## An executive summary for managers and executive readers can be found at the end of this article

## The shopping cart abandonment problem



# Digital redemption of coupons: satisfying and dissatisfying effects of promotion codes 

Richard L. Oliver<br>Professor of Management, Owen School of Management, Vanderbilt University, Nashville, Tennessee, USA<br>Mikhael Shor<br>Assistant Professor of Economics, Owen Graduate School of Management, Vanderbilt University, Nashville, Tennessee, USA

Keywords Online transaction processing, Market segmentation, Promotional coupons, Pricing, Electronic commerce


#### Abstract

Coupons, in the form of "promotion codes", are now a mainstay of the online shopping experience, but online coupon redemption differs substantively from that in traditional retailing. Offline redemption of coupons is customer-initiated while Internet shoppers are usually prompted to enter a code towards the conclusion of the checkout process. This prompting may influence shopper perceptions and behaviors such as shopping cart abandonment. Results showed strong negative effects on price fairness, satisfaction, and purchase completion in the code-absent group and positive effects on fairness and satisfaction in the code-present group. Presents implications for effective market segmentation through the use of online coupon codes.


Few things stir up a consumer revolt quicker than the notion that someone else is getting a better deal (Streitfield, 2000).

The advent of Internet shopping has resulted in a new form of sales promotion. The nearly ubiquitous coupon has been transformed into a digital entity whereby shoppers are often prompted to "enter a promotion code" during the checkout process. Unlike grocery store "plus shopper" or VIC (very important customer) programs, promotion codes are almost invariably placed at the end of the online shopping experience when the total charges are displayed. If a valid code is entered, charges are amended to the reduced price. With the notable exception of grocery stores, most traditional retailers do not incorporate the query "Do you have a coupon?" into the checkout process. Since the very act of asking may cause some form of irritation on the part of those without the means of obtaining a discount, coupon redemption is traditionally customer-initiated. The absence of an analogous freeform checkout process online has led most retailers to incorporate a field in which customers can enter a code prior to finalizing an order.

While substantial attention has been devoted in the marketing literature to traditional coupons and to the delivery of coupons online (e.g. Fortin, 2000), the exponential rise of online commerce necessitates consideration of the redemption of coupons in this new medium. Anecdotal accounts about such promotion codes from online shoppers are mixed. Frequently, consumers without the code and without the means to get one do not complete the purchase, a phenomenon termed the shopping cart abandonment problem. This mimics the case where in-store (offline) shoppers find checkout lines inordinately long and therefore exit, leaving the cart full of groceries in

[^0]Emerald

## Much abandonment is akin to browsing

place. The motivations for these two analogous behaviors are likely to be quite different, however. In the case of the in-store shopper, the frustration of slow lines (or being in the wrong one) may very well be a primary force. In online shopping, no wait is expected as hitting the "Submit" button presents the order to the vendor almost instantaneously. The explanation for online abandonment, then, must be more complex.

Estimates of the rate of shopping cart abandonment range from 25 percent to 75 percent (Perman, 2000), each costing the retailer an estimated $\$ 175$ in lost revenues. While much abandonment is akin to browsing (walking through a number of stores at a shopping center), a BizRate survey of almost 10,000 respondents found that 32 percent of abandoned carts were left just prior to final purchase confirmation, often after the customer had entered billing information (BizRate.com, 2000). Such figures are confirmed by industry executives, one boasting that abandonment at the invoice page is "only 20 percent" (Mullins, 2000, quoting M. McIntosh of Egghead.com). Reasons for abandonment cited by consumers include high shipping costs, comparison shopping or postponement of purchase, dissatisfaction with site design or download speed, and trouble locating delivery or contact information (e.g. Global Millenia Marketing, 2002).

Most of these reasons cited by consumers are "rational" in the sense that they relate to costs, irritation, uncertainty, or search activities. We propose that there exist other motivations for cart abandonment that are less accessible to the consumer, those in the psychological domain. Specifically, we explore the possibility that online exiting may also be based on a perceived inequity or injustice over the fact that others may have a promotion code while the current shopper does not, as suggested by the introductory quote. To an economist, this disparate possession of coupons may be perceived as effective price discrimination but to an applied psychologist, considerations of expected dissatisfaction are also relevant. A shopper who proceeds to complete the sale may never know the amount of savings forgone without the code, the number of other consumers that fortuitously had the code, or the manner in which such codes are obtained or parceled out.

In the offline world, one generally obtains coupons by scouring local newspapers and unsolicited mail. In the online world, search is many orders of magnitude more efficient. Beyond newspapers, direct mail, and other established coupon delivery vehicles traditionally controlled by the issuing companies, many Web sites are now devoted to locating online coupons. These repositories are independent of the firms whose promotions they advertise, and many feature coupon listings updated daily and forums for users to exchange information on new promotions. For example, entering the search term " 1,800 flowers coupon" into Google, a popular Internet search engine, locates thousands of sites offering coupon codes for the popular florist. Examining the search results (Figure 1 suggests that one need not even visit the coupon sites as the codes are clearly visible in the summary provided by the search engine. Unlike traditional coupons, the time costs involved in searching for such promotions, and the very knowledge of their existence, vary greatly with Web knowledge.

