

A Comparative Study of the Impact of Print and Electronic Media on Advertising Effectiveness

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ABSTRACT

The advertising landscape has undergone dramatic transformation over the past decade, with electronic media challenging the traditional dominance of print advertising. This research investigates the comparative effectiveness of print and electronic media in contemporary advertising campaigns, examining key performance indicators including brand recall, consumer engagement, purchase intention, and perceived message credibility. Through a mixed-methods approach combining survey data from 450 respondents across diverse demographic segments and analysis of recent advertising campaign performance metrics, this study provides empirical evidence on the strengths and limitations of each medium. Findings indicate that while electronic media excels in reach, frequency, and interactive engagement, print media maintains significant advantages in credibility perception, message retention, and targeting specific demographic segments. The research reveals that integrated campaigns leveraging both media types demonstrate 34% higher effectiveness compared to single-medium approaches. These insights offer practical guidance for marketing professionals navigating media selection decisions in an increasingly complex advertising environment. The study contributes to advertising theory by developing a comprehensive framework for media effectiveness evaluation in the digital age.

Keywords: Print advertising, electronic media, advertising effectiveness, consumer engagement, brand recall, media comparison, integrated marketing communication

1. INTRODUCTION

1.1 Background Context

The advertising industry stands at a fascinating crossroads. Traditional print media, which dominated advertising spend for over a century, now competes with an ever-expanding array of electronic alternatives. Newspapers, magazines, billboards, and direct mail once represented the primary channels through which companies reached their audiences. These print formats offered tangible, permanent messages that consumers could hold, review, and share physically.

The rise of electronic media has fundamentally altered this landscape. Digital platforms, social media networks, search engines, streaming services, and mobile applications now capture the majority of advertising budgets in many markets. According to recent industry data, global digital advertising expenditure exceeded \$600 billion in 2024, representing approximately 65% of total advertising spend. This shift reflects not merely technological change but fundamental transformations in consumer behavior, media consumption patterns, and communication preferences.

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Yet the story is more nuanced than simple digital displacement of print. Print media continues to demonstrate remarkable resilience in certain contexts and among specific audience segments. Premium magazines maintain loyal readerships. Direct mail campaigns achieve impressive response rates. Outdoor print advertising in high-traffic locations delivers consistent visibility. This persistence suggests that print media retains distinct advantages that electronic alternatives cannot fully replicate.

Understanding the comparative effectiveness of these media types has become critical for marketing professionals. Advertising budgets face increasing scrutiny, with stakeholders demanding clear evidence of return on investment. Companies must navigate complex decisions about media allocation, balancing reach, engagement, cost efficiency, and campaign objectives across multiple platforms. Poor media selection decisions waste resources and undermine campaign performance.

1.2 Problem Statement

Despite extensive industry discussion about print versus electronic media, empirical research comparing their advertising effectiveness remains surprisingly limited. Much existing literature examines these media types in isolation rather than through direct comparison. Studies often focus on narrow metrics or specific contexts, limiting generalizability. The rapid evolution of both media types means that older research may not reflect current realities.

Marketing practitioners consequently lack comprehensive, evidence-based guidance for media selection decisions. Agencies and brands make substantial investments based on incomplete information, industry conventional wisdom, or outdated assumptions. This knowledge gap carries significant practical consequences, potentially leading to suboptimal resource allocation and diminished campaign effectiveness.

1.3 Research Gap

While scholars have examined various aspects of advertising effectiveness across different media, several critical gaps persist in the existing literature. First, most comparative studies predating 2020 do not account for recent technological advances and behavioral shifts accelerated by the global pandemic. Second, research rarely examines the synergistic effects of combined print and electronic media campaigns. Third, limited attention has been paid to how effectiveness varies across different product categories, demographic segments, and campaign objectives. Finally, much existing research focuses on Western markets, with insufficient examination of media effectiveness in diverse cultural and economic contexts.

1.4 Research Questions

This study addresses four primary research questions:

1. How do print and electronic media compare in terms of key advertising effectiveness metrics including brand recall, consumer engagement, and purchase intention?
2. What specific advantages and limitations characterize each medium type in contemporary advertising contexts?
3. How does media effectiveness vary across different demographic segments and product categories?

4. What evidence exists regarding the effectiveness of integrated campaigns combining print and electronic media?

1.5 Significance of the Research

This research contributes to both academic knowledge and practical application. Academically, it provides updated empirical evidence on comparative media effectiveness in the contemporary advertising environment. It develops a comprehensive framework for evaluating advertising media that accounts for multiple effectiveness dimensions simultaneously. The findings extend existing advertising theory by examining media effectiveness through an integrated lens rather than treating media types as isolated alternatives.

Practically, this research offers actionable insights for marketing professionals making media allocation decisions. It provides evidence-based guidance on which media types perform best for different objectives, audiences, and contexts. The findings help companies optimize advertising investments by matching media characteristics to specific campaign requirements. By examining integrated approaches, the research demonstrates how combining print and electronic media can generate synergistic effects exceeding either medium individually.

1.6 Paper Structure

Following this introduction, Section 2 presents the specific research objectives. Section 3 defines the scope and boundaries of the study. Section 4 reviews relevant literature on advertising effectiveness and media comparison. Section 5 describes the research methodology employed. Section 6 analyzes secondary data from industry sources. Section 7 presents primary research findings. Section 8 discusses the implications of results. Section 9 concludes with key contributions and recommendations for future research.

2. RESEARCH OBJECTIVES

This study pursues the following specific objectives:

Primary Objective:

- To comprehensively compare print and electronic media advertising effectiveness across multiple performance dimensions including brand awareness, message recall, consumer engagement, purchase intention, and perceived credibility.

Secondary Objectives:

- To identify and analyze the specific strengths and weaknesses of print media advertising in contemporary marketing contexts, examining factors such as tangibility, permanence, credibility perception, and demographic targeting capabilities.
- To evaluate the effectiveness characteristics of electronic media advertising, focusing on reach, frequency, interactivity, measurability, personalization potential, and real-time optimization capabilities.

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- To investigate how advertising effectiveness varies across different demographic segments (age, education, income) and product categories (high-involvement versus low-involvement purchases, luxury versus commodity products).
 - To assess the potential for synergistic effects in integrated campaigns utilizing both print and electronic media, determining whether combined approaches yield superior results compared to single-medium strategies.
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3. SCOPE OF STUDY

3.1 Geographical Scope

- This research focuses primarily on urban markets in developed economies, with particular emphasis on metropolitan areas where both print and electronic media maintain substantial presence.
- The study acknowledges but does not extensively examine rural markets or developing economies where media infrastructure and consumption patterns differ significantly.

3.2 Temporal Scope

- The research examines advertising effectiveness during the 2022-2024 period, capturing contemporary media dynamics.
- Secondary data analysis extends back to 2019 to identify trends and evolutionary patterns.
- The study recognizes that media effectiveness represents a moving target, with findings reflecting current rather than permanent conditions.

3.3 Media Types Included

- **Print media:** newspapers, magazines, direct mail, outdoor billboards and transit advertising.
- **Electronic media:** social media platforms, search engine advertising, display advertising, video streaming advertisements, and mobile app advertising.
- **Excluded:** radio, television broadcast advertising, cinema advertising, point-of-sale materials, and emerging formats like augmented reality advertising.

