

# Effectiveness and Efficiency of TV's Brand-Building Power: A Historical Review

## Why the Persuasion Rating Point (PRP) Is a More Accurate Metric than the GRP

### FRANK FINDLEY

Marketing Accountability  
Standards Board  
frankfindley@themasb.org

### KELLY JOHNSON

Disney  
Kelly.Johnson@disney.com

### DOUGLAS CRANG

MSW Research  
dcrang@mswresearch.com

### DAVID W. STEWART

Loyola Marymount  
University  
David.Stewart@lmu.edu

This article examines the effectiveness of television advertising and changes in television-audience response in the United States since the 1980s. It concludes that television remains one of the most effective platforms for advertising, despite the rise of digital media and new technological developments. On a single, quality exposure basis, television advertising continues to be highly effective, although the rate of delivery of advertising selling power per gross rating point (GRP) has declined, but the decline is mitigated by the increasing number of households in the United States. Television advertising remains effective despite the potential increase in distracted viewing, but advertisers need to manage the quality of their messages and the media weight of their advertising more carefully than in the past. The persuasion rating point (PRP) offers an accurate measure of that effectiveness.

### INTRODUCTION

Radical changes continue to shape the media landscape. Although much recent research has been conducted on the effectiveness of new media platforms, less attention has been given to that media-plan staple—television advertising. A common question in media planning revolves around whether television is as effective in 2017 as it was in the 1980s or whether its role has diminished to the point of being nonviable. Even if television remains an effective advertising medium, there are

questions about how television compares with the many other media-platform alternatives available today.

This article answers those questions. From the 1980s through the 2010s, the delivery of television-advertising sales effectiveness on the basis of a single quality exposure has been measured consistently by numerous organizations (Stewart and Kamins, 2003). This measurement provides a unique quantification of the effectiveness of television advertising over several decades. Additionally, consistent and

## Management Slant

- Television still has the power to move markets and remains an extraordinarily efficient medium for reaching large audiences at a time when other media are increasing in cost even as they reach smaller audiences.
- Television's ability to influence consumers is not independent of the effectiveness and the persuasiveness of the message.
- Prudent advertisers optimize the efficiency of television as an advertising medium by placing weight against the most persuasive message executions.
- The breadth of media alternatives available to advertisers today makes optimization of message persuasiveness more important than ever.

Submitted May 8, 2018;  
revised May 2, 2019;  
accepted August 20, 2019.

repeated studies of the rate of delivery of a television commercial's sales effectiveness per gross rating point (GRP) have been conducted over this same time period. Finally, a market-mix modeling analysis of more than 7,500 campaigns provides further perspective on the strength and efficacy of television advertising for continuous branding activities relative to other media channels.

This research demonstrates that the 30-second television-advertisement format, when delivered via a quality exposure, is as effective today as in the 1980s. It also, however, shows that approximately 25 percent more gross rating points now are needed to deliver the same brand-building power in market, which implies that television-channel proliferation, time-shifting technology, and simultaneous digital-media consumption are having an impact on the advertising-viewing experience. This decline is mitigated, however, by a 45 percent increase in the number of households in the United States over the same time period.

This research confirms several key principles of brand building, with corresponding marketing-process implications. There is a need for a conceptual shift, from managing advertising solely on the basis of exposure rates to taking into account also the brand-preference-shifting power of the advertising units themselves—that is, a shift from gross rating points to persuasion rating points.

Beginning in early 2016, the Advertising Research Foundation released a series of papers and presentations on the results of its "How Advertising Works, Today" initiative (Snyder, 2016; Stipp, 2016). Included in these papers was a broad-based meta-analysis that drew on the results of more than 5,000 campaigns to establish "ground truths" of today's advertising environment, which were compared with those examined in the original Advertising Works study (Lodish, 1991). The conclusions in the 2016 analyses regarding the traditional media platforms of television, print, and radio advertising were surprising to many. Rather than recommending that greater percentages of media spend be moved to the newer digital platforms, the analyses encouraged marketers to "spend smart by adding back traditional media to [their] digital investment to maximize ROI" (Snyder, 2016, p. 27).

These research findings suggest that for a generalized campaign, the optimal media spending mix generally is close to a 75 percent traditional and 25 percent digital media mix. Television advertising was cited as particularly valuable because of its strong synergies with digital media. These results are consistent with earlier studies of the effectiveness of television advertising in the digital era. The results of 388 case studies suggest that advertising is as effective as it ever has been, even in the face of new digital media (Rubinson, 2009).

These are provocative findings and recommendations in light of the many claims that traditional media are dead or at least

dying (Lee, 2012). They raise the question of what can account for this strong showing for traditional media, especially television. Television historically has been recognized as one of the most powerful advertising media. This has been demonstrated empirically through advertising strength, test market, scanner sales change, and single-source and market-mix modeling analyses. Of special concern has been a potential for decreased attention to television advertisements driven by the proliferation of channels to surf; time-shifting and advertisement-skipping technology; and the simultaneous use of laptops, smartphones, and tablets. Little has been published that provides perspective through a direct comparison of television's recent effectiveness with previous decades, however.

