Where you say it matters: Why packages are a more believable source of product claims than advertisements

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Abstract

This research demonstrates that a marketing claim placed on a package is more believable than a marketing claim placed in an advertisement. In three studies, we show that the benefit of greater believability for packages is driven by perceptions of proximity. In general, consumers perceive packages, and thus the claims they offer, as closer to the product than ads and their respective claims. This perception of greater claim-to-product proximity is likely to make a claim seem more verifiable. Therefore, claim-to-product proximity is taken as a signal of the marketers’ credibility, decreasing inferences of manipulative intent and thereby increasing claim believability and purchase likelihood.

Keywords: Persuasion; Proximity; Marketing media; Packages; Advertisements

By 2016, global advertisement expenditure is expected to reach over $530 billion (ZenithOptimedia Group Limited, 2015) and the cost of packaging materials over $800 billion (Pira International, 2011). Despite the vast amount of resources dedicated to advertising and packaging, there is a dearth of research identifying how these marketing media may differ. Indeed, research has generally assumed that consumers respond to advertisements and packaging in the same manner; findings in one format are assumed to work similarly in the other (e.g., Bellizzi & Hite, 1992; Mohr, Eroglu, & Ellen, 1998). While there are similarities between packages and ads, we contend that their differences need also be appreciated in order to better understand how various marketing media work.

In this paper, we explore the impact of one notable difference between ads and packages, the proximity of claims made in each to the referenced product. Marketing messages, such as claims communicating advantages of a product, are closer to the product when they are featured on a package as opposed to in an ad. We hypothesize that merely presenting a message close to the referenced product offers a signal to the consumer that the marketer is trustworthy, and this results in higher message believability and greater purchase likelihood.

Claim-to-product proximity and its effects on believability

Product promotion is necessary due to an inherent information asymmetry between the producer of a product and the intended consumer; presumably, marketing messages offer information about the firm and its product to audiences who would otherwise lack this knowledge. However, marketers wish to do more than simply offer information; their messaging seeks to encourage purchase. This does not go unnoticed; through experience consumers develop an understanding of marketers’ motives and form beliefs about the appropriateness of particular marketing tactics (Friestad & Wright, 1994). When marketers use tactics that the consumer perceives as inappropriate, unfair, or manipulative, the consumer infers manipulative intent (Campbell, 1995).
becomes more skeptical towards the marketing message (Boush, Friestad, & Rose, 1994) and more resistant to persuasion attempts (Campbell, 1995; Campbell & Kirmani, 2000).

Given that skepticism towards marketing is a general and growing phenomenon (Boush et al., 1994; Nielsen, 2011), it is increasingly important to identify tactics marketers can use to signal their credibility. Research has demonstrated, for instance, that consumers perceive presenting information that is less ambiguous or from a third party as more fair and appropriate (Kirmani & Zhu, 2007). Similarly, consumers tend to perceive comparisons that are positively valenced (Jain & Posavac, 2004) and complete (Barone, Rose, Miniard, & Manning, 1999) as more honest, sincere, and unbiased. Presumably, consumers infer that these are tactics a deceptive marketer would not undertake. Therefore, they signal that the marketer is trustworthy and, in doing so, increase the overall effectiveness of marketing communications (Barone et al., 1999; Jain & Posavac, 2004; Kirmani & Zhu, 2007).

In line with this stream of research, we propose that claim-to-product proximity serves as a signal of the marketer’s credibility. With the referenced product close, a product-related claim seems easier to test. Consumers should associate marketing tactics that seem to encourage claim verifiability with trustworthy firms as only an honest firm is likely to encourage such behavior. Indeed, deceptive firms that intend to manipulate and mislead consumers are unlikely to encourage claim verifiability as it enhances the risk of discovery. This suggests that when the perception of claim verifiability is heightened by claim-to-product proximity, consumers will perceive the marketer and their messages as less manipulative and more trustworthy. Because we predict that packages are higher in perceptions of claim-to-product proximity than advertisements, we hypothesize that consumers will infer less manipulative intent and therefore find product claims more believable when they are presented on a package versus in an ad.

Differences between packages and advertisements

While the difference in believability between packages and ads has yet to be formally identified in the marketing literature, there are several differences, in addition to claim-to-product proximity, which might suggest that claims placed on packages are more believable than those in ads. For instance, in the U.S. food industry, there are more stringent regulations on packages (from the FDA) than on ads (from the FTC). If consumers perceive this difference, then they may perceive food health claims made on packages as more credible than those featured in ads (Mazis & Raymond, 1997). Furthermore, consumers may extrapolate this perception onto other product categories and form lay beliefs about the relative believability of packages and ads. Consumers’ experience in the marketplace may also lead to lay beliefs about the purpose of packaging and advertisements. For instance, consumers may believe that packages are meant to communicate objective information, such as usage instructions, whereas ads are meant to persuade consumers to select a specific brand.

