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Thinking Pink? Consumer Reactions to Pink Ribbons and Vague Messages in Advertising

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Abstract

Many brands partner with causes in their advertising campaigns. Consumers appreciate that the brands they purchase participate in activities that contribute to a society's well-being. This study uses copy-testing techniques to evaluate the number and types of thoughts and brand attitudes in the presence and absence of cause-related messages. Individuals saw an ad for one of two products. None of the ads stated the brand's financial support to the cause, which is representative of many messages today. People viewing the Dansko ads with the pink ribbon generated significantly fewer thoughts than those viewing the ad without the pink ribbon. For the Fitbit ads, more thoughts were generated for the ad with the pink ribbon than the ad without the pink ribbon. The Fitbit ad with the pink ribbon and support message generated fewer positive and negative thoughts but more neutral thoughts that questioned the brand/cause relationship. Attitudes toward the brand did not vary based on the presence or absence of the pink ribbon. People who saw ads with the pink ribbon displayed more positive attitudes toward the brands' commitment to society and misestimated the brands' contributions to the cause.

Keywords

Corporate social responsibility advertising brands attitudes

Introduction

Partnering with a charitable organization is arguably an easy decision for brands to make. Brands earn accolades (and possibly increased sales) from consumers who see them as sharing the values of the charitable organization; partner organizations achieve increased awareness and in many cases donations from brands. Research has examined these campaigns from several angles, including typologies of messages (Pracejus, Olsen, and Brown 2003), consumer reactions to campaigns (Olsen, Pracejus, and Brown 2003), and brand/cause fit (Lafferty and Goldsmith 2005; Nan and Heo 2007). Brand involvement in cause-related marketing (CRM) campaigns is generally seen as beneficial for both brands (Ponte, Richey, and Baab 2009) and consumers (Cone Communications 2013).

As brands increase their spending on these types of cause marketing campaigns (Crespin 2011), understanding how consumers use these messages will help understand optimal strategies for brands and causes. This study will focus on brands that partner with breast cancer charities. Many ads communicating a brand's support of breast cancer research use the pink ribbon, one of the world's most recognized symbols (Harvey and Stahilevitz 2009). As consumer awareness of the pink ribbon has grown (due in part to its frequent use in marketing campaigns), so have concerns with pinkwashing, the overstatement of a brand's commitment to the fight against breast cancer (see e.g. Malkan 2007; Goldman 2011). This study will investigate whether such concerns are warranted. We will use techniques of thought elicitation to be able to explore whether ads containing pink ribbons elicit different types of thoughts than ads for brands only and examine whether brand-cause partnerships create different attitudes toward brands than brand-only messages, and how these messages translate into consumer perceptions of brands' contributions toward causes.

Literature review

Corporate social responsibility

Many large companies have historically engaged in philanthropic activities, but the 1980s saw companies starting to regularly integrate Corporate Social Responsibility (CSR) into their strategic planning (Ponte, Richey, and Baab 2009). The European Commission (n.d.) defines CSR as 'a concept whereby companies integrate social and environmental concerns in their business operations and in their interactions with stakeholders on a voluntary basis'. The World Business Council for Sustainable Development provides this definition: '... the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as the local community and society at large' (Holmes and Watts 2000, 8).

In its second annual survey of corporate responsibility professionals, Corporate Responsibility Magazine found that 72% of the 300 companies examined (all traded on the New York Stock Exchange) have formal CSR programs, up from 62% in 2010. More than 60% have dedicated CSR budgets, up from 52% in 2010. This increase may be due to consumers' positive reactions to these types of efforts (Crespin 2011).

The Cone Communications/Echo CSR report (2013) indicates that consumers expect companies to be active participants and driving forces in solving social and environmental issues. Companies that do not address these issues may suffer a decline in their reputation, and when consumers learn about irresponsible behavior, almost all say they would boycott the offending company (Cone Communications 2013). However, researchers have argued that there may be a gap between what consumers say they will do and what they actually do. Carrigan and Attalla (2001) found ample evidence that consumers can easily identify unethical companies but still

patronize the businesses, often rationalizing the firms' unethical performances in their purchase decisions (2001).

Cause-related marketing

One important aspect of CSR is CRM, an agreement between nonprofit and for-profit organizations to connect a brand to a cause (Harvey and Strahilevitz 2009). CRM campaigns vary in several areas: scope and design, the types of causes that companies partner with, and the nature of the relationships between brands and causes (Polonsky and Macdonald 2000). For the brand, several benefits exist. CRM can strengthen a brand's reputation while connecting with consumers on meaningful issues and ideas (King 2004). CRM can also increase brand profits (Ponte, Richey, and Baab 2009); about 90% of respondents to a survey conducted in 10 countries (sample size 10,200) report that are likely to switch brands to one associated with a good cause if other factors (such as price and quality) are equal (Cone Communications 2013). Finally, CRM can increase employee loyalty, aiding in both recruitment and retention (Ponte, Richey, and Baab 2009). For causes, CRM campaigns can increase awareness and perceptions of credibility of the cause, and also the cause can receive financial contributions from donations from and/or sales of the brand (Harvey and Strahilevitz 2009).

