

MEASURING MAGAZINE ADVERTISING EFFECTIVENESS AND SYNERGIES

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In an environment where magazines are "challenged by the greater portability of video devices and by time pressure," (Green, 2006) and readership fragmentation (Gugel, 2001), it is more important for magazine publishers and advertisers alike to engage their target audiences by delivering relevant advertising messages within the right mindset of the consumer. As an increasingly complex media landscape continually becomes a more consumer controlled marketplace, where time and choices are critical elements of consumer behavior among media options, more efficient and effective ways are needed to understand how to achieve marketing communication goals through multiple touchpoints. As consumers are increasingly becoming ad avoiders and as new media platforms continue to emerge, marketers are faced with the challenge of understanding "What is the optimum combination of elements in my media mix?"

The concept of media synergy has been suggested as an effective means to improving communication and building brand equity (share, awareness, intention, etc.). In more simplistic terms, brands that utilize integrated marketing communication strategies may perform better in the marketplace. Research has shown that "when print and TV are used synergistically, print can lead people to see the TV commercial in new ways, encourage more response, reinforce the TV message, and create a more positive feeling towards the brand" (Cooke, 1997). Many practitioners call this "the multiplier effect," where mixed TV and magazine exposure opportunities can transfer credibility and can improve the learning effect (Speetzen, 2001).

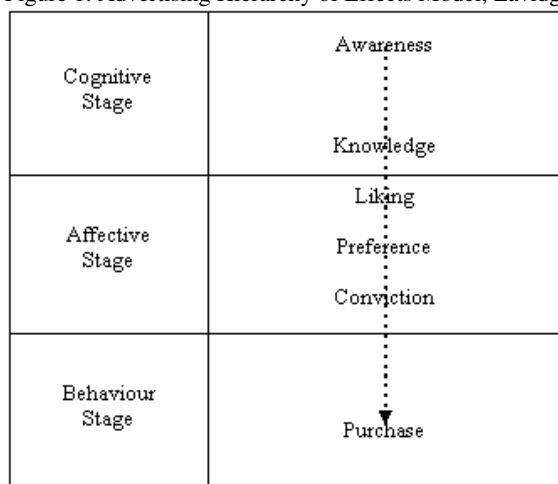
The active process element of magazine advertising was evaluated by Millward Brown in 1995. It found that "proven" recall levels tend to be highest for TV advertising. "Television viewing is more passive and incidental and is likely to be stored as an audio-visual story or set of images. A magazine ad, on the other hand, is more likely to be actively processed at the time of reading, and therefore this processed message take-away may be the dominant advertising association" (Farr, 1995). Advertising tracking data has established that respondents have difficulty describing or recalling magazines ads since they decay quickly, but that respondents can tell you what the message was. These research evaluations, in addition to current measurements that include online advertising in the media mix, demonstrated that purchase consideration is often significantly affected by exposure opportunities to magazine advertising. A study by Northwestern University's Media Management Center in 2003 determined magazines offer a powerful contribution to advertising engagement, which could be considered an influential factor during purchase decision cycle.

Turning to the realm of online advertising within the media mix, it is evident that a partnership has emerged between magazine and online media properties. However, "these integrated partnerships between magazine advertising and the Internet need to be enhanced, and advertisers are not fully considering the potential benefits of web-print marketing strategy" (Kanso and Nelson, 2004, pp. 322-323). Dynamic Logic and Millward Brown have conducted extensive advertising effectiveness research studies to gain insight into how integrated media strategies can be incorporated into the magazine and Internet partnership. A recent case study published by Dynamic Logic and Forbes.com illustrates the ability of this partnership to improve branding measures by using consistent creative elements, complementary messaging, and highly contextual placements.

Our Research

CrossMedia Research conducted by Dynamic Logic and Millward Brown examines the branding impact of advertising campaigns that utilize a multiple media strategy. The model developed by Lavidge and Steiner (1961) illustrates the process by which advertising works and portrays consumers passing through a series of sequential phases starting from brand or advertising awareness (cognitive stage), to favorability or preference (affective stage) and finally to actual purchase (behavioral stage).

Figure 1. Advertising Hierarchy of Effects Model, Lavidge and Steiner 1961.



For the purposes of gathering a deeper understanding of a medium's role within the hierarchy of advertising effects, five widely recognized branding metrics were used in the Dynamic Logic and Millward Brown studies (Figure 2). Minor variation in question wording exists due to the specific requirements of individual brand categories across the 170 cross media campaign evaluations.