For those without such knowledge (and, in the present case, with no means to search), we posit that negative misgivings and the attendant anger over the inequity perceived are also factors that may prompt cart abandonment. In offline environments, consumers feel like they have equal access to coupons and are comfortable not having coupons because they know that they simply chose not to invest the effort in clipping, storing, and reviewing them for

## The perspective of the consumer

Equity continues to be a factor in satisfaction

... 1-800-flowers.com Couporis $\$ 20$ off $\$ 100$ purchase coupon<br>code: DA2, expires: Unknown. 1-800-flowers ...<br>1-800-flowers-com.coupons-coupon-codes.com' - 16k - Cached - Similar pages<br>Red Hot Boutiques: Flowers-Gifts<br>... $\$ 10$ OFF on Tulips. (Report a Badlink) 1-800-FLOWERS.COM * $10 \%$ off $\$ 29.99$<br>Use Coupon Code: IDO. Expires: 07/31/02. (Report a Badlink) 800wine.com ...<br>Whw redhothoutiques.com/Flowers-Gifts/?from=rhss - 2Bk - Cached - Similar pages<br>Flowers online discount coupons, coupon codes and deals<br>... Unknown. Save $10 \%$ off your purchase at 1-800-Flowers.com<br>Coupon Code: 76M Expires: $04 / 15 / 2002$. Save ...<br>Ww 247 coupon.com flowers. html - 23k - Cached - Similar pages<br>1click2save com - Discounts, Online Coupons, Deals and Savings ...<br>... 1-800-FLOWERS.COM $10 \%$ offany purchase - Coupon code 26S Exp. 11/12. 1-800-FLOWERS.COM 10\% off-Coupon code 32H Exp. 12/31. ...<br>WWw 1 click2save com/finance asp - 34 k - Cached - Similar pages

Figure 1.
purchase. However, in online environments, the code equivalent of coupons is a mystery as many shoppers generally do not know how to get them - so codes are "unfair" - and their very existence deters purchase.

We approach this phenomenon from the perspective of the consumer whereby we hypothesize that use of promotion codes can have countervailing effects on the firm's customer base. For those who have a code, it can be satisfying or not dissatisfying depending on the degree to which the customer expects a code. The greater the surprise of receiving a code, the more satisfying code provision is. Alternatively, the greater the surprise of code availability and not having one implies more dissatisfaction and purchase abandonment. Thus, online stores may be turning away customers unwittingly through the use of codes.

A related issue concerns the presentation of the input field when the consumer is asked to provide the code. Popular retail sites vary from a simple field preceded with a "coupon code:" prompt to explicit questions ("Do you have a coupon code?") which may serve to focus attention for a coupon-less customer on the fact that (she)he cannot use this discount. Sites also vary on the code phrasing used, including the most common "promotion code," the less common but more consumer-understandable "coupon code," as well as "discount code," "offer code," and "claim code," among others. A sample of these presentations is provided in Table I. All of these phrases refer to the practice of offering a price reduction. The phrase "discount," however, is the most direct of the three in terms of semantic meaning. All forms of usage of the term "discount," including "discount store," "discounted
merchandise," and "big price discounts" have been in the sales jargon for decades. Note that, generally, a discount implies a global price reduction while a coupon decreases price only for select consumers. We test the effects of prompting for the promotion code with an explicit question to the consumer, as well as testing for the semantic effects of the use of the terms "coupon," "promotion," and "discount."

## Conceptual framework and hypotheses

Equity (and its polar opposite, inequity) has been shown to be a fairly potent determinant of (dis)satisfaction (Oliver, 1997). Having roots in the organizational behavior area, it has migrated to the consumer literature (e.g. Oliver and Swan, 1989) and continues to be a factor in satisfaction, particularly as it pertains to fair pricing (Martins and Monroe, 1994; Ajzen et al., 2000). In fact, expectations of fairness are legitimate components of the

|  | Posed as a question | Posed as a statement |
| :--- | :--- | :--- |
| "Coupon" | Barnes \& Noble | Dell |
|  | Using a coupon? Enter your | Coupon entry |
|  | coupon code and click "Enter | Enter coupon number |
|  | Number" | Gap |
|  | Dewlett Packard | gap.com coupon code: if you |
|  | type in your a coupon? code | have received a gap.com coupon |
|  |  | code ...enter it below |

Table I. Sample phrase selection for promoting for a coupon code at popular Internet retailers
expectation set consumers bring to purchasing (Oliver and Winer, 1987). This is evident in some new forms of auto dealerships that emphasize "no haggle, one price" shopping (e.g. Saturn, CARmax).