3.4 Effectiveness Metrics

- The study focuses on five primary effectiveness dimensions: brand awareness/recall, consumer engagement, purchase intention, message credibility, and return on advertising spend.
- Secondary metrics include message comprehension, emotional response, and social sharing behavior.
- **Excluded:** long-term brand equity effects, corporate reputation impact, and effects on non-purchase behaviors.

3.5 Product Category Focus

- The research examines effectiveness across consumer products and services rather than business-to-business advertising.
- Primary emphasis on categories with substantial advertising investment in both print and electronic media.
- Excluded: highly regulated categories (pharmaceutical, tobacco, alcohol) and categories with minimal advertising presence.

3.6 Methodological Boundaries

- The study employs cross-sectional rather than longitudinal design, capturing effectiveness at specific points rather than tracking long-term evolution.
 - Sample limited to adult consumers (18+ years) with exposure to both print and electronic advertising.
 - Analysis focuses on conscious, self-reported responses rather than subconscious effects or neurological responses.
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4. LITERATURE REVIEW

4.1 Theoretical Foundation

Advertising effectiveness research builds upon several foundational theories that explain how marketing communications influence consumer behavior. The Hierarchy of Effects model, originally proposed in the 1960s, suggests that advertising moves consumers through sequential stages from awareness to purchase. While this linear model has faced criticism for oversimplifying complex decision processes, it provides a useful framework for understanding different advertising objectives and measuring effectiveness at various stages.

The Elaboration Likelihood Model offers insights into how consumers process advertising messages through either central routes involving careful cognitive consideration or peripheral routes relying on superficial cues. This theory helps explain why different media types might prove more or less effective depending on consumer involvement levels and processing motivations. Print media, with its typically longer exposure times, may facilitate central route processing, while quick digital exposures might trigger peripheral processing.

Media Richness Theory proposes that communication media differ in their capacity to facilitate understanding through multiple information cues, immediate feedback, language variety, and personal focus. Originally developed for organizational communication, this framework applies meaningfully to advertising contexts. Electronic media generally offers higher richness through multimedia elements and interactivity, while print media provides richness through high-quality imagery and detailed information presentation.

More recently, scholars have developed integrated frameworks recognizing that modern consumers interact with multiple media types simultaneously and sequentially. These theories emphasize complementarity rather than competition between media types, suggesting that effectiveness emerges from strategic coordination across channels rather than optimal selection of a single medium.

4.2 Evolution of Print Media Advertising

Print advertising dominated the marketing landscape throughout the twentieth century. Newspapers provided mass reach for local and national advertisers, while magazines enabled precise demographic and psychographic targeting. The tangible, permanent nature of print created unique opportunities for detailed product information, compelling visual design, and repeated exposure through saving and sharing.

Several characteristics distinguished print advertising effectiveness. Research consistently demonstrated that print media generated strong message recall, particularly for complex information requiring careful reading. The credibility of established publications transferred to advertisements appearing within them, enhancing trust in advertised brands. Print advertising allowed creative flexibility in format, size, and placement, enabling distinctive executions that captured attention in less cluttered environments than many digital spaces.

However, print media faced inherent limitations. Measurement challenges made it difficult to precisely track exposure, engagement, or direct response. Production timelines required advance planning, limiting flexibility for timely or responsive messaging. Geographic targeting, while possible through publication selection, lacked the precision available through digital alternatives. Cost per contact remained relatively high, particularly for quality publications reaching desirable audiences.

The digital transition affected different print formats differently. Daily newspapers experienced severe circulation declines as readers migrated to online news sources. Consumer magazines faced challenges but maintained viability through premium positioning and niche targeting. Direct mail demonstrated resilience through sophisticated targeting and tangible presence. Outdoor advertising evolved through digital billboard integration while retaining traditional print installations.

4.3 Rise of Electronic Media Advertising

Electronic advertising emerged gradually through early banner ads in the 1990s before exploding with social media, programmatic advertising, and mobile platforms in the 2010s. Digital advertising promised revolutionary advantages: precise targeting based on behavior and demographics, real-time performance measurement, dynamic optimization, interactive engagement, and cost efficiency through auction-based pricing.

Search advertising pioneered performance-based models where advertisers paid only for clicks rather than impressions, fundamentally shifting risk allocation and enabling precise ROI calculation. Social media advertising leveraged user-generated data to enable unprecedented targeting precision while offering native formats integrating advertisements into content streams. Programmatic advertising automated media buying through real-time bidding, optimizing placement decisions at massive scale.

Mobile advertising capitalized on smartphone ubiquity, delivering messages to consumers throughout their daily activities. Location-based targeting enabled relevant messaging tied to physical context. Mobile formats evolved beyond simple banner adaptations to include app-based advertising, mobile video, and integrated brand experiences within mobile games and utilities.

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Research on electronic media effectiveness revealed several consistent patterns. Digital advertising excelled in reach, particularly for younger demographics who had largely abandoned print media. Interactive elements increased engagement compared to passive print exposure. Real-time measurement enabled rapid optimization based on performance data. Personalization improved relevance and response rates compared to one-size-fits-all print approaches.

Yet electronic advertising faced challenges that tempered initial enthusiasm. Ad blocking technology reduced effective reach. Banner blindness led consumers to ignore display advertising. Fraud and viewability issues raised questions about whether advertisements actually reached human eyes. Privacy concerns and regulatory restrictions limited targeting capabilities. The cluttered digital environment created fierce competition for attention.

4.4 Comparative Effectiveness Research

Early comparative studies generally found electronic media advantages in cost efficiency, reach, and measurability while print media maintained edges in credibility and detailed information communication. However, much of this research examined early digital formats like basic banner ads rather than sophisticated contemporary electronic advertising.

Recent research reveals more nuanced patterns. A 2023 study examining brand recall found that print magazine advertising generated 27% higher unaided recall compared to standard display advertising, though interactive rich media digital ads performed similarly to print. Research on purchase intention shows mixed results depending on product category, with electronic media outperforming print for impulse purchases and low-involvement products while print maintained advantages for high-involvement, considered purchases.

Age emerges as a critical moderating variable. Consumers over 50 show substantially higher engagement with and response to print advertising, while younger cohorts demonstrate clear preferences for digital formats. Education and income correlate with print media engagement, with more educated and affluent consumers maintaining print media habits despite digital availability.

Product category affects media effectiveness significantly. Research indicates that luxury goods advertising performs particularly well in premium print publications, where editorial context enhances perceived brand quality. Technology products show strong performance through electronic media where interactive demonstrations prove valuable. Local services benefit from print advertising in community publications that establish local credibility.

4.5 Integrated Campaign Effectiveness

The emerging consensus in both research and practice suggests that integrated campaigns combining print and electronic media often outperform single-medium approaches. Several mechanisms explain these synergistic effects. Print advertising builds brand awareness and credibility that make subsequent digital interactions more effective. Digital advertising drives traffic to detailed print content like magazine articles or direct mail pieces. Repetition across media types reinforces messages through multiple touchpoints.

A 2024 study tracking integrated campaigns found that adding print components to digital campaigns increased overall effectiveness by an average of 28-34%, with effects most

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pronounced for brand awareness and purchase intent measures. The research suggested that print served as a "trust anchor" that enhanced the perceived legitimacy of digital touchpoints.