In 2016, the Marketing Accountability Standards Board launched a new phase of its Brand Valuation & Investment Project, with a goal to document the major drivers of brand preference (Findley, 2017). As a part of this initiative, Marketing Accountability Standards Board members MSW Research and Nielsen Research provided historic and contemporary data that allow a direct comparison that addresses three major questions:

- RQ1: Do television advertisements on a single-exposure basis still evoke the same level of sales effectiveness among consumers as in the past?
- RQ2: Is this sales impact delivered in market at the same rate per gross rating point as in the past?
- RQ3: How does television advertising compare with other media in the number of exposures needed to be effective?

## STUDY DESIGN

Answering the first two questions required identification of a television-advertising sales-effectiveness metric whose sensitivity and calibration have been maintained consistently over the years. MSW Research has been using a behavioral, sales-validated brand-preference approach in pre- and posttesting since the 1960s. This measure—CCPersuasion™—captures the shift in brand preference (or choice) for the advertised brand among a competitive set of products as the result of a single, quality advertisement exposure in a natural program context. A quality exposure is an exposure that is sufficient to have an impact on the viewer, in contrast to any opportunity for exposure or incidental exposure. In media scheduling, the former is measured by effective reach, whereas the latter is referred to only as "reach" (Naples, 1979).

**Table 1** Evidence of CCPersuasion™ Validity

Change in Brand Preference Range	Average Share Change	Percentage of Advertisements Achieving Share Point Difference of:			
		0.0+	0.5+	1.0+	2.0+
21.0+	+5.1	100	100	95	80
16.0–20.9	+2.3	100	97	71	51
12.0–15.9	+1.8	98	88	63	40
7.0–11.9	+0.8	83	53	34	9
5.0–6.9	+0.3	68	32	16	3
3.5–4.9	+0.1	60	23	8	0
<3.5	–0.1	52	13	4	1

On its own, the change in in-lab brand preference that forms the basis of the CCPersuasion measure has been shown to explain more than half the variance in share changes within a quarter (and 65 percent when media weight placed behind the advertisement is taken into account) and thus demonstrates both magnitude and probabilistic validity (Hanssens, 2016). A comparison of the CCPersuasion (change in brand preference) versus actual changes in market share when the tested advertising was run in market is provided (See Table 1). The table also provides a distribution of changes in market share associated with observed CCPersuasion scores.

CCPersuasion provides a yardstick by which the sales effectiveness of the television-advertising format itself can be examined. The CCPersuasion measure is both conceptually and operationally simple. It is operationalized as a change in choice behavior following exposure to advertising for a particular brand.

Consumers who purchase products in the relevant category are presented with pictures of product packages or logos of products in the category prior to exposure to any advertising and are asked to select the brand that they would like to receive as a reward for participating in the research. These consumers then view television programming in which advertising is embedded. After being asked a variety of questions about the television programming, participants in the research again are presented with pictures of packaging and logos and are asked to select a preferred brand for another product giveaway.

The number of individuals who switch to the brand whose advertising they saw during the television programming is a raw measure of the persuasive power of the advertising. This raw measure of persuasion may be adjusted to account for known characteristics of the product category and brand, such as market share, and ambient switching rates within the category. An earlier book provided a more detailed discussion of this measure, including a detailed discussion of its reliability and validity (Stewart and Furse, 1986).

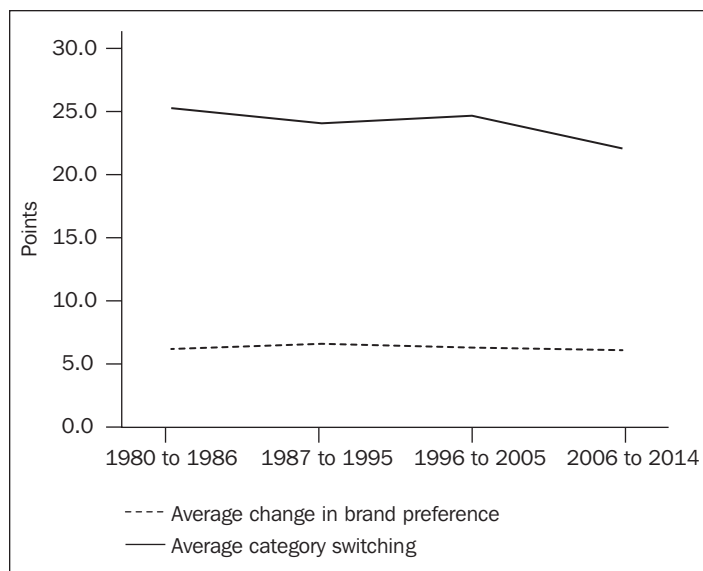
In addition to the measure of persuasion, the methodology also provides a category-switching metric that quantifies brand loyalty across all competitive brands in the category. A decline in category switching means that consumers are less apt to change their preferred brands, whereas a rise means that they are more apt to change preferred brands. This switching metric was used as a further comparison point for the brand-preference trend to understand whether any change was television specific or caused by category dynamics that affect all forms of advertising.

The MSW Research analytic database consists of more than 23,000 advertisement measurements for different media types, brands, categories, and countries. Because these data were collected organically over time, a subset was drawn limiting the cases to 30-second television advertisements collected in the United States for typical categories with brands advertising throughout 1980–2014. This reduced the possibility of skews caused by changes in relative representation, as in the growth of direct-to-consumer advertising by pharmaceutical brands starting in the late 1990s.