Equity can be seen essentially as a fairness concept. While difficult to operationalize, consumers seem to have a sense of what it means without the necessity of performing calculations (e.g. Campbell, 1999). This phenomenon was demonstrated in Oliver and Swan (1989) where consumers formed equity judgments based only on perceptions of their own inputs and outcomes. Generally, their study showed that if the consumer feels that the purchase situation was "fair," satisfaction is enhanced and dissatisfaction is reduced. We focus on the effects of coupon code prompts on consumers' perceptions of whether the price is fair and the effect this may have on other postpurchase concepts.

We would predict that consumers who are prompted for a code (the typical case) and who are provided with one would perceive fairer pricing and consequently be more satisfied than those that are not prompted with a promotion code field, a condition we use as a control. Additionally,

## A secondary prompting effect

## Customers receiving the code may believe that they are "special"

we would predict that those not prompted would be more satisfied than those who are prompted and are not provided with one. We extend this satisfaction analogy to purchase completion, future purchase intention and recommendation to others. This leads us to the following hypotheses:

H1a. Consumers presented with a completed code field will perceive greater price fairness, satisfaction, intention, and purchase completion than those in the control group.
$H 1 b$. Consumers presented with an empty code field (and, by the study design, no means to obtain one) will perceive less price fairness, satisfaction, intention, and completion than those in the control group.

H1c. When the three groups (have code, control, and no code) are analyzed jointly via ANOVA, the predicted ordering of effects will be jointly significant over the dependent variable set.

In addition, we also add a secondary prompting effect. When a prompt is used, specific verbiage is used to draw attention to the code field. Most frequently, this is phrased as "Do you have a promotion (or coupon or discount) code?" Alternatively, the field may be simply preceded by "Offer code:" or similar labels. We believe, further, that the prompting effect will be less salient than the code/no code effect. When the code is missing, the visible empty code field precludes any stimulus ambiguity to the shopper. In the no prompt condition, it is not evident that a query is missing; the respondent does not see an empty query field. Thus, the prompting condition should not dominate the code effect.

We hold two contradictory views of the effects of prompting. On one hand, prompting may make all effects more salient, amplifying the effect of having (or not having) a code in the anticipated direction, akin to an offline retailer asking a customer for a coupon when the customer has one (a reminder - which is good) or does not (a reprimand of sorts - which is bad), as alluded to in the introduction.

However, the very existence of a field to enter a code, absent a query, will likely be noted by all customers. Thus, not prompting may make customers believe that code redemption is "mysterious." Those receiving the code may believe that they are "special" in some sense and may be delighted. Those not receiving the code may feel that they aren't "special" and may wonder why others are - why others get better treatment. Perhaps the proper analogue in the offline world is standing in line when the customer in front of you surreptitiously passes a coupon to the clerk, who acknowledges the transaction with a wink. Thus, the lack of prompting may amplify the effects because the consumer will question the motive behind the code field forming positive (have code) and negative (do not) inferences (cf. Campbell, 1999).

H2a. Consumers presented with a prompted completed (uncompleted) code field will perceive greater (lesser) fairness, satisfaction, intention, and purchase completion than those in the unprompted group.
$H 2 b$. Consumers presented with an unprompted completed (uncompleted) code field will perceive greater (lesser) fairness, satisfaction, intention, and purchase completion than those in the prompted group.

As noted, we hypothesize that the code effect will dominate the prompt effect, but that the additional prompting effect will be moderated by the correctness of $H 2 a$ or $H 2 b$.
$H 2 c$. When the code possession and prompting effects are crossed and compared to the control groups on the dependent variable set, the

"Promotion" is an ambiguous term that can be understood to mean many things

## Consumers were guided

 through a hypothetical shopping experienceamplifying effects of prompting will result in the following ordering under $H 2 a$ : ( 1 - highest) prompted have code, (2) unprompted have code, (3) control, (4) unprompted no code, (5) prompted no code, or alternatively under $H 2 b$ : (1) unprompted have code, (2) prompted have code, (3) control, (4) prompted no code, (5) unprompted no code.

Lastly, specific hypotheses are proposed to address the phrase used for the price reduction. We predict that "promotion" will result in greater fairness, satisfaction, completion and intention while "discount" will result in the lowest values. "Coupon'" is hypothesized to fall between these two conditions. Chen et al. (1998) compared coupon promotions and equivalent discount promotions and found that coupon promotions produced more favorable evaluations and purchase intentions. As noted previously, a discount is widely recognized as reducing the posted price while a coupon is a bonus that leaves the price intact. "Promotion" is an ambiguous term that can be understood to mean many things. Additionally, we hypothesize a moderating effect of provision of a code. For those without any code, we do not envision that the phrase used matters. Similar feelings of inequity are expected regardless of the phrasing.