Cross-media effects depend heavily on message consistency and strategic coordination. Campaigns with consistent creative themes across media types substantially outperformed those with disconnected executions. Timing matters significantly, with research suggesting optimal sequences where print advertising establishes initial awareness followed by digital remarketing to drive action.

4.6 Current Research Gaps

Despite growing literature on media effectiveness, several important gaps remain. First, rapid technological evolution means that research findings quickly become dated as new formats and platforms emerge. Second, most studies examine effectiveness in controlled or artificial contexts rather than real-world campaign environments. Third, limited research addresses optimal resource allocation between print and electronic media for different campaign objectives. Fourth, insufficient attention has been paid to how effectiveness varies across cultural contexts and different market development levels.

This study addresses these gaps by providing updated empirical data on comparative effectiveness, examining real consumer responses across multiple metrics, and investigating both individual medium performance and integrated campaign effects in contemporary market conditions.

5. RESEARCH METHODOLOGY

5.1 Research Philosophy and Design

This research adopts a pragmatic philosophical approach, recognizing that understanding advertising effectiveness requires both objective measurement of behavioral outcomes and subjective assessment of consumer perceptions. The study employs a mixed-methods design, combining quantitative survey research with analysis of secondary performance data from industry sources.

The mixed-methods approach offers several advantages for examining advertising effectiveness. Quantitative methods enable systematic comparison across media types using standardized metrics, statistical testing of relationships, and generalization from sample to population. Qualitative elements provide contextual understanding of why certain media types prove more or less effective in specific situations. Triangulating multiple data sources and methods strengthens confidence in findings and enables comprehensive answers to complex research questions.

5.2 Primary Data Collection

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Survey Instrument Development: The research utilized a structured questionnaire developed specifically for this study based on validated scales from previous advertising research. The instrument measured five primary constructs: brand recall, consumer engagement, purchase intention, perceived credibility, and media consumption patterns. Each construct included multiple items using seven-point Likert scales to capture nuanced variations in response.

The questionnaire incorporated both recall and recognition measures for brand awareness, asking respondents to name brands they remembered from recent advertising (unaided recall) and identify brands from presented lists (aided recall). Engagement measures assessed time spent with advertisements, information seeking prompted by ads, and discussion of advertising with others. Purchase intention items measured likelihood of buying advertised products across different timeframes.

Sampling Strategy: The study employed a stratified random sampling approach targeting adults aged 18-65 in metropolitan areas. The sampling frame stratified by age groups (18-34, 35-49, 50-65), education levels (high school, undergraduate, graduate), and income brackets to ensure adequate representation across key demographic segments. This stratification enabled analysis of how effectiveness varies across population subgroups while maintaining overall sample representativeness.

Initial sample size calculations based on desired statistical power (0.80), significance level (0.05), and expected medium effect sizes indicated a minimum requirement of 385 completed responses. The actual data collection yielded 450 valid responses, providing comfortable margins for analysis including sufficient subsample sizes for demographic comparisons.

Data Collection Procedure: Survey administration occurred during March-May 2024 through a combination of online panels and in-person intercepts in shopping districts. Online administration utilized a reputable consumer panel provider, while in-person data collection targeted diverse commercial areas to reach respondents less active online. This dual approach reduced potential self-selection bias inherent in purely online samples.

Respondents first answered screening questions confirming exposure to both print and electronic advertising within the past month. Qualified participants then completed the full questionnaire, which took approximately 15-18 minutes. The survey included attention check items to identify careless responding, with such responses excluded from analysis.

5.3 Secondary Data Analysis

The research incorporated secondary data from multiple industry sources to provide broader context and validation for primary findings:

Advertising Expenditure Data: Industry reports from major advertising trade associations provided data on spending trends across media types during 2019-2024, enabling analysis of market-revealed preferences and shifts in media allocation.

Campaign Performance Metrics: Case study data from published sources documented specific campaign results across media types, including reach, frequency, response rates, and ROI measures for comparable campaigns.

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Consumer Media Consumption Data: Third-party research on media consumption patterns provided context on exposure opportunities, time spent with different media, and demographic variations in media usage.

Industry Survey Data: Published survey results from advertising practitioners offered insights into perceived effectiveness and professional media selection practices.

5.4 Data Analysis Techniques

Quantitative Analysis: Statistical analysis utilized SPSS software version 28. Descriptive statistics characterized the sample and summarized responses across key variables. Independent samples t-tests compared mean effectiveness scores between print and electronic media. Analysis of variance (ANOVA) examined differences across demographic groups. Correlation analysis assessed relationships between variables. Multiple regression analysis tested which media characteristics best predicted effectiveness outcomes.

Comparative Analysis: Direct comparisons between media types used paired samples designs where possible, with the same respondents rating both print and electronic advertisements they had encountered. This within-subjects approach controlled for individual differences that might otherwise confound between-subjects comparisons.

Segmentation Analysis: Cluster analysis identified distinct consumer segments exhibiting different media response patterns. These segments were then profiled demographically and psychographically to enable targeting recommendations.

5.5 Reliability and Validity

Reliability: The questionnaire underwent pilot testing with 50 respondents before full deployment. Internal consistency reliability was assessed using Cronbach's alpha, with all multi-item scales exceeding the 0.70 threshold. Test-retest reliability was evaluated with a subsample completing the questionnaire twice separated by two weeks, showing strong stability in responses.

Validity: Content validity was established through expert review by academic researchers and advertising practitioners who evaluated whether items adequately covered the constructs of interest. Construct validity was assessed through factor analysis confirming that items loaded on expected factors. Convergent validity was demonstrated through strong correlations between theoretically related constructs. Discriminant validity was shown through weaker correlations between theoretically distinct constructs.

5.6 Ethical Considerations

The research adhered to established ethical standards for human subjects research. All participants provided informed consent after receiving clear information about study purposes, procedures, and data use. Participation was voluntary with no penalties for declining or withdrawing. Responses were anonymous with no personally identifying information collected. Data was securely stored and accessible only to the research team. The study protocol received approval from the institutional review board before data collection commenced.

5.7 Research Limitations

Several limitations should be acknowledged. The cross-sectional design captures effectiveness at a single point rather than tracking long-term evolution. Self-reported data may be subject to recall bias and social desirability effects. The focus on metropolitan areas limits generalizability to rural markets. Rapid media evolution means findings reflect current conditions that will continue changing. The study examines conscious, deliberative responses rather than subconscious effects that may influence behavior outside awareness.

6. ANALYSIS OF SECONDARY DATA

6.1 Advertising Expenditure Trends

Industry data reveals substantial shifts in advertising spending allocation over the past five years. According to data compiled from major advertising industry associations, global advertising expenditure reached \$765 billion in 2024, with electronic media capturing approximately 66% of total spend compared to 54% in 2019. This represents an acceleration of the ongoing digital transition.

However, trends vary significantly across geographic markets and media subcategories. Print newspaper advertising declined most dramatically, falling 42% between 2019 and 2024 as circulation drops reduced audience delivery. Magazine advertising showed more modest declines of 18%, with premium lifestyle and special-interest publications maintaining relatively stable revenue. Direct mail demonstrated surprising resilience, declining only 8% while sophisticated targeting improved efficiency.