Figure 2. Standard Metrics Used in Questionnaire.

Key Metrics	Definition
Aided Brand Awareness	Measures the level of familiarity respondents have with the brand listed.
Aided Advertising Awareness	Measures the level of claimed awareness respondents have with any brand-related marketing communications
Message Association	Measures the extent to which respondents can match the campaign messaging with the sponsor or brand.
Brand Favorability	Measures the extent to which respondents have a positive or favorable opinion of the brand.
Purchase Intent	Measures the likelihood of respondents to make a purchase

Each of the cross media studies is based on a live, in-market test that measure a campaign's impact on the audience to which the campaign is targeted, both online and offline. Respondents are usually sampled by using a combination of Dynamic Logic's proprietary AdScout tracking system and from a nationally representative online panel to account for audiences that are not reached by the online media. Using an online survey instrument, the research relates advertising "opportunity to see" (OTS) to brand attitudes, utilizing a control/exposed research design. The analysis is based on comparisons of respondent groups that have exposure opportunity to different combinations of media, where each of these groups is compared against a baseline control group.

To determine exposure opportunity to see, the studies utilize AdScout, a patent-pending cookie technology that is part of Dynamic Logic's AdIndex system. When respondents enter the survey, the system recognizes whether or not they have been served any online ads in a given campaign. Television advertising OTS is survey based and measured by self-reported media usage and compared with syndicated audience measurement data. The offline media schedule is reconciled with media usage reported by the respondent to determine if they had an opportunity to see the advertisement. Magazine OTS is determined either by specific-issue level reading or by frequency of reading.

This paper presents the results of a study conducted for a major automotive company to assess the integrated marketing effectiveness of a cross-platform TV, magazine, and online campaign. It also discusses aggregated results from 32 CrossMedia Research studies. Using specific issue readership, the automotive research study isolated respondent-level frequency of exposure to the magazine campaign, evaluating the branding effectiveness of magazine advertising in isolation and in combination with the other media. The first phase of the analysis assessed each media vehicle's contribution to awareness, branding, and purchase consideration, with a particular focus on the integrated effects. The calculation of exposure frequency for both magazine and online advertising, together with longitudinal analysis of the television campaign, provided a better understanding of how magazine advertising strengthens branding metrics and is reinforced by exposure to advertising in other media. Media spending was then incorporated into the analysis to understand the relative cost efficiencies created by the cross-platform campaign.

Jeep Compass Case Study

In 2006, the Magazine Publishers of America selected Dynamic Logic to conduct research on the effectiveness of an integrated television, magazine, and online advertising campaign for the launch of the new Jeep Compass. Since the campaign was developed to launch the vehicle, both awareness of the brand and purchase consideration were key objectives.

Dynamic Logic and Millward Brown surveyed nearly 4,500 respondents recruited from websites on the Jeep Compass media plan between July and December of 2006. The data were balanced to match the pre-control group and the in-campaign group to U.S. Census demographic data and syndicated media consumption data.

Opportunity to see TV advertising was determined by asking questions about overall television viewing, specific daypart viewing, and program/network viewing. Dynamic Logic and Millward Brown determined magazine advertising OTS through a two-stage process. Respondents were asked whether they had read or looked through any of the titles in which advertising appeared within the past three months. Readers of particular titles were then asked about specific issue readership to assess their opportunity to see Jeep Compass advertising. Electronic tracking ("cookie") data were used to determine exposure to online advertising. Six branding metrics were included in the study: aided brand awareness, aided advertising awareness, message association, brand imagery, brand favorability, and purchase consideration.

Dynamic Logic and Millward Brown compared levels of the branding metrics across all eight possible media combinations: control (no media OTS), TV-only, magazine-only, online-only, TV + magazine, TV + online, magazine + online, and TV + magazine + online. In most cases, opportunity to see advertising in two media was associated with stronger levels of branding than single media. With the exception of brand awareness, OTS for advertising in two media produced levels of branding comparable to that for all three media. Overall, combinations that included magazines were associated with higher branding scores than the other OTS cells.