The resulting dataset consists of 2,076 distinct television advertisements for 258 brands competing in 104 categories. Average category switching and changes in brand-preference levels then were grouped into four time periods chosen to match later parts of the research. The 104 product categories represented a broad range of consumer packaged goods, durable products, quick-service restaurants, pharmaceuticals, and consumer services.

The category-switching data reveal that, over time, consumers have become less apt to switch brands in the categories examined. On the basis of this finding, it would be expected that television advertising would have become correspondingly less able to switch consumers. This proved not to be the case, however.

Despite a decline in the rate of switching within categories, the advertisement-caused changes in brand preference have remained consistent across the decades (See Figure 1). The implication is that the deteriorating category dynamics have been counterbalanced by other factors, and on a single, quality-exposure basis as measured



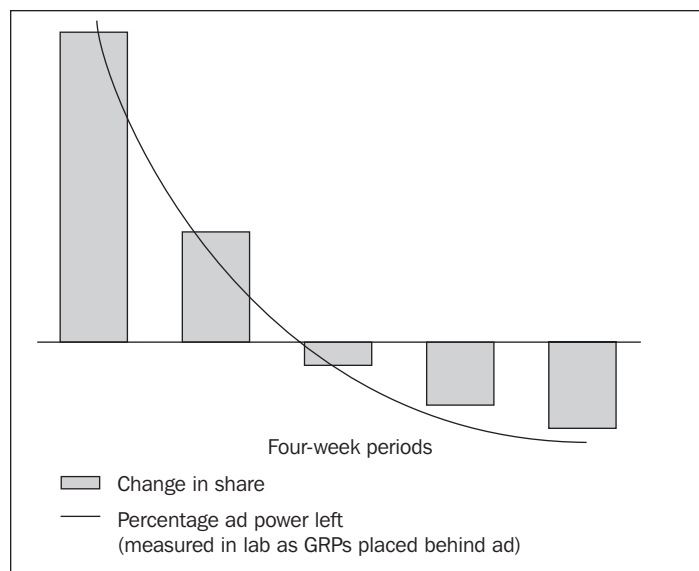
**Figure 1** Average Change in Brand Preference for 30-Second Television Ads and Category Switching Over Time

in the lab, the television-advertising format remains a dependable format for driving brand preference. Identifying the factors that have allowed the 30-second television format to remain effective is beyond the scope of this research.

One hypothesis is that the advent of digital-video production and animation technology has made it possible for agencies to produce more creative television advertisements cost-effectively. There is ample evidence that more creative advertising, at least as defined by a more compelling and persuasive message, is a key factor in advertising effectiveness (Harvey, 2016; Poggi, Poltrack, and Wood, 2017; Stewart and Furse, 1986; Stewart and Koslow, 1989). Another hypothesis is that the growing use of science-based advertising and message-testing systems has helped cull relatively underperforming advertisements.

Researchers also can use these brand-preference change levels for advertisements to quantify the rate of delivery (per gross rating point) of sales effectiveness by taking reads before and after the advertising airs. An advertisement's CCPersuasion level can be tested prior to launch, for example, and then at subsequent times thereafter, when varying amounts of media weight have been placed behind it. As the advertisement delivers its selling power in market, it "wears out," and its ability to generate brand-preference shifts declines, as shown by lower persuasion results. The advertisement's ability to affect further sales consequentially also faces diminishing returns.

The largest share increase occurs during the first four-week period an advertisement is on air, when its power of persuasion is strongest (See Figure 2). Smaller share increases occur in



**Figure 2** Correspondence of Share Change and Ad Power Left from Wearout

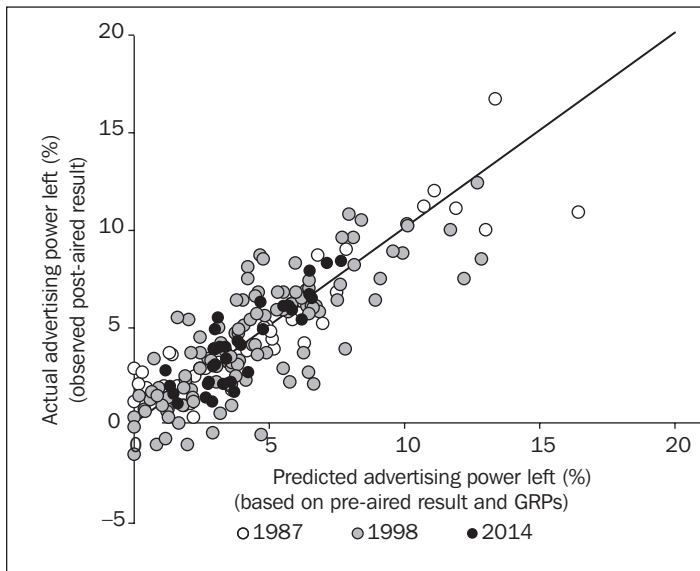
Source: Masterson, 1999

subsequent four-week periods as the advertisement continues to air and the persuasion levels fall. For those cases in which the advertisement was aired longer with subsequently more media weight placed behind it, small share decreases were observed toward the end of the run. These declines in share change include two related factors: fewer people to switch to the brand as the airing progresses (because prior airing already had switched preferences), and the effects of competitors' marketing and advertising activity switching preferences back to their brands. These findings not only support the concept of wearout but also explain why leaving worn-down advertisements on air is not helpful in growing—or maintaining—market share.

