was stated, on perception of quality.

When the brand is familiar, perception of quality increases significantly ( $F=3.321$ ,  $P=0.070$ ) with increases in the magnitude of the face value when the coupon shows only the face value, but when the offer states both the face value and

the price to be paid, the perception of quality decreases with increases in the magnitude of the face value. When the brand is unfamiliar, there is no significant interaction between face value and the manner in which the offer is stated. In fact, when the brand is not familiar, perception of quality does not change at all with increasing face value (see figure 3).

**H<sub>9</sub>: Perception of price of the coupon advertised brand will decrease as the magnitude of the coupon face value increases, more so when the final price after coupon discount is stated on the coupon.**

\*\*\* CELL MEANS \*\*\*

Q29PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

TOTAL POPULATION

4.46  
( 160)

FACEVALU	FNLPRICE	
	1	2
1	4.63 ( 40)	4.34 ( 40)
2	4.66 ( 40)	4.20 ( 40)

\*\*\* ANALYSIS OF VARIANCE \*\*\*

Q29PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	100.281	3	33.427	18.167	.000
BRAND	94.556	1	94.556	51.390	.000
FACEVALU	.100	1	.100	.054	.816
FNLPRICE	5.625	1	5.625	3.057	.082
2-way Interactions	2.431	3	.810	.440	.724
BRAND FACEVALU	.100	1	.100	.054	.816
BRAND FNLPRICE	2.025	1	2.025	1.101	.296
FACEVALU FNLPRICE	.306	1	.306	.166	.684
3-way Interactions	13.806	1	13.806	7.504	.007
BRAND FACEVALU FNLPRICE	13.806	1	13.806	7.504	.007
Explained	116.519	7	16.646	9.047	.000
Residual	279.675	152	1.840		
Total	396.194	159	2.492		

\*\*\* CELL MEANS \*\*\*

Q33PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

TOTAL POPULATION

4.03  
( 160)

		FNLPRICE	
		1	2
FACEVALU	1	4.08 ( 40)	3.80 ( 40)
	2	4.15 ( 40)	4.08 ( 40)

\*\*\* ANALYSIS OF VARIANCE \*\*\*

Q33PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
<b>Main Effects</b>	<b>8.075</b>	<b>3</b>	<b>2.692</b>	<b>1.018</b>	<b>.387</b>
BRAND	5.625	1	5.625	2.127	.147
FACEVALU	1.225	1	1.225	.463	.497
FNLPRICE	1.225	1	1.225	.463	.497
<b>2-way Interactions</b>	<b>10.800</b>	<b>3</b>	<b>3.600</b>	<b>1.361</b>	<b>.257</b>
BRAND FACEVALU	.400	1	.400	.151	.698
BRAND FNLPRICE	10.000	1	10.000	3.781	.054
FACEVALU FNLPRICE	.400	1	.400	.151	.698
<b>3-way Interactions</b>	<b>9.025</b>	<b>1</b>	<b>9.025</b>	<b>3.412</b>	<b>.067</b>
BRAND FACEVALU FNLPRICE	9.025	1	9.025	3.412	.067
<b>Explained</b>	<b>27.900</b>	<b>7</b>	<b>3.986</b>	<b>1.507</b>	<b>.169</b>
<b>Residual</b>	<b>402.000</b>	<b>152</b>	<b>2.645</b>		
<b>Total</b>	<b>429.900</b>	<b>159</b>	<b>2.704</b>		

\* \* \* C E L L M E A N S \* \* \*

Q39PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

TOTAL POPULATION

3.46  
( 160)

		FNLPRICE	
		1	2
FACEVALU			
1		3.05 ( 40)	3.50 ( 40)
2		3.85 ( 40)	3.45 ( 40)

\* \* \* A N A L Y S I S O F V A R I A N C E \* \* \*

Q39PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
<b>Main Effects</b>	<b>6.550</b>	<b>3</b>	<b>2.183</b>		
BRAND	.900	1	.900	.805	.493
FACEVALU	5.625	1	5.625	2.074	.152
FNLPRICE	.025	1	.025	.009	.924
<b>2-way Interactions</b>	<b>14.525</b>	<b>3</b>	<b>4.842</b>		
BRAND FACEVALU	6.400	1	6.400	1.785	.152
BRAND FNLPRICE	.900	1	.900	.332	.565
FACEVALU FNLPRICE	7.225	1	7.225	2.664	.105
<b>3-way Interactions</b>	<b>.400</b>	<b>1</b>	<b>.400</b>		
BRAND FACEVALU FNLPRICE	.400	1	.400	.147	.702
<b>Explained</b>	<b>21.475</b>	<b>7</b>	<b>3.068</b>		
<b>Residual</b>	<b>412.300</b>	<b>152</b>	<b>2.713</b>	<b>1.131</b>	<b>.347</b>
<b>Total</b>	<b>433.775</b>	<b>159</b>	<b>2.728</b>		

\* \* \* C E L L M E A N S \* \* \*

Q45PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

TOTAL POPULATION

3.68  
( 160)

		FNLPRICE	
		1	2
FACEVALU			
1		4.40	3.78
	( 40)	( 40)	
2		3.29	3.25
	( 40)	( 40)	

\* \* \* A N A L Y S I S O F V A R I A N C E \* \* \*

Q45PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
<b>Main Effects</b>	<b>49.807</b>	<b>3</b>	<b>16.602</b>	<b>8.542</b>	<b>.000</b>
BRAND	18.701	1	18.701	9.622	.002
FACEVALU	26.651	1	26.651	13.712	.000
FNLPRICE	4.456	1	4.456	2.292	.132
<b>2-way Interactions</b>	<b>6.869</b>	<b>3</b>	<b>2.290</b>	<b>1.178</b>	<b>.320</b>
BRAND FACEVALU	.798	1	.798	.411	.523
BRAND FNLPRICE	2.678	1	2.678	1.378	.242
FACEVALU FNLPRICE	3.393	1	3.393	1.746	.188
<b>3-way Interactions</b>	<b>.541</b>	<b>1</b>	<b>.541</b>	<b>.278</b>	<b>.599</b>
BRAND FACEVALU FNLPRICE	.541	1	.541	.278	.599
<b>Explained</b>	<b>57.216</b>	<b>7</b>	<b>8.174</b>	<b>4.206</b>	<b>.000</b>
<b>Residual</b>	<b>295.426</b>	<b>152</b>	<b>1.944</b>		
<b>Total</b>	<b>352.642</b>	<b>159</b>	<b>2.218</b>		

\* \* \* C E L L M E A N S \* \* \*

Q51PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

TOTAL POPULATION

4.15  
( 160)

		FNLPRICE	
		1	2
FACEVALU	1	4.52 ( 40)	4.53 ( 40)
	2	3.45 ( 40)	4.10 ( 40)

\* \* \* A N A L Y S I S O F V A R I A N C E \* \* \*

Q51PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
<b>Main Effects</b>	<b>26.835</b>	<b>3</b>	<b>8.945</b>	<b>3.810</b>	<b>.011</b>
BRAND	.218	1	.218	.093	.761
FACEVALU	22.425	1	22.425	9.552	.002
FNLPRICE	4.193	1	4.193	1.786	.183
<b>2-way Interactions</b>	<b>4.325</b>	<b>3</b>	<b>1.442</b>	<b>.614</b>	<b>.607</b>
BRAND FACEVALU	.028	1	.028	.012	.914
BRAND FNLPRICE	.105	1	.105	.045	.833
FACEVALU FNLPRICE	4.193	1	4.193	1.786	.183
<b>3-way Interactions</b>	<b>.390</b>	<b>1</b>	<b>.390</b>	<b>.166</b>	<b>.684</b>
BRAND FACEVALU FNLPRICE	.390	1	.390	.166	.684
<b>Explained</b>	<b>31.550</b>	<b>7</b>	<b>4.507</b>	<b>1.920</b>	<b>.070</b>
<b>Residual</b>	<b>356.830</b>	<b>152</b>	<b>2.348</b>		
<b>Total</b>	<b>388.380</b>	<b>159</b>	<b>2.443</b>		

This hypothesis was not supported by the data. None of the items showed a significant interaction between face value and the manner in which the offer is stated on price perception. Perception of price for brands featured on high value coupons

does not seem to decrease when the coupon features both the face value and the final price to be shown.

However, for two of the items, “When regularly priced, this product is more expensive than most brands” and “I can get this product at a low price without a coupon offer”, there are significant three-way interactions between all three independent variables, as shown in the following tables:

\* \* \* C E L L M E A N S \* \* \*

Q29PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

TOTAL POPULATION

4.46  
( 160)

FNLPRICE = 1

		FACEVALU	
		1	2
BRAND			
	1	5.55	5.05
		( 20)	( 20)
	2	3.70	4.28
		( 20)	( 20)

FNLPRICE = 2

		FACEVALU	
		1	2
BRAND			
	1	4.90	5.40
		( 20)	( 20)
	2	3.78	3.00
		( 20)	( 20)

\* \* \* A N A L Y S I S O F V A R I A N C E \* \* \*

Q29PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	100.281	3	33.427	18.167	.000
BRAND	94.556	1	94.556	51.390	.000
FACEVALU	.100	1	.100	.054	.816
FNLPRICE	5.625	1	5.625	3.057	.082
2-way Interactions	2.431	3	.810	.440	.724
BRAND FACEVALU	.100	1	.100	.054	.816
BRAND FNLPRICE	2.025	1	2.025	1.101	.296
FACEVALU FNLPRICE	.306	1	.306	.166	.684
3-way Interactions	13.806	1	13.806	7.504	.007
BRAND FACEVALU FNLPRICE	13.806	1	13.806	7.504	.007
Explained	116.519	7	16.646	9.047	.000
Residual	279.675	152	1.840		
Total	396.194	159	2.492		

\* \* \* C E L L M E A N S \* \* \*

Q33PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

TOTAL POPULATION

4.03  
( 160)

FNLPRICE = 1  
FACEVALU

BRAND	1	2
1	4.20 ( 20)	3.90 ( 20)
2	3.95 ( 20)	4.40 ( 20)

FNLPRICE = 2  
FACEVALU

BRAND	1	2
1	3.95 ( 20)	4.80 ( 20)
2	3.65 ( 20)	3.35 ( 20)

\* \* \* A N A L Y S I S O F V A R I A N C E \* \* \*

Q33PRICE  
BY BRAND  
FACEVALU  
FNLPRICE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
<b>Main Effects</b>	<b>8.075</b>	<b>3</b>	<b>2.692</b>	<b>1.018</b>	<b>.387</b>
BRAND	5.625	1	5.625	2.127	.147
FACEVALU	1.225	1	1.225	.463	.497
FNLPRICE	1.225	1	1.225	.463	.497
<b>2-way Interactions</b>	<b>10.800</b>	<b>3</b>	<b>3.600</b>	<b>1.361</b>	<b>.257</b>
BRAND FACEVALU	.400	1	.400	.151	.698
BRAND FNLPRICE	10.000	1	10.000	3.781	.054
FACEVALU FNLPRICE	.400	1	.400	.151	.698
<b>3-way Interactions</b>	<b>9.025</b>	<b>1</b>	<b>9.025</b>	<b>3.412</b>	<b>.067</b>
BRAND FACEVALU FNLPRICE	9.025	1	9.025	3.412	.067
<b>Explained</b>	<b>27.900</b>	<b>7</b>	<b>3.986</b>	<b>1.507</b>	<b>.169</b>
<b>Residual</b>	<b>402.000</b>	<b>152</b>	<b>2.645</b>		
<b>Total</b>	<b>429.900</b>	<b>159</b>	<b>2.704</b>		

These three-way interactions are significant at  $P=0.007$  and  $P=0.067$  with  $F=7.504$  and  $F=3.412$  respectively. It would seem from the interpretation of the graph of this interaction (see figure 4 and figure 5) that when the brand is a familiar one, in this case Sensor, perception of price becomes more positive with the magnitude of the face value when the offer states only the face value, and decreases with the magnitude of the face value when the offer states both the face value and the price to be paid.