As illustrated in Figure 3, the level of aided awareness for Jeep Compass advertising was significantly higher among those with OTS for two media, although the combination of three media did not results in any further increase over ad awareness among those with opportunity to see both magazine and online advertising. Magazine advertising was associated with the highest level of ad awareness, both as a single medium and in combination with other media. A positive relationship existed between magazine advertising frequency and advertising awareness, with awareness increasing among respondents exposed to five or more magazine issues, either in isolation or in combination with other media. This overall pattern was also seen for association of the advertising message with Jeep Compass, where the combinations of magazine and online or of magazine and TV advertising OTS resulted in the highest message association.

Figure 3. Jeep Compass Aided Advertising Awareness by Media Opportunity to See.

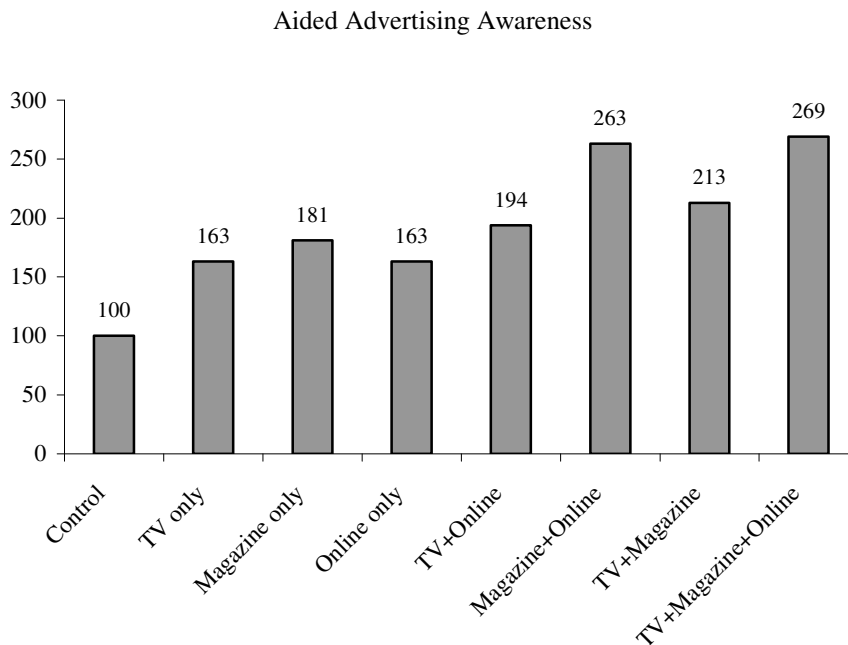
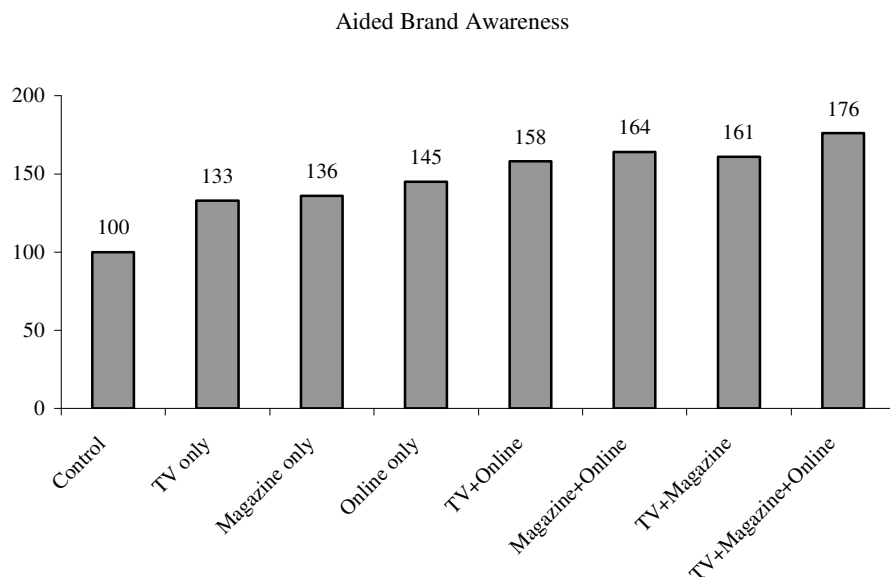