It should be noted that the practical implication of this is that accounting for advertising wearout when creating and scheduling advertising is desirable. The reason an advertisement wears out is that its sales-building power has been delivered to market. The more an advertisement wears out, the greater is the share-change impact already made in market, and the more important it becomes to refresh the message.

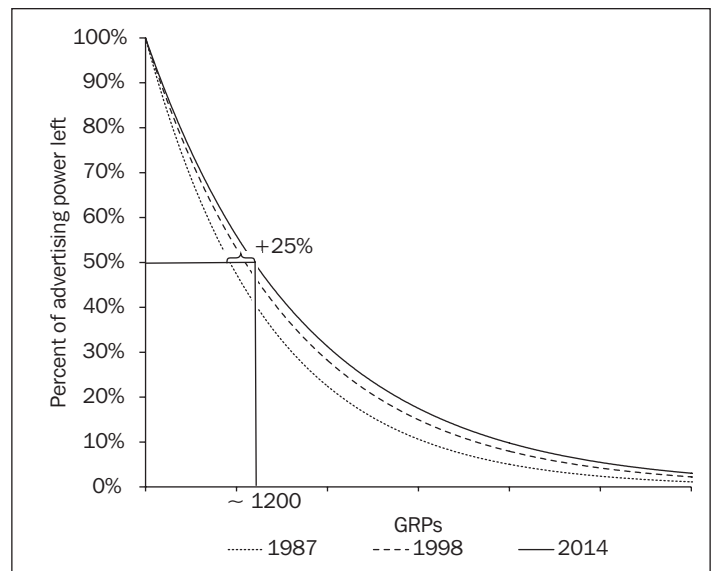
The finding that wearout in advertising power can be predicted by the number of gross rating points placed behind the advertisement was first published in 1987 in the *Journal of Advertising Research* (JAR; Blair, 1987), with a replication study published a decade later (Blair and Rabuck, 1998). In 2000, the study was one of 18 selected by JAR's editorial review board as a classic—an article that has withstood the test of time (Advertising Research Foundation, 2000).

It is interesting that between the original and replication studies, a difference was noted in the number of gross rating points



**Figure 3** Predicted vs. Actual Advertising Power Left

Source: MSW Research CCPersuasion Scores and Nielsen Research Gross Rating Points



**Figure 4** Television Wearout Rate Over Time

Source: MSW Research CCPersuasion Scores and Nielsen Research Gross Rating Points

needed to wear out an advertisement to a given percentage of its original level of sales effectiveness. The implication is that in the intervening 10 years between the studies, the delivery of selling power per gross rating point diminished. Said another way, greater media weight was required to produce the same change in brand preference. This was a time of great growth in cable television and a resulting channel proliferation, which empowered viewers to switch to other stations during commercial breaks. Between 1980 and 1999, the percentage of U.S. households with cable television grew from 22.6 percent to 68.0 percent (TVHistory, 2018).

This analysis recently was extended through 2014 (MSW•ARS Research, 2017). As shown (See Figure 3), the ability of gross rating points to predict actual post-airing power left remains strong (correlations range from .81 to .91 across the time periods). As also shown (See Figure 4), however, the rate of wearout has changed. A trend toward a slower rate of delivery of selling power per gross rating point has continued over time. If one quantifies this result, it now takes approximately 25 percent more gross rating points than it did in the 1980s to deliver a television advertisement with half the power.

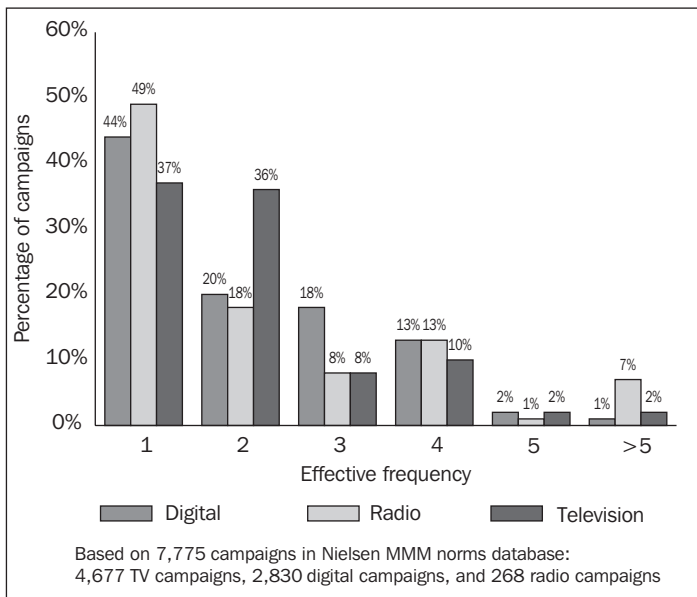
This should not be construed to mean that television advertising overall has become a less-effective or less-efficient advertising platform. This is because the number of households in the United States has increased by roughly 45 percent over the decades, from 80.8 million in the 1980 census to 115.5 million in the 2010 census (Statista, 2017). Each rating point now represents more households, thereby effectively mitigating the decline in absolute terms.