This contrasts sharply with what happens to price perception for the brand with lower familiarity. When the brand featured is less familiar, Perception of price becomes more positive as the face value increases when the coupon offer states both the face value and the price, but decreases as the magnitude of the face value increases when the offer states only the face value.

The most plausible explanation for this phenomenon is that price expectations of familiar brands are in general higher than for unfamiliar brands. When the price is stated on the coupon for a familiar brand, price expectations are adjusted downward, with subjects using the discount price shown on the coupon to adjust price expectations. Similarly, the subjects' expectations of price of the unfamiliar brand were quite low, and the additional information provided by the inclusion of price on the coupon adjusted their price perceptions more positively.

This significant three-way interaction serves to support the theory that the price to be paid, when shown on coupons has a significant effect on perception of price.

**H<sub>10</sub>: The intention to use the coupon to purchase the featured brand will be greater, the greater the coupon face value, but significantly more so for familiar brands than for unfamiliar brands.**

\*\*\* CELL MEANS \*\*\*

INTENT  
BY BRAND  
FACEVALU  
FNLPRICE

TOTAL POPULATION

3.72  
( 160)

		FACEVALU	
		1	2
BRAND			
	1	3.41 ( 40)	4.48 ( 40)
	2	3.39 ( 40)	3.59 ( 40)

		FACEVALU	
		1	2
FNLPRICE = 1			
BRAND			
	1	3.65 ( 20)	4.37 ( 20)
	2	3.13 ( 20)	3.81 ( 20)

		FACEVALU	
		1	2
FNLPRICE = 2			
BRAND			
	1	3.17 ( 20)	4.60 ( 20)
	2	3.65 ( 20)	3.36 ( 20)

\* \* \* A N A L Y S I S   O F   V A R I A N C E   \* \* \*

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
INTENT BY BRAND FACEVALU FNLPRICE					
Main Effects	24.567	3	8.189	4.628	.004
BRAND	8.311	1	8.311	4.697	.032
FACEVALU	16.171	1	16.171	9.139	.003
FNLPRICE	.084	1	.084	.047	.828
2-way Interactions	8.122	3	2.707	1.530	.209
BRAND   FACEVALU	7.715	1	7.715	4.360	.038
BRAND   FNLPRICE	.251	1	.251	.142	.707
FACEVALU FNLPRICE	.156	1	.156	.088	.767
3-way Interactions	7.084	1	7.084	4.004	.047
BRAND   FACEVALU FNLPRICE	7.084	1	7.084	4.004	.047
Explained	39.772	7	5.682	3.211	.003
Residual	268.950	152	1.769		
Total	308.722	159	1.942		

This hypothesis is supported by the data, with a significant interaction between familiarity with the brand and face value ( $F=4.36$ ,  $P=0.038$ ). The implication is that whether a brand enjoys high or low familiarity, different relative face values must be used in order to generate the same levels of intention to use the coupon. Specifically, intention to use the coupon does not increase as dramatically with face value for unfamiliar brands as for familiar brands (see figure 6).

There is also a significant ( $P=0.047$ ) three-way interaction between the face value, the familiarity with the brand, and the way in which the offer is stated. (See figure 7). When the offer states both the face value and the price to be paid, there is no interaction between face value and familiarity with the brand. However, when only the face value is shown on the coupon, there is a significant interaction between these

two variables. When only the face value is shown, intention to use the coupon for the familiar brand increases dramatically as the magnitude of the face value increases. Intention to use the coupon for the unfamiliar brand does not increase, and in fact decreases very slightly, as the magnitude of the face value increases.

**H<sub>11</sub>: The liking for the offer will be greater, the greater the coupon face value,  
but significantly more so for familiar brands than for unfamiliar brands.**

\*\*\* C E L L M E A N S \*\*\*

LIKEOFFR  
BY BRAND  
FACEVALU  
FNLPRICE

TOTAL POPULATION

4.03  
( 160)

		FACEVALU	
		1	2
BRAND			
	1	3.50 ( 40)	4.67 ( 40)
	2	3.76 ( 40)	4.19 ( 40)

		FACEVALU	
		1	2
BRAND			
	1	3.69 ( 20)	4.59 ( 20)
	2	3.57 ( 20)	4.40 ( 20)

		FACEVALU	
		1	2
BRAND			
	1	3.31 ( 20)	4.75 ( 20)
	2	3.95 ( 20)	3.98 ( 20)

\* \* \* A N A L Y S I S O F V A R I A N C E \* \* \*

BY    LIKEOFFR  
       BRAND  
       FACEVALU  
       FNLPRICE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	26.294	3	8.765	10.177	.000
BRAND	.504	1	.504	.586	.445
FACEVALU	25.613	1	25.613	29.740	.000
FNLPRICE	.177	1	.177	.205	.651
2-way Interactions	5.769	3	1.923	2.233	.087
BRAND   FACEVALU	5.507	1	5.507	6.394	.012
BRAND   FNLPRICE	.083	1	.083	.097	.756
FACEVALU FNLPRICE	.179	1	.179	.208	.649
3-way Interactions	4.573	1	4.573	5.310	.023
BRAND   FACEVALU FNLPRICE	4.573	1	4.573	5.310	.023
Explained	36.637	7	5.234	6.077	.000
Residual	130.909	152	.861		
Total	167.545	159	1.054		

There is a significant interaction ( $F=6.394$ ,  $P=0.012$ ) between the familiarity with the brand and the magnitude of the face value on liking of the offer. For the brand with the lower familiarity, increases in face value did not generate dramatically higher liking for the offer. Mean liking for the offer at \$0.40 was 3.76, and at \$1.00, it was 4.19. For the brand with higher familiarity, liking for the offer grew from 3.50 to 4.67, a much greater increase (see figure 8). Consumers will like coupon offers if the savings are good, but they will like it even more if they are familiar with the featured brand, for the same reasons as those listed in previous hypotheses and also because the greater the familiarity of the brand, the lower the costs of switching because the brand may have already been tried in the past.

There was also a significant ( $F=5.310$ ,  $P=0.023$ ) three way interaction of the independent variables on liking for the offer, which is not surprising since the same was true for intention to use the coupon (see figure 9).

Again, when the offer included both the face value and the price to be paid, there was no interaction whatsoever between the familiarity brand shown and the magnitude of the face value. However, when the coupon showed only the face value, the liking for the coupon offer for the unfamiliar brand did not change as the magnitude of the face value increased, while the liking for the offer for the familiar brand grew sharply as face value increased.

*Other Hypotheses*

**H<sub>12</sub>: There is a strong inverse correlation between the dependent variables (psychological value, liking for the brand, liking for the offer, perception of price, perception of quality and intention to use the offer) and degree of perceived risk associated with the featured product.**

Correlations of dependent variables with RISK:

PSYVALUE	-.2145*
LIKEBRND	-.3655**
LIKEOFFR	-.2912**
Q29PRICE	-.1684
Q33PRICE	.0233
Q39PRICE	.1275
Q45PRICE	.0272
Q51PRICE	.2302*
QUALITY	-.3457**
INTENT	-.1770

N of cases: 160                      1-tailed Signif: \* - .01    \*\* - .001

Analysis of correlations showed that higher degrees of psychological value, liking for the brand and offer, and perception of quality of the featured product were all inversely correlated with lower the perceived risk in buying the brand.

This would seem to support the idea that liking for the brand, liking for the offer and perception of quality of the brand may vary with familiarity at least in part because lower degrees of perceived risk are associated with higher degrees of liking for the brand and perception of quality.

However, there was no significant correlation between perceived risk and intention to use the coupon. The conclusion is that while intention to use the coupon varies significantly with the degree of familiarity with the featured product, it does not seem to be because of the degree of perceived risk associated with that product.

**H<sub>13a</sub>: The degree of positive psychological effect of using a coupon consumers experience will be greater, the greater the magnitude of the coupon face value, and this response will not vary depending on the degree of coupon proneness.**

\*\*\* CELL MEANS \*\*\*

PSYVALUE  
BY FACEVALU  
PRONE

TOTAL POPULATION

3.71  
( 160)

FACEVALU  
1 2  
3.45 3.98  
( 80) ( 80)

PRONE  
1 2  
3.43 4.33  
( 109) ( 51)

PRONE  
1 2  
FACEVALU  
1 3.25 4.00  
( 58) ( 22)  
2 3.63 4.59  
( 51) ( 29)

\*\*\* ANALYSIS OF VARIANCE \*\*\*

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	36.466	2	18.233	21.567	.000
FACEVALU	8.005	1	8.005	9.469	.002
PRONE	25.459	1	25.459	30.114	.000
2-way Interactions	.365	1	.365	.432	.512
FACEVALU PRONE	.365	1	.365	.432	.512
Explained	36.831	3	12.277	14.522	.000
Residual	131.881	156	.845		
Total	168.713	159	1.061		

This hypothesis is supported by the data. There is no significant interaction effect ( $F=0.432$  and  $P=0.512$ ) between these characteristics of the consumer - coupon proneness - and face value of the coupon. In other words, the positive psychological value generated by the magnitude of the face value of the coupon does not change depending on the degree of coupon proneness or value consciousness; conversely, the degree of positive psychological value generated by being highly coupon prone does not change depending on face value.

The subject's degree of coupon proneness itself did have significant main effects on the subject's degree of positive psychological effect ( $F=30.114$  and  $P=0.000$ ). This indicates that the characteristics of the consumer him or herself will have a main effect on the positive psychological value associated to the use of the coupon. The more coupon prone the respondent is, the better they will feel if they use the coupon. The strength of the relationship as measured by  $\omega^2$  is 0.145.

**H<sub>13b</sub>: The degree of positive psychological effect of using a coupon consumers experience will be greater, the greater the magnitude of the coupon face value, more so for more value conscious subjects.**

\*\*\* CELL MEANS \*\*\*

PSYVALUE  
BY FACEVALU  
VALUCONS

TOTAL POPULATION

3.71  
( 160)

FACEVALU

1 2

3.45 3.98  
( 80) ( 80)

VALUCONS

1 2

3.56 3.89  
( 85) ( 75)

VALUCONS

1 2

FACEVALU

1 3.33 3.58  
( 41) ( 39)

2 3.77 4.23  
( 44) ( 36)

\*\*\* ANALYSIS OF VARIANCE \*\*\*

PSYVALUE  
BY FACEVALU  
VALUCONS

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	16.107	2	8.054	8.256	.000
FACEVALU	11.562	1	11.562	11.852	.001
VALUCONS	5.099	1	5.099	5.228	.024
2-way Interactions	.431	1	.431	.442	.507
FACEVALU VALUCONS	.431	1	.431	.442	.507
Explained	16.538	3	5.513	5.651	.001
Residual	152.175	156	.975		
Total	168.713	159	1.061		

This hypothesis is not supported. Similar to  $H_{13a}$ , there is no interaction effect between value consciousness and face value on psychological value at  $F=0.442$  and  $P= 0.507$ .