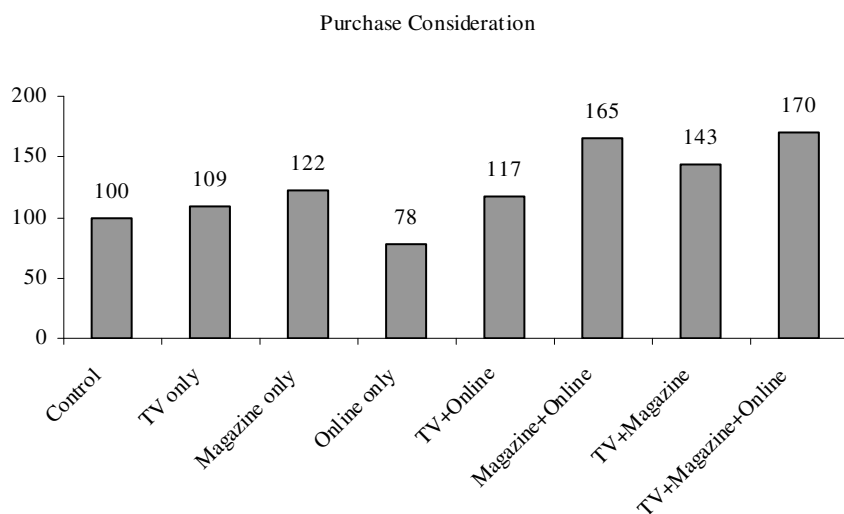
Figure 4 shows that magazines were also associated with increases in brand awareness. As noted earlier, the combination of all three media resulted in the highest score on this metric. As is the case for all the results presented in this section, the impact of each media combination is indexed to the control baseline level of 100.

Figure 4. Jeep Compass Aided Brand Awareness by Media Opportunity to See.



The findings for persuasion, as measured by brand favorability and purchase consideration, are consistent with the general pattern seen for advertising awareness. The combination of magazines and one other medium yielded the optimal results. The duplication of exposure across magazines and other media appear to have created the strongest impact, although the combination of magazine and online advertising may be reaching a slightly different audience than the combination of magazine and TV. As in the case of advertising awareness, purchase consideration was highest among consumers with opportunity to see advertising in five or more magazine issues, either in isolation or together with other media advertising. The results for purchase consideration appear in Figure 5.

Figure 5. Jeep Compass Purchase Consideration by Media Opportunity to See.

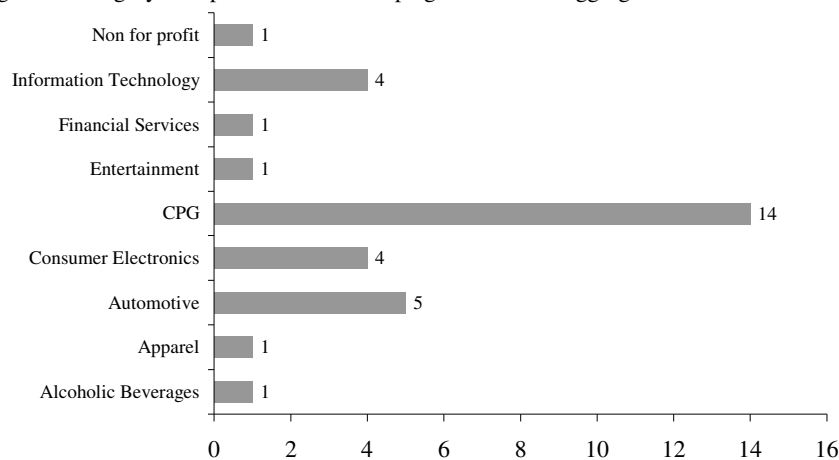


Aggregate Analysis

There are presently over 180 cross media studies in the Dynamic Logic and Millward Brown CrossMedia Research database. For the purposes of this research, 32 of these advertising campaigns that had a combination of television, magazine (consumer publications) and online (display) with similar media allocation and duplication levels were aggregated to better understand how these media work together at building or shifting specific brand attitudes through the traditional hierarchy of advertising effects model.

As in the Jeep Compass case analysis conducted for the Magazine Publishers of America, the campaign results are based on a comparison of attitudinal scores for each of the respondent groups. The average scores for each exposed cell, representing respondents who were determined to have an opportunity to see advertising on one or more media channels, are compared to a control baseline collected prior to the campaign start date. Percentage point increases are calculated and tested for statistical significance using a two-tailed t test for population proportions at a 90% confidence level. Campaigns included in these aggregate results include those which have television, magazine, and online media scheduled comparatively at similar time periods, where the audience overlap did not result in highly discrete groups with atypical audience characteristics. Figure 6 summarizes the category composition of the 32 cross media studies for this research.