Although much media attention has been paid to the increase in households without a television, in 2018, 95.9 percent of all U.S. households had one or more televisions receiving traditional television signals. This was down from a high of 98.9 percent (Lynch, 2018). The average television household has 2.3 television sets. The average household watched seven hours and 50 minutes of television each day in 2017, down from a peak of eight hours and 55 minutes in 2009–2010. The hours of viewing in 2017 were substantially higher than the hours during the four decades of the 1960s to the 1990s (Madrigal, 2018).

Although it is not possible on the basis of the above analysis to assign a cause to this change in rate, the outcomes are consistent with the hypotheses of decreased attention to television advertisements previously mentioned. They also are consistent with a shift to a frequency of exposure beyond that which is optimal for television, which is a concern given the increased fragmentation arising from channel proliferation.

Every media platform has its own strengths and challenges, however. Although the interruptive nature of television advertising may make it more susceptible to divided attention with other media, it also provides television with one of the most immersive visual and audio experiences. Television also remains a powerful tool for building brands over the long term. In contrast, the cost of digital advertising may be lower, but it often must compete for attention with the content in which it is embedded. Additionally, the costs of digital advertising are increasing far faster than the cost of television advertising, even as the size of the audiences it delivers declines (Fahey, 2017).





**Figure 5** Effective Frequency by Media Types

To understand how these strengths and challenges affect the number of exposures needed, Nielsen Research conducted an effective-frequency analysis. This analysis was based on market-mix modeling results for 7,775 digital, radio, and television campaigns (See Figure 5). The market-mix modeling results were used to calculate each campaign's optimal number of average times to be shown to consumers to achieve sustained maximum sales effectiveness. A histogram then was created showing the percentage of campaigns for each media type—television, radio, and digital—that fell in each effective frequency range (Tsvetkov, 2017). Although the percentage of television campaigns with an effective frequency of 1 was lower than for the other two platforms, it quickly made up for that deficit with a higher percentage of campaigns with an effective frequency of 2. The conclusion from this is that all examined media types can be effective within the range of average frequencies typically deployed for them.

### INSIGHTS AND IMPLICATIONS

Four important insights emerge from this research:

- On a single, quality exposure basis, the television-advertisement format is as effective now as it was in the 1980s. It is just more difficult to obtain that quality exposure in today's media environment.
- The rate of delivery of advertisement-selling power per gross rating point has slowed over the decades. It now takes approximately 25 percent more gross rating points to deliver the same power to market as it did in the 1980s. This decline coincides

with audience technology changes, such as the proliferation of channels, time shifting, and multiple-device usage.

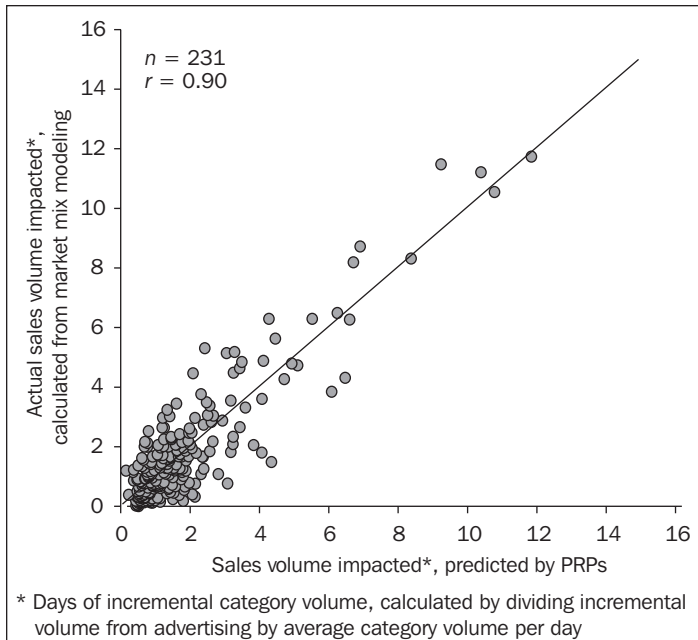
- More than mitigating this decline, the number of U.S. households has increased by 45 percent over the same period of time, whereas the number of hours households spend viewing television remains above what it was in the 1960s to 1990s.
- Despite a potential increase in distracted viewing, television advertising still maintains an effective-frequency profile that is comparable to other media channels, including digital.

This research further highlights several previously identified business practices in the use of television advertising to build brands (Findley, 2017). Television remains an effective media platform, and television advertising should continue to be used to maintain and grow market share. By focusing attention on the development stage, brands can improve advertisement quality to such a degree as to more than compensate for the decline in the rate of advertisement-selling power delivery per gross rating point.