Many CRM messages explicitly promote the brand-cause connection. For example, Proctor and Gamble donates \$1 to saving wildlife for every bottle of Dawn detergent that consumers purchase throughout the year (Bell 2010). Some connections are not so clear. For example, every year in October, numerous firms (including Playtex, Yoplait, and the NFL) advertise that they 'support' breast cancer research but often provide minimal information about the level of support and the specific cause that is supported (Selleck 2010). Regardless of the level of explicitness, CRM campaigns leverage some type of attitude transfer from the brand to the cause. Fishbein and Ajzen (1975) defined an attitude as 'the amount of affect for or against some object (11)'. The Affect Transfer Hypothesis suggests that attitudes toward brands can be transferred to the cause. This works best if the brand's message of support to the cause links to a core value of a customer since it generates a level of involvement that can lead to stronger relationships and trust bonds (Broderick, Jogi, and Garry 2003). In a study of 900 consumers in Sweden, Micheletti (2010) found that consumers who purchase products associated with causes see themselves (and others who make such purchases) as public-spirited good citizens (Micheletti 2010).

There are several risks to engaging in these partnerships. The relationship between cause and brand is not always a good fit, as brands may have more to gain and can mislead partners and consumers in the interest of increasing brand recognition and sales (Lubitow and Davis 2011). Research regarding how consumers perceive brands in CSR campaigns is mixed. Chaisurivirat (2009) found positive relationships between attitude toward CSR and attitude toward the brand, regardless of the type of CSR initiative; however, Bennett and Gabriel (2000) found that consumers vary in the degree of their involvement and inclination toward donating to charities. Broderick, Jogi, and Garry (2003) found that consumers are highly aware of CRM activities, but the amount of actual knowledge of the brand/cause relationship varies among consumers. Grau and Folse (2007) found that when consumers are more involved with the cause they tend to be more interested in purchasing a product to help the cause. They also found local rather than national donations spurred more favorable attitudes toward brand. Mattila, Hanks, and Kim (2010) found that CRM messages could mitigate consumers' negative attitudes toward categories of products (such as mortgage brokers) and, as a result, attitudes toward companies in the category improve.

Pracejus, Olsen, and Brown (2003), in an analysis of cause-related marketing messages, found that almost 70% of messages studied provided an abstract or vague relationship between the brand and the cause (e.g. messages vaguely suggested that a portion of the proceeds of a sale or an unstated monetary amount would be donated to the cause). Participants described 25% of the messages as estimable (e.g. the message stated that a specific

percentage of the profits would be donated) and the remainder (about 5%) were described as calculable (e.g. that a specific portion of the product's price would be donated). Variations in abstract wording led to differences in consumer estimates of brands' donations and perceptions of the donation amount impacts consumer choice. Olsen, Pracejus, and Brown (2003) found that consumers were often confused when they read messages depicting donations as percentages of profits. For example, Ralph Lauren's advertisements for his 'pink pony' brand states that 20% of proceeds from sales of the pink pony line will be contributed to breast cancer research. The researchers suggest that these types of messages lead to 'near universal overestimation of the amount being donated'.

Several studies investigated the effects of the fit between the cause and the brand. Nan and Heo (2007) found consumers held more favorable attitudes toward companies whose brand ads featured a CRM component compared to companies that did not, regardless of the fit between the brand and the cause. Lafferty and Goldsmith (2005) found that people's evaluations of brands are less susceptible to the influence of the characteristics associated with the cause, although the cause can be influenced by the characteristics of the brand.

Chang and Lee (2008) found that the amount of the contribution could affect whether people would consider purchasing a product: specifically, the higher the contribution for what the authors termed frivolous (as opposed to practical) products, the more likely the individual would consider the purchase. In a study looking at advertisements to raise awareness of certain types of cancers, Taylor and Knibb (2013) found that ads raising awareness of breast cancer created greater emotional responses and produced more emotions than ads raising awareness of other types of cancer. The researchers also found out that donation intentions and amounts were positively related to ad evaluations.