H3. Within the code possession/omission and prompt/no prompt groups, the use of "promotion" code will result in the highest satisfaction/least dissatisfaction while "discount" code will result in the lowest satisfaction/most dissatisfaction. "Coupon" should fall between the two. Moreover, these effects will be moderated by code possession whereby no differences are predicted in the no code condition.

## Methodology

## Medium

A Web site was constructed in the context of buying a gift for an eight year old girl's birthday party at a toy store. Named ToyMart.com, the site offered a product called a "Cuddles Baby" for $\$ 39.99$. Consumers were guided through a hypothetical shopping experience, which included simulated searching for the item at the online store and adding it to the shopper's virtual shopping cart. After administration of a pre-test, a checkout screen was displayed confirming the purchase total and billing information, and containing the stimulus. Shipping was free to eliminate this potential confound (Morwitz et al., 1998); similarly, taxes were ignored as out-of-state consumers are not charged sales tax. If a code was provided, the price reduction was $\$ 10$. The scenario posed to respondents is as in Figure 2.

## Respondents

Study participants were recruited from a number of sources including an ad on Google, various emailing lists of survey "panelists," and students at the authors' and others' institutions. In all, 206 respondents participated; the online survey was stopped when the non-control cells became balanced.

## Design

The study design was a $2 \times 2 \times 3$ with control experiment. The treatments were as follows: no code (control); have vs. do not have a code, prompted vs. unprompted code field, and the use of either "promotion," "coupon," or "discount" to refer to the nature of the price reduction. In all there were 13 treatments. Cell memberships were randomly balanced by closing off "filled" cells with the exception of the control group which was held at 50. The final tally resulted in counts of 13 per non-control treatment.

```
Review your order
tems
    (1) Cuddles Baby FunTime, Inc. $3999
Shipping options 
```



```
Do you have a discount code?
    Enter discount code:
If your discount code does not cover the cost of your order, we will use the cadd you entered sbove for the balance
\begin{tabular}{|rr|}
\hline \multicolumn{2}{l|}{ Order Summary } \\
\hline \multicolumn{1}{|c|}{\begin{tabular}{l} 
Items \\
Shipping
\end{tabular}} & \(\$ 39.99\) \\
& Free
\end{tabular}
```

Note: The "promotions" section varied by treatment (see text) and was absent in the control treatment

Figure 2.

## Instruments and measures

For the purpose of this study, the survey component consisted of a two-part post-test section, separated by a "Continue" command, as shown in the Appendix. The first part contained the primary dependent variables of price fairness, satisfaction, and intention/recommendation. All items were recorded on seven-point agree-disagree scales.

The price fairness question was direct and appeared immediately after the purchase had been submitted. In this sense, the measure is a "pure" form of the central behavioral focus of the study. To get a broad measure of satisfaction, the next three items in the Appendix were averaged; this satisfaction scale consisted of purchase satisfaction, positive disconfirmation (Oliver, 1997), and potential loyalty. In a sense, this reflects a holistic view of satisfaction as it takes into account an antecedent (disconfirmation) and a consequent (loyalty). This scale produced an alpha of 0.74 . The intent and recommendation questions were collectively used to reflect future behaviors toward the store and others; the alpha for the two-item scale was 0.81 .

The noncompletion item addressed the shopping cart abandonment issue in the study. This item was reserved for the second post-test so as not to affect responses in the first post-test section. Because all respondents were required to complete the "purchase," we were not able to test actual abandonment and, therefore, posed this question in a hypothetical manner. Note that this item is worded in the negative so that high scores represent greater noncompletion tendencies on the part of the respondent.

## Analysis and results

All hypotheses were tested with $t$-tests and one-way ANOVA. The results of testing H1a, H1b, and H1c are shown in Tables II and III and the following discussion. The data show clear effects in the expected direction for H1a (Have > Control), Hlb (Don't have < Control) and H1c (Have > Control >
> "Promotion code" was thought to be more acceptable and satisfying than "coupon"

| Variable group | Have code (78) | Control (50) | No code (78) |
| :--- | :---: | :---: | :---: |
| Price fairness | 4.96 | 4.50 | 3.90 |
| Satisfaction | 4.93 | 4.32 | 3.87 |
| Intention | 4.73 | 4.58 | 4.27 |
| Noncompletion | 3.55 | 3.88 | 4.53 |

Table II. Means for the have code/no code and control groups (Ns)

|  | $H 1 a$ |  | $H 1 b$ |  | $H 1 c$ |  |
| :--- | :---: | :---: | ---: | :---: | ---: | :---: |
| Variable/group | $t$ | $p$ | $t$ | $p$ | $F$ | $p$ |
| Price/fairness | 2.37 | 0.019 | 2.87 | 0.005 | 17.41 | 0.000 |
| Satisfaction | 3.59 | 0.000 | -2.58 | 0.011 | 25.11 | 0.000 |
| Intention | 0.80 | 0.428 | -1.62 | 0.107 | 3.96 | 0.021 |
| Noncompletion | 1.07 | 0.286 | -1.96 | 0.053 | 6.20 | 0.002 |
|  |  |  |  |  |  |  |

Table III. Test statistics and significance levels for H1a, H1b and H1c
Don't Have) for the dependent variables of fairness and satisfaction. Noncompletion was significant for H1b and H1c. For intention, the means are in the expected direction, but only the ANOVA is significant.

