

ON THE PREVALENCE AND IMPACT OF VAGUE QUANTIFIERS IN THE ADVERTISING OF CAUSE-RELATED MARKETING (CRM)

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ABSTRACT: A series of three studies examines potential consumer confusion associated with the advertising copy used to describe cause-related marketing (CRM) campaigns, where money is donated to a charity each time a consumer makes a purchase. The first study assesses the relative frequency of various copy formats in CRM on the Internet. The authors find that the majority of the copy formats (69.9%) are abstract (e.g., a portion of the proceeds will be donated), 25.6% are estimable (e.g., X% of the profits will be donated), and 4.5% are calculable (e.g., X% of the price will be donated). Subsequent studies find that (1) slight variations in abstract wording in advertising copy leads to considerable differences in consumers' estimates of the amount being donated, (2) the amount of the donation estimate for each abstract copy format varies considerably across individuals, and (3) the donation amount can impact choice. Taken together, the three studies demonstrate that the vast majority of advertising copy used to describe CRM donations is abstract, that different but legally equivalent abstract copy formats result in large differences in mean perceived donation level, and that these donation levels can impact consumer choice. Implications for advertising strategy and public policy are discussed.

Cause-related marketing (CRM) is a technique whereby the contribution of an advertiser to a cause is "linked to customers' engaging in revenue-producing transactions with the firm" (Varadarajan and Menon 1988, p. 60). This growing form of promotion now exceeds \$700 million per year in the United States (IEG 2001). The practice of CRM is often touted as a win-win proposition, whereby a firm can "support worthwhile causes whilst at the same time building the business" (Atkins 1999, p. xvii). Although CRM may always be a win-win for the sponsoring brand and the cause, we wondered if the consumer was receiving equal benefit, or whether the unique wording found in the advertising copy of many CRM promotions (e.g., "a portion of the proceeds . . .") might, in fact, be confusing and even misleading.

The issues of potential ethical missteps in a limited number of brand-cause associations led a consortium of 19 states attorneys general to issue a "Draft Report on Cause Marketing" (1999). While the report stemmed from the potentially deceptive implied superiority claims of a pain reliever named after the Arthritis Foundation, it addresses many potential deceptions in associations between causes and

brands. One potential for deception enumerated in the document relates to the amount actually being donated to charities in CRM campaigns. Specifically, the draft report states that "Advertisements arising from all corporate-nonprofit arrangements shall not mislead, deceive or confuse the public about the effect of consumers' purchasing decisions on charitable contributions by the consumer or the commercial sponsor."

The current literature, however, is silent with respect to how CRM campaigns are described in advertising copy, as well as how these descriptions are interpreted by consumers. To determine whether and when consumers might be confused or misled, research needs to investigate several aspects of CRM. First, it is necessary to determine the ad copy formats that are currently being used to describe donation levels to consumers. Once this is known, studies must explore how the use of these various copy formats impact consumer understanding of the amount being donated, and whether the amount being donated can impact brand choice. We address these issues through a series of three studies that demonstrate that (1) the ad copy formats used to describe the donation amounts are often very different (and less specific) than the formats used in previous academic research on CRM; (2) although vague quantifiers currently have no known legal meaning, for any given quantifier there is large variance regarding estimates provided by respondents, and some vague quantifiers result in higher donation estimates

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than others; and (3) the level of the CRM donation can affect choice.

DOES THE AMOUNT BEING DONATED MATTER TO CONSUMERS?

In order for confusion about donation levels to be of practical concern, this confusion must impact some consumer action (e.g., choosing one brand over another). This is akin to what is known in the consumer deception literature as "materiality" (Ford and Calfee 1986; Richards and Preston 1992). Although previous work has demonstrated the impact of CRM (i.e., its absence versus presence) on consumers, there has been a lack of research focus directly addressing whether the amount of donation also impacts consumers.

Many studies suggest that the presence of CRM can impact purchase decisions. Webb and Mohr (1998), for example, find that one-third of their sample report CRM impacts their purchases. Cone/Roper (1999) reports that two-thirds of respondents would be influenced by the presence of CRM, all else being equal. Ross, Patterson, and Stutts (1992) find CRM had a positive impact on perceptions of advertisers. Pracejus and Olsen (in press) demonstrate that brands engaged in CRM are chosen more often than those that are not, and that this difference is greater for high-fit associations.