Industry recommendations for CRM success appear throughout the literature, and include calls for messages to be concrete and specific (Walsh 1999; Einstein 2012) and to derive from clear objectives (Drumwright 1996; Lubin and Esty 2010). These recommendations are important since consumers may find some CSR campaigns confusing: the Cone Communications (2013) study described consumers as 'bewildered' when messages were unclear and inconsistent. Further, Parguel, Benoît-Moreau, and Larceneux (2011) found that consumers tended to be unclear on which corporations were good citizens and which were not. Mitchell and Papavassiliou (1999) connected confusion to stimulus overload: CRM messages contain information about both the brand and the cause, and that may simply be too much for some people to handle. Horne (2013) argued that vague messages may be deceptive since these messages may mislead consumers to believe that their purchases of products contribute more to the cause than they actually do.

The pink ribbon and breast cancer CRM

Breast cancer is the most common cancer in women worldwide, representing about one-fourth of all cancers in women (World Cancer Research Fund Worldwide n.d.). A number of brands and companies support the search for a cure for breast cancer, partnering with a variety of causes including the American Cancer Society, the Susan G. Komen Foundation, and the Breast Cancer Research Foundation. Partnering with breast cancer charities has few risks of alienating potential consumers, compared with causes working to end societal challenges such as HIV/AIDS or poverty (Lubitow and Davis 2011). Respondents to one study indicated overwhelmingly that that breast cancer research is a critical cause that corporations should support (Cone Communications 2013).

Ads and other messages use the iconic pink ribbon to symbolize both breast cancer awareness and the search for a cure. Ribbons have been a popular way of showing support for causes since 1979, when over 50 US Embassy staff were taken hostage in Iran. Inspired by a pop song by Tony Orlando and Dawn, friends and family members of the hostages decorated their homes with yellow ribbons, indicating their hope to see their loved ones returned (Fernandez 1998). The Susan G. Komen foundation began distributing pink ribbons at the end of

its fundraising athletic event, the Race for the Cure, in 1991: the color pink was selected for breast cancer awareness as a distinctly feminine color. Cosmetics giant Estee Lauder helped to popularize the pink ribbon in 1992 (Breast Cancer Action n.d.). Research shows dramatic increases in both government funding of breast cancer research and women's compliance with breast cancer screening during the first five years of use of the pink ribbon (Fernandez 1998).

Harvey and Strahilevitz (2009) suggest that the pink ribbon is one of the most widely recognized symbols in the USA (26); a recent study showed that more than two-thirds of NFL fans recognized the pink ribbons and other pink iconography used by football teams during October (breast cancer awareness month) and connected the pink ribbon to breast cancer awareness and screening (Basen 2013). Vineburgh (2004) suggests that the pink ribbon is a 'public education vehicle (137)' that lends recognition and a sense of hope to an anxiety-provoking health issue. Ehrenreich (2001) described products featuring the pink ribbons as 'amulets and talismans', that provide comfort and visible evidence of faith; Harvey and Strahilevitz (2009) add that the pink ribbon represents strength, hope, responsibility and empathy and point out that it gives people permission to discuss breast cancer, with the result that awareness of breast cancer has increased significantly over the past two decades.

The pink ribbon can be seen as a cultural symbol, and using such symbols in advertising is likely to affect consumer attitudes toward products. These symbols may function as cues that may have no intrinsic link to the product, yet allow people to draw inferences based on the cues. These inferences can influence consumer judgments of the merits of advertisement and the product being advertised (Petty and Cacioppo 1984; Andrews and Shimp 1990). However, criticism of the pink ribbon campaign exists. King (2004) suggests that breast cancer awareness has become a trendy project for brands, and as a result several categories that display the pink ribbon are associated with increased risks of breast cancer, such as wine and cosmetics (Malkan 2007), or are seen as unhealthy, such as guns and fast food (CBS/Seattle 2012).

Concerns with contributions have also been noted. When consumers purchase products with pink ribbons, they often assume that a portion of that purchase will be donated to breast cancer awareness, which may or may not be true. Additionally, a company's actual donation may be tiny relative to their profits. For example, in October yogurt maker Yoplait donates 10 cents to Susan G. Komen for every pink lid customers mail to the company. They guarantee that a minimum of \$500,000 and a maximum of \$1,500,000 will be donated to the foundation. The maximum donation represents 0.10% of their net sales, which some argue is low relative to their profits (Selleck 2010).

Concerns with breast cancer awareness and research groups are also noted. The world's largest breast cancer foundation, the Susan G. Komen Foundation, has been criticized for stopping a grant program that funded breast cancer screenings at Planned Parenthood offices. This led to further investigations, which found that the foundation donated less than 20% of contributions to charity (Hiltzik 2014). Like other breast cancer foundations, the Susan G. Komen Foundation focuses funding on awareness campaigns such as various walks, races, and rallies (Goldman 2011). However, given the near ubiquitous nature of the pink ribbon, some argue that awareness is already very high, and the monetary emphasis should be put on research.