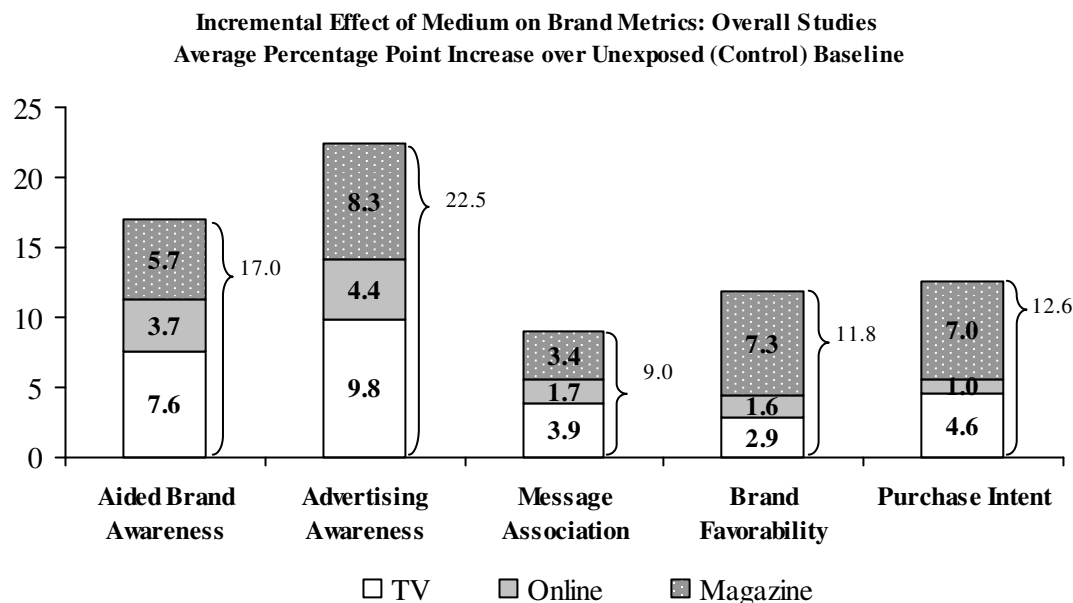
Figure 6. Category Composition of 32 Campaigns Used For Aggregate Cross Media Analysis.



Consumer Packaged Goods (CPG/FMCG) has the largest representation in this analysis, with 14 studies combined from 2001 to 2007. Interestingly, although there is a wide range of categories tested, all of the campaigns measured are limited to consumer magazines (campaign that included newspapers or trade publications were excluded from this aggregated study). A total of 301,028 respondents were surveyed across these 32 cross media campaigns.

The results presented in Figure 7 show that all three media—television, magazines, and Internet—are effective at increasing consumer awareness, preference, and purchase intent. The figure below indicates the incremental contribution of each medium to the five key brand metrics in the traditional purchase funnel. The Internet increase represents the additional impact of online advertising on top of TV alone by comparing consumers with opportunity to see only TV advertising with those having OTS for both media. The magazine increase denotes the change in each metric produced by adding magazine advertising to TV and Internet using the same approach.

Figure 7. Aggregated Campaigns Measured by Dynamic Logic and Millward Brown Between 2004 and 2007.
 $\Delta = \text{Exposed} - \text{Control}$