Strahilevitz and Meyers (1998) show that consumers are not only drawn to some products engaged in CRM, but that under some conditions, a majority actually prefers the donation to a price reduction. Strahilevitz (1999) also demonstrates that the magnitude of a donation influences preference when people are asked to choose between a CRM donation and a price discount of the same dollar amount. Barone, Miyazaki, and Taylor (2000) found that CRM can impact choice, but this effect was only detected when price and product performance remained constant.

To date, however, only one study has directly explored the impact of different donation levels on choice (Holmes and Kilbane 1993). Although Holmes and Kilbane do not find a significant impact of donation level, they also fail to detect an impact of price, calling into question the power of their study. We are aware of no other research that has examined whether the level of the donation, holding price constant, impacts choice. Hence, it may be the case that while consumers prefer a product offering a CRM donation, they may also be ambivalent with respect to the donation level. Study 3 in the present paper explicitly tests whether donation level does impact choice.

It should also be noted that in all three of the cited papers that examine choice-behavior (Pracejus and Olsen in press; Strahilevitz 1999; Strahilevitz and Meyers 1998), participants are given a specific donation amount expressed in absolute dollar terms. In the real world, however, such specificity is far from universal.

VAGUE QUANTIFIERS

Before we began this program of research, anecdotal evidence made it clear that not all ad copy describing CRM donations gave the kind of specific dollar values that have previously been explored in the literature. At the time of this writing, for example, a Nike promotion included the tag "A portion of your purchase supports youth community programs around the world."

Although phrases like "a portion" have not previously been considered in the context of advertising copy, they have received considerable attention in the judgment and decision-making literature, where they are known as "vague quantifiers." Mapping vague quantifiers onto specific values can be traced back to the early work of Simpson (1944). Since then, numerous studies have examined the relationship between vague probability statements and the numerical values respondents generate from them (e.g., Beyth-Marom 1982; Budescu and Wallsten 1985; Fillenbaum et al. 1991; Routh 1994; Wallsten et al. 1986). More recently, researchers in this area have focused on people's preferences for vague quantifiers versus specific numeric values (usually probabilities). For example, Wallsten et al. (1993) reports the number of people who preferred to receive and transmit probability information in verbal form (30%), numerical form (35%), and both forms (35%). In addition, Kuhn (1997) suggests that negative frames produce a greater preference for vague quantifiers.

There are three well-established findings in the vague-quantifiers literature that can serve as a starting point for understanding how people might interpret abstract terms found in CRM claims. First, while there is broad agreement among people about the ordinal relations that hold between sets of vague quantifiers, there is large variability when people map these terms onto a numerical scale. Second, there is often considerable overlap in the values assigned to adjacent and near adjacent terms. Third, this line of research indicates that even terms that denote very unlikely events often elicit sizeable numerical responses (Budescu and Wallsten 1985; Fillenbaum et al. 1991; Wallsten et al. 1986).

For example, in one study, mean probability estimates associated with the terms "rarely" and "seldom" were 8% and 16%, respectively (Budescu and Wallsten 1985). These findings have led us to expect that (1) people believe that some abstract CRM phrases imply larger contributions than others, (2) donation amount (and percentage) estimates elicited by a given phrase are likely to be highly variable, and (3) even conservative phrases will elicit relatively large donation amount (and percentage) estimates.

While the vague quantifier literature seems to cleanly map onto the study of CRM, our studies represent a significant departure in two key respects. First, we are examining vague

quantifiers in a context in which the outcome of consumer mapping has direct relevance to advertising strategy as well as public policy. That is, if vague quantifiers result in estimates that are not reflective of the true amount being donated, then their use can be considered confusing and perhaps even misleading.

The second departure from the above-cited literature is that with few exceptions (e.g., Wright, Gaskell, and O'Muircheartaigh 1994), previous studies have focused on mapping vague quantifiers (e.g., some, many, most, etc.) onto numeric probabilities bounded by 0 and 1. However, we explore the process of mapping a completely different set of vague quantifiers (portion, substantial portion, etc.) onto dollar metric numeric estimates bounded by zero and the full purchase price.