This would seem to indicate that psychological value varies positively with both coupon proneness and value consciousness, and that for both these groups, psychological value varies with face value to the same degree whether one is highly coupon prone or value conscious or not.

Just as in  $H_{13a}$ , psychological value of using the coupon varies with the subject's degree of value consciousness, although at a lesser degree of significance ( $P= 0.024$ ). The more value conscious the respondent is, the better they will feel if they use the coupon.

**H<sub>14a</sub>: For coupon prone consumers, the degree of positive psychological effect of using a coupon consumers experience will be greater when the offer states only the face value than when it states both the face value and the price to be paid.**

\*\*\* CELL MEANS \*\*\*

PSYVALUE  
BY FNLPRICE  
PRONE

TOTAL POPULATION

3.71  
( 160)

FNLPRICE

1	2
3.81 ( 80)	3.62 ( 80)

PRONE

1	2
3.43 ( 109)	4.33 ( 51)

PRONE	
	1            2
FNLPRICE	
1	3.69    4.08 ( 55)   ( 25)
2	3.15    4.57 ( 54)   ( 26)

\*\*\* ANALYSIS OF VARIANCE \*\*\*

PSYVALUE  
BY FNLPRICE  
PRONE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
<b>Main Effects</b>	<b>30.226</b>	<b>2</b>	<b>15.113</b>	<b>18.243</b>	<b>.000</b>
FNLPRICE	1.765	1	1.765	2.131	.146
PRONE	28.646	1	28.646	34.578	.000
<b>2-way Interactions</b>	<b>9.250</b>	<b>1</b>	<b>9.250</b>	<b>11.165</b>	<b>.001</b>
<b>FNLPRICE PRONE</b>	<b>9.250</b>	<b>1</b>	<b>9.250</b>	<b>11.165</b>	<b>.001</b>
<b>Explained</b>	<b>39.476</b>	<b>3</b>	<b>13.159</b>	<b>15.883</b>	<b>.000</b>
Residual	129.237	156	.828		
Total	168.713	159	1.061		

This hypothesis is supported. The manner in which the offer is stated alone is not enough to be responsible for a variation in the psychological value derived from using a coupon, but in conjunction with the degree of coupon proneness of the respondent, it is important (see figure 10 for graph). This is evidenced by an interaction with  $F=11.165$  and  $P= 0.001$ . While showing the price to be paid along with the face value does not result in lowered psychological value, psychological value grows much more with the increase in face value when only the face value is shown.

Highly coupon prone consumers probably pay less attention to the value of the offer, and instead concentrate on the savings in isolation from the price. To state the final price to be paid on the coupon probably detracts from the positive psychological effects of using the coupon by reminding the coupon prone consumers that he or she has to spend to save.

**H<sub>14b</sub>: For value conscious consumers, the degree of positive psychological effect of using a coupon consumers experience will not vary with the manner in which the offer is stated.**

\*\*\* CELL MEANS \*\*\*

PSYVALUE  
BY FNLPRICE  
VALUCONS

TOTAL POPULATION

3.71		
( 160)		

FNLPRICE

1	2	
3.81	3.62	
( 80)	( 80)	

VALUCONS

1	2	
3.56	3.89	
( 85)	( 75)	

	VALUCONS	
	1	2
FNLPRICE		
1	3.68	3.96
	( 42)	( 38)
2	3.44	3.82
	( 43)	( 37)

\*\*\* ANALYSIS OF VARIANCE \*\*\*

PSYVALUE  
BY FNLPRICE  
VALUCONS

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
<b>Main Effects</b>	<b>6.059</b>	<b>2</b>	<b>3.030</b>	<b>2.907</b>	<b>.058</b>
FNLPRICE	1.514	1	1.514	1.453	.230
VALUCONS	4.479	1	4.479	4.298	.040
<b>2-way Interactions</b>	<b>.093</b>	<b>1</b>	<b>.093</b>	<b>.089</b>	<b>.766</b>
FNLPRICE VALUCONS	.093	1	.093	.089	.766
<b>Explained</b>	<b>6.152</b>	<b>3</b>	<b>2.051</b>	<b>1.968</b>	<b>.121</b>
<b>Residual</b>	<b>162.561</b>	<b>156</b>	<b>1.042</b>		
<b>Total</b>	<b>168.713</b>	<b>159</b>	<b>1.061</b>		

This hypothesis is supported. Value conscious consumers are probably much more aware of regular prices and of the value that given face values offer, and so the manner in which the offer is stated would be of less importance in creating a variation in psychological value for highly value conscious consumers. That is confirmed, as there is no significant interaction ( $F=0.089$  and  $P=0.766$ ) between the manner in which the offer is stated and value consciousness.

The reminder of the final price to be paid is probably less of a surprise to the value conscious consumer, therefore not negatively affecting how “good they feel” about taking advantage of the offer.

**H<sub>15a</sub>: Liking for the coupon advertisement itself will be greater, the greater the magnitude of the coupon face value, but not more so for more highly coupon prone subjects.**

\*\*\* CELL MEANS \*\*\*

LIKEOFFR  
BY FACEVALU  
PRONE

TOTAL POPULATION

	4.03	
( 160)		

FACEVALU

1	2
3.63	4.43
( 80)	( 80)

PRONE

1	2
3.80	4.52
( 109)	( 51)

	PRONE	
	1	2
FACEVALU		
1	3.41	4.20
	( 58)	( 22)
2	4.24	4.76
	( 51)	( 29)

\*\*\* ANALYSIS OF VARIANCE \*\*\*

LIKEOFFR  
BY FACEVALU  
PRONE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	39.748	2	19.874	24.374	.000
FACEVALU	21.955	1	21.955	26.927	.000
PRONE	14.134	1	14.134	17.335	.000
2-way Interactions	.601	1	.601	.737	.392
FACEVALU PRONE	.601	1	.601	.737	.392
Explained	40.349	3	13.450	16.495	.000
Residual	127.196	156	.815		
Total	167.545	159	1.054		

As hypothesized, there is no interaction between face value and coupon proneness ( $F=0.737$  and  $P=0.392$ ), supporting the idea that coupon prone consumers don't pay attention to the value offered any more than low coupon prone consumers.

Coupon proneness has significant ( $F=17.335$  and  $P=0.000$ ) main effects on liking for the offer itself. This suggests that coupon prone consumers have a more positive evaluation of offers in general than value conscious consumers, regardless of face value.

**H<sub>15b</sub>: Liking for the coupon advertisement itself will be greater, the greater the magnitude of the coupon face value, but more so for more highly value conscious subjects.**

\*\*\* CELL MEANS \*\*\*

LIKEOFFR  
BY FACEVALU  
VALUCONS

TOTAL POPULATION

4.03  
( 160)

FACEVALU

1 2

3.63 4.43  
( 80) ( 80)

VALUCONS

1 2

3.94 4.13  
( 85) ( 75)

VALUCONS

1 2

FACEVALU

1 3.65 3.61  
( 41) ( 39)

2 4.22 4.69  
( 44) ( 36)

\*\*\* ANALYSIS OF VARIANCE \*\*\*

LIKEOFFR  
BY FACEVALU  
VALUCONS

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	27.439	2	13.719	15.573	.000
FACEVALU	26.093	1	26.093	29.619	.000
VALUCONS	1.826	1	1.826	2.072	.152
2-way Interactions	2.677	1	2.677	3.039	.083
FACEVALU VALUCONS	2.677	1	2.677	3.039	.083
Explained	30.116	3	10.039	11.395	.000
Residual	137.429	156	.881		
Total	167.545	159	1.054		

This hypothesis is supported by the data. There is an interaction (at  $F=3.039$  and  $P=0.083$ ) between face value and value consciousness on liking for the offer. Those subjects who exhibited relatively high value consciousness tended to like the coupon offer more when it was \$1.00 than relatively low value conscious subjects. Therefore, the more highly value conscious the subject, the more important face value is in their assessment of liking for the offer. (For graph of interaction, see figure 11).

It is of interest to note that value consciousness itself, unlike coupon proneness, has no significant main effects on liking for the offer ( $F=2.072$  and  $P=0.152$ ). In other words, being highly value conscious does not imply that one will evaluate offers any more positively than low value conscious consumers. The opposite is true of coupon prone consumers: coupon proneness itself affects liking for the offer.

**H<sub>16a</sub>: For coupon prone subjects, the intention to use the coupon to purchase the featured brand will not vary significantly with the coupon face value.**

\*\*\* CELL MEANS \*\*\*

INTENT  
BY FACEVALU  
PRONE

TOTAL POPULATION

3.72  
( 160)

FACEVALU

1 2

3.40 4.04  
( 80) ( 80)

PRONE

1 2

3.42 4.35  
( 109) ( 51)

PRONE

1 2

FACEVALU

1 3.13 4.11  
( 58) ( 22)

2 3.76 4.53  
( 51) ( 29)

\*\*\* ANALYSIS OF VARIANCE \*\*\*

INTENT  
BY FACEVALU  
PRONE

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	41.891	2	20.945	12.262	.000
FACEVALU	12.443	1	12.443	7.284	.008
PRONE	25.719	1	25.719	15.057	.000
2-way Interactions	.357	1	.357	.209	.648
FACEVALU PRONE	.357	1	.357	.209	.648
Explained	42.248	3	14.083	8.244	.000
Residual	266.474	156	1.708		
Total	308.722	159	1.942		

This hypothesis is supported by the data. A two-way analysis of variance reveals that even though face value and coupon proneness each have significant main effects on the subject's intention to use the coupon (at  $P=0.008$  and  $P=0.000$  respectively), there is no interaction effect ( $F=0.209$  and  $P=0.648$ ) between the two. This means that highly coupon prone consumers do not evaluate face values differently from low coupon prone subjects in forming their intention to purchase. The main effects demonstrate that the face value does impact the intention to use the coupon, and this impact does not vary depending on whether the respondent was or was not coupon prone.

This is somewhat consistent with the literature which describes the coupon prone consumer to feel a predisposition to use coupons regardless of their value overall in the buy.

**H<sub>16b</sub>: For value conscious subjects, the intention to use the coupon to purchase the featured brand will be greater, the greater the coupon face value.**

\*\*\* CELL MEANS \*\*\*

INTENT  
BY FACEVALU  
VALUCONS

TOTAL POPULATION

3.72  
( 160)

FACEVALU

1 2

3.40 4.04  
( 80) ( 80)

VALUCONS

1 2

3.56 3.89  
( 85) ( 75)

VALUCONS

1 2

FACEVALU

1 3.41 3.38  
( 41) ( 39)

2 3.70 4.44  
( 44) ( 36)

\*\*\* ANALYSIS OF VARIANCE \*\*\*

INTENT  
BY FACEVALU  
VALUCONS

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	21.081	2	10.541	5.835	.004
FACEVALU	16.825	1	16.825	9.314	.003
VALUCONS	4.910	1	4.910	2.718	.101
2-way Interactions	5.840	1	5.840	3.233	.074
FACEVALU VALUCONS	5.840	1	5.840	3.233	.074
Explained	26.921	3	8.974	4.968	.003
Residual	281.801	156	1.806		
Total	308.722	159	1.942		

This hypothesis is supported by the data. The magnitude of the face value did influence value conscious consumers in a significant way to have a higher intention to use the coupon ( $F=3.233$  and  $P=0.074$ , see figure 12). Value conscious consumers are described as taking face values into consideration in making their decisions first about whether the coupon is a good value, and second about their intention to use the coupon. Unlike coupon prone consumers, value consciousness does not have any significant main effects ( $P=0.101$ ) on intention to use the coupon. In other words, high value conscious consumers don't respond in general with a greater intention to use a coupon than low value conscious coupon.