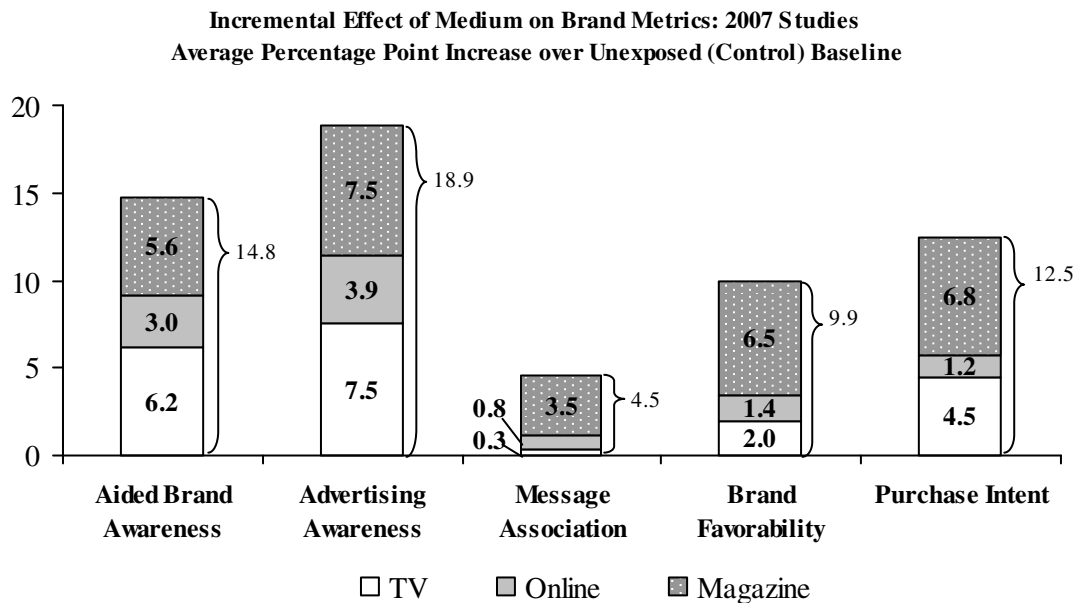
This analysis is based on a more robust sample of campaigns and wider diversity of categories compared to a previous analysis of 17 campaigns conducted by Dynamic Logic (2006). The results are generally consistent with the earlier analysis, where

1. Media synergy is evident across all levels of the purchase funnel
2. TV remains a powerful medium for increasing aided brand awareness. While the largest increase in this metric is fuelled by TV exposure, magazine and online advertising are associated with incremental increases over television alone. On average, magazines outperformed online advertising at creating aided brand awareness.
3. TV and magazine advertising also produced greater increments than online advertising in total communication/advertising awareness. The impact of magazine advertising may be due, in part, to the size of magazine ads and the higher involvement typical of its "controlled" reader environment (Farr, 1995). Internet advertising may be less memorable compared to other traditional media, but was still able to generate awareness of the brand.
4. Magazine advertising continued to be the strongest driver of brand persuasion, as measured by increments in both brand favorability and purchase intent/consideration. In many of the campaigns tested, the magazine advertising contained more product information than a short TV spot or an Internet display unit. These findings about magazine advertising effectiveness are consistent with recent aggregated analyses by Marketing Evolution which found that "magazines produced the highest percentage point increases in purchase intent, along with providing the highest absolute levels." (Magazine Publishers of America, 2006, p. 3).

Looking at the most recent campaigns (Figure 8), a similar story emerges; the results for the 15 most recent campaigns with comparable media allocations across the three media are comparable to the overall findings. While metric increases overall seem slightly lower, this could be a function of increased digital media fragmentation increases, multitasking, and increasing consumer avoidance of advertising messages (Papper, Holmes, and Popovich, 2004; Spaeth, 2005). The average consumer is exposed to 600-625 potential messages per day (whether noticed or not), where 272 are from TV, radio, magazines and newspapers (Media Matters, 2007). It is important to take the number of campaigns (n=15) into consideration and bear in mind that statistical variation may also be a factor in these results.