OUTLINE OF RESEARCH PROGRAM

Given the implications of this research for advertising strategy and public policy, our first goal was to establish the degree to which various formats are used to convey CRM donation amounts to consumers. Once an indication of the prevalence of these formats had been established, we explored consumer response in terms of donation estimates to the various formats. Finally, we sought to establish whether the resultant perceived level of donation could impact choice.

Study 1 explores the relative prevalence of various formats for describing donation amounts on the World Wide Web. Study 2 looks at the impact of specific ad copy wording formats and product price on donation estimates. Study 3 tests whether the level of donation can impact consumer choice.

STUDY 1

To examine current industry practice regarding CRM, a survey of Web sites was conducted. Although such offers are present in a wide array of media, including signage and packaging, the decision to limit this content analysis to the Web was based on the straightforward nature of such a search, as well as a desire to not limit the study to a particular geographic region or product class (conditions that would likely need to be imposed if a more labor-intensive search were required). The specific goals of this content analysis were to obtain some indication of the frequency with which different types of phrases are used to describe CRM donations. A Web search using Google was employed in an effort to provide a broad examination of the presence of CRM campaigns on the Web. This search was conducted in June 2002. Based on a preliminary investigation of different phrases present, the following search parameters were used: (1) with all the words "donated to"; (2) with any of the words "charity, charities"; and with the exact phrases listed in Table 1. We recognize

that such a search is not exhaustive (i.e., some CRM campaigns do not have associated Web pages). Further, the search criteria used do not ensure that all CRM offers available on the Web will be identified. Nonetheless, given the goals of the study (i.e., to ground the research with respect to some indication of prevailing practice), these compromises were not considered overly limiting.

All search results were scrutinized to ensure that each of the Web sites reported related to specific CRM offers. As such, duplicate sites were removed, as were sites not related to a specific CRM campaign (e.g., sites dealing with taxation rules, issues of policy, or general issues regarding CRM as an advertising tool). Each Web site was classified with respect to whether it was (1) an advertiser linking a CRM offer to sales of its product or service, (2) a charity noting a CRM effort in place to support it, or (3) a news article about a company employing a CRM offer. In cases of news articles, only articles noting the specific CRM actions of an organization were considered (i.e., any general articles regarding the topic were not included). News articles were included in the count since they contained the same information that the other Web sites did, but within the context of a third party.

Results

The initial search produced a total of 5,937 sites. Following the removal of duplicate and nonspecific sites, as per the procedure discussed previously, a total of 3,414 different sites were evaluated. Three broad categories of CRM offers were found. Calculable formats ($\approx 4\%$ of sample) refer to descriptions of the donation amount that allow consumers to calculate the actual amount being donated. For example, a common calculable format is "X% of the sales." Estimable formats ($\approx 26\%$ of sample) provide consumers with only some of the information needed to calculate the donation amount. A common estimable format is "X% of profits." Abstract formats ($\approx 70\%$ of sample) provide consumers with almost no idea as to the actual amount being donated (e.g., "a portion of the proceeds will be donated").

It is possible to examine the amounts reported for both estimable and calculable formats. A total of 4.6% of the calculable sites and 38.6% of the estimable sites reported 100% of the descriptor (e.g., price or profit) would be donated to charity. Of those calculable sites reporting less than 100%, values ranged from .5% to 92%, with a mean of 19.2%, a median of 10%, and a standard deviation of 23.6%. Of the estimable sites reporting less than 100%, the values ranged from .5% to 95%, with a mean of 33.3%, a median of 20%, and a standard deviation of 28.6. Note that these values are provided for descriptive purposes, and should not be generalized to represent industry norms for CRM campaigns in general. More particularly, it is very possible that those reporting