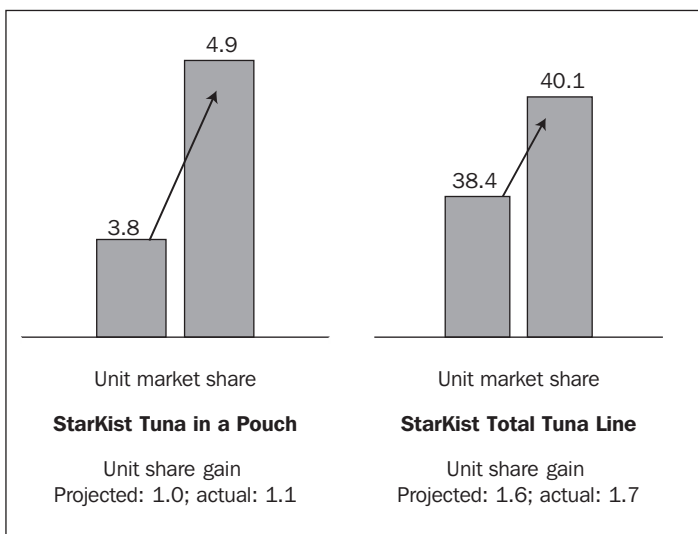
Although a focus on message quality always has been critical to advertising success, today's media environment makes message quality even more important because it leverages media expenditures. Maintaining media weight levels at sufficient rates to enable a continuous presence simultaneously ensures that an appropriate minimum frequency is achieved. Trafficking gross rating points behind advertisements on the basis of their persuasive strength manages the diminishing returns from wearout and maximizes sales power delivered in market.

These results imply that the keys to television-advertising success remain the same as in the past: actively managing both the quality (individual execution sales effectiveness) and the quantity (media weight and flighting concentration) simultaneously to ensure that advertising plans meet business objectives. Combining media weight and advertising quality into a metric for managing plans was first discussed more than 25 years ago in an article published by the Advertising Research Foundation, "Moving beyond GRPs to PRPs: Another Major Challenge for the 21st Century" (Blair, 1993). A persuasion rating point is simply a gross rating point weighted by a measure of persuasion (Batra, Myers, and Aaker, 2006, p. 513). It is a simple matter to use the wearout relationship to combine mathematically the delivery of an advertisement's preference-changing power with gross rating points, thus creating persuasion rating points.

The relationship between persuasion rating points and marketing-mix modeling outcomes for 231 campaigns is shown (See Figure 6; MSW•ARS Research, 2016). The strength of this relationship demonstrates that measuring the preference-building power of advertising and then managing that advertising (and its



**Figure 6** Case Study on the Use of Persuasion Rating Points



**Figure 7** StarKist Predictions vs. Actuals

**Table 2** Traditionally Planned Gross Rating Points versus Persuasion-Rating-Point-Optimized Gross Rating Points

Commercial	Brand Preference Building Power	Planned GRPs		Optimized GRPs
Commercial A:60	5.9	34	↑	166
Commercial B:60	5.5	116	↓	65
Commercial C:60	2.6	162	↓	81
Commercial D:30	4.3	42	↑	106
Commercial E:30	3.0	36	↓	18
Commercial F:30	2.9	58	↓	29
Commercial G:30	2.3	35	↓	18

subsequent wearout) using the persuasion rating point paradigm will assist advertisers in optimizing their advertising investments and more accurately forecasting marketing impact.

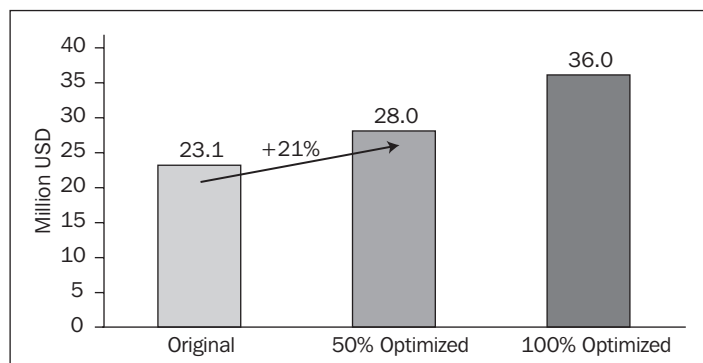
This is not just a theoretical supposition; it has been demonstrated through multiple case studies. One published example comes from StarKist tuna (Shepard, 2003). StarKist faced the daunting task of releasing a radical new product form, tuna in a pouch, in an 80-year stable category. To be successful, the advertising not only needed to establish this new line extension but also needed to grow the brand overall. To achieve these goals, the brand team employed a rigorous advertising-testing program using lab-measured changes in brand preference to choose the most effective advertising executions. By combining this with planned gross rating points to create persuasion rating points, StarKist forecasted in-market response to within one-tenth of a share point for both the new form and the total line (See Figure 7).

The accuracy of these predictions led management to approve an unplanned second wave of advertising when additional wearout analysis indicated the advertisements could build sales further. Barry Shepard, then StarKist's vice president of marketing, summarized the benefit of this additional wave in this way:

The results from the initial advertising quarter yielded an ROI of 76 percent, an enormous improvement over the break-even ROI we had expected for the quarter using a traditional approach. Incorporating the costs and incremental profits involved with the unplanned—or second—flight, we were up to 368 percent return on our TV advertising activity (Shepard, 2003).