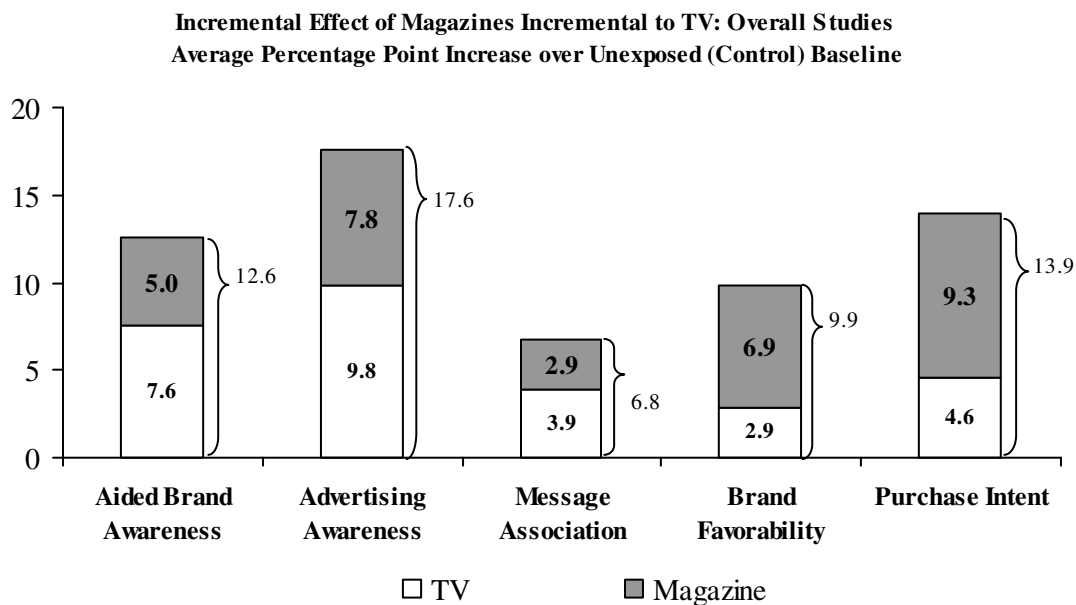
Considering potential statistical and campaign variation, it is worth to note that magazines contributed most at helping consumers retain brand information. While magazines are the most influential on persuasion metrics, possibly due to their high engagement value (Magazine Publishers of America, 2007), among the most recent campaigns magazines also work best for conveying specific advertising messages. Past Millward Brown research confirms that due to higher involvement compared to the more passive viewing experience of TV advertising, magazine messages are more likely to be retained. This, in turn, may transfer to consideration (Farr, 1995).

Figure 8. Aggregated Cross Media Campaigns (N=15) Measured in 2007.
 $\Delta = \text{Exposed} - \text{Control}$



In the results presented up to this point, evaluation of magazine advertising was treated as an incremental effect to TV-plus-Internet advertising. Where possible, we also reviewed magazines as an incremental medium to television (Figure 9) without the presence of Internet advertising. In this scenario, a consistent role of magazines is seen when added to television, where the largest contribution was again seen for both brand favorability and purchase intent/consideration. In terms of awareness, magazines play a similar role independent of the incremental order effects: they are still an awareness-building medium among the campaigns tested. However, television still has the strongest memorability, potentially due to its audio and visual dynamics.

Figure 9. Incremental order effects: aggregated cross-media campaigns (N=32) where magazines are an incremental treatment to television advertising.
 $\Delta = \text{Exposed} - \text{Control}$



Discussion

The findings from both the Jeep Compass case analysis and the aggregate analysis of 32 campaigns present a consistent story of the power of magazine advertising to contribute within the overall advertising mix, particularly at the later stages of evaluation and consideration in the purchase funnel. The frequency analysis of the Jeep Compass data also indicate that magazine advertising insertions performed even more strongly when seen in the context of other media advertising, suggesting a synergistic effect.

The aggregate analysis supports earlier research demonstrating that magazines are the most effective medium at persuading consumers at trial or consideration and that magazines help to build awareness over the results produced by TV advertising alone. With the addition of 15 campaigns to the analysis, consumer-based magazine advertising regardless of industry (including automotive and CPG), exhibits a similar pattern of performance across the awareness and persuasion metrics to that seen in the previous analysis of 17 campaigns measured by Dynamic Logic. Among the 15 recent campaigns measured, magazines contributed the most to advertising message retention, possibly due to the advent of time shifting and consumer control options of traditional media.

Although not the direct focus of this aggregate analysis, Dynamic Logic and Millward Brown performed an independent comparison the impact of creative integration. This analysis suggests that integrated partnerships between magazine and online are highly effective. Creative evaluation research across these studies demonstrates vast differences in how media work together depending on the look and feel of the creative being consistent. It can be important for advertisers to leverage engagement using an integrated strategy across media to maximize campaign impact.

The results suggest that further research in sequencing is warranted. The results of the aggregate analysis show that magazines have a higher level of influence on purchase intent when used incrementally to television advertising. However, the analysis does not address issues of flighting and sequencing of exposure. Future research could examine differences in magazine advertising effectiveness due to timing of exposure.

In addition, more research is needed on how magazines interact with different digital components of the media mix as more media options become available. In particular, research could examine how much overlap is seen on a campaign basis between specific media companies, and how they can leverage a clear narrative among their audience. As magazine publishers move into other media platforms, understanding how these platforms work together can provide useful insights to optimize cross media campaigns.

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