TABLE I
Study I: Cause-Related Marketing Web Search

Phrase	Type of Web site			Total sites	Percent of all sites
	Company Web site	Charity Web site	Third-party site		
Abstract quantifiers					
Portion of (the) proceeds	617	28	253	898	26.30
Portion of (the) net proceeds	14	4	3	21	.62
Portion of (the) profit(s)	46	11	22	79	2.31
Portion of (the) net profit(s)	3	0	2	5	.15
Portion of (the) price	9	1	1	11	.32
Portion of (the) sales	86	15	58	159	4.66
Part of (the) proceeds	409	23	133	565	16.55
Part of (the) net proceeds	2	0	1	3	.09
Part of (the) profit(s)	29	3	21	53	1.55
Part of (the) net profit(s)	0	0	0	0	0
Part of (the) price	7	2	10	19	.56
Part of (the) sales	6	0	8	14	.41
Percentage of (the) proceeds	149	12	42	203	5.95
Percentage of (the) net proceeds	1	0	0	1	.03
Percentage of (the) profit(s)	58	7	39	104	3.05
Percentage of (the) net profit(s)	1	0	3	4	.12
Percentage of (the) price	8	0	4	12	.35
Percentage of (the) sales	108	25	103	236	6.91
Subtotal	1,552	131	703	2,387	69.92
Estimable quantifiers					
× Percent of (the) proceeds	128	5	144	277	8.11
× Percent of (the) net proceeds	12	7	3	22	.64
× Percent of (the) profit(s)	33	1	56	90	2.64
× Percent of (the) net profit(s)	3	2	10	15	.44
All of (the) proceeds	253	17	110	380	11.13
All of (the) net proceeds	10	0	4	14	.41
All of (the) profit(s)	56	3	17	76	2.23
All of (the) net profit(s)	1	0	0	1	.03
Subtotal	496	35	344	875	25.63
Calculable quantifiers					
× Percent of (the) price	10	0	15	25	.73
× Percent of (the) sales	39	7	75	121	3.54
All of (the) price	0	0	0	0	0
All of (the) sales	3	0	3	6	.18
Subtotal	52	7	93	152	4.45
Total	2,101	173	1,140	3,414	100.00

Notes: Search conducted June 18, 2002, with the following search parameters: with all the words "donated to"; with the exact phrase listed in the table above; with any of the words "charity, charities" (updated within the last year).

specific amounts may be more generous than those preferring to use an abstract format.

As noted above, about 70% of the formats were completely abstract in nature. The most common abstract format was "a portion of the proceeds." Although any abstract format could refer to any donation amount, some seemed to imply larger amounts than others. Specific modifiers encountered were as follows: substantial, significant, large, major, and sizeable. A

detailed examination of how frequently these modifiers were used to modify a "portion" of sales, price, profit, or proceeds yielded a total of 165 CRM sites. Of these, the results may be broken down as follows: substantial (30.9%), significant (24.2%), large (23.0%), major (19.4%), and sizeable (2.4%). Given that there is no specific legal definition of when a portion becomes "substantial," we were curious about whether consumers would make different estimates based on different

abstract formats. Given that abstract formats are the most common way to describe CRM donations to consumers, we believe that any differences in donation estimates between various abstract ad copy formats should be carefully considered.

Discussion

It is clear that there are a great number of cause-related marketing campaigns described on the Web. The wording used to describe these offers varies considerably, from very vague (e.g., a portion of the proceeds) to very specific (e.g., 5% of the sales will be donated to charity). The majority ($\approx 70\%$) were abstract/vague, whereas estimable formats ($\approx 26\%$) and calculable formats ($\approx 4\%$) occurred in a sizeable, but smaller number of CRM campaign descriptions.

Within the abstract descriptions of donation amounts, which accounted for the vast majority of CRM offers in our sample, we found that some sites used modifiers (e.g., substantial portion) to describe the amount being donated. Given that there is currently no legal definition as to what constitutes a portion, as opposed to, for example, a substantial portion, Study 2 examines whether consumer estimation of donation amounts is influenced by various abstract ad copy formats.

STUDY 2

Participants

Four hundred twenty-four students participated in this study as part of an introductory psychology course at the University of Alberta.