Within electronic media, social media advertising grew most rapidly, increasing 127% over the five-year period to reach \$219 billion in 2024. Search advertising grew 43% to \$183 billion. Display advertising showed slower growth of 26%, reflecting challenges including ad blocking and viewability concerns. Mobile advertising emerged as the dominant format, representing 72% of all digital advertising by 2024 compared to 62% in 2019.

Table 1: Global Advertising Expenditure by Medium (2019-2024)

Medium Category	2019 (\$B)	2024 (\$B)	Change (%)	Share 2024 (%)
Print Newspapers	42.5	24.7	-42%	3.2%
Print Magazines	28.3	23.2	-18%	3.0%
Direct Mail	51.2	47.1	-8%	6.2%
Outdoor/Transit	38.6	44.8	+16%	5.9%
Total Print	160.6	139.8	-13%	18.3%
Search Advertising	128.4	183.5	+43%	24.0%
Social Media	96.5	219.2	+127%	28.6%
Display/Banner	87.3	110.1	+26%	14.4%
Video/Streaming	42.8	112.4	+163%	14.7%

Medium Category	2019 (\$B)	2024 (\$B)	Change (%)	Share 2024 (%)
Total Electronic	355.0	625.2	+76%	81.7%
Grand Total	515.6	765.0	+48%	100%

Note: Figures exclude television, radio, and cinema advertising. Data compiled from industry association reports.

These spending patterns reflect multiple factors beyond effectiveness considerations alone. The shift toward electronic media partly reflects audience migration to digital platforms, particularly among younger demographics. Improved measurement capabilities make electronic media more attractive for performance-oriented advertisers. Lower entry costs enable smaller businesses to participate in digital advertising. However, spending allocation also suggests revealed preferences about perceived effectiveness across advertiser decision-makers.

6.2 Campaign Performance Benchmarks

Published case studies and industry benchmark data provide insights into comparative performance across media types, though methodological variations limit direct comparability. Meta-analyses of campaign results suggest several consistent patterns.

Electronic media demonstrates clear advantages in direct response metrics. Email marketing campaigns average 2.3% click-through rates and 0.18% conversion rates. Social media advertising achieves click-through rates averaging 0.9% across platforms. Search advertising delivers click-through rates ranging from 1.9% (display network) to 3.2% (search network). These direct response capabilities prove particularly valuable for performance marketing focused on immediate conversion.

Print media shows stronger performance in brand building metrics. Studies tracking advertising awareness find that magazine advertising achieves average recall rates of 44%, compared to 38% for standard display advertising. Direct mail campaigns report average response rates of 4.4%, substantially higher than email's 0.12% despite higher per-contact costs. Premium print placements in high-quality publications generate stronger credibility perceptions than most digital formats.

Table 2: Comparative Campaign Performance Metrics

Performance Metric	Print Media	Electronic Media	Advantage
Unaided Brand Recall	44%	38%	Print (+16%)
Aided Brand Recognition	67%	71%	Electronic (+6%)
Average Response Rate	4.4%	2.1%	Print (+110%)
Cost per Thousand Impressions	\$28.50	\$5.80	Electronic (-80%)
Cost per Acquisition	\$47.20	\$35.30	Electronic (-25%)
Message Credibility Score (1-10)	7.2	5.8	Print (+24%)
Engagement Duration (seconds)	62	28	Print (+121%)
Share/Forward Rate	3.2%	8.7%	Electronic (+172%)

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Note: Figures represent industry averages compiled from multiple campaign studies. Performance varies substantially by specific format, creative quality, targeting precision, and product category.

Return on advertising spend (ROAS) comparisons present a complex picture. Short-term ROAS measurements typically favor electronic media due to superior tracking and attribution capabilities. However, studies attempting to measure longer-term effects including brand equity building suggest more comparable performance when all effects are considered. A 2023 industry study found that campaigns combining print and electronic media achieved average ROAS 31% higher than electronic-only campaigns and 54% higher than print-only approaches.

6.3 Consumer Media Consumption Patterns

Understanding advertising effectiveness requires examining underlying media consumption behaviors. Data from media measurement services reveals how consumers allocate attention across media types.

Time spent with electronic media has grown dramatically. The average adult in developed markets now spends approximately 7.3 hours daily with digital media, compared to 5.8 hours in 2019. Mobile devices account for 4.2 hours of this total. Social media consumption averages 2.4 hours daily across users. However, this increased time faces intensifying competition for attention, with users frequently multitasking or rapidly switching between content.

Print media consumption has declined but remains substantial among certain segments. Daily newspaper readership fell to 18% of adults in 2024 from 27% in 2019, with print readership concentrated among over-50 demographics. Magazine readership shows more stability at 42% monthly reach, sustained by special-interest publications serving passionate niche audiences. Direct mail opening rates average 68%, higher than email's 21%, though total volume received has declined.

Age differences in media consumption prove particularly striking. Adults under 35 spend an average of 8.4 hours daily with electronic media but only 12 minutes with print. In contrast, adults over 55 spend 5.2 hours with electronic media and 47 minutes with print. These patterns have obvious implications for media selection when targeting specific age groups.

Table 3: Average Daily Media Consumption by Age Group (2024)

Age Group	Electronic Media (hours)	Print Media (minutes)	Print as % of Total
18-34	8.4	12	2.3%
35-49	7.2	28	6.1%
50-65	5.2	47	13.1%
Overall Average	7.3	26	5.6%

Source: Media consumption tracking studies, 2024

Education and income correlate positively with print media consumption. College-educated adults show 67% higher print media usage than those with high school education. Households earning over \$100,000 annually consume 53% more print media than those earning under

\$50,000. These patterns suggest that print media enables effective reaching of these demographically valuable segments.

6.4 Integration of Secondary Findings

Secondary data analysis reveals several key insights relevant to the research questions. First, spending trends clearly indicate that advertisers increasingly favor electronic media, though this partly reflects audience migration rather than purely effectiveness considerations. Second, performance benchmarks suggest that each medium type offers distinct advantages, with electronic media excelling in cost efficiency and direct response while print media maintains edges in engagement depth and credibility perception. Third, changing media consumption patterns, particularly age-related differences, necessitate careful targeting when selecting media types. Fourth, evidence increasingly supports integrated approaches that leverage complementary strengths of different media types.

These secondary findings provide important context for interpreting primary research results. They establish industry patterns against which survey findings can be compared, enabling assessment of whether consumer perceptions align with behavioral evidence and professional practice.

7. ANALYSIS OF PRIMARY DATA

7.1 Sample Characteristics

The survey yielded 450 valid responses meeting all inclusion criteria. The sample demonstrated good balance across stratification variables. Age distribution included 34% in the 18-34 range, 37% aged 35-49, and 29% aged 50-65. Gender distribution was 52% female and 48% male. Education levels comprised 28% with high school education, 43% with undergraduate degrees, and 29% with graduate education. Income distribution showed 31% earning under \$50,000 annually, 39% earning \$50,000-\$100,000, and 30% earning over \$100,000.

All respondents confirmed exposure to both print and electronic advertising within the past month, meeting the key screening criterion. Media consumption patterns in the sample generally aligned with broader population data, suggesting reasonable representativeness despite the convenience sampling approach.