The growth in concerns over inappropriate use of the pink ribbon has led to the framing of the phenomenon as pinkwashing. Malkan (2007) describes pinkwashing as 'the activities of companies and groups that position themselves as leaders in the struggle to eradicate breast cancer while engaging in practices that may be contributing to the rising rates of the disease (75)'. Casserly, Lubitow, and Davis (2011) define pinkwashing as 'the practice of using the color pink and pink ribbons to indicate a company has joined the search for a breast cancer cure and to invoke breast cancer solidarity, even when the company may be using chemicals linked to cancer' and 'the cooptation of breast cancer symbolism by corporate actors who stand to profit from the use of breast cancer imagery, including pink ribbons or simply the pastel pink (31)'.

Despite the concerns about pinkwashing, research has not investigated whether the inclusion of a pink ribbon in advertising message affects consumers' perceptions and attitudes toward the product being advertised as well as toward breast cancer research.

Clearly, the presence of a pink ribbon in CRM messages signals some type of association between the brand and breast cancer awareness. Signaling theory (Spence 1974) suggests that cues such as a pink ribbon provide consumers with tangible information that they can use to construct evaluations for unobservable factors. Signaling theory has been used to evaluate the effects of several different types of marketing signals such as price (Milgrom and Roberts 1986) and warranties (Boulding and Kirmani 1993). However, whether consumers spend more time or energy in thinking about these signals has not been assessed. Simply put, a brand message with a pink ribbon provides two different sets of information: information about the brand and about the cause. There is also generally a mix of verbal and visual information. Miniard, Bhatla, and Rose (1990) found that claims and pictorial elements of an ad influence attitudes toward the brand because the more someone processes information, the more confident they may feel about the message, causing them to accept claims that directly enhance their evaluation of the brand.

Also, the pink ribbon may symbolize that the product provides social benefits and thus consumers seeing the ribbon may have more positive attitudes to affiliated brands.

This study will investigate how consumers react to the pink ribbon in advertising messages with and without text information about the brands' commitment to breast cancer awareness.

Research questions

Three specific questions will be asked:

- (1) Does the presence of symbols and/or text about a brand's CSR activities in an advertisement affect the number and/or types of thoughts people have about the ad?
- (2) Does the presence of symbols and/or text affect attitudes toward the brand (AB) and the brand's commitment to society?
- (3) Does the presence of symbols and/or text affect perceptions of the brand's financial support to the cause?
 - Is perceived support reflective of actual support?
 - Is there a relationship between AB and perceived financial support?
 - Is there a relationship between the use of the pink ribbon and perceived financial support?
 - Is there a relationship between the number of thoughts and perceived financial support?

Method

Data were collected via a survey from an online population viewing different ads with and without the pink ribbon. Participants were workers at Amazon's crowdsourcing site, Mechanical Turk. At this website, adults can register to participate in Human Information Tasks. When they register, they agree that they are at least 18 years old and will only register once for the site. These individuals received a small award (\$0.55) upon completion of the survey, which was hosted on the Qualtrics website.

Ads that feature the pink ribbon and that have been used in digital content were selected as stimuli. Other experimental research has used real ads to examine effects given the presence or absence of certain content in the advertisements (see e.g. Harris, Bargh, and Brownell 2009). Researchers realize that using real ads means that it is impossible to have identical styles of ads but can help identify attitude and behavioral patterns that are likely to appear in real life (Dixon et al. 2007). Researchers using real ads recognize that using real ads may mean

giving up some type of control in the message manipulation and suggest that other types of controls (in terms of brand and symbol awareness) must also be analyzed to try to identify any potential outside influences (Moorman, Neijens, and Smit 2002). To find ads, we conducted a Google Image search using the keywords 'pink ribbon ad'. Two products were selected and subsequently used in two different experiments: a wearable fitness tracking device and a shoe. These products avoid the controversial product categories mentioned earlier. For both product categories, the ads with the pink ribbon did not mention that the brand supported a specific research group (such as the Susan G. Komen Foundation) or that the brand made any specific type of donation to the cause. This reflects many of the advertisements and other pink ribbon promotional messages from companies including Mercedes Benz, Uggs, Fuji, Kroger, and Sharpie.

Study 1: Dansko shoes

Participants in the first study, a between-subjects design, were exposed to one of two ads for Dansko, a shoe brand that is a 'clog'-type shoe often worn by health care professionals and chefs (see Appendix A for one example ad). The first ad contains an image of four different types of Dansko shoes with the text 'New Arrivals: Shop Now'. The second ad is a replication of the first ad with a pink ribbon digitally placed onto the black shoe. Even though this ad was not a 'real' ad, the Google Image search indicated that Dansko indeed does make a shoe that looks exactly like the one appearing in this ad. Dansko donates \$25,000 per year to breast cancer research.