This may be because value conscious consumers can at once have a high degree of liking for an offer, yet not have intention to act upon their liking for the offer, either because they don't need the product, or they insist upon their preferred brand, for example.

**H<sub>17</sub>: A subject's positive evaluation of the coupon offer itself can have an impact on their positive evaluation of the brand featured on coupon.**

```
Correlations: LIKEBRND
              LIKEOFFR    .4126**
N of cases:   160          1-tailed Signif: * - .01 ** - .001
```

Correlation analysis uncovered that there is a highly significant positive correlation (0.416, at a 0.001 level of significance) between liking for the coupon offer, and liking for the featured brand. This result would seem to support Hahn et al's (1995) suggestion that a consumer's evaluation of the featured brand can be affected by the consumer's like (or dislike) of a coupon offer.

However, one can't find cause from correlation. The evaluation of the coupon could influence the evaluation of the brand, or the evaluation of the brand could influence the evaluation of the coupon.

**H<sub>18</sub>: The subject's actual choice of brands will be positively correlated with the brand to which he was exposed in the coupon advertisement.**

```
Correlations:  BRAND
                BRNDPICK  -.0445
N of cases:    160          1-tailed Signif:  * - .01  ** - .001
```

This hypothesis is not supported by the data. Choice of brand does not vary significantly ( $P=0.205$ ) with brand exposure. Furthermore, there was no significant correlation between brand choice and intention to use the coupon, or brand choice and liking for the advertised brand.

What is most likely at work in the brand choice decision is that the choice was made in the classroom situation, and may have been influenced by the actions and comments of other subjects as they made their brand choice decisions.

Another possible explanation is that the brand that was overwhelmingly chosen, Sensor, benefits from a broadcast advertising campaign. If measurements had been taken about familiarity for both the advertised brand and the alternate brand, familiarity with the chosen brand, as opposed to just the advertised brand, might serve to explain this behaviour. The conclusion to be drawn is that familiarity is extremely important to brand choice.

## **Conclusions**

Although some of the hypotheses presented were not supported by the data, enough were supported to come to the conclusion that the manipulated independent variables familiarity with the brand, face value, and manner in which the offer is stated all played a role in the subject's perceptions. Furthermore, the measured independent variables of coupon proneness and value consciousness served as important explanatory variables in uncovering important interactions. Figure 13 provides a summary table of all analyses of variance that were examined.

### ***Impact of familiarity with the brand featured on the coupon***

Familiarity with the brand revealed itself to be important in the determination of liking for the brand, perception of quality of the advertised brand, and intention to use the coupon. Familiarity with the brand also had main effects on perceived price for two of the five measurement items, with price perceptions of more familiar brands being more positive.

Furthermore, familiarity, with its implications about greater levels of information about a product, significantly affects a subject's level of perceived risk in using a coupon to purchase the featured brand. Perceived risk varied significantly, and was lower, the greater the subject's familiarity with the advertised brand.

Much of the literature points to perceived risk as an important mediating factor in explaining why consumers would be more likely to use a coupon for a given brand, and this was tested here. The findings showed that there was a strong inverse correlation between perceived risk and liking for the brand and perceived quality of the brand. In other words, the lower the risk, the higher the liking for the brand, and the higher the perceived quality, which would seem to indicate that familiar brands may be liked, and be perceived to be of high quality because the perceived risk is low. There was no such significant correlation with intention to use the coupon. These findings suggest that while familiarity is indeed important in a consumer's intention to use a coupon, it is unlikely to be due to the degree of perceived risk.

Familiarity with the brand had no main effects on liking for the offer and psychological effect of using the coupon, indicating that liking an offer and "feeling good about" using it does not depend on familiarity with the featured brand.

#### ***Impact of magnitude of the face value***

As coupons are in themselves economic incentives, it was expected that face value would be one of the most important independent variable studied here. Where familiarity had no main effects on psychological value and liking for the offer, magnitude of the face value does.

Psychological effect of using a coupon, liking for the coupon offer, and intention to use the coupon all vary significantly with the magnitude of the coupon

face value. Further, two of the measures of perception of price also varied with the face value, with higher face values leading to less positive price perceptions.

Some literature suggests that the magnitude of face values may in itself be related to changes in perception of price of the featured brands, and this study showed that face value alone had significant main effects on perception of price, and that higher face values tended to lead to both lower price perceptions, although clearly the lack of a good measurement scale for price perceptions is a limitation of the study.

These findings in themselves are not surprising, but the interactions that were found were of extreme interest.

For example, highly value conscious subjects liked the coupon offer less than low value conscious subjects when the offer had a \$0.40 face value, but when the offer was for \$1.00, they liked the offer significantly more than low value conscious subjects. This implies that highly value conscious consumers will be more driven by the content of an offer, as opposed to feeling a “commitment to the coupon” as research suggests that coupon prone consumers do. This is supported further by the fact that no such interaction exists among low or high coupon prone consumers, who don't evaluate the \$0.40 coupons significantly differently than the \$1.00 offer. This is explainable because value conscious consumers by definition spend more effort in determining the worth of the coupon offer, as opposed to highly coupon prone consumers, who tend to express liking for the coupon regardless of whether the coupon is actually offering superior value. Value conscious consumers need to assess the actual value provided by the coupon prior to their assessment of liking for the offer.

This tendency also applies to the value conscious consumer's intention to use the coupon, as the same interaction with face value exists.

In contrast, there is no significant interaction between face value and value consciousness on psychological value of using a coupon, although both these independent variables each have main effects on psychological value. This goes against Henderson's theory (1990) that highly value conscious consumers are not motivated by psychological incentives and most by economic incentives, since value consciousness has main effects on psychological value (when value consciousness increases, so does positive psychological effect). Furthermore, there being no interaction between value consciousness and face value also discounts that value conscious consumers are motivated more by economic incentives. The problem with Henderson's remarks may simply be that the two concepts of economic and psychological incentive are not mutually exclusive. For example, the psychological incentive is born from the economic savings, making it difficult to separate them in a cut and dry manner.

### ***Impact of the manner in which the offer is stated***

Taken alone, the manner in which the offer is stated has no significant main effects on liking for the brand or offer, psychological effect of using the coupon, perception of quality, perception of price, or intention to use the coupon. In concert with certain other independent variables, however, it serves to produce some telling interactions.

The manner in which the offer is stated also becomes important to the psychological effect of using the coupon when also considered with coupon proneness and value consciousness. Highly coupon prone consumers have dramatically higher positive psychological effect when the price is not stated on the coupon. This is different from low coupon prone consumers, whose positive psychological effect is only slightly higher when the coupon states only the face value and not the price. The coupon prone consumer tends to focus in on the face value alone when using a coupon, and having the final price to be paid right on the coupon probably detracts from the enjoyment of the savings and reminds the respondent that they're spending money.

Finally, there are significant three-way interactions between the face value, the familiarity with the brand, and the way in which the offer is stated on four of the dependent variables: perception of quality, liking for the offer, intention to use the coupon, and two of the price perception items.

When it comes to both liking for the offer and intention to use the coupon, there is no interaction between the brand familiarity and face value when the offer states both the face value and the price. When the offer states only the face value, a significant interaction occurs: while liking for the offer and intention to use it stay relatively flat or declining as face value increases for the unfamiliar brand, they increase dramatically for the familiar brand.

A possible explanation for this is that when a consumer is familiar with a product, his or her intention is to buy that product, with or without a coupon. The intention to use the coupon hinges solely on that consumer's evaluation of whether the savings offered on the coupon exceed the costs of having to clip, save, and use the coupon. When the price is included on the coupon along with the face value, a consumer is better able to ascertain the percentage discount the coupon offers, enabling a better decision about the value of \$0.40 or \$1.00 on the selling price. When the coupon states only the face value, and the consumer does not know whether the deal amount offered is good or not because of their lack of knowledge of the brand and its price, then increasing face value does not increase liking for the offer or the intention to use the offer.

Perception of quality does not vary at all with face value when the brand is unfamiliar. Interestingly, when the brand is familiar, perception of quality decreases when the final price is stated, and increases when only the face value is stated.

The three-way interaction on perception of price is equally interesting. When the brand is familiar, perception of price becomes more positive as face values increase when the coupon states only the face value, and become less positive as face values increase when the price is stated on the coupon. This is an indication that consumers use the information provided on the coupon advertisement in forming their price perceptions. On the other hand, when the brand is less familiar, price perception increases as face values increase when the offer states both the face value and the price, and decreases with the magnitude of the face value when the coupon states only the face value. These findings indicate that the subject's price expectations of the less familiar brand were less positive, meaning that because they did not know the brand, they presumed that the brand was relatively inexpensive, cheaper. Including the price information in this case served to adjust price expectations positively.

### ***Other findings***

Further to findings about the manipulated independent variables, the study also allowed for some peripheral questions to be answered in general about coupon usage which are useful to the practitioner.

Specifically, it was found that there is a strong positive correlation between liking for the offer and liking for the brand. Although one cannot find cause from correlation, these findings are important in the respect that the offer may possibly affect a consumer's liking for the brand, as well as liking for the brand affecting liking for the offer.

A final finding of interest was that the brand to which the subjects were exposed during the course of testing seemed to have no effect upon their choice of the free sample they chose. Overwhelmingly, the students picked the brand which enjoyed high familiarity over the brand to which they'd been exposed to on the coupon. This would seem to indicate what marketers probably already believe - that a single exposure to a coupon is not enough to make a dent in a consumer's familiarity with a brand, to influence or persuade brand choice when all things are held equal in competition with familiar brand.

### **Discussion of limitations**

The limitations of this study hinged upon three main issues. The first was the lack of reliability of a measurement scale for price perception. Fortunately, individual tests on the six items designed to measure price perception when significant were consistent in terms of results. Second, although the subjects used in this study were homogeneous group, their knowledge of prices for this category appeared to be limited. Should a separate study be conducted, the use of students would be recommended against unless a different product category were used. This group tended to exhibit a lack of knowledge of price and ranged their estimates of the price of a pack of blades from \$1.00 to \$9.00. This is probably because a large majority are not the household shopper, and don't have first hand knowledge of the purchase price, even though they are users of the product category. For further research, perhaps

chocolate bars or compact disks might be a more appropriate choice to get more accurate price perceptions.