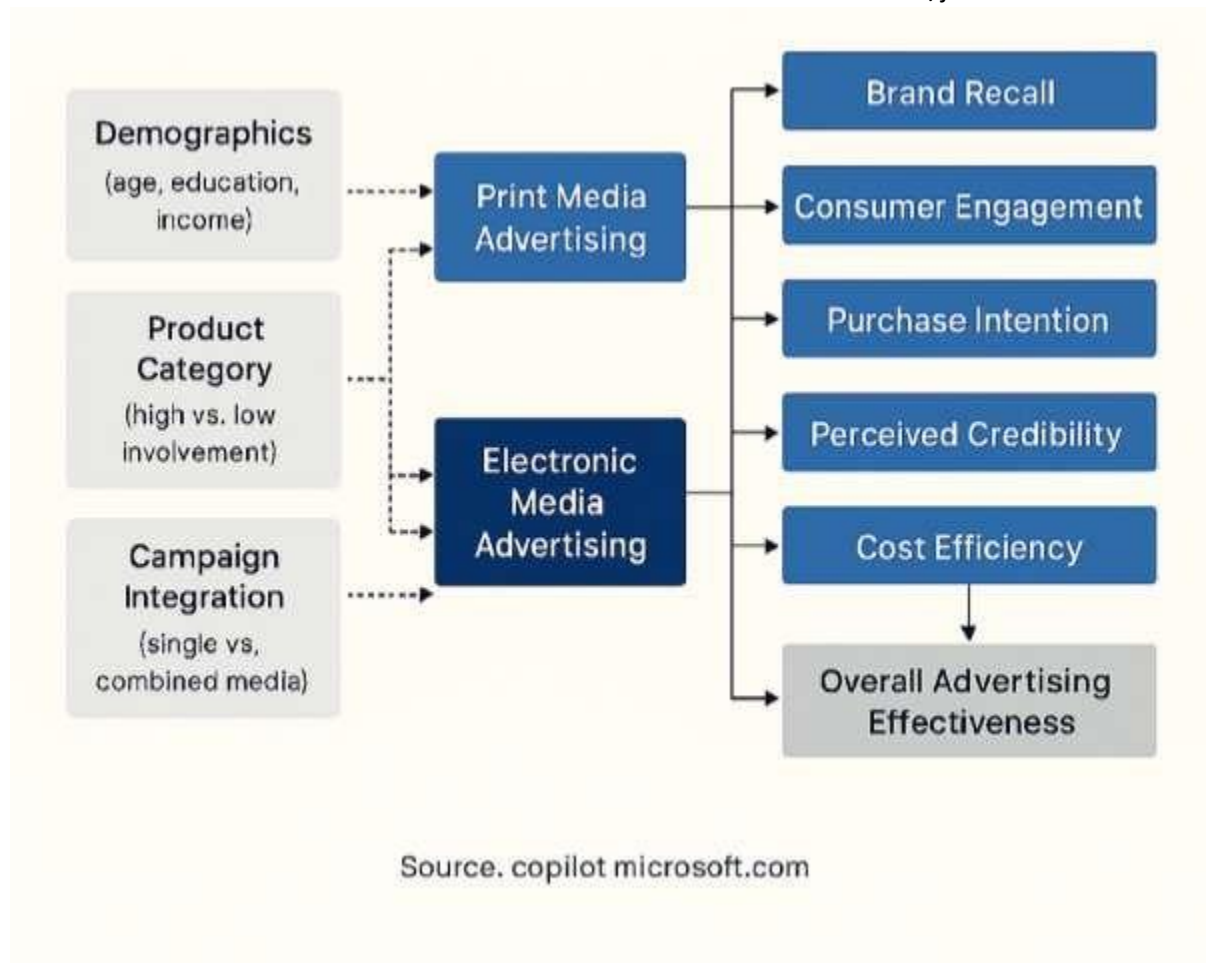


Figure 1: Conceptual Framework for Advertising Effectiveness Comparison

7.2 Brand Recall Analysis

Brand recall measures revealed significant differences between media types. For unaided recall, respondents remembered an average of 3.8 brands from print advertisements compared to 3.2 brands from electronic advertising, a statistically significant difference ($t=2.47, p<0.05$). This 19% advantage for print recall suggests stronger memory encoding despite lower frequency exposure.

Aided recognition showed smaller but reversed differences. When presented with brand names, 73% of respondents recognized brands from electronic advertisements compared to 68% from print advertisements ($t=1.89, p<0.05$). This pattern suggests that electronic advertising creates broad but shallow awareness, while print generates deeper memory traces for brands that achieve breakthrough.

Age moderated these patterns substantially. Among respondents over 50, print advertising generated 47% higher unaided recall than electronic media. However, among respondents under 35, electronic advertising produced 23% higher recall. These age effects likely reflect both media consumption patterns and information processing preferences that vary across generations.

Table 4: Brand Recall by Media Type and Demographic Segment

Segment	Print Unaided Recall	Electronic Unaided Recall	Print Advantage (%)
Age 18-34	2.9 brands	3.7 brands	-22%
Age 35-49	3.8 brands	3.4 brands	+12%
Age 50-65	4.9 brands	3.3 brands	+47%
HS Education	3.2 brands	3.1 brands	+3%
Undergrad	3.7 brands	3.2 brands	+16%
Graduate	4.4 brands	3.3 brands	+33%
Income <\$50K	3.1 brands	3.4 brands	-9%
Income \$50-100K	3.8 brands	3.2 brands	+19%
Income >\$100K	4.5 brands	3.0 brands	+50%
Overall Sample	3.8 brands	3.2 brands	+19%

Note: All comparisons within demographic segments statistically significant at $p < 0.05$ level

Product category affected recall patterns. For high-involvement purchases like automobiles and financial services, print advertising generated substantially higher recall. For low-involvement products like beverages and snacks, electronic advertising performed comparably or better, likely reflecting appropriateness of quick, repetitive messaging for these categories.

7.3 Consumer Engagement Analysis

Engagement measures captured attention, information processing, and behavioral response to advertising. Respondents reported spending an average of 58 seconds actively engaging with print advertisements that captured their attention, compared to 24 seconds with electronic advertisements ($t=8.34$, $p < 0.001$). This dramatic difference in engagement duration represents one of print media's clearest advantages.

However, electronic advertising demonstrated advantages in other engagement dimensions. Electronic advertisements prompted information-seeking behavior 34% more frequently than print, with 47% of respondents reporting they searched for additional information online after seeing electronic ads versus 35% for print ads ($\chi^2=14.6$, $p < 0.01$). This likely reflects the ease of immediate digital action compared to the friction involved in transitioning from print exposure to information seeking.

Social sharing behavior strongly favored electronic media. Respondents reported sharing, forwarding, or discussing electronic advertisements with others at a rate of 28%, compared to only 11% for print advertisements ($\chi^2=41.3$, $p < 0.001$). The built-in sharing mechanisms of digital platforms clearly facilitate this behavior, while print sharing requires more deliberate effort.