While these differences may have some effect on believability, we propose that, in our studies, perception of claim-to-product proximity is the primary driver of the impact of presentation material (package vs. ad) on claim believability. Indeed, in our studies, we manipulate both presentation material and claim-to-product proximity. If claim-to-product proximity is driving the effect of presentation material on believability, making the referenced product seem closer to the claim should increase claim believability when it is presented in an ad but not when it is presented on a package. If a package is already perceived as close to the product, a manipulation to make the product seem closer should not impact product claim believability. Therefore, we hypothesize an interaction between presentation material and manipulations of product-to-claim proximity. We test this hypothesis, and our proposed mediator, differences of manipulative intent, across three studies.

Of note, in all of our studies, we limit our exploration to advertisements in print and exclude other forms such as television, radio, or mobile. By doing this, we are able to control for other factors that might influence believability such as vividness (Fortin & Dholakia, 2005) or involvement (Krugman, 1965, 1967; Wright, 1974). Theoretically, it would seem these other forms of advertising share print’s distance from the product and thus, all else being equal, would be less believable than packages. However, this investigation focuses solely on advertisements in print.

Study 1

In study 1, we examine the downstream effect of presentation material and claim-to-product proximity on actual purchase behavior. Earlier work has established a direct relationship between claim believability and purchase likelihood (Yagci, Biswas, & Dutta, 2009). Consequently, we predict the same pattern of results for purchase as we would for believability. Specifically, our hypothesis is that consumers will be more likely to believe a marketing claim, and thus make a purchase, when a claim is presented on a package versus in an advertisement and that the effect of presentation material on claim believability and product purchase is driven by perceptions of claim-to-product proximity. Therefore, presenting a referenced product near the claim should increase ad claim believability, making an ad claim appear as believable as a package claim and thus making an ad as effective as a package in generating sales.

Method

Participants and design

Participants were 122 undergraduate students (46.7% female) who were randomly assigned to one of four conditions in a 2 (claim-to-product proximity: control, close) × 2 (presentation material: package, ad) between-subjects design.

Procedure

Upon entering the lab, each participant was given $1 ostensibly in appreciation for his or her time. After an hour of completing
unrelated studies, each participant was taken individually to a separate room where a display for Kickers energy spray was set up. They were told by a research assistant that the experimenters were selling bottles of Kickers energy spray left over from a previous experiment for $1 and asked if they wanted to make a purchase. On a table was a display promoting the product featuring either an advertisement or package of the energy spray. In the close proximity condition, the display also featured a bottle of Kickers energy spray. In the control condition, the product itself was not displayed. See Appendix A.

Results

Purchase rate

A binary logistic regression analysis using purchase rate (i.e., whether the participant made a purchase) as the dependent variable and presentation material, claim-to-product proximity, and their interaction as independent variables revealed a main effect of presentation material favoring the package condition ($M_{\text{package}} = 46.77\%$, $M_{\text{ad}} = 23.33\%$; Wald $\chi^2 = 7.17$, $p < .01$). There was also a significant interaction between presentation material and claim-to-product proximity (Wald $\chi^2 = 5.37$, $p < .05$; see Fig. 1). Supporting our predictions, in the control condition, participants who saw the package ($M = 51.61\%$) were more likely to make a purchase than those who saw the ad ($M = 10.00\%$; $\chi^2(1) = 12.31$, $p < .01$). Again, consistent with our predictions, in the close condition, when the display included a bottle of the actual product, presentation material had no impact on purchase likelihood ($M_{\text{package}} = 41.94\%$, $M_{\text{ad}} = 36.67\%$; $\chi^2(1) = .18$, $p = .68$). While claim-to-product proximity had no effect on purchase likelihood in the package conditions ($\chi^2(1) = .58$, $p = .45$), it significantly increased purchase likelihood in the ad conditions ($\chi^2(1) = 5.96$, $p < .05$).

Discussion

Consumers were more inclined to buy if product claims were presented on a package rather than in an ad. Moreover, this effect of presentation material was mitigated if the product was presented near the claim, suggesting that claim-to-product proximity was driving the effect of presentation material on purchase likelihood. These results use real sales data to support our theory that packages are more effective than ads at generating sales because they are associated with greater claim-to-product proximity, and claim-to-product proximity makes the claims featured on packages appear more believable. However, the role of claim believability in the relationship between presentation material, claim-to-product proximity, and purchase likelihood was not fully explored. We do so next in study 2.