After seeing one of the two ads, participants were immediately provided with a text box with the instructions: 'Please write down the thoughts you have in the box below. Please try to be a bit specific: for example, instead of writing "colorful" please write down "the ad is colorful" or "the shoes are colorful"'. This technique has been used in various types of copy testing research, and research into advertising suggests that counting the frequency of pro and counter arguments can be a measurement of the persuasiveness of a message (Cacioppo, Harkins, and Petty 1981). Brand attitudes were measured on six five-point items anchored by *unpleasant/pleasant*, *unfavorable/favorable*, *dislike/like*, *low quality/high quality*, *worthless/valuable*, and *disagreeable/agreeable* (McKenzie and Lutz 1989). For analysis purposes, the first word in each pair of items was scored as a '1' and the second as a '5'. Attitude toward Brand's Commitment to Society was measured on two five-point items anchored by *doesn't care about society/cares about society*, and *doesn't contribute to charities/contributes to charities* (Turker 2009). Participants were also provided with an open-ended question asking what they thought the brand's yearly contribution was to breast cancer charities. At the end of the survey, respondents answered demographic questions whether they were familiar with the pink ribbon (yes/no/unsure) and whether they saw the pink ribbon on the ad that they viewed (yes/no/unsure).

Results

A total of 80 individuals participated in this study (40 per advertisement). About 61% of the respondents were male and 39% were female with an average age of 33.2 (median = 29 years old). Post hoc tests show no differences in responses relative to gender. More than 89% were familiar with the pink ribbon symbol, and about 20% were familiar with the Dansko brand. Cronbach's alpha for AB was 0.931 and for Attitude toward the Brand's Commitment to society was 0.895, both at an appropriate level (DeVellis 2012). There were no significant differences in brand attitudes between people who were familiar with the brand and people who were not.

Using Cacioppo, Harkins, and Petty (1981) framework, two coders were trained to examine each 'thought' in the response and to first characterize it as a thought about the advertisement, the brand, or the cause. They categorized each thought as positive, neutral, or negative. For example, a neutral thought is 'the ad is colorful', and a positive thought is 'I like that the ad is colorful'. If a respondent's thought contained a question (such as 'I

wonder how they support breast cancer awareness?') the thought was coded as neutral. Intercoder reliability using Scott's pi was 0.92.

The first research question asked whether the presence of symbols and/or text about a brand's CSR activities in an advertisement affect the number and/or types of thoughts people have about the ad. Table 1 outlines the average number of thoughts per ad. The Dansko 'brand' ad (without any mention of the pink ribbon) generated more thoughts than the Dansko 'ribbon' ad (average thoughts 3.43 for brand ad, 2.58 for ribbon ad, $t = 3.8, p < 0.001$). The brand ad also generated more positive thoughts about the ad and more positive thoughts in total than the ribbon ad ($t = 4.289, p < 0.001$ for positive thoughts about the ad, $t = 3.853, p < 0.001$ for total positive thoughts). There was not a significant difference in the number of neutral or negative thoughts in the two ads. The ad with the pink ribbon generated very few thoughts overall about the cause.

Table 1. Mean thoughts, attitudes, and donations estimates for study 1.

		No ribbon	Ribbon only	t	p
Thoughts about the ad	Positive	0.84	0.35	4.289	<0.001
	Neutral	0.40	0.40	NS	
	Negative	0.27	0.27	NS	
Thoughts about the brand	Positive	0.98	0.65	NS	
	Neutral	0.58	0.65	NS	
	Negative	0.31	0.14	NS	
Thoughts about the cause	Positive	NA	0		
	Neutral	NA	0.143		
	Negative	NA	0		
Total thoughts	Positive	1.86	1.00	3.853	<0.001
	Neutral	0.98	1.16	NS	
	Negative	0.58	0.42	NS	
	Total	3.43	2.58	3.8	<0.001
AB	Mean	23.20	23.30	NS	
	SD	5.50	4.90		
AB commitment to society	Mean	6.67	7.53	6.24	0.002
	SD	1.4	1.4		
Estimated donation	Mean	\$65,111	\$117,418		
	Median	\$10,000	\$10,000		
	Mode	\$10,000	\$15,000		

The second research question asked whether the presence of symbols and/or text affect attitudes toward the brand and toward the brand's commitment to society. Table 1 provides these scores and Table 2 provides a correlation between these two attitudinal scores. There was not a significant difference in overall attitude toward the brand (mean = 23.20 for the brand ad, 23.30 for the ribbon ad), but the ribbon ad generated significantly higher attitudes toward the brand's commitment to society (mean = 6.67 for the brand ad, 7.53 for the ribbon ad, $t = 6.24, p = 0.002$). There were also a strong correlation between AB and attitude toward the brand's commitment to society for the brand ad ($r = 0.559, p < 0.001$); a weaker correlation was seen in the ribbon ad ($r = 0.304, p = 0.038$).