The choice of product for this study presents another possible limitation. The brands Gillette Sensor and CustomPlus were chosen because they are existing products on the blades & razors market which enjoy very different levels of familiarity, media support, and market share. The two products were shown in different sizes; Sensor 5's and CustomPlus 10's happen to have the same retail price. The problems that might exist here are two-fold. First, Sensor is a permanent system blade, and CustomPlus is a disposable razor, and these two forms may or may not have inherent variances in perception of quality in themselves. Secondly, since 5's were chosen for Sensor and 10's for CustomPlus, so that the price would be the same for the pack, these difference in sizes may have affected the price perception of the product. For example, one might expect to pay more for a pack of 10 blades than a pack of 5 blades, regardless of brand and form. It should be noted that each subject was exposed to either one or the other brands, and so there was no ability to compare the two products. However, the possible impact of these differences cannot be ignored since it is possible they may have added some degree of confounding to the results related to familiarity with the brand on quality perception and price perception.

## **Managerial Implications**

Probably the most significant of managerial implications from this study is the fact that consumers tend to take the stated discount price on the coupon as their internal reference price for the product, even though they seem to be aware of the regular price. The attitude seems to be that in comparison to the featured price, the regular price is no longer a “good price”.

In reacting to this understanding the marketing practitioner using high face values should try to ensure that only the face value appears on the coupons, lest the consumer should learn what the lowest available retail price is for a given brand. This implication is further supported by the finding that for highly coupon prone consumers, the psychological value of using a coupon offer is dramatically higher for the coupon when only the face value is stated. And yet another reason to avoid stating the regular and final price on a coupon offer, perception of quality of the featured product for high value coupons is slightly higher when the offer states only the face value than when it states the face value and the regular and feature price.

Another interesting finding is that liking for the offer and intention to use a coupon is very much affected by whether or not the final price is stated on the coupon, when taken into account with familiarity of the brand and face value. When the face value is low on an unfamiliar brand, intention to use the coupon is very low. However, intention to use the coupon for the same offer is much higher when that

offer includes regular price. The learning is that if the intention is to generate trial with a coupon offer on a new product, and only a small face value is offered, and the face value and the regular and feature price should be shown.

Put another way, if the brand is a familiar one, the marketer should be aware that higher face values generate much higher intention to use the coupon and if the brand is unfamiliar. Also, if the brand is unfamiliar, it's preferable to include both the face value and the price on the coupon, as this generates a higher level of intention in general for low familiarity brands, and because for lower familiarity brands, showing only the face value and increasing face values won't necessarily generate more redemptions, just cost more for each redemption. This is important to know, because in many coupon forms, the marketer cannot state the final price to be paid due to their national, non-account specific nature, such as free-standing inserts.

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# Exhibits and Figures

## Questionnaire

***Thank you for participating in our study. Your answers are important to us. Please follow the instructions below.***

1. Please indicate which of these categories best describes your usage of store coupons in the past 12 months:

(1)	(2)	(3)	(4)	(5)	(6)
Never	once or twice	On occasion (more than twice)	once a month	Every few weeks	Every week
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*For each of the following statements, please indicate on the scale provided the degree to which you agree with each statement, giving your rating from Strongly Disagree (1) to Strongly Agree (7).*

	Strongly Disagree	1	2	3	4	5	6	Strongly Agree
2. Redeeming coupons makes me feel good.	<input type="checkbox"/>							
3. I am very concerned about low prices, but I am equally concerned about product quality.	<input type="checkbox"/>							
4. I enjoy clipping coupons out of newspapers.	<input type="checkbox"/>							
5. When grocery shopping, I compare the prices of different brands to be sure I get the best value for the money.	<input type="checkbox"/>							
6. When I use coupons, I feel that I am getting a good deal.	<input type="checkbox"/>							
7. I enjoy using coupons, regardless of the amount that I save by doing so.	<input type="checkbox"/>							
8. I have favourite brands, but most of the time, I buy the brand I have a coupon for.	<input type="checkbox"/>							
9. When I buy products, I like to be sure that I'm getting my money's worth.	<input type="checkbox"/>							
10. I am more likely to buy a brand for which I have a coupon.	<input type="checkbox"/>							
11. I generally shop around for lower prices on products, but they still must meet certain quality requirements before I'll buy them.	<input type="checkbox"/>							
12. When purchasing a product, I always try to maximize the quality I get for the money I spend.	<input type="checkbox"/>							

*For each of the following statements, please indicate on the scale provided the degree to which you agree with each statement, giving your rating from Strongly Disagree (1) to Strongly Agree (7).*

	Strongly Disagree	1	2	3	4	5	6	Strongly Agree	7
13. Coupons often cause me to buy products I normally would not buy.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
14. When I shop, I usually compare the price per kg information for brands I normally buy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
15. Beyond the money I save, redeeming coupons gives me a sense of joy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
16. I always check prices at the grocery store to be sure I get the best value for the money I spend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

***Please refer to the advertisement on the following page in answering questions #17 to #63.***

**UNPAIR**

**\$1.00**

**each without coupon**

**each with coupon**

**Custom Plus 10 razors**

Limit one coupon per item per customer. Taxes applicable on price before discount.

77802503

**UNIPRIX**

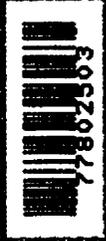
**40¢**

**each without coupon**

**each with coupon**

**Custom Plus 10 razors**

Limit one coupon per item per customer. Taxes applicable on price before discount.



**\$1.00**

**UNIPAR**

**Custom Plus  
10 razors**

Limit one coupon per  
item per customer.  
Taxes applicable on price  
before discount.

Plus  
Plus



**UNIPRA**

**40¢**

**Custom Plus  
10 razors**

Limit one coupon per  
item per customer.  
Taxes applicable on price  
before discount.



**\$1.00**

**UNEPAN**

**Gillette**

**Sensor 5**

**Cartridges**

each with coupon

each without coupon

Limit one coupon per item per customer. Taxes applicable on price before discount.

77802503

**UNIPAK**

**40¢**

**Gillette**

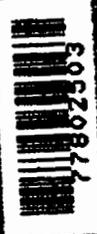
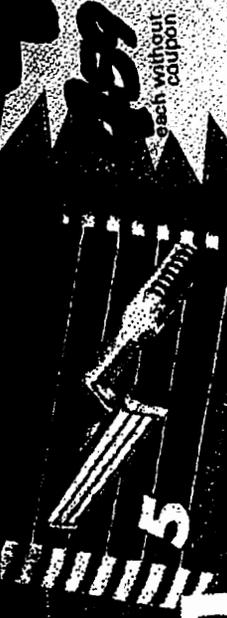
**Sensor 5**

**Cartridges**

each with coupon

each without coupon

Limit one coupon per item per customer. Taxes applicable on price before discount.



**\$1.00**

**Gillette**



**Sensor 5  
Cartridges**

Limit one coupon per  
item per customer.  
Taxes applicable on price  
before discount.

**UNIPAIN**



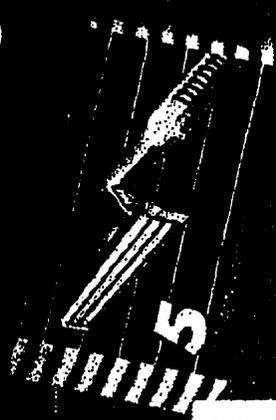
**UNIPAIN**

**40¢**

**gillette**

**Sensor 5 Cartridges**

Limit one coupon per item per customer. Taxes applicable on price before discount.



5



For each of the following statements, please indicate on the scale provided the degree to which you agree with each statement, giving your rating from Strongly Disagree (1), to Strongly Agree (7).

	Strongly Disagree						Strongly Agree	
	1	2	3	4	5	6	7	
17. This is one of the best known brands in its product category.	<input type="checkbox"/>							
18. This product is unique.	<input type="checkbox"/>							
19. This is a pretty good offer for the advertised product.	<input type="checkbox"/>							
20. I have seen this brand advertised.	<input type="checkbox"/>							
21. A person who would use this coupon to buy the brand would be a very smart shopper.	<input type="checkbox"/>							
22. For this brand, a \$0.40 coupon makes it worth as much effort to use the coupon as a \$1.00 coupon.	<input type="checkbox"/>							
23. There is no risk that this brand won't be as good as any other brand on the market.	<input type="checkbox"/>							
24. This coupon offer is attractive.	<input type="checkbox"/>							
25. I would like to try this product.	<input type="checkbox"/>							
26. When you purchase a pack of blades, it's hard to make a bad choice.	<input type="checkbox"/>							
27. Once I decide I'm going to purchase this brand, using a coupon to buy it is just an added "bonus".	<input type="checkbox"/>							
28. When you purchase a pack of blades, it's not a big deal if you make a mistake.	<input type="checkbox"/>							
29. When regularly priced, this product is more expensive than most brands.	<input type="checkbox"/>							
30. This offer would motivate me to buy the advertised product.	<input type="checkbox"/>							
31. The cost of blades is too high to experiment - I think that it's better to stick with what I know is a good product.	<input type="checkbox"/>							
32. This product is of high quality.	<input type="checkbox"/>							
33. I can get this product at a low price without a coupon offer.	<input type="checkbox"/>							
34. This brand is always good value for the money.	<input type="checkbox"/>							
35. This brand will perform extremely well.	<input type="checkbox"/>							

For each of the following statements, please indicate on the scale provided the degree to which you agree with each statement, giving your rating from Strongly Disagree (1), to Strongly Agree (7).

	Strongly Disagree		1	2	3	4	5	6	Strongly Agree	
36. If I received this coupon offer, I would definitely use it to buy the advertised brand.	<input type="checkbox"/>									
37. The savings amount offered on this coupon is very good.	<input type="checkbox"/>									
38. This product is well made.	<input type="checkbox"/>									
39. This brand is only affordable if there is a coupon offer or it's on sale.	<input type="checkbox"/>									
40. If I used this coupon to save money on the brand, I'd probably treat myself to another item I wanted in the store.	<input type="checkbox"/>									
41. I'd be very pleased if a family member saved money by using the coupon for this brand.	<input type="checkbox"/>									
42. If I were to use this coupon to make the purchase of this brand, I'd feel very good about it.	<input type="checkbox"/>									
43. I would get excited if I was able to save money on this brand by merely clipping and saving this coupon.	<input type="checkbox"/>									
44. Going out of one's way to clip, save, and use this coupon seems a little foolish.	<input type="checkbox"/>									
45. Even with this coupon, this brand is expensive.	<input type="checkbox"/>									
46. If I bought this brand and it didn't perform very well, it would be awful.	<input type="checkbox"/>									
47. This coupon offer is a good opportunity to save money.	<input type="checkbox"/>									
48. The savings on this coupon isn't really worth the effort of clipping and saving it.	<input type="checkbox"/>									
49. Anybody should want to use this coupon to buy the brand.	<input type="checkbox"/>									
50. I don't believe there is much difference in the performance of the different brands in this product category.	<input type="checkbox"/>									
51. Thanks to this coupon offer, I could get this brand at a much lower price than other regularly priced brands.	<input type="checkbox"/>									
52. I was aware of the brand.	<input type="checkbox"/>									
53. I like the packaging for this product.	<input type="checkbox"/>									

For each of the following statements, please indicate on the scale provided the degree to which you agree with each statement, giving your rating from Strongly Disagree (1), to Strongly Agree (7).