Study 2

Method

Participants and design

Participants were 185 undergraduate students (67% female) who participated online in exchange for partial course credit. Participants were randomly assigned to one of four conditions in a 2 (claim-to-product proximity: control, close) × 2 (presentation material: package, ad) between-subjects design.

Procedure

Participants were presented with a photo of a display for Kickers energy spray. As in study 1, the display featured either a package or ad for the energy spray and also featured a bottle of Kickers energy spray (close proximity condition) or not (control condition). Participants were asked to rate the overall believability of product claims using three measures adopted from Beltramini and Evans’ (1985) believability scale, each on a 9-point scale: believable, trustworthy, and credible. They also rated purchase likelihood (1 = Not at all likely to purchase, 7 = Extremely likely to purchase). They were then asked three questions to verify stimuli realism and presentation material manipulation. See web appendix for manipulation check language and results for this and study 3.

Results

Purchase intent

Analysis of purchase intent revealed a marginal main effect of presentation material ($M_{\text{package}} = 2.14$, $M_{\text{ad}} = 1.82$; $F(1, 181) = 3.22$, $p = .07$) coupled with a significant interaction
between claim-to-product proximity and presentation material ($F(1, 181) = 4.91, p < .05$; see Fig. 2A). In the control condition, participants who saw the claims on the package ($M = 2.29$) indicated higher purchase intent than those who saw the claims in an ad ($M = 1.46$; $F(1, 181) = 7.51, p < .01$). In the close condition, there was no difference in terms of purchase intent between participants who saw the claims on the package ($M = 2.02$) and those who saw the claims in an ad ($M = 2.10$; $F(1, 181) = .10, p = .76$). While claim-to-product proximity had no effect on purchase intent in the package condition ($F(1, 181) = .79, p = .37$), it significantly increased purchase intent in the ad condition ($F(1, 181) = 4.79, p < .05$).

**Mediation by believability**

Analysis of a composite score of overall believability ($\alpha(3) = .79$) revealed only a significant interaction between claim-to-product proximity and presentation material ($F(1, 181) = 4.00, p < .05$; see Fig. 2B). In the control condition, participants who saw the claims on the package ($M = 3.21$) rated them as more believable than those who saw claims in an ad ($M = 2.40$; $F(1, 181) = 4.79, p < .05$). In the close condition, participants rated the claims on the package ($M = 3.02$) as believable as the claims in the ad ($M = 3.22; F(1, 181) = .34, p = .56$). While claim-to-product proximity had no effect on the believability of claims on the package ($F(1, 181) = .30, p = .59$), it significantly increased the believability of claims in the ad ($F(1, 181) = 4.89, p < .05$).

The proximity manipulation was predicted to moderate the effect of presentation material (the independent variable) on perceptions of believability (the mediator), and perceptions of believability was predicted to exert a direct influence on purchase intent (the dependent variable). We tested this model using PROCESS model 8 (Hayes, 2013). Results support the proposed process, revealing a significant overall indirect effect (based on 5000 bootstraps) ($B = .42, SE = .21, 95\% CI: .02$ to $.88$). As predicted, in the control condition, the indirect effect of believability was significant ($B = -.33, SE = .14, 95\% CI: -.63$ to $-.08$), while in the close condition, it was not ($B = .08, SE = .15, 95\% CI: -.21$ to $.41$).

**Discussion**

This study replicated the results from study 1; under control conditions, participants were more likely to purchase a product if they were presented with a package rather than an ad for the product. However, in the close conditions, when the referenced product was presented alongside the package or ad, presentation material had no impact on purchase likelihood; participants were equally likely to purchase the product regardless of whether a package or ad was displayed. Moreover, mediation analyses confirm that the effects of presentation material and
claim-to-product proximity on purchase likelihood are driven by perceptions of claim believability. Packages are perceived as more believable than ads, and that this is due to greater perception of claim-to-product proximity for packages than ads.

We argue that perceptions of claim-to-product proximity increase claim believability and purchase likelihood by acting as a signal of the marketer’s credibility. The next study offers support for this by examining the effect of presentation material and claim-to-product proximity on both claim believability and inferences of manipulative intent. We also test the generalizability of our findings by using a new product category and extend the managerial implications of our work by employing a new manipulation of claim-to-product proximity. Instead of varying whether or not the actual referenced product is displayed near claim presentation material, we manipulate varying whether or not the actual referenced product is present in the package or ad. Arguably, the presence of a product’s image (as opposed to the presence of the actual product) is a less powerful manipulation of claim-to-product proximity and thus serves as a more conservative test of our hypotheses. Additionally, the presence of a product’s image on a package or in an ad is more directly under the marketer’s control.