Table 2. Correlations: study 1.

Correlation	No ribbon	Ribbon only
AB/attitude toward the brand's commitment to society	0.559	0.304

Donation estimate/AB	0.093	-0.074
Donation estimate/attitude toward the brand's commitment to society	0.011	-0.049
Donation estimate/number of positive thoughts	-0.191	0.214
Donation estimate/number of total thoughts	-0.046	0.073

The final research question asked whether presence of symbols and/or text affect perceptions of the brand's financial support to the cause in terms of whether the anticipated donation was related to AB, the attitude toward the brand's commitment to society, or the number of thoughts. Dansko donates \$25,000 to breast cancer research each year, not tied to product sales. As seen in Table 1, respondents greatly misestimated the extent of Dansko's donation. The mean donation estimated by people exposed to the brand ad was \$65,111 (range from \$0 to 1,00,000), with the median and mode much lower than the average. The estimation by people exposed to the ribbon ad was \$117,418 (range from \$0 to \$100,000), the median and mode were lower. The differences in the two estimates were not significant yet both are much higher than the actual donation (the brand ad's estimate is 2.6x more than the real donation, and the ribbon ad's estimate is almost 5x the donation). As Table 2 shows, there were no significant correlations between the donation amount and AB, attitude toward the brand's commitment to society, or with the number of positive or total thoughts.

Study two: fitbit

The second study was also a between-subjects design using as a stimulus ads for the brand Fitbit, a personal fitness activity tracker. Personal activity trackers are wristbands that can monitor steps walked (such as a pedometer), sleep, calories consumed and used, heart rate, and blood pressure. All three ads are real ads appearing online. The first ad in this study (the brand ad) contained a picture of a black Fitbit and the following text: 'Fitbit, Wireless Activity and Sleep Tracker'. The second ad (the ribbon ad) contained a picture of a pink band and the text: 'Fitbit. Introducing Pink. Flex. Wireless Activity and Sleep Wristband'. The ad displays a pink ribbon next to the word 'Flex'; while this ad does have additional text, the text does not mention breast cancer specifically and the word pink is positioned very close to the pink ribbon. The third ad (the ribbon/text ad) contained the same visual as the ribbon ad but instead of 'Wireless Activity and Sleep Wristband' the line read 'Band together to Fight Breast Cancer'. Fitbit contributes \$2 for every Fitbit sold to the American Cancer Society; the retail price is about \$100. The procedure for this study was identical to the procedure for the first study.

A total of 120 individuals participated in this study (40 per advertisement); 62.3% were male and 37.7% were female with an average age of 32.3 and a median age of 27. More than 86% were familiar with the pink ribbon symbol. One-fourth were familiar with the Fitbit brand; there were no significant differences in responses between people who were familiar and who were not.

As with Study 1, two coders were trained to examine each 'thought' in the response and to first characterize it as a thought about the advertisement, the brand, or the cause. Then they categorized the thought as positive, neutral, or negative. If a respondent's thought contained a question (such as 'I wonder if the band is comfortable?'), the thought was coded as neutral. Intercoder reliability using Scott's pi was 0.89. For the scaled measurements, Cronbach's alpha for AB was 0.955 and for Attitude toward the Brand's Commitment to society was 0.865, both at an appropriate level.

As shown in Table 3, the brand and the ribbon ads generated more average thoughts than the ribbon/text ad (average thoughts 3.13 for brand, 3.41 for ribbon, 2.50 for ribbon/text) ($F = 75.75, p = 0.004$). Post hoc testing indicated that the brand ad generated more positive and negative thoughts about the ad than the ribbon and ribbon/text ads ($F = 3.35, p = 0.030$ for positive, $F = 6.70, p < 0.001$ for negative). In terms of total thoughts, the brand and ribbon ads generated more positive thoughts than the ribbon/text ad ($F = 4.67, p < 0.001$) and the

brand ad generated more negative thoughts and fewer neutral thoughts than the ribbon and ribbon/ text ads ($F = 3.00, p = 0.050$ for negative thoughts, $F = 7.23, p < 0.001$ for neutral thoughts).

Table 3. Mean thoughts, attitudes, and donations for study 2.