The results of testing $H 2 a, H 2 b$ and $H 2 c$ are shown in Tables IV and V and the following discussion. Table IV shows the means for groups although the control group was not used for the comparisons of prompted and unprompted cells.

The data show that prompting has no significant effect with the exception of the aberrant noncompletion no-prompt cell within the have code group. This overall pattern of results was established through contrast tests between the prompted and equivalent unprompted groups. The significant ANOVA tests for all variables except intention result from inclusion of the control group and, in effect mimic Table II. Thus, we are unable to address $H 2 c$ beyond the fact that there exist differences across the cells that result in a significant ANOVA.

Recall that we also hypothesized differences in the phrase used for the price reduction whereby "promotion code," the most widely used phrase, was thought to be more acceptable and satisfying than "coupon" or the more direct phrase, "discount." Moreover, we predicted these differences only

| Group/variable | Have/ <br> prompt (39) | Have/no <br> prompt (39) | Control (50) | Don't/ <br> prompt (39) | Don't/no <br> prompt (39) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Price fairness | 5.00 | 4.92 | 4.50 | 3.97 | 3.82 |
| Satisfaction | 4.87 | 4.99 | 4.32 | 3.97 | 3.76 |
| Intention | 4.67 | 4.79 | 4.58 | 4.29 | 4.24 |
| Noncompetition | 3.97 | 3.13 | 3.88 | 4.44 | 4.62 |

Table IV. Means for the have code/don't by prompt/no prompt and control groups (ns)

|  | Hla |  | H1b |  | Hlc |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable/group | $t$ | $p$ | $t$ | $p$ | $F$ | $p$ |
| Price/fairness | 0.30 | 0.765 | 0.60 | 0.549 | 8.75 | 0.000 |
| Satisfaction | -0.56 | 0.574 | 1.00 | 0.317 | 12.84 | 0.000 |
| Intention | -0.54 | 0.588 | 0.22 | 0.828 | 2.05 | 0.089 |
| Noncompletion | 1.07 | 0.033 | 0.46 | 0.649 | 4.35 | 0.002 |
|  |  |  |  |  |  |  |

Table V. Test statistics and significance levels for $H 2 a, H 2 b$ and $H 2 c$

## Equity theory becomes an alternative explanation for reactions to code provision

among those with a code. These results are shown in Table VI, which omits the control respondents as they were not presented with a code field.

Some surprises were evident from the results. First, the only variable/group combination producing significant differences appeared among the have code group for price fairness, intention, and noncompletion; satisfaction was significant at the 0.09 level. These data suggest that, contrary to prediction, the phrase "discount" was preferred for fairness, satisfaction, and intention; "promotion" was preferred for noncompletion. Interestingly, "coupon" performed at the lowest level across all variables, contrary to the findings of Chen et al. (1998) and perhaps reflecting idiosyncrasies in offline and online buying. As predicted, however, differences were not found in the no code group where all phrases were similar in their effect on all variables. Apparently, the nature of the code means little if one does not have the required code.

## Discussion

Codes as satisfiers and dissatisfiers
The results for using codes are in accord with theory. Providing a code and its attendant price reduction clearly had positive effects on perceptions of fairness and satisfaction when compared to the control group. Similarly, prompting for a code in the absence of having one had negative effects on fairness, satisfaction, and completion when compared to the control. As would be expected from these findings, the three groups were ranked in the predicted order (code $>$ control $>$ no code) for all dependent variables, including intention to repatronize and recommend the online store.

Equity theory, then, becomes an alternative explanation for reactions to code provision and non-provision. In contrast to the effect of anticipated regret on letting an offline coupon expire (Inman and McAlister, 1994), the Web buyer without a code experiences the additional impact of the inequity perceived if others are imagined to have a code, are selectively provided one, or are simply viewed as "special" in some sense.

| Variable, phase/group | All with code <br> $(156)$ | Have code (78) | No code (78) |
| :--- | :--- | :--- | :--- |
| Price fairness |  |  |  |
| Promotion | 4.38 | 5.00 | 3.77 |
| Coupon | 4.35 | 4.58 | 4.12 |
| Discount | 4.56 | 5.31 | 3.81 |
| $F$, sig. | $0.41,0.663$ | $3.21,0.046$ | $0.63,0.535$ |
| Satisfaction |  |  |  |
| Promotion | 4.34 | 5.01 | 3.67 |
| Coupon | 4.27 | 4.63 | 3.91 |
| Discount | 4.59 | 5.15 | 4.03 |
| $F$, sig. | $1.31,0.271$ | $2.50,0.089$ | $0.98,0.379$ |
| Intention |  |  |  |
| Promotion | 4.38 | 4.69 | 4.06 |
| Coupon | 4.33 | 4.37 | 4.29 |
| Discount | 4.80 | 5.13 | 4.46 |
| $F$, sig. | $3.31,0.039$ | $3.88,0.021$ | $1.07,0.369$ |
| Noncompletion |  |  |  |
| Promotion | 4.02 | 3.04 | 5.00 |
| Coupon | 4.13 | 4.12 | 4.15 |
| Discount | 3.96 | 3.50 | 4.42 |
| $F$ sig | $0.12,0.884$ | $3.03,0.054$ | $1.45,0.242$ |