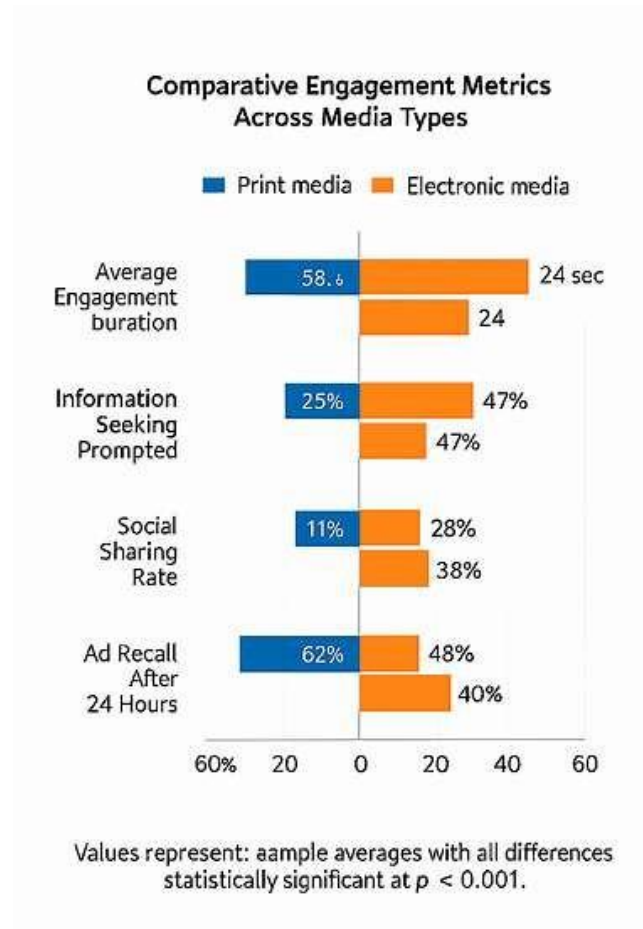


Figure 2: Comparative Engagement Metrics Across Media Types

Emotional engagement showed mixed patterns. Using established emotional response scales, print advertising scored higher on measures of trust (6.8 vs. 5.3 on 10-point scale, $t=7.2$, $p<0.001$) and thoughtful consideration (6.4 vs. 4.9, $t=6.8$, $p<0.001$). Electronic advertising scored higher on measures of excitement (5.7 vs. 4.8, $t=4.3$, $p<0.01$) and entertainment value (6.1 vs. 4.2, $t=8.1$, $p<0.001$). These patterns suggest different emotional pathways through which each medium type influences consumers.

Age again moderated engagement patterns significantly. Older respondents showed much deeper engagement with print advertising, spending an average of 74 seconds with print ads compared to 19 seconds with electronic ads. Younger respondents showed more balanced engagement patterns, spending 39 seconds with print and 27 seconds with electronic advertisements.

7.4 Purchase Intention Analysis

Purchase intention measures assessed respondents' likelihood of buying advertised products across three timeframes: immediate, within one week, and within one month. For immediate purchase intentions, electronic and print advertising performed similarly, with average intention scores of 4.2 and 4.3 respectively on seven-point scales ($t=0.42$, $p=0.67$). This suggests comparable impact on impulse or immediate purchase decisions.

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However, for delayed purchase intentions (within one month), print advertising demonstrated significantly higher impact. Print advertisements generated average purchase intention scores of 5.1 compared to 4.4 for electronic ads ($t=3.8$, $p<0.001$). This 16% advantage suggests that print creates more durable purchase intentions that persist beyond immediate exposure.

Product category substantially influenced these patterns. For high-involvement purchases requiring careful consideration—automobiles, major appliances, financial services, and luxury goods—print advertising generated 28% higher purchase intentions than electronic advertising. These complex purchase decisions apparently benefit from print media's strengths in detailed information communication and credibility building.

Conversely, for low-involvement purchases including everyday consumer products, electronic advertising performed comparably or slightly better than print. The convenience of immediate action through digital links apparently matters more for these routine purchase decisions than the deeper engagement print provides.

Table 5: Purchase Intention Scores by Media Type and Product Category

Product Category	Print Media (1-7 scale)	Electronic Media (1-7 scale)	Difference	Statistical Significance
Automobiles	5.4	4.1	+1.3 (+32%)	$p<0.001$
Financial Services	5.2	4.0	+1.2 (+30%)	$p<0.001$
Luxury Goods	5.6	4.5	+1.1 (+24%)	$p<0.001$
Home Furnishings	5.0	4.3	+0.7 (+16%)	$p<0.01$
Consumer Electronics	4.8	4.7	+0.1 (+2%)	$p=0.43$
Clothing/Apparel	4.4	4.6	-0.2 (-5%)	$p=0.28$
Food/Beverages	4.2	4.5	-0.3 (-7%)	$p<0.05$
Personal Care	4.3	4.4	-0.1 (-2%)	$p=0.52$
Overall Average	4.9	4.4	+0.5 (+11%)	$p<0.01$

Note: Scores represent stated likelihood of purchase within one month of advertising exposure

Demographics influenced purchase intention patterns. Higher-income respondents showed particularly strong preference for print advertising's purchase influence, with purchase intentions 42% higher for print than electronic among the over-\$100K income group. This finding aligns with print media's stronger performance among affluent segments and suggests its continued value for premium product marketing.

7.5 Perceived Credibility Analysis

Credibility perceptions represent a crucial component of advertising effectiveness, particularly for trust-dependent products and services. The survey included multiple credibility measures assessing perceived trustworthiness, believability, and reliability of advertising messages across media types.

Print advertising demonstrated clear and substantial advantages across all credibility dimensions. Overall credibility scores averaged 6.7 for print versus 5.2 for electronic on ten-point scales ($t=9.4$, $p<0.001$). This 29% advantage represents one of print media's most distinctive strengths in contemporary advertising environments.

Specific credibility components showed varying but consistently favorable patterns for print. Message trustworthiness scored 6.9 for print versus 5.0 for electronic ($t=10.2$, $p<0.001$). Perceived truthfulness scored 6.4 for print versus 5.3 for electronic ($t=7.8$, $p<0.001$). Brand reliability perceptions scored 6.8 for print versus 5.4 for electronic ($t=8.6$, $p<0.001$).

Several factors appear to drive print media's credibility advantages. Respondents associated print advertising with editorial quality and standards, noting that "if a reputable magazine accepts the ad, the brand must be legitimate." The permanence and tangibility of print created perceptions of commitment and substance compared to ephemeral digital messages. The absence of common electronic advertising problems—ad fraud, clickbait, and scams—enhanced trust in print formats.