Study 3

Method

Participants and design

Participants were 339 members (54.3% female; M_age = 33) of a panel (mTurk) who participated in the experiment online in exchange for $0.22. Participants were randomly assigned to one of four conditions in a 2 (claim-to-product proximity: control, close) × 2 (presentation material: package, ad) between-subjects design.

Procedure

Participants were presented with either an ad or package for an electric kettle describing it as able to “take 16 ounces of room temperature water to boiling in 2 seconds flat.” The ad/package included either a picture of the kettle (close condition) or a picture of a tea cup (control condition). See Appendix B. Participants were asked to rate the believability of the product claim (1 = Not at all Believable, 9 = Extremely Believable).

Results

Analysis of believability ratings revealed only a significant interaction between presentation material and claim-to-product proximity (F(1, 335) = 5.07, p < .05; see Fig. 3A). As predicted, in the control condition, participants who saw the claim on the package (M = 4.47) rated it as more believable than those who saw the claim in an ad (M = 3.37; F(1, 335) = 5.76, p < .05). Whereas, in the close condition, participants rated the claim on the package (M = 3.94) as believable as the claim in the ad (M = 4.26; F(1, 335) = .56, p = .46). Indeed, while claim-to-product proximity had no effect on the believability of the claim on the package (F(1, 335) = 1.44, p = .23), it significantly increased the believability of the claim in the ad (F(1, 335) = 3.91, p < .05).

Posttest

We also sought to identify the mechanism underlying the effect of product-to-claim proximity on believability. Our prediction is that when consumers perceive a claim as close to a product, either because it appears on a package or due to an orthogonal manipulation of product proximity, they will perceive the marketer as more honest, or less purposefully manipulative, and this will increase claim believability. To support our theorization, we measured perceptions that the marketer uses inappropriate persuasion tactics in a posttest using the same study design and stimuli as the main study.

Participants in this posttest (n = 279 mturk participants, 53.8% female; M_age = 33) were assigned to one of the four conditions of study 3. After seeing the ad or package, they completed an inferred motives scale (Campbell, 1995), modified to the tested conditions. Specifically, they rated their agreement with the following statements (1 = Strongly Disagree, 7 = Strongly Agree): The way this package/advertisement tries to persuade people seems acceptable to me (reverse coded). This package/advertisement tried to manipulate the audience in ways that I don’t like; I was annoyed by this package/advertisement because it seemed to be trying to inappropriately manage or control the consumer audience; I didn’t mind this package/advertisement—it tried to be persuasive without being excessively manipulative (reverse coded); This package/advertisement was fair in what was said and shown (reverse coded); I think that this package/advertisement is unfair.

Analysis of mean ratings from the inferred motives scale (α(6) = .92) revealed only a significant interaction between presentation material and claim-to-product proximity (F(1, 275) = 4.00, p < .05; see Fig. 3B). In the control condition, participants inferred less negative motivation when the claim was presented on a package (M = 3.83) than in an ad (M = 4.46; F(1, 275) = 6.46, p = .01). In the close condition, there was no effect of presentation material on inferred motives (M_package = 3.95, M_ad = 3.89; F(1, 275) = .07, p = .80). While there was no difference between package conditions (F(1, 275) = .24, p = .63), participants in the ad condition inferred less negative motivation in the close condition than in the control condition (F(1, 275) = 5.46, p < .05).

Discussion

Results from study 3 replicate our prior findings. Furthermore, results from our posttest provide evidence that the influence of claim-to-product proximity on believability is driven by inferences of manipulative intent. When the marketing claim is close to the product, consumers perceive the marketer and the marketing material as more fair and less manipulative or deceptive. Importantly, because measures of manipulative intent where taken in a separate posttest, it is not possible that the measurement of claim believability somehow affected reported inferences of manipulative intent.
General discussion