	Strongly Disagree	1	2	3	4	5	6	Strongly Agree
54. If I bought this brand and it didn't do as good a job as my regular brand, I would feel very upset.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
55. This coupon offer makes no difference to my intention to buy (or not to buy) the brand.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
56. If all the brands were the same price, this is the one I'd choose.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
57. With this coupon offer, this product will be less expensive than most brands.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
58. I don't think a consumer would be disappointed with the performance of this product.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
59. This brand would definitely satisfy my needs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

60. Please indicate on the scale the category that describes your overall liking for the featured brand. (Please check only one.)

Like strongly	Like	Like somewhat	Neither like nor dislike	Dislike somewhat	Dislike	Dislike strongly
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

61. Please indicate the approximate price you would expect to pay for this product if you found it in the store? \$ \_\_\_\_\_

62. Please indicate on the scale provided how likely you would be to use this coupon. (Please check only one.)

Extremely Likely	Likely	Somewhat likely	Neither likely nor unlikely	Somewhat unlikely	Unlikely	Extremely Unlikely
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

63. Please indicate which of the following categories best describes your previous experience with the product featured in the advertisement. (Please check only one.)

Never tried	Tried once or twice	Use on occasion	Use about half the time	Use most of the time	Only use this brand
(1)	(2)	(3)	(4)	(5)	(6)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*In order that we may classify the information you have provided, we need to ask you a few questions about yourself, which will be kept anonymous and confidential.*

64. What is your age: \_\_\_\_\_

65. What is your sex:

(m) Male  (f) Female

66. Which of the following best describes your current status:

(1) Single, living with parent(s)

(2) Single, not living with parents

(3) Married, or living as though married

67. Please indicate the number of people, including young children, currently living in your household (please indicate the number): \_\_\_\_\_

68. Please check the box which best describes your total household income before taxes:

(1) Under \$15,000

(2) \$15,000 to \$29,999

(3) \$30,000 to \$44,999

(4) \$45,000 to \$59,999

(5) Over \$60,000

# Scale Frequency Coupon Proneness

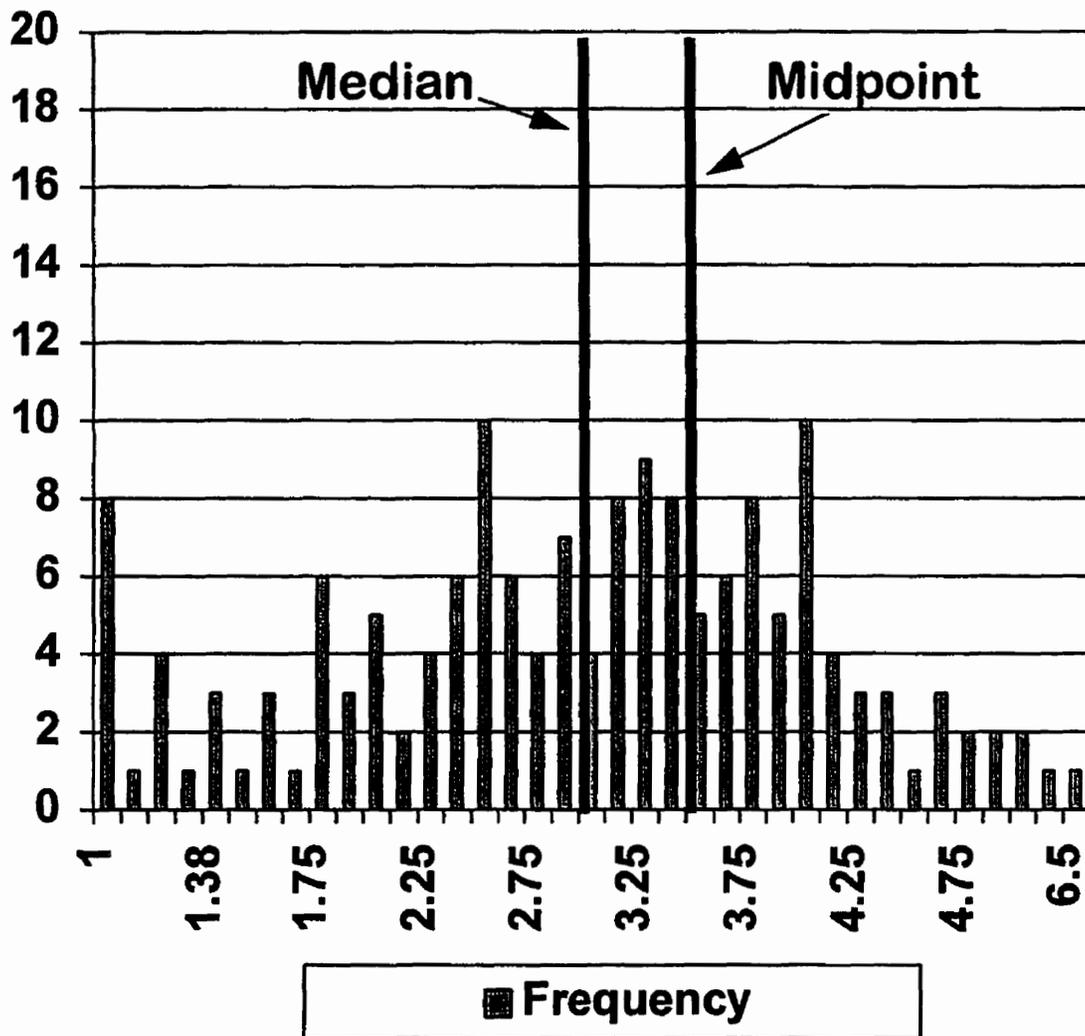


Figure 1

# Scale Frequency Value Consciousness

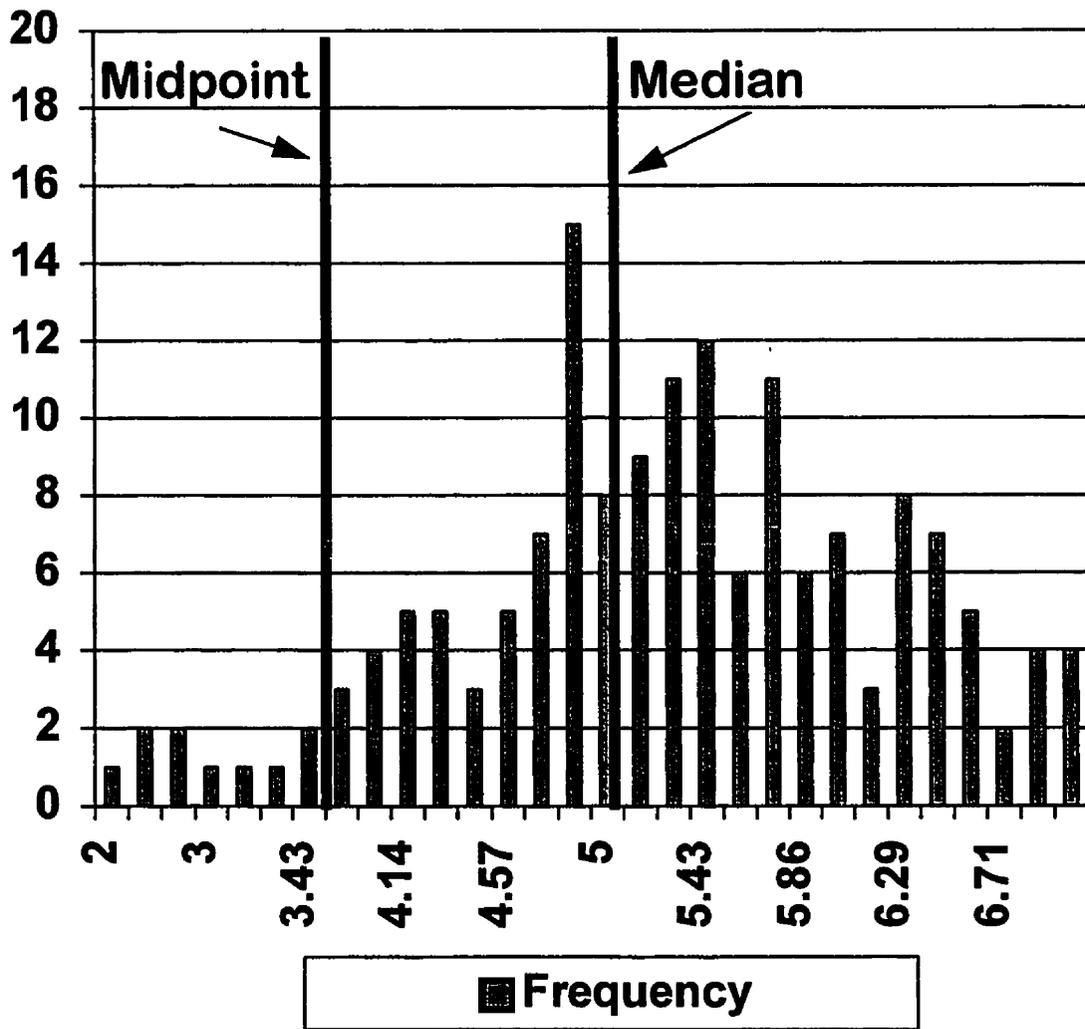
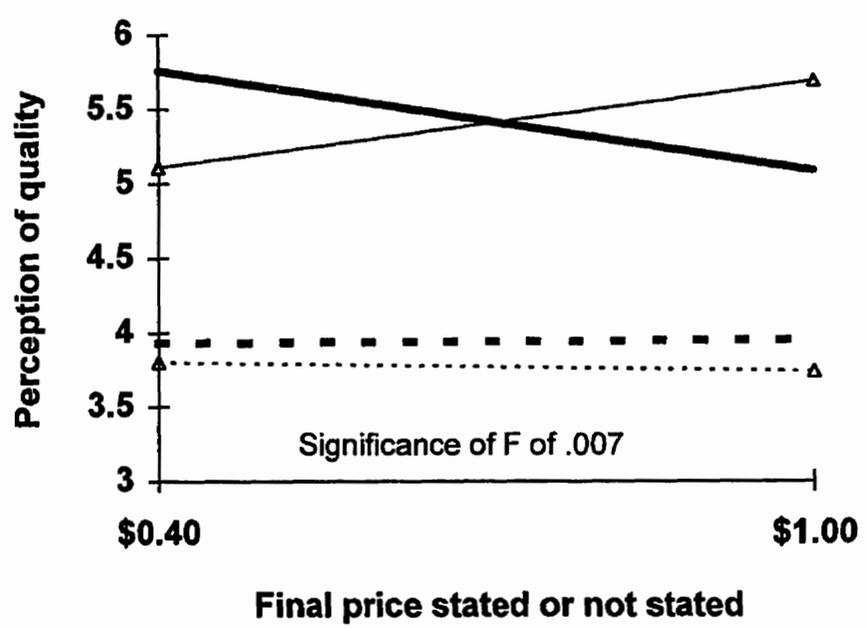