Experimental Stimuli and Procedure

The product class chosen for use in this study was consumer electronics products. A $2 \times 2 \times 2 \times 2$ full-factorial, between-subjects design was employed, manipulating a qualifier in the ad copy regarding the amount of proceeds donated (a portion versus a substantial portion); a qualifier in the ad copy regarding the type of proceeds donated (proceeds versus net proceeds); the purchase price of the product (\$49.98 versus \$499.98); and the estimation method (percent estimate versus dollar estimate). For the \$49.98 product, estimates were provided for a personal cassette stereo; for the \$499.98 product, a DVD player was used. For both products, the prices were within the range of current market prices at the time.

While the first two factors were of primary concern for assessing whether different abstract formats would impact estimates, the second two were admittedly more exploratory. We included price as a between-subjects factor to determine whether a given vague quantifier (e.g., "portion") would have

the same meaning across different price points. We included estimation method as a between-subjects factor to examine potential differences in usage between these two scales.

The survey presented participants with the following information: "A recent ad from an electronics manufacturer contained the following information. 'For each Personal Cassette Stereo (DVD player) sold this month, [descriptors regarding type and amount of donation] will be contributed to charity. The Personal Cassette Stereo (DVD player) retails for \$49.98 (\$499.98).'" Respondents were then asked to provide an estimate of the amount donated to charity, expressed as either a percent or an actual dollar value, depending on the estimation method condition.

Results

Given that two different estimation metrics were used (i.e., half of the conditions required percent estimates and half of the conditions required dollar estimates), all percent estimates were converted to dollars (i.e., the percent estimate multiplied by the purchase price) for purposes of comparability. Table 2 reports the mean donation estimates by condition. Analysis of variance (ANOVA) was performed to examine main effects and interactions of the between-subject variables. The overall model was significant, $F(15, 408) = 5.80, p < .001$. The main effect for amount of proceeds was significant, $F(1, 408) = 9.78, p < .001$, indicating that participants expect more to be donated under conditions where the phrase "a substantial portion" is used ($\bar{x} = \$20.97, 9.8\%$ of price), relative to simply "a portion" ($\bar{x} = \$11.44, 4.79\%$ of price). The purchase price also exerted a significant impact, $F(1, 408) = 66.80, p < .001$, with an average of \$4.36 (8.7% of price) being estimated for the \$49.98 product, and \$28.97 for the \$499.98 product (5.8% of price). Neither the type of proceeds main effect (i.e., proceeds versus net proceeds), $F(1, 408) = .90$ n.s., nor the estimation method main effect (i.e., percent versus dollar estimates), $F(1, 408) = .06$, n.s., were significant.

A significant two-way interaction occurred between amount and purchase price, $F(1, 408) = 3.94, p < .05$. This is due to a greater absolute dollar change in the donation estimate for the \$499.98 product, when the phrase is changed from portion (\$21.08) to substantial portion (\$36.71, $t_{202} = 2.54, p < .05$), a difference of \$15.63. The donation estimate for the \$49.98 product shifted from \$2.66 in the portion condition to \$6.10 in the "substantial portion" condition ($t_{218} = 4.54, p < .001$), a difference of \$3.44. No other significant two-way or higher interactions were observed.

It is interesting to examine this interaction from the perspective of the percent of the purchase price. For the \$49.98 product, participants estimate 5.3% is donated to charity under the portion condition and 12.2% under the "substan-

TABLE 2
Study 2: Mean Donation Estimates by Condition (N = 424)

Description of donation	Donation estimate ^a (Walkman at \$49.98)	Donation estimate ^a (DVD player at \$499.98)
Portion of:		
Proceeds (dollar estimate)	3.58 (5.02)	11.64 (13.52)
Proceeds (percent estimate) ^b	2.06 (2.37)	17.31 (29.21)
Net proceeds (dollar estimate)	2.24 (2.76)	29.68 (70.37)
Net proceeds (percent estimate) ^b	2.79 (4.62)	26.58 (49.53)
Substantial portion of:		
Proceeds (dollar estimate)	6.66 (7.92)	36.19 (36.41)
Proceeds (percent estimate) ^b	7.09 (7.26)	37.59 (31.91)
Net proceeds (dollar estimate)	4.08 (7.83)	40.50 (62.91)
Net proceeds (percent estimate) ^b	4.59 (4.45)	32.50 (35.85)

^a Mean donation estimate is provided, with standard deviation of estimate reported in parentheses.