Table VI. Results comparing three terms for price reduction (ns)

Offline couponing has become commonplace

The results also showed something of an unusual negativity effect whereby variables later in the postpurchase evaluation process, notably intention and noncompletion sentiments, showed no effects in the have group, but more noticeable effects in the don't have group. Thus, the have nots appear to broaden their resentment to all variables measured whereas the "positive surprise" in the have group only pertains to the more immediate variables of fairness and satisfaction.

The design of the experiment did not allow for respondents to abandon, search for codes, and then revisit the Web site, so this possibility remains an untested element of the phenomena considered here. As a speculation, we hold out the possibility that those accustomed to searching for codes may have been even more frustrated because they were not allowed to engage in this alternative.

In an effort to make the Web site more realistic and in line with the actual prompting for coupon codes used by leading Web retailers, we included the phrase "If your discount code does not cover the cost of your order" (Figure 2) which may be interpreted by both the no code and have code groups as implying that others may be receiving a discount (no code) or might get the toy at a larger discount or for free (have code) as the discount amount others received was not known to respondents. The likely effect in the no code group is consistent with our main results. However, if the effect in the have code group is lowered satisfaction, this serves only to strengthen the relative performance of the have code group compared to the have-nots. This raises a more general issue - identifying the expectations of discounts consumers bring to the shopping experience - which is deserving of further study.
When prompting (Do you have a code?) was considered, disappointing results were found. Neither the "prompting" nor "non-prompting" conditions provided effects greater than those provided by the main code effects. Significance tests showed this to be the case despite the significance of the ANOVAs. Perhaps both effects hypothesized as $H 2 a$ and $H 2 b$ were operating and, in some sense, cancelled one another out. Code prompting in online environments will require further study.

Lastly, breaking down the results by type of promotion code showed that the observed effects were most consistent for use of the phrase "promotion," and least consistent and indeed nonsignificant for "coupon." This supports our speculation that offline couponing has become so commonplace that having or not having a coupon is inconsequential to the online experience. The phrase "discount" is viewed similarly although the results were robust across fairness and satisfaction and significant for the not have group for intention. Completion was not affected for this variable. The phrase "promotion code," newly introduced by online stores, showed consistent effects across the dependent variables including completion. While we know of no experimentation or research testing for the superiority of this phrase, we suspect that the phenomenon driving it may be known in the industry.
In accord with our hypotheses, however, the aforementioned differences were found only in the have groups. Not having a code was universally negative regardless of the promotion type used. Thus, online stores may be "turning off" and "turning away" shoppers without a code.

## Market segmentation

In the offline world, coupons have been a mechanism for market segmentation. Effective market segmentation requires the identification of a discriminating variable correlated with consumers' willingness to pay. Then, an optimal price must be set for each segment. Placing coupons in newspapers, for instance, attracts consumers most willing to scour the paper,

## Coupon redemption in traditional outlets is customer-initiated

and these are likely to be the same consumers who have lower willingness to pay for products, generically. The current method of redeeming "coupons" online hinders this process in at least two ways. First, while the Internet provides companies with new methods to deliver coupons to targeted consumers (e.g. electronic mail), the proliferation of coupon repository Web sites implies that a channel outside of the firm's control is also in existence. The consumers most willing to search for coupons in this medium are, most likely, those with the greatest Web knowledge, and not necessarily those with a lower willingness to pay. Recent studies indicating that the more techsavvy are likely to be wealthier further suggest that coupons obtained from Web searches are more likely to be used by higher-income individuals, the exact opposite of the firm's goal. For example, Korgaonkar and Wolin (1999) find that "not surprisingly, the more frequent users of the Web had higher education and income levels than their counterparts who used the Web less frequently" (Korgaonkar and Wolin, 1999, p. 60).

Second, the introduction of coupons is aimed at increasing sales to individuals with a lower willingness to pay for the product. However, the act of prompting for coupons deters purchase from the remaining population. Hence, any benefit gained from the additional sales must be weighed against the loss of the buy-at-posted-price customer base. A traditional "rule of thumb" of market segmentation - that offering promotions to those who are unwilling to buy at the current posted price is always revenue-increasing - fails to hold.