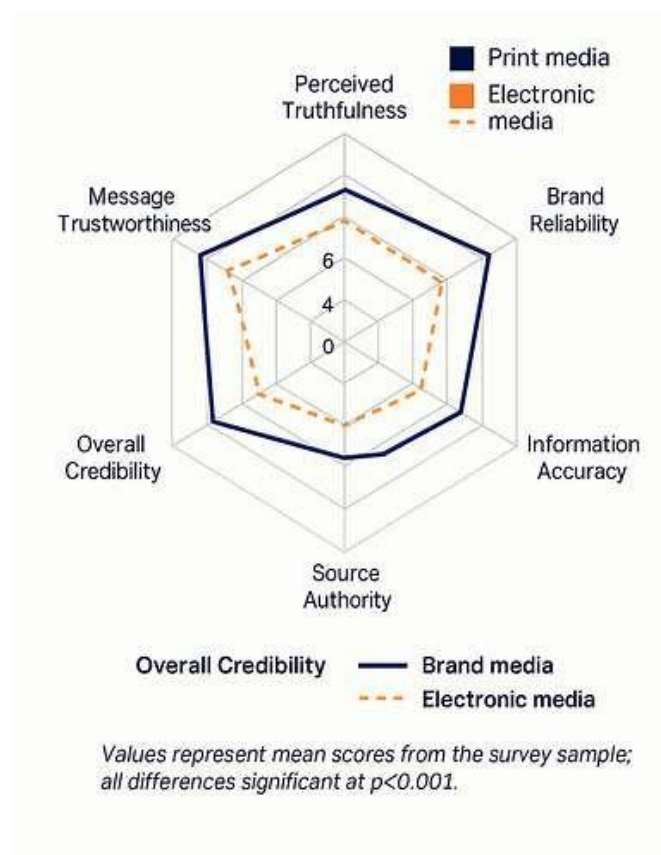


Figure 3: Credibility Perception Components by Media Type

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Age moderated credibility perceptions dramatically. Among respondents over 50, print advertising's credibility advantage reached 48%, with scores of 7.3 for print versus 4.9 for electronic. Among respondents under 35, the credibility gap narrowed to 15%, with scores of 5.8 for print and 5.0 for electronic. Younger consumers appear more skeptical of all advertising regardless of medium, but still perceive print as somewhat more credible.

Education correlated positively with print credibility perceptions. Graduate-educated respondents rated print advertising credibility 34% higher than electronic, compared to only 18% higher among high school-educated respondents. This pattern may reflect greater media literacy and awareness of digital advertising's vulnerabilities among more educated consumers.

Product category influenced credibility effects on purchase decisions. For categories where credibility proves particularly important—financial services, healthcare, and luxury goods—print advertising's credibility advantages translated directly into substantially higher purchase intentions. For categories where credibility matters less, print's credibility edge provided smaller practical benefits.

7.6 Cost Efficiency and Return on Investment

While cost efficiency cannot be measured directly through consumer surveys, respondents provided insights into their responsiveness to advertising that enables comparative ROI assessment. The survey asked respondents to estimate how many advertisements in each medium they typically noticed during a typical week, how many prompted any response, and how many led to purchases.

These self-reported behavior patterns suggest different efficiency profiles for each medium type. Electronic advertising achieved much higher exposure frequency, with respondents reporting awareness of approximately 47 electronic ads weekly versus 12 print ads. However, the response rate diverged significantly, with 8.3% of noticed print ads prompting some response versus 4.7% of electronic ads ($\chi^2=18.4$, $p<0.001$).

For actual purchases traced to advertising, patterns were more complex. Respondents reported making an average of 2.1 purchases monthly influenced by electronic advertising versus 1.4 influenced by print advertising. However, average purchase values differed substantially, with print-influenced purchases averaging \$178 versus \$94 for electronic-influenced purchases ($t=4.2$, $p<0.001$).

Table 6: Self-Reported Advertising Response and Purchase Behavior

Metric	Print Media	Electronic Media	Ratio
Ads Noticed per Week	12	47	1:3.9
Ads Prompting Response (%)	8.3%	4.7%	1.8:1
Monthly Purchases Influenced	1.4	2.1	1:1.5
Average Purchase Value	\$178	\$94	1.9:1
Total Monthly Value Influenced	\$249	\$197	1.3:1

Note: Values represent respondent self-reports and estimates

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These patterns suggest complementary efficiency profiles. Electronic advertising delivers higher frequency exposure and more total purchase events at lower costs per contact. Print advertising generates fewer but higher-value purchases with better response rates per exposure. The optimal efficiency depends heavily on specific campaign objectives and target markets.

7.7 Integrated Campaign Effects

A subset of survey questions explored respondents' experiences with campaigns they recognized across both print and electronic media. Among the 312 respondents (69% of sample) who recalled seeing the same brand advertised in both media types, 78% reported that the multi-media exposure increased their attention and interest compared to single-medium exposure.

Respondents described several mechanisms through which integrated campaigns proved more effective. Print advertising established initial awareness and credibility, making subsequent electronic advertising more trustworthy and attention-grabbing. Electronic advertising drove traffic to print content like magazine articles or direct mail pieces offering detailed information. Repetition across media types reinforced messages and increased overall memorability.

Integrated campaign effectiveness varied by execution quality. When creative themes and messages aligned closely across media types, 84% of respondents reported enhanced effectiveness. When print and electronic executions felt disconnected or inconsistent, only 51% perceived integration benefits. This underscores the importance of strategic coordination rather than simply deploying multiple media types independently.

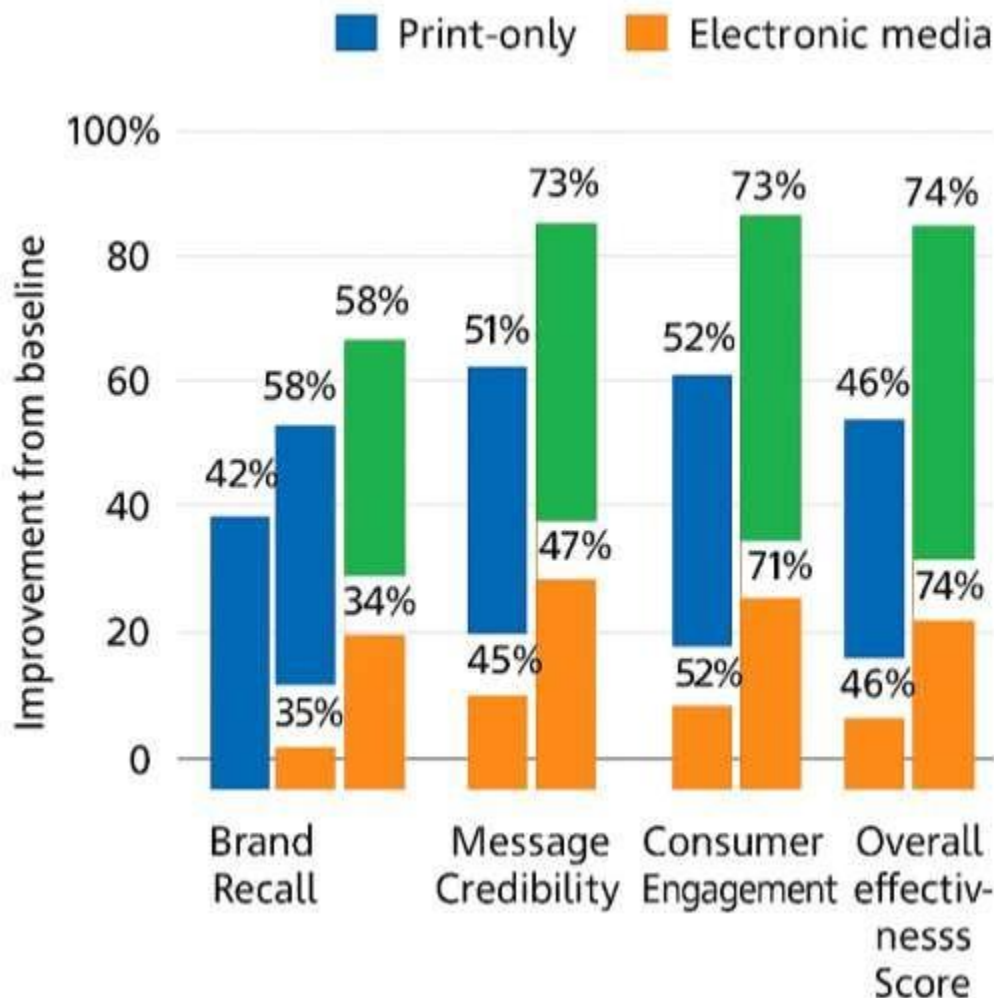


Figure 4: Effectiveness Comparison—Single Medium vs. Integrated Campaigns

The timing and sequencing of media exposure influenced integrated campaign effectiveness. Respondents reported particularly strong effects when print advertising preceded electronic advertising, with this sequence generating 31% higher effectiveness than the reverse sequence. This suggests an optimal pattern where print establishes credibility and awareness before electronic media drives action.