^b For purposes of comparison, the percent estimate provided is converted to a dollar value.

tial" portion condition, whereas for the \$499.98 product, the percent estimates are 4.2% and 7.3% for each of these conditions, respectively. Relative to the purchase price, when the estimates are examined from a percent viewpoint, not only do we see a higher donation estimate across conditions for the lower-price product (8.7%) relative to the higher-price product (5.8%), but also a greater impact of "portion" versus "substantial portion" for the low-price product conditions.

While the means reveal part of the story, an examination of the range of responses observed is also instructive. For the \$49.98 product, the donation estimates ranged from \$0.00 to \$25.00 (50% of price) with a standard deviation of \$3.84 when the descriptor was "a portion," and from \$.01 (.2% of price) to \$30.00 (60% of price) with a standard deviation of \$6.99 for "a substantial portion." For the \$499.98 product, for "a portion," estimates ranged from \$0.00 to \$300.00 (60% of price) with a standard deviation of \$45.17, and from \$.98 (.2% of price) to \$300.00 (60% of price) with a standard deviation of \$42.63 for "a substantial portion." Clearly there are considerable individual differences in the interpretation of each phrase.

Discussion

Perhaps it is not surprising to find that consumers provide different estimates based on whether the term "substantial" appears prior to "portion" in the ad copy. What an individual

advertiser considers substantial is quite subjective, however. For example, it may be substantial relative to industry norms, relative to previous giving, or relative to what the advertiser would normally consider fair. Hence, a donation of 1% of the price may or may not constitute a substantial portion, depending on a particular point of view. Clearly, though, evidence from this study suggests that consumers do take this wording into account when generating their estimates.

Two other observations regarding the donation estimates are noteworthy. First, as the purchase price increases, the absolute value of the donation estimate increases. However, the donation, as represented by the percent of purchase price, is found to decrease. Second, as would be expected from decision-making research on vague quantifiers, the variance associated with the estimates is very high.

While it is not our intention to make claims about the actual donation estimates in the general population from our convenience sample, it is interesting to compare the estimates given here with the median calculable amounts from Study 1. The median donation amount among businesses that explicitly disclosed this value was 10% of sales price. Although this amount is nominally higher than the experimental estimates under either "portion" or "substantial portion," it is not inconceivable that firms donating smaller percentages are more likely to choose abstract formats. In other words, firms that are donating large percentages may be more likely to make their donation amounts explicit in their advertising.

For this reason, comparisons of experimental estimates with calculable values should be made with caution.

The moderator regarding the type of proceeds (proceeds versus net proceeds) had no impact on estimation. We included this distinction because despite the prevalence of the word "proceeds" in our content analysis, its meaning is quite ambiguous. *Merriam-Webster's Collegiate Dictionary* (2002) gives two definitions of "proceeds": (1) "the total amount brought in" (i.e., revenue) and (2) "the net amount received" (i.e., profit). It is possible that participants inferred the latter definition, ignored the term "net," or both.

While the impact of various ad copy wording on peoples' donation estimates may be of theoretical interest, it is of more practical importance if perceived donation amount actually impacts choice. Study 3, therefore, examines whether the amount donated can influence consumer decision making. This is important, as it has not been demonstrated previously.

STUDY 3

The primary goal of this study is to establish whether the amount of the CRM donation can impact choice, holding retail price constant.

Procedure

Participants

Thirty-three undergraduate students participated in this study on a voluntary basis.

Experimental Stimuli and Procedure

To examine the impact of donation level, a discrete-choice conjoint task was used. This method presents the respondent with a series of choice sets, with each choice set comprised of a number of alternatives. A number of product attributes are described for each option in a choice set. Given these descriptions, participants are asked to simply choose one of the alternatives (or none). This method is particularly appropriate to measuring the impact of donation level on choice, as it enables not only the identification of whether an attribute impacts choice, but also a direct assessment of the magnitude of this impact (see Haaijer, Kamakura, and Wedel 2000; Sándor and Wedel 2001 for examples of advanced uses, as well as Louviere, Hensher, and Swait 2000 for a comprehensive review of this method and its applications).