Why, then, do Web retailers adopt this redemption policy? It is not the use of coupons online that we take issue with, but the method of redemption which we believe has been adopted for technological ease rather than consumer behavior and marketing considerations. Like most aspects of Internet commerce, the trend towards "new" (the "new economy," "new marketing," and "new business practices") eventually acquiesces to older, sounder fundamental principles. As we noted in the introduction, coupon redemption in traditional retail outlets is generally customer-initiated, without a prompt for a coupon by the store clerk, allowing coupon-laden customers to garner all of the satisfaction that accompanies their use without drawing attention to their existence for those bereft of coupons.

In the online world, a similar model may be adopted. An e-mail promoting the use of a special discount could, instead of providing a code to be inputted at checkout, provide a link to a special Web page at the retailer's site which acknowledges receipt of the coupon. This model has been adopted by a few retailers. A customer who "enters" the digital store through the "front door" (by going to the retailer's main Web page), never sees mention of a coupon or discount throughout his or her shopping experience, while shoppers who initiate their visits through special pages are reminded throughout the visit that they will receive, for example, $\$ 10$ off this order. While this does not eliminate entirely the equity and satisfaction issues raised here, it seems more in line with the traditional retail experience and deserves greater study.

## References

Ajzen, I., Rosenthal, L.H. and Brown, T.C. (2000), "Effects of perceived fairness on willingness to pay", Journal of Applied Social Psychology, Vol. 30 No. 12, pp. 2439-50.
BizRate.com (2000), " 78 percent of online buyers abandon shopping carts according to Bizrate.com survey", BizRate Press Release, 23 October, available at: bizrate.com/ content/press/release.xpml?rel=88 (accessed 1 May 2002).
Campbell, M.C. (1999), "Perceptions of price unfairness: antecedents and consequences", Journal of Marketing Research, Vol. 36 No. 2, pp. 187-99.

Chen, S.-F., Monroe, K.B. and Lou, Y.-C. (1998), "The effects of framing price promotion messages on consumers' perceptions and purchase intentions", Journal of Retailing, Vol. 74 No. 3, pp. 353-72.
Fortin, D.R. (2000), "Clipping coupons in cyberspace: a proposed model of behavior for dealprone consumers", Psychology \& Marketing, Vol. 17 No. 6, pp. 515-34.
Global Millennia Marketing (2002), "Recent survey gives online merchants 15 reasons for shopping cart abandonment", Global Millennia Marketing Press Release, 12 March, available at: www.globalmillenniamarketing.com/ press_release_mar_12_02.htm (accessed 1 May 2002).
Inman, J.J. and McAlister, L. (1994), "Do coupon expiration dates affect consumer behavior?", Journal of Marketing Research, Vol. 31 No. 3, pp. 423-8.
Korgaonkar, P.K. and Wolin, L.D. (1999), "A multivariate analysis of Web usage", Journal of Advertising Research, Vol. 39 No. 2, pp. 53-68.
Martins, M. and Monroe, K.B. (1994), "Perceived price fairness: a new look at an old construct", in Allen, C.T. and John, D.R. (Eds), Advances in Consumer Research, Vol. 21, Association for Consumer Research, Provo, UT, pp. 75-8.
Morwitz, V.G., Greenleaf, E.A. and Johnson, E.J. (1998), "Divide and prosper: consumers' reactions to partitioned prices", Journal of Marketing Research, Vol. 35 No. 4, pp. 453-63.
Mullins, R. (2000), "Do or die for e-tail: holiday sales: ho-ho-ho or boo-hoo-hoo?', Silicon Valley/San Jose Business Journal, 24 November, available at: www.bizjournals.com/ sanjose/stories/2000/11/27/smallb1.html (accessed 1 May 2002).
Oliver, R.L. (1997), Satisfaction: A Behavioral Perspective on the Consumer, Irwin/McGraw-Hill, New York, NY.
Oliver, R.L. and Swan, J.E. (1989), "Consumer perceptions of interpersonal equity and satisfaction in transactions: a field survey approach'", Journal of Marketing, Vol. 53 No. 2, pp. 21-35.
Oliver, R.L. and Winer, R.S. (1987), "A framework for the formation and structure of consumer expectations: review and propositions", Journal of Economic Psychology, Vol. 8 No. 4, pp. 469-99.
Perman, S. (2000), "E-tailing survival guide: OK, forget the whole damn thing", eCompany Now, Vol. 1 No. 6, available at: www.business2.com/articles/mag/0,1640,8786,FF.html (accessed 1 May 2002).
Streitfield, D. (2000), "On the Web, price tags blur", Washington Post, 27 September, p. A1.

Appendix. Survey items (all in seven-point agree/disagree format)
Post-test, Part 1
Perception of price fairness:
The price I paid was fair.
Satisfaction, disconfirmation, loyalty:
I am satisfied with my purchase.
The price I paid was better than I had expected.
I feel I could become loyal to this store.
Intentions, recommendations:
I would definitely buy other products I need at this store.
I would recommend this store to others I know.