In another example of the power of persuasion rating points, a major food company used brand preference to determine the optimal number of gross rating points to place behind each advertisement as it was sent to air (Blair, 2006). The goal was to “implement systems for allocating TV media weight based on the unique value of each ad in the portfolio, only for as long as they are working” (p. 9). The study covered all television advertisements for four brands over 12 months. The optimal number of gross rating points for each advertisement given the pool for shifting that length was determined from persuasion rating points and compared with planned gross rating points from the company's traditional approach. An example optimization scenario for one brand is shown (See Table 2).

After 12 months, the marketer used market-mix modeling to compare the average quarterly return achieved with the optimal plan versus what would have been achieved with the traditional approach. The optimal approach resulted in a calculated increase of \$12.9 million. To provide a conservative estimate, the marketer calculated the expected improvement from shifting only 50 percent



**Figure 8** Increase in Advertising Return with Partial GRP Optimization

of the indicative gross rating points. Even this conservative implementation would have resulted in a 21 percent improvement in return versus the traditional approach (See Figure 8).

Persuasion rating points also hold tremendous potential to address the emerging issue of cross-platform optimization. Television, radio, print, and digital platforms all have different communication strengths and weaknesses as well as synergies with the others. Brand preference accurately measures the brand-building power of executions from each of these. As cross-media gross rating points become more readily available, persuasion rating points will be calculable for a brand's entire media portfolio. This ultimately will elevate the discussion from "which platforms to use" to the more important topic of consistently producing and executing profitable advertising activity across all platforms.

## CONCLUSION

Although not quite as vigorous as in its heyday, television still has the power to move markets. It remains an extraordinarily efficient medium for reaching large audiences at a time when other media are increasing in cost even as they reach smaller audiences. Television's ability to influence consumers is not independent of the effectiveness and the persuasiveness of the message, however. Prudent advertisers thus will optimize the efficiency of television as an advertising medium by placing weight against the most persuasive message executions. Although this always has been good practice, the breadth of media alternatives available to advertisers today makes optimization of message persuasiveness even more important than in the past. It also means that devoting more attention to and resources for the creation and testing of alternative messages is a wise management practice. **JAR**

## ABOUT THE AUTHORS

**FRANK FINDLEY** is executive director of the Marketing Accountability Standards Board (MASB) where he represents the U.S. in the creation of international (ISO) marketing standards. His previous work at ARS group, comScore, and MSW Research resulted in improvements to copytest, tracking, media, and competitive intelligence systems. He is a coinventor of the patented Outlook media planner. Findley's research has appeared in publications including *Quirk's*, and the book *Accountable Marketing* (Routledge, 2016) and has been presented at ARF, AMA, ANA, IIR, and CASRO conferences.

**KELLY JOHNSON** is vice president research for Disney Advertising Sales. Johnson and her team are responsible for delivering best-in-class audience insights, marketplace thought leadership, and innovative research solutions to grow revenue. She played a key role in ESPN's groundbreaking cross-media research initiatives, including Project Blueprint, and worked with Nielsen to develop out-of-home television measurement. Johnson is Grand Winner of the 2011 ARF Great Mind Award in the Rising Star category, and her work has been published in the *Journal of Advertising Research*.

**DOUGLAS CRANG** is senior director of research at MSW Research. He provides analytics and data support to address both client-specific and industry-wide research issues pertaining to advertising creative pretesting and development as well as brand health tracking. His responsibilities also include preparing industry white papers, new product development, and authoring blogs covering a wide variety of research topics. Crang has more than 25 years of experience in the marketing research industry.

**DAVID W. STEWART** is President's Professor of Marketing and Business Law at Loyola Marymount University and a founding director and chair of MASB. He previously served as a tenured faculty member and in administrative roles at Vanderbilt University, the University of Southern California, and the University of California Riverside. Stewart is past editor of the *Journal of Marketing*, *Journal of the Academy of Marketing Science*, and *Journal of Public Policy and Marketing*. He has published more than 300 papers and twenty books, including *Accountable Marketing* (Routledge, 2016) and *Financial Dimensions of Marketing Decisions* (Palgrave Macmillan, 2019).

## REFERENCES

- ADVERTISING RESEARCH FOUNDATION. Special Classics Issue, *Journal of Advertising Research* 40, 6 (2000).
- BATRA, R., J. G. MYERS, and D. A. AAKER. *Advertising Management*, 5th ed. New York: Pearson, 2006.
- BLAIR, M. H. "An Empirical Investigation of Advertising Wearin and Wearout." *Journal of Advertising Research* 27, 6 (1987): 45–50.
- BLAIR, M. H. "Moving Beyond GRPs to PRPs: Another Major Challenge for the 21st Century." Paper presented at the Advertising Research Foundation's 12th Annual Electronic Media Workshop, 1993.