The product class chosen was ink-jet printers. The task employed a $4 \times 2 \times 2$ within-subjects design, manipulating donation level (0%, 1%, 5%, and 10% of the retail price donated to the community); pages printed per minute (9 versus 12); and bonus software (included versus not included). This

last attribute was described as a package that would allow a person to change some basic physical aspects of photographic images (e.g., size, orientation, contrast). In an effort to ensure a realistic and engaging choice task, pretesting to determine important attributes was conducted with a separate group of 32 individuals who assessed various printer attributes on a seven-point scale anchored "not at all important" (1) and "extremely important" (7). The mean values for "pages per minute" and "bonus software" were 5.44 and 4.91, respectively. Both the former ($t_{31} = 8.02, p < .001$) and the latter ($t_{31} = 3.35, p < .01$) differed significantly from the neutral point of the scale. Individuals were asked to assume that they were in the market for an ink-jet printer and that they were to make a choice among different printers. The retail price of the printer was disclosed (\$150) and was held constant.

The purpose of the present study was to establish whether the amount of donation in CRM could influence choice, holding price constant. The donation levels were chosen to represent a range of responses similar to the mean values observed in Study 2. The design of the discrete-choice task permitted the estimation of all main effects and interactions, and required each participant to consider 16 choice sets, each with two product alternatives. These choice sets were created as follows: (1) a full-factorial array of all possible attribute combinations was generated, (2) a second full-factorial array of all possible attribute combinations was created and randomly paired with profiles from the initial set, and (3) these pairings were randomized. All choice sets also included a "neither" alternative that individuals could select if they felt neither product alternative was acceptable.

Following the discrete-choice task, a number of questions regarding ink-jet printers were asked. Specifically, individuals were asked to indicate whether they had purchased an ink-jet printer in the past; when they had purchased this printer; whether they intended to purchase such a printer in the future; and if so, when they planned to purchase this printer (in months).

Results

Relevance of Product

Overall, 84.8% of participants had purchased an ink-jet printer in the past and/or intended to purchase an ink-jet printer in the next two years.

Discrete-Choice Task

Multinomial logistic regression was used to estimate parameters for the discrete-choice task (see Table 3). For the donation level, an intercept was used to examine the impact of the presence of a CRM offer (i.e., 0% versus above 0%). This was

TABLE 3
Study 3: Discrete-Choice Conjoint Task

Parameter	Parameter estimate	Standard error of parameter	Asymptotic t statistic
Intercept	3.22	.61	5.28*
CRM presence intercept	1.06	.27	3.89*
Page per minute (<i>P</i>)	1.03	.23	4.48*
Bonus software (<i>B</i>)	1.13	.21	5.38*
Donation amount (<i>D</i>)	.17	.03	6.23*
<i>P</i> × <i>B</i> interaction	.01	.24	.04
<i>P</i> × <i>D</i> interaction	.02	.03	.78
<i>B</i> × <i>D</i> interaction	.02	.03	.85
<i>P</i> × <i>B</i> × <i>D</i> interaction	.02	.03	.68

* $p < .001$.

done to ensure that any observed effect of the level of donation reflected that the preference varied with the amount of donation, not merely the donation itself (i.e., to examine the possibility that people react favorably to a CRM offer, but are not affected by how much is actually donated). The rho-square for the model was .89, indicating that the model fit the data extremely well.

The main effect for page per minute was significant, as was the main effect for the bonus software, indicating that both of these attributes influenced choice. The intercept for the presence of a CRM offer was significant, hence the mere presence of an offer influenced choice in a positive manner. Of even greater relevance (i.e., to establish that the amount of the donation also had an impact), the effect of donation amount was also significant, indicating that beyond merely having a donation present, the actual donation amount can have a positive impact on choice. When examining the parameter associated with this variable, it is important to remember that this value is multiplied by the percent value of the donation level.

It should be noted that models employing a quadratic term for the donation level were estimated. In these models it was found that the quadratic term was not significant on its own or in interaction with other dependent variables. Hence, this term and the resulting interactions were removed from the final model reported.