Figure 2

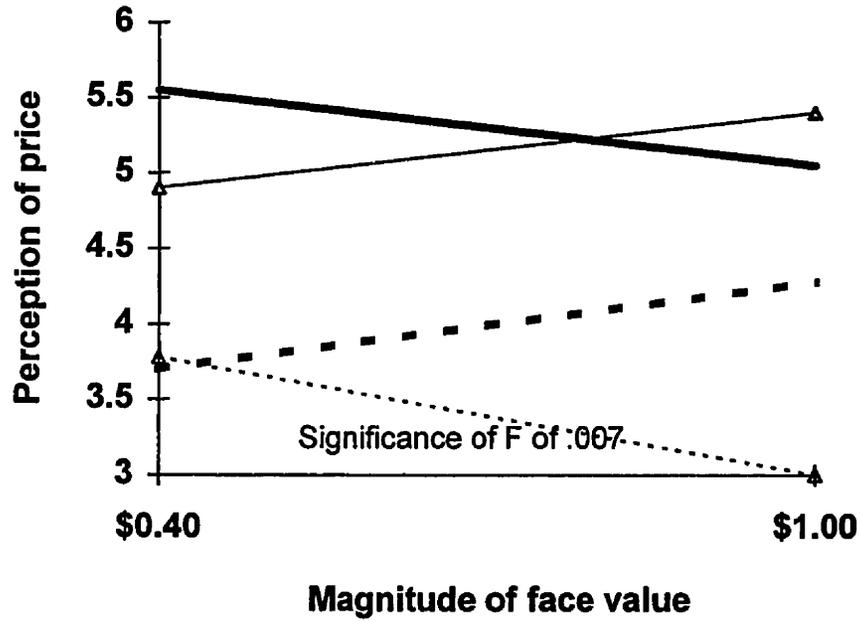
**ANOVA: Quality by  
Brand (1,2) Facevalu (1,2) Fnlprice (1,2)**



—●— High fam., FV+price    - - ■ - - Low fam., FV+price  
—▲— High fam., FV only    ···◆··· Low fam., FV only

Figure 3

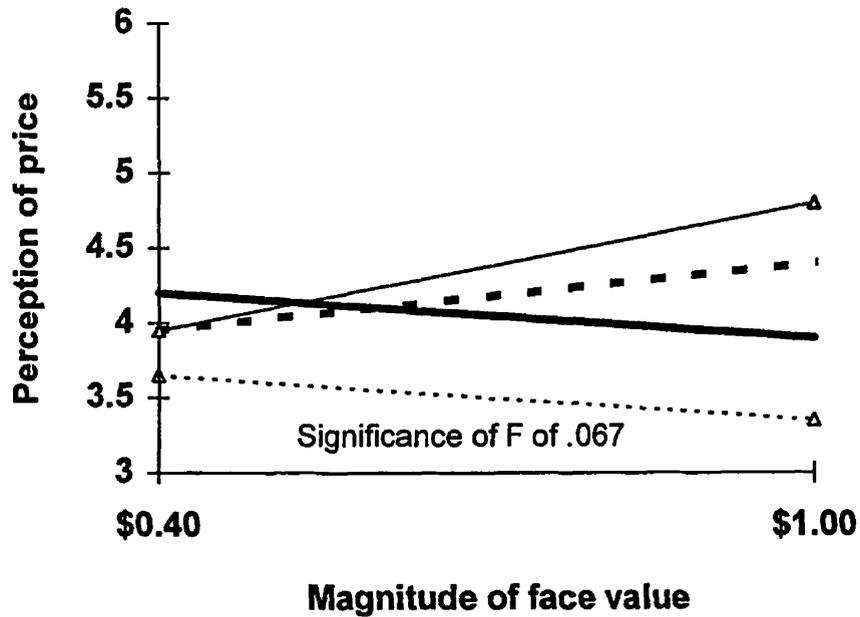
**ANOVA: Q29price by  
Brand (1,2) Facevalu (1,2) Fnlprice (1,2)**



—	High fam., FV+price	- - -	Low fam., FV+price
—△—	High fam., FV only	· · ·△· · ·	Low fam., FV only

Figure 4

**ANOVA: Q33price by  
Brand (1,2) Facevalu (1,2) Fnlprice (1,2)**



— High fam., FV+price    - - Low fam., FV+price  
—△— High fam., FV only    ···△··· Low fam., FV only

Figure 5

**ANOVA: intention  
by Facevalu (1,2) brand (1,2)**

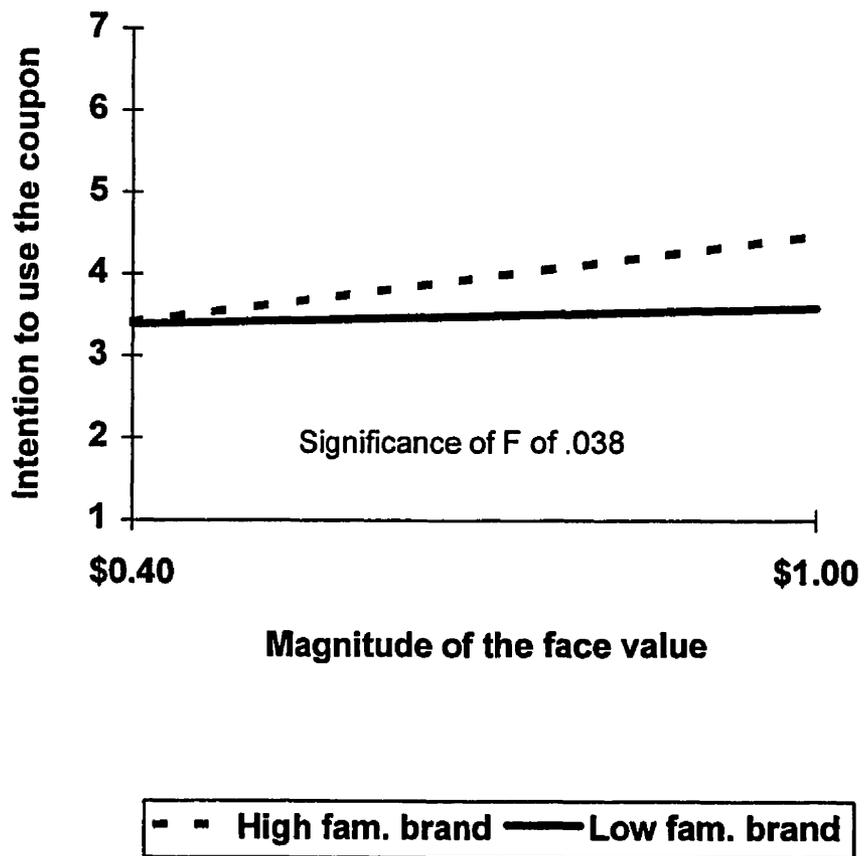


Figure 6

**ANOVA: intention by  
Brand (1,2) Facevalu (1,2) Fn|price (1,2)**

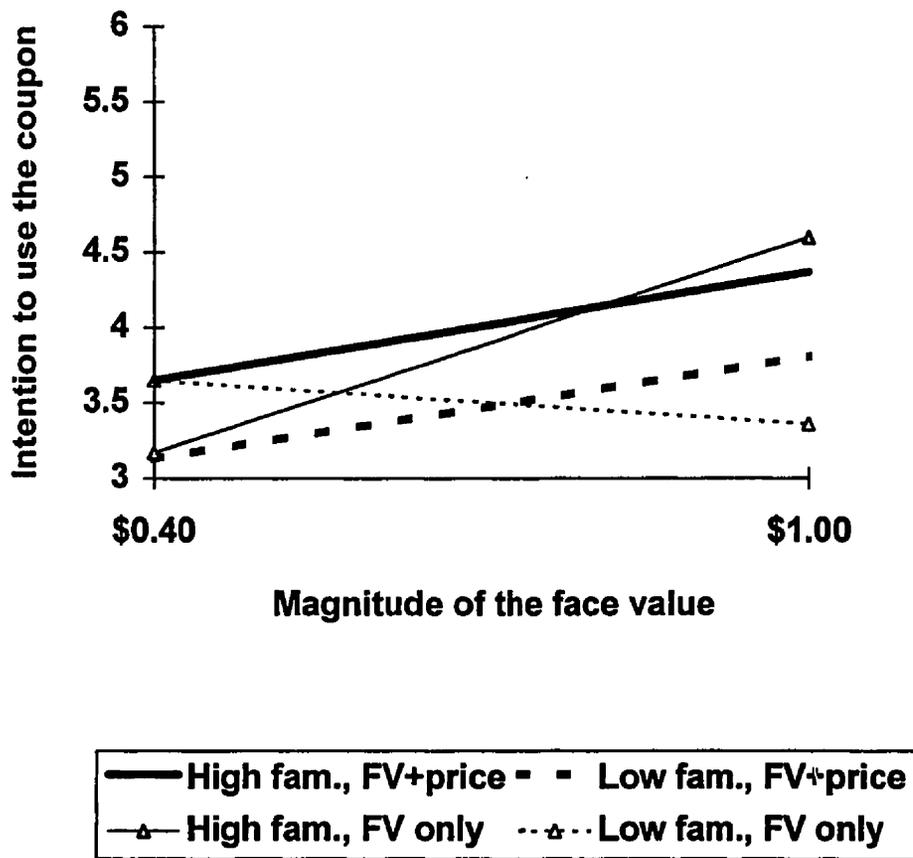


Figure 7

**ANOVA: Liking for the Offer  
by Facevalu (1,2) Fnlprice (1,2)**

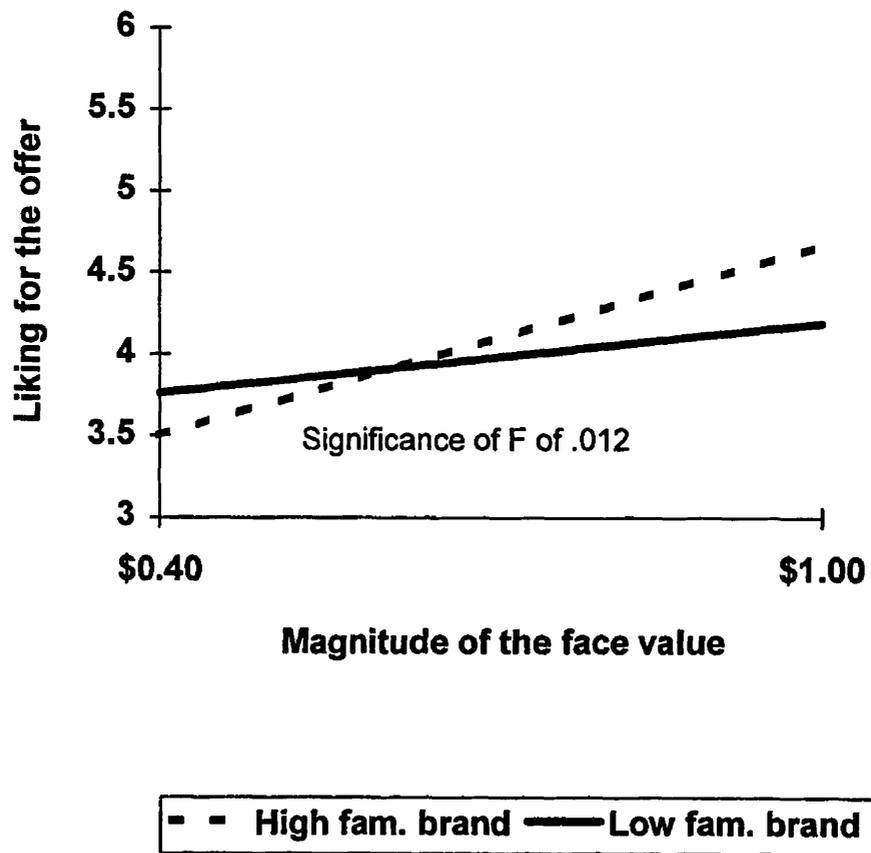
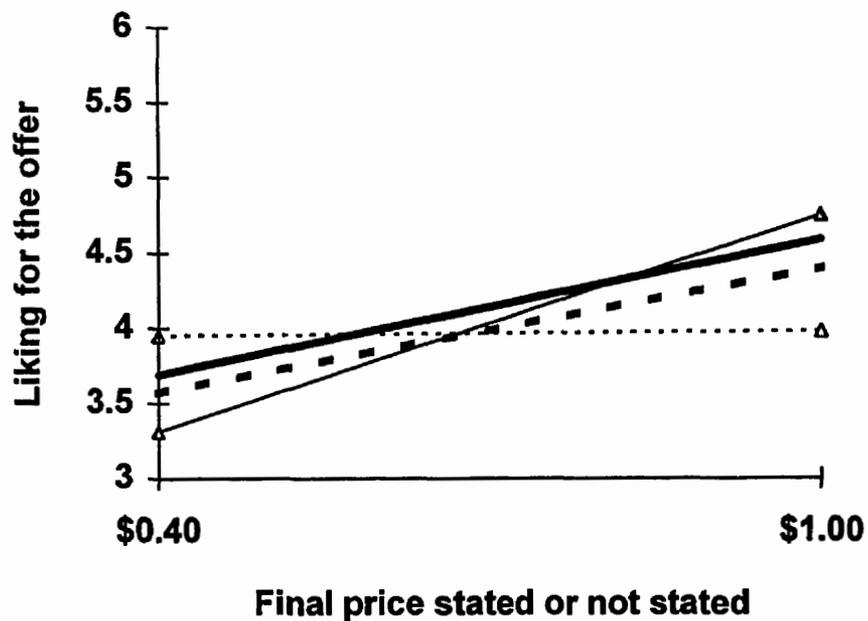