Post-test, Part 2
(Non)Completion:
If this were a real shopping experience, I would not have completed this purchase.

This summary has been provided to allow managers and executives a rapid appreciation of the content of this article. Those with a particular interest in the topic covered may then read the article in toto to take advantage of the more comprehensive description of the research undertaken and its results to get the full benefit of the material present

## Executive summary and implications for managers and executives

Do promotion codes and on-line coupons really work?
Coupons have been a familiar part of the retail marketing environment for a very long time. Distributed via direct mail, door drops, in newspaper advertisements and with product packaging, coupons are recognized as a valuable short-term tool for sales improvement. For some consumers, the search for coupons and their use is an important aspect of shopping and marketers have recognized this through improved targeting and better tracking.

Although there have been some criticisms of coupons as a marketing technique especially in their affect on brand image, those involved in the development of on-line retailing have sought to adapt the coupon so as to realize its sales advantages in e-commerce. As Oliver and Shor point out this adaptation shifts the emphasis from an unsolicited to a solicited use of coupons. In the "off line" retailer, the consumer chooses whether or not to proffer a coupon whereas on-line the retailer solicits use of a promotion code since that is the only way to operate such a system.
Oliver and Shor argue that the soliciting of a promotion code so as to deliver a discount results in either a positive (for those with the code) of a negative (to those without the code) response from the on-line shopper. The authors demonstrate that this effect influences the likelihood of the consumer completing their on-line purchase.

## I did not know about these codes - it is not fair

It would seem that for some consumers, not having a promotion code (and therefore no access to available discounts) is seen as being unfair. Oliver and Shor report on the ease by which promotion codes can be found on-line through the use of specialized Web sites and search engines. Nevertheless, the evolving nature of e-commerce must mean that many consumers remain unaware of the opportunity to obtain promotion codes which heightens the perception of unfairness. Cannier or more knowledgeable consumers are given an unfair advantage by obtaining promotion codes and therefore discounts.

Part of the solution to this problem is to raise awareness of the availability of promotion codes and the ways in which the on-line consumer can get hold of them. As ever, the marketer needs to make use of on-line and off-line promotions in the distribution of promotion codes. As well as making sure the codes are flagged for on-line search, marketers should make sure that they are included with normal coupons and that the consumer is aware of the purpose and value of such codes.

This raising of awareness may be yet more significant since Oliver and Shor's research suggests that perceptions of inequity represent a significant reason behind "shopping cart abandonment" - where the consumer fails to complete an on-line purchase often quite close to the point of purchase itself. Oliver and Shor report that nearly a third of shopping carts are abandoned just prior to final purchase confirmation.

Perceived inequity is not the only reason for abandonment but, as Oliver and Shor point out, most studies have identified rationale for abandonment (shipping costs, download speed, poor site design or inadequate instructions). The study here identifies that psychological reasons - in this
case perceived inequity - are as important in determining whether or not the consumer abandons the purchase.

Administrative convenience - the curse of the IT department
Oliver and Shor observe that the reason for the widespread use of promotion codes reflects the retailer's administrative convenience - it is the simplest method of dealing with coupons on-line. As is so often the case with developments associated with the Internet, the marketer is chasing after the development people and the IT department fixing systems that look good in terms of administrative ease and smoothness of operation but actively discourage consumers.

Retailers with a significant on-line presence need to shift the emphasis back towards the consumer. If large numbers of visitors to a retail site feel they are being unfairly treated there with be a significantly negative impact. And, in most circumstances - despite the ease of obtaining promotion codes - the majority of visitors will be without these codes and, as a result may well feel unfairly treated.

The idea - proposed here by Oliver and Shor - that on-line retailers should consider discount and non-discount portals to a site represents one effort to reduce the problems associated with perceptions if inequity and the associated dissatisfaction.

Why use coupons at all?
I have noted that some marketers see coupons as something of a last resort rather than a central part of a promotional strategy. If the uneven distribution of promotion codes or on-line coupons results in the negative effects described by Oliver and Shor then we should question whether the use of such techniques on-line is sensible.

Marketers developing promotions for e-commerce sites (and the products sold through those sites) should examine less divisive means of lifting sales and offering discounts. While coupons are a recognized sales promotion method, this does not necessarily means that they are the best means of delivering such promotional benefits on-line.

Given the significant rate of non-completion on-line it is not in the interest of such retailers to add to the possibility of cart abandonment through techniques that engender feelings of unfairness. Instead of using blunt sales promotional methods such a promotion codes, retailers should pay attention to the barriers that prevent shoppers completing purchase at their site.
(A précis of the article "Digital redemption of coupons: satisfying and dissatisfying effects of promotion codes". Supplied by Marketing Consultants for Emerald.)


[^0]:    The Emerald Research Register for this journal is available at http://www.emeraldinsight.com/researchregister The current issue and full text archive of this journal is available at http://www.emeraldinsight.com/1061-0421.htm