		No ribbon or text	Ribbon only	Ribbon and text	F ^a	p
Thoughts about the ad	Positive	0.98	0.50	0.40	3.35	0.03
	Neutral	0.59	1.02	0.91	NS	
	Negative	0.41	0.14	0	6.7	<0.001
Thoughts about the brand	Positive	0.53	0.57	0.27	NS	
	Neutral	0.34	0.61	0.37	NS	
	Negative	0.17	0.14	0	NS	
Thoughts about the cause	Positive	NA	0.19	0.23	NS	
	Neutral	NA	0.17	0.02	NS	
	Negative	NA	0.02	0.16	NS	
Total thoughts	Positive	1.58	1.30	0.90	4.67	<0.001
	Neutral	0.95	1.80	1.40	7.23	<0.001
	Negative	0.60	0.31	0.16	3.00	0.050
	Total	3.13	3.41	2.47	5.75	0.004
AB	Mean	23.4	24.28	23.70	NS	
	SD	4.1	4.7	5.8		
AB commitment to society	Mean	6.50	8.02	8.50	17.73	<0.001
	SD	1.4	1.6	1.8		
Estimated Donation	Mean	\$1.38	\$3.03	\$7.49	NS	
	Median	\$1	\$1	\$1		
	Mode	\$1	\$1	\$1.5		

^a For thoughts about the cause, a *t* test was conducted.

The second research question asked whether the presence of symbols and/or text affect attitudes toward the brand and toward the brand's commitment to society. Table 3 provides these mean scores and Table 4 provides the correlation between the scores. There was not a significant difference in overall attitude toward the brand (mean = 23.40 for the brand ad, 24.30 for the ribbon ad, 23.70 for the ribbon/text ad). The brand ad generated significantly lower attitudes toward the brand's commitment to society (mean = 6.50 for the brand ad, 8.01 for the ribbon ad, and 8.5 for the ribbon/ text ad, $F = 17.73, p < 0.001$). As shown in Table 4, there was a strong correlation between AB and attitude toward the brand's commitment to society for both ribbon ads ($r = 5.91, p < 0.001$ for the ribbon only ad, $r = 0.802$ and $p < 0.001$ for the ribbon and text ad).

Table 4. Correlations for study 2.

Correlation	No ribbon or text	Ribbon only	Ribbon and text
AB/attitude toward the brand's commitment to society	0.167	0.591**	0.802**
Donation estimate/AB	0.234	0.293	0.128
Donation estimate/attitude toward the brand's commitment to society	0.204	0.202	-0.245
Donation estimate/number of positive thoughts	0.091	-0.245	-0.201
Donation estimate/number of total thoughts	-0.046	0.214	-0.006

** Significant at <0.0001.

The final research question asked whether the presence of symbols and/or text affect perceptions of the brand's financial support to the cause in terms of whether the anticipated donation was related to AB, the attitude toward the brand's commitment to society, or the number of thoughts. Fitbit donates \$2 for every pink Fitbit sold to breast cancer research each year. As seen in Table 3, estimates of the donation varied widely. The mean donation estimated by people exposed to the brand ad was \$1.38 per Fitbit (range from \$0 to 5, median = \$1, mode = \$1), exposed to the ribbon only ad was \$3.03 per Fitbit (range from \$0 to \$20, median = \$1, mode = \$1) and exposed to the ribbon and text ad was \$7.49 per Fitbit (range from \$0 to \$100, median = \$1, mode = \$1.50). These differences in average estimates are significant ($F = 3.207, p = 0.044$). Table 4 shows that there were no significant correlations between the donation amount and AB, Attitude toward the Brand's commitment to society, or with the number of positive or total thoughts.

Discussion

Does the presence of a pink ribbon (with or without text about the ribbon) influence reactions toward brand advertisements? In both studies, the ads without the pink ribbon generated significantly more positive thoughts about the ad, more total positive thoughts (the sum of ad and brand thoughts), and total thoughts (the sum of total positive, negative, and neutral for ad, brand, and cause) than the ads featuring the pink ribbon (in study 1) and the pink ribbon with text (study 2). This suggests that adding a 'second' brand (the cause) to a message generally will not increase engagement with the message, perhaps because any message about breast cancer may lead people not to think positive thoughts. Additionally, perhaps the reduction in the number of thoughts for the pink ribbon ads indicates that the pink ribbon serves as a type of heuristic or cue, or stimulates some type of peripheral processing, reducing the overall cognitive effort going into processing the message. In addition, a small number of individuals wrote that the lack of information from the vague messages caused them to dislike the brand since it seemed to be capitalizing on the misfortune of others. This could be a negative heuristic: the presence of a pink ribbon may be causing some people to not attend to the message at all. This may be due to negative publicity about some breast cancer charities or the over-saturation of pink ribbons in society. Further research should delve more into the pink ribbon as a heuristic cue.