Figure 8

**ANOVA: Liking for the offer by  
Brand (1,2) Facevalu (1,2) Fnprice (1,2)**



—●—	High fam., FV+price	- - -●- - -	Low fam., FV+price
—△—	High fam., FV only	...△...	Low fam., FV only

Figure 9

**ANOVA: Psyval by Prone (1,2) Fnlprice (1,2)**

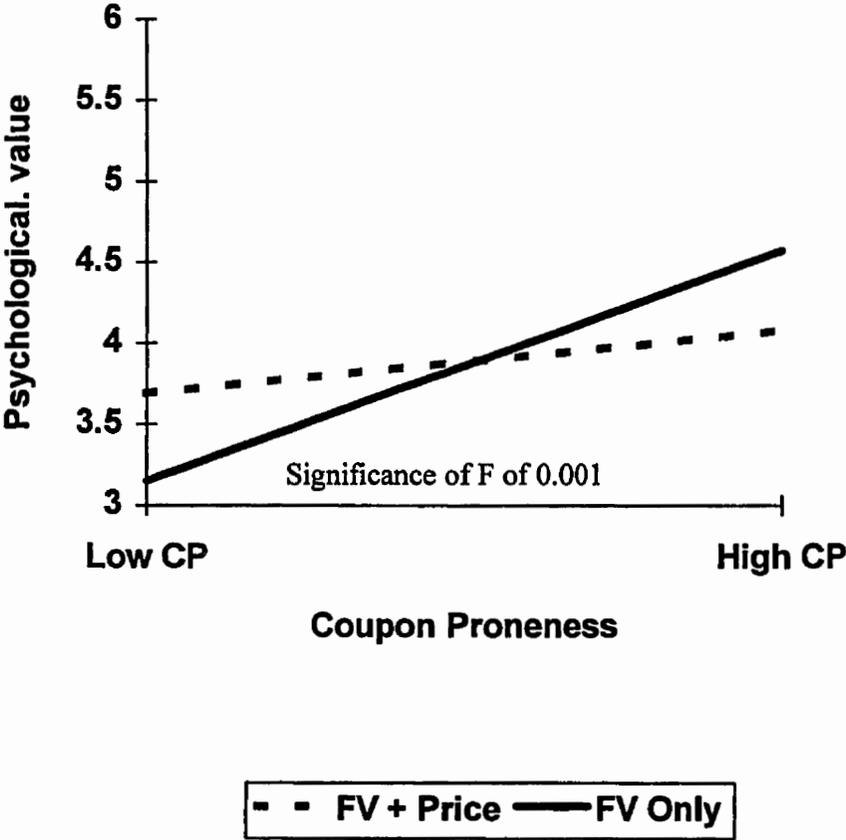


Figure 10

**ANOVA: Likeoffr by Facevalu (1,2) Valucons (1,2)**

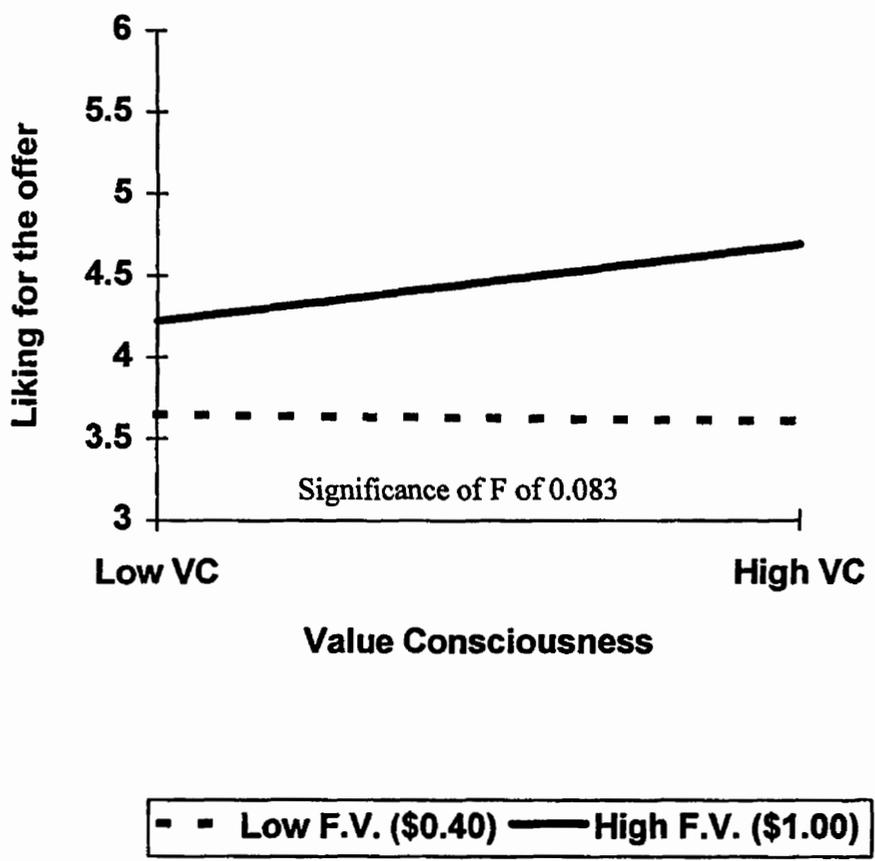


Figure 11

**ANOVA: Intention by  
Facevalu (1,2) Valucons (1,2)**

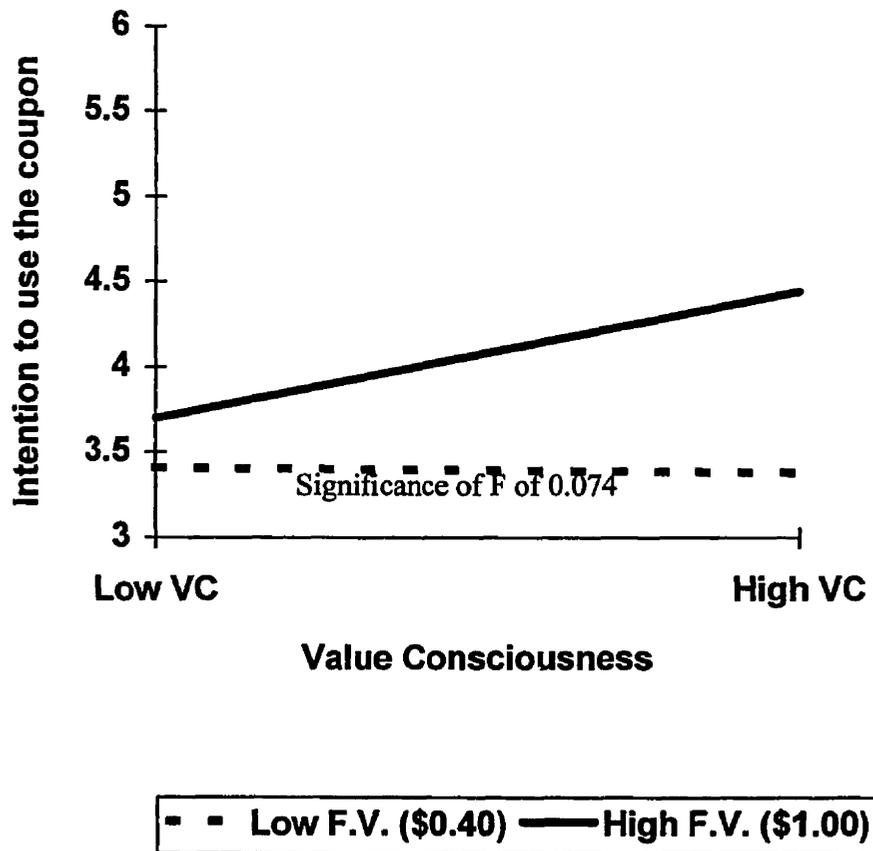


Figure 12

### Summary of ANOVA

	(A) Low vs. high familiarity	(B) Low vs. high \$.40 vs. \$.1 Face value	(C) face value vs FV w/ price Offer statement	Main Effects	2-way Interactions	3-way Interactions	Other Hypotheses
Psychological effect	H1	H1*	H1	H1			(BxC)H13a (BxC)H13b (CxC)H14a* (CxC)H14b
Liking for the brand	H2*	H3*	H3*	H3*	(AxB)H11*	(AxBxC)**	(BxC)H15a (BxC)H15b*
Liking for the offer	H4*	H4	H4	H4*	(BxC)H9	(AxBxC)**	
Q29: When regularly priced, this product is more expensive than most...	H4	H4	H4	H4	(BxC)H9	(AxBxC)**	
Q33: I can get this product at a low price without a coupon offer	H4	H4	H4	H4	(BxC)H9		
Q39: This brand is only affordable if there's a coupon offer or it's on sale	H4*	H4*	H4	H4	(BxC)H9		
Q46: Even with this coupon, this brand is expensive	H4	H4*	H4	H4	(BxC)H9		
Q51: Thanks to this coupon offer, I could get this brand at a lower price...	H5*	H5	H5	H5	(AxB)H8a (BxC)H8b	(AxBxC)**	
Perception of quality	H6*	H6*	H6*	H6*	(AxB)H10*	(AxBxC)**	(BxC)H16a (BxC)H16b*
Intention to use the coupon							
Perception of risk	H7*						

\* = Significant  
\*\* = Not hypothesized, but significant.

Figure 13