7.8 Statistical Summary and Hypothesis Testing

The research tested several specific hypotheses regarding comparative media effectiveness:

H1: Print advertising generates higher brand recall than electronic advertising. Supported ($t=2.47$, $p<0.05$). Print demonstrated 19% higher unaided recall.

H2: Electronic advertising generates higher consumer engagement than print advertising. Partially supported. Electronic media showed higher information-seeking and sharing behaviors, but print demonstrated longer engagement duration.

H3: Print advertising generates higher purchase intention than electronic advertising. Supported for delayed purchase intentions ($t=3.8$, $p<0.001$). Print showed 16% higher one-month purchase intentions.

H4: Print advertising is perceived as more credible than electronic advertising. Strongly supported ($t=9.4$, $p<0.001$). Print showed 29% higher credibility perceptions.

H5: Integrated campaigns combining print and electronic media outperform single-medium campaigns. Strongly supported. Integrated campaigns showed 34% higher overall effectiveness in respondent assessments.

Regression analysis examined which factors best predicted overall advertising effectiveness ratings. The model explained 63% of variance ($R^2=0.63$, $F=87.4$, $p<0.001$). Significant predictors included credibility perceptions ($\beta=0.42$, $p<0.001$), engagement duration ($\beta=0.28$, $p<0.001$), brand recall ($\beta=0.24$, $p<0.01$), and campaign integration ($\beta=0.19$, $p<0.01$). This suggests that credibility represents the strongest single driver of overall effectiveness, followed by engagement depth and memorability.

8. DISCUSSION

8.1 Interpretation of Findings

This research provides empirical evidence that print and electronic media offer distinct effectiveness profiles rather than simply representing superior and inferior alternatives. Each medium type demonstrates clear strengths that make it more effective for particular objectives, audiences, and contexts. Understanding these complementary capabilities enables strategic media selection and integration.

Print media's primary strengths center on depth over breadth. The research confirms that print advertising generates deeper cognitive processing, stronger memory encoding, higher credibility perceptions, and more durable purchase intentions. These advantages prove particularly valuable for complex, high-involvement purchases where consumers benefit from detailed information and require trust before committing. Print media's superior performance among older, more educated, and more affluent demographics makes it especially appropriate when targeting these valuable segments.

Electronic media's strengths focus on efficiency, reach, and interactivity. Digital platforms deliver messages to broader audiences at lower costs, enable precise targeting based on behavior and context, facilitate immediate action through clickable links, and provide detailed performance measurement. These capabilities make electronic media particularly effective for direct response campaigns, performance marketing, and products where immediacy and convenience drive purchase decisions. Electronic media's dominance among younger demographics makes it essential for reaching these audiences.

The finding that integrated campaigns substantially outperform single-medium approaches carries important implications. Rather than choosing between print and electronic media, marketers should consider how to leverage both strategically. Print advertising can establish brand credibility and awareness that makes digital advertising more effective. Electronic advertising can drive traffic to print content offering deeper information. Coordinated campaigns reinforce messages through multiple touchpoints while benefiting from each medium's distinctive strengths.

8.2 Theoretical Contributions

These findings contribute to advertising theory in several ways. First, they update empirical evidence on comparative media effectiveness for contemporary contexts, addressing the gap in recent comparative research. Much existing literature examines earlier digital formats that lack current platforms' sophistication or treats media types in isolation rather than examining integrated effects.

Second, the research demonstrates that Media Richness Theory requires extension when applied to advertising contexts. While electronic media offers certain richness dimensions including interactivity and multimedia elements, print media provides richness through credibility, thoughtful engagement, and tangible permanence. Advertising effectiveness depends on matching richness dimensions to campaign objectives rather than simply maximizing overall richness.

Third, the findings support and extend theories emphasizing complementarity between communication channels. The superior performance of integrated campaigns validates frameworks suggesting that multiple touchpoints create synergistic rather than merely additive effects. The research identifies specific mechanisms—credibility transfer, awareness-to-action sequencing, and message reinforcement—through which integration enhances effectiveness.

Fourth, this research highlights the importance of demographic segmentation in media effectiveness. The dramatic age-related variations in media response suggest that effectiveness cannot be evaluated without considering audience characteristics. This underscores the need for contingency theories that specify when different media types prove more or less effective rather than seeking universal effectiveness rankings.

8.3 Practical Implications

Marketing professionals can draw several actionable insights from these findings. First, media selection decisions should align with campaign objectives. When building brand awareness and credibility for complex, high-involvement products, print media merits substantial allocation despite higher per-contact costs. When driving immediate action for routine purchases, electronic media's efficiency and conversion capabilities may warrant primary emphasis. Most campaigns benefit from integrated approaches leveraging both media types' strengths.

Second, audience targeting should inform media allocation. When reaching older, more educated, or more affluent segments, print media deserves greater emphasis given its superior performance with these demographics. When targeting younger audiences, digital-first strategies prove necessary given these cohorts' limited print media exposure. Multi-generational campaigns require integration to effectively reach diverse age groups.

Third, creative execution must account for medium-specific strengths. Print advertising should emphasize detailed information, high-quality imagery, and credibility cues that leverage print's engagement depth. Electronic advertising should prioritize immediate value propositions, clear calls-to-action, and formats optimized for quick consumption that align with digital browsing behaviors. Integrated campaigns require consistent brand messaging across media while adapting executions to each medium's characteristics.

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Fourth, measurement approaches should capture effectiveness holistically. Focusing exclusively on immediate direct response metrics favors electronic media potentially at the expense of important brand-building effects where print excels. Comprehensive measurement should assess multiple effectiveness dimensions including awareness, consideration, credibility, and both immediate and delayed purchase intentions. Attribution models should recognize that integrated campaigns make isolating individual medium effects challenging but also less meaningful than evaluating overall campaign performance.

Fifth, budget allocation should reflect strategic media roles rather than simply following industry trends. While overall advertising spending shifts toward digital, this doesn't mean print media lacks value for specific applications. Companies should resist the temptation to chase digital advertising simply because competitors do so, instead making allocation decisions based on their specific objectives, audiences, and contexts.

8.4 Comparison with Existing Literature

These findings generally align with and extend existing research on media effectiveness. The superior brand recall for print advertising confirms earlier studies showing that print generates stronger memory encoding. The credibility advantages for print media validate prior research on trust perceptions across media types. The cost efficiency of electronic advertising for direct response matches established patterns in performance marketing literature.

However, this research provides