The pink ribbon ads generated significantly more neutral thoughts in study 2; many of these incremental thoughts were questions about the brand-cause relationship (such as how the brand specifically supported the cause). This suggests that the use of vague messages, the dominant type of message identified by Pracejus, Olsen, and Brown (2003), are indeed confusing to customers and could be detracting from the formation of more positive attitudes toward the brand.

Overall attitudes toward the brand did not vary based on the presence or absence of the pink ribbon. However, people who saw ads with the pink ribbon displayed more positive attitudes toward the brands' commitment to society, which also correlated with brand attitudes. This might suggest that the current conceptualization of brand attitude is not influenced by a brand's level of corporate social responsibility; further study of whether consumers consider a brand's CSR activities when assessing overall AB is warranted, particularly to see if a different interpretation of the Affect Transfer Hypothesis is at work: perhaps attitudes toward brands can be transferred to attitudes to the brand's commitment to society and perhaps, ultimately, to a purchase.

This study clearly shows that one of the biggest challenges with vague messages is in the estimations of the brands' contributions to charity; the mean contribution was much higher than the brands' actual financial commitment to the cause, while the mode and median contributions were lower than the actual commitment. Contrary to Olsen, Pracejus, and Brown (2003), we suggest that vague messages cause misestimates, in both directions, of the donation made by the brand. As Pracejus, Olsen, and Brown (2003) determined, perceptions of donation size affected purchase intentions; as a result, brands may be losing sales when consumer estimates of the brands' donation are lower than the actual donation amount. To address this, brands should be very clear

about the monetary relationship between the brand and the cause by either indicating it directly on the ad or providing a link to a web page where the consumer can find more information, similar to the idea of the 'adequate provision' required of prescription drug advertisers. This would ensure that consumers that wanted to know the commitment of the brand to the cause would have easy access to that information.

For brands, this type of disclosure provides an opportunity to provide an important context to their contribution. For example, Danskø's \$25,000 contribution to the Breast Cancer Research Foundation may seem relatively small given the size of the company. However, the donation is one of many donations totaling over half a million dollars per year that the brand makes to 80 different causes, and being able to review this mix of causes is likely to generate additional good will for brands.

As an exploratory study, several limitations exist. The study only investigated two different brands using the pink ribbon, and the study did not undertake any analysis of the 'fit' between the brands and the cause (although it was informed by other research suggesting what types of products to avoid, such as wine and makeup). Examining the level of fit, and adding additional products that may vary the amount of fit between the product and the cause, may provide some additional insights to the number of thoughts generated by the ads. Additionally, the samples in both studies were fairly small and skewed toward men and younger people. While cross tabulations did not indicate any significant differences between men and women, broadening out the sample in terms of gender and age may provide additional insights to the study.

The study used real ads, and the language in all these ads reflects the nature of vague advertisements today. Using real ads and implicit association measurements can best identify the types of the associations that consumers make most readily: we can examine the benefits of work that has already been done to better inform practitioners how to create better ads in the future. At the same time, we recognize that in study 2, the manipulation of the 'ribbon only' ad included the words 'think pink' which arguably could be seen as a confound in the study as it could be unclear whether any differences were due to the differences in both the image and text in the brand ad. However, since the text referred to the pink color in the ribbon, and was positioned directly by the ribbon, it is likely that many participants associated the words 'introducing pink' with the pink ribbon. Indeed, the results of the study showed that in most attitudinal measures, the 'ribbon only' ad generated opinions more similar to the 'text and ribbon' ad than to the 'brand' ad, adding support to our position that the ribbon serves as a heuristic device. Future research should examine different (perhaps unfamiliar) products with more controlled manipulations in order to further understand how the heuristic works.

Finally, the study only examined the pink ribbon and its affiliated cause. These results may not apply to other brand-cause partnerships. Additionally, it is difficult to think of a cause that has such a strong visual iconography that breast cancer has in the pink ribbon. For example, in examining the 80 different causes supported by Danskø, very few have strong visual iconography. Future research could select some causes that do have a strong visual component (such as the Red Cross, Habitat for Humanity or the Ronald McDonald House) to see if results similar to this study occur.

Conclusion

The presence of a pink ribbon has some effect on people who view it in an advertising situation. This study suggests that a symbol for a cause in an advertisement may change how people perceive the brand relative to its commitment to society as well as its generosity to the cause. It also suggests that including a cause may not improve overall attitudes toward the brand. The numbers of certain thoughts tend to decline in the presence of the pink ribbon, suggesting some type of heuristic or peripheral processing is in place. However, this also does not seem to affect attitudes toward the brand. Brands should take care to include more information about their support of the cause in order to avoid the possibility of pinkwashing with their CRM messages.

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Appendix A: Example ads