Theoretical contributions

Most empirical research on claim believability has focused on factors of advertisement claims that directly (Beltramini & Evans, 1985; Swinyard, 1981) or indirectly (Ha & Hoch, 1989; Hoch & Ha, 1986) influence persuasiveness; believability in the context of packaging has been neglected or assumed to be covered by work on ads. This is the first research to demonstrate that consumers may respond differently to the two presentation materials. While there are numerous dimensions on which ads and packages differ, we chose to focus on proximity of claim to product. By orthogonally manipulating marketing material as well as claim-to-product proximity, in these studies, we successfully ruled out other differences between the two marketing media as the driver of its effect on believability. The studies demonstrate that proximity between a claim and a product acts as a signal of the marketer’s credibility, decreasing inferences of manipulative intent. This, in turn, enhances claim believability and subsequent purchase likelihood. Presumably, claim-to-product proximity acts as a signal of the marketers’ credibility by increasing perceptions of claim verifiability. With the referenced product close by, it seems easier for a consumer to test the claims made and identify misleading firms. Thus, on a broader level, our research also contributes to work on persuasion by identifying a factor that influences believability and revealing the process through which this factor operates.

Our results potentially offer an extension to another area of consumer behavior research, that of contagion, the perception that qualities of beings or objects can spread through perceived proximity. Contagion has been shown to influence consumer attitudes and preferences for products (Argo, Dahl, & Morales, 2006; Mishra, 2009; Morales & Fitzsimons, 2007). However, prior work has only considered how perceived qualities spread from a person or object to (another) object; our work reveals contagion from a statement (i.e., product claim) to an object (i.e., product).

Our results can also be considered in the context of vividness theory (Nisbett & Ross, 1980). It is also possible that positioning the product more proximally allows for easier visualization of the claim which in turn may increase believability. Such a process suggests an extension of how vividness can increase imagined consumption (Nowlis, Mandel, & McCabe, 2004).

Managerial implications

In this paper, we limit our empirical analysis to the greater believability of packages specifically with respect to print advertisements. Importantly, our studies demonstrate specific techniques that marketers can use to increase the believability of claims in print ads. For instance, study 3 revealed that placing an image of a referenced product within an ad increases message...
believability and the overall effectiveness of a print ad. It is likely
that these tactics would also increase the believability of claims
featured in ads in other media such as television or mobile. In
fact, that in studies 2 and 3 the stimuli were presented on
computer screens suggests that the effects may hold outside of the
typical package or print advertisement context.

More broadly, we speculate that the effect of claim-to-product
proximity is relevant to an array of marketing media beyond
packages and ads. Regardless of context, increasing claim-to-
product proximity should increase claim believability. For
instance, we would expect product spokespeople to seem more
believable if they stand close to the products they discuss.
Similarly, it is likely that claims on billboards that are located
closer, ideally within sight of, a promoted retailer are perceived as
more believable than those that are located further from a store and
therefore from the product. A claim in a pop-up ad or web banner
may also seem more believable if there is obvious, easy
click-through to the company’s website; indeed, we would expect
ease of access to emphasize proximity between the claim and
the product even within the geographically free domain of the
Internet.

However there are, no doubt, also boundary conditions to our
results. We only tested strong product claims where believability
is of issue and also where the statements about the products
are central to purchase. If a product only has weak claims that
are easily believable, then product proximity may not matter.
Moreover, consumers purchase products for many reasons
beyond the functional claims offered by the marketer. In the
luxury and status goods market, for example, where goods are
often purchased primarily for the sake of self-enhancement and
less for functional benefits, product proximity to a message may
be irrelevant to sales.

Nevertheless, we hope our conceptualization and findings
help several different audiences: marketers who need product
claims to be believed, consumers who must always develop their
persuasion knowledge, and consumer behavior researchers trying
to understand and further investigate fundamental mechanisms
responsible for people’s behavior in the marketplace.

Appendix A. Study 2 stimuli and representation of study 1 stimuli (run in person)

For these studies, the set-up did not permit participants to see the actual magazine covers. However, to ensure that the source was not
driving our effects, we tested two titles, People and Better Homes and Gardens. This was randomized and counterbalanced between
subjects. There was no effect of magazine title on overall purchase (Study 1: M_People = 21.88%, M_Better Homes and Gardens = 25%; Wald
χ² = .09; Study 2: M_People = 1.72, M_Better Homes and Gardens = 1.83; F < 1). Furthermore, all results hold if presentation material by
product-to-claim proximity analyses are conducted on each title independently.

Control conditions

Advertisement (Better Homes and Gardens) Advertisement (People)
Appendix B. Study 3 stimuli

Close conditions

Advertisement (Better Homes and Gardens)  Advertisement (People)

Package

Control conditions

Advertisement  Package

Close conditions

Advertisement  Package
Appendix C. Supplementary data

Supplementary data to this article can be found online at http://dx.doi.org/10.1016/j.jcps.2015.11.002.

References