Discussion

For consumer confusion over donation amounts to be of real concern to advertisers, it should be shown that the amount being donated makes a difference to some consumer behavior. Choice between brands is one such important behavior. Results here strongly indicate that the amount of the donation can have a significant impact on choice. While previous studies have shown that the absence or presence of CRM can im-

part choice, we know of no previous study that has directly shown a link between donation amount and choice. This study, therefore, helps to make a case for the importance of the findings of Study 2. It also motivates the future investigation of donation estimates under other formats.

GENERAL DISCUSSION

This research was motivated by a desire to (1) assess the ways in which CRM donations are being described to consumers, (2) establish whether specific abstract ad copy formats impact consumer estimation of donation amount, and (3) establish whether this donation amount can influence consumer choice.

Although it is not uncommon to encounter the often-ambiguous phrases found in CRM campaigns (e.g., "a portion of the proceeds . . ."), we were nonetheless surprised at the prevalence of these abstract formats. We found that approximately 7 out of 10 CRM descriptions on the Web were totally abstract, giving no hint to consumers as to the actual amount being donated. There are some possible legitimate reasons why advertisers choose abstract formats over others. Many CRM campaigns have caps, or maximum amounts that will be donated (Varadarajan and Menon 1988). We empathize with a copywriter who might be asked to describe an elaborate formula by which the total donation amount will be calculated. Simply saying in an advertisement "something will be given" eliminates the need for such complex, potentially confusing disclosures. However, even where the ad copy is technically correct, if such offers result in overestimation of the donation amount by the consumer and this, in turn, results in differential purchase behavior because of the overestimation, there is reason for concern from a policy perspective.

Although prior research into vague quantifiers has demonstrated that people often overestimate amounts represented by seemingly "small" vague quantifiers (Budescu and Wallsten 1985), we should point out that because we have no firm

benchmarks, we cannot say whether people overestimate the amount when told a "portion" would be donated. Despite numerous high-level contacts with philanthropic consortia, CRM trade organizations, and the offices of several states' attorneys general, no such benchmarks seem to be currently available. Future research should certainly investigate what the average advertiser really means by "a portion" in this context. Nevertheless, the large variance associated with estimates suggests that whatever the true value is for a particular promotion, consumer interpretations are likely to vary tremendously. We did, however, find evidence that the particular abstract wording used in CRM ad copy can have a large impact on donation estimates. Specifically, using the term "substantial" caused mean estimates to more than double.

It should be noted that the mean estimates associated with specific ad copy wordings in this paper should not be construed as absolute, generalizable benchmarks. Our focus, rather, has been on examining whether variations in abstract ad copy wording can lead to different donation estimates. Advertisers wishing to ensure that their campaigns meet or exceed consumer expectations should conduct such research with individuals in relevant market segments to ensure that the perceived estimates are in line with intended donations.

In review, the results of the present set of studies suggest that the particular abstract ad copy used to describe a CRM offer does influence perceived donation magnitude. Second, the variance associated with these estimates is extremely large, suggesting that consumers differ widely with respect to what a given term means (e.g., there is not universal understanding in the minds of individuals with respect to what a "portion" means). Third, given that the level of donation impacts choice, the ability of an offer to be estimated with reasonable accuracy may be of concern to advertisers and regulators.

We would argue that consumers selecting product/service alternatives that possess a CRM offer are acting in good faith. Therefore, to the extent possible, this faith should be maintained via the presentation of CRM offers in straightforward understandable formats. Such formats should be readily and accurately interpretable by the consumer. Hence, from a policy perspective, it is suggested that when at all possible, enterprises identify CRM offers either in the form of a dollar value per unit, or as a percent of the sales price. Such a policy would reduce the variance in estimates, and therefore diminish the potential for confusion caused by abstract formats.

In conclusion, we would like to reiterate the point we made at the beginning of this document. Cause-related marketing is almost always a win-win situation for the advertiser and the charity. It is important to remember, however, that CRM is not a dyadic exchange; it is a triadic one. It involves a third player: the consumer. We hope the research presented here will help ensure that the interests of all three parties are well served.

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