- BLAIR, M. H. *Innovative Business Solutions for the Emerging ROMI Branding Environment*. Evansville, IN: ARSgroup, 2006.
- BLAIR, M. H., and M. J. RABUCK. "Advertising Wearin and Wearout: Ten Years Later—More Empirical Evidence and Successful Practice." *Journal of Advertising Research* 38, 5 (1998): 7–18.
- FAHEY, M. (2017, March 21). "Digital Ads: More Expensive but Reaching Fewer Consumers." Retrieved from CNBC website: <https://www.cnbc.com/2017/03/20/digital-ads-more-expensive-but-reaching-fewer-consumers.html>
- FINDLEY, F. "Establishing Drivers of Brand Preference/Choice." Webcast presented by the Advertising Research Foundation, March 2017.
- HANSSSENS, D. M. "What Is Known about the Long-Term Impact of Advertising." In *Accountable Marketing: Linking Marketing Actions to Financial Performance*, D. W. Stewart and C. T. Gugel, eds. New York: Routledge, 2016.
- HARVEY, B. (2016). "Crossmedia ROI Optimization Must Include Creative." Paper presented at Advertising Research Foundation Audience Measurement conference, June 2016. Retrieved from [https://cdn.thearf.org/ARF\\_Knowledgebase/ARF%20Audience%20Measurement/AM\\_2016/Cross-Media-ROAS.pdf](https://cdn.thearf.org/ARF_Knowledgebase/ARF%20Audience%20Measurement/AM_2016/Cross-Media-ROAS.pdf)
- LEE, B. "Marketing Is Dead." *Harvard Business Review*, August 9, 2012. Retrieved from <https://hbr.org/2012/08/marketing-is-dead>
- LODISH, L. M. "Key Findings from the 'How Advertising Works' Study." In *Transcript Proceedings from the ARF Marketplace Advertising Research Workshop*. New York: Advertising Research Foundation, 1991.
- LYNCH, J. L. "Nielsen Estimates That 119.9 Million U.S. Homes Have TVs for the Upcoming Season." *Adweek*, September 7, 2018. Retrieved from <https://www.adweek.com/tv-video/nielsen-estimates-that-119-9-million-u-s-homes-have-tvs-for-the-upcoming-season/>
- MADRIGAL, A. C. "When Did TV Watching Peak?" *The Atlantic*, May 30, 2018. Retrieved from <https://www.theatlantic.com/technology/archive/2018/05/when-did-tv-watching-peak/561464/>
- MASTERSON, P. "The Wearout Phenomenon." *Marketing Research* 11, 3 (1999): 27–31.
- MSW•ARS RESEARCH. (2016). "Touchpoint® Global Validation Summary." Available on request via the 'Contacts' form at [www.mswresearch.com](http://www.mswresearch.com)
- MSW•ARS RESEARCH. (2017). "Television's Brand Building Power – How It Has Changed Over the Years". Retrieved from <http://blog.mswarsresearch.com/televisions-brand-building-power-how-it-has-changed-over-the-years/>
- NAPLES, M. J. *Effective Frequency: The Relationship between Frequency and Advertising Effectiveness*. New York: McGraw-Hill, 1979.
- POGGI, J., D. F. POLTRACK, and L. WOOD. "Reach. Targeting. Recency. Creative. Context. Five Keys to Advertising Effectiveness." Slide presentation presented at the Advertising Research Foundation Audience Measurement conference, June 2017. Retrieved from [https://cdn.thearf.org/ARF\\_Knowledgebase/ARF%20Audience%20Measurement/AM\\_2017/2-Monday/Holistic-Quantitative-Qualitative-Research-PUBLIC.pdf](https://cdn.thearf.org/ARF_Knowledgebase/ARF%20Audience%20Measurement/AM_2017/2-Monday/Holistic-Quantitative-Qualitative-Research-PUBLIC.pdf)
- RUBINSON, J. "Empirical Evidence of TV Advertising Effectiveness." *Journal of Advertising Research* 49, 2 (2009): 220–226.
- SHEPARD, B. "A True Return on Investment—Developing and Managing Advertising for StarKist Tuna in a Pouch." *Quirk's Marketing Research Review* 17, March (2003): Article 20030305. Retrieved from <https://www.quirks.com/articles/developing-and-managing-advertising-for-starkist-tuna-in-a-pouch>
- SNYDER J. "How Advertising Works, Today." Paper presented at the Advertising Research Foundation RE!THINK conference, March 2016.
- STATISTA. (2017). "Number of Households in the U.S. from 1960 to 2019." Retrieved from [www.statista.com/statistics/183635/number-of-households-in-the-us/](http://www.statista.com/statistics/183635/number-of-households-in-the-us/)
- STEWART, D. W., and D. H. FURSE. *Effective Television Advertising: A Study of 1000 Commercials*. Lexington, MA: Lexington Books, 1986.
- STEWART, D. W., and M. KAMINS. "Marketing Communications." in *Handbook of Marketing*, B. Weitz, ed. Thousand Oaks, CA: Sage, 2003.
- STEWART, D. W., and S. KOSLOW. "Executional Factors and Advertising Effectiveness: A Replication." *Journal of Advertising* 18, 3 (1989): 21–32.
- STIPP, H. "What 80 Years of Study Means for the Future of Advertising Research." *Journal of Advertising Research* 56, 3 (2016): 231–234.
- TSVETKOV, T. "MASB Winter Summit BIV Project Team Update." Paper presented at the Winter Summit of the Marketing Accountability Standards Board, 2017.
- TVHISTORY. (2018). "U.S. Households with Cable Television from 1977 to 1999." Retrieved from the Television History—The First 75 Years, Television Fact and Statistics—1939 to 2000 website: <http://www.tvhistory.tv/facts-stats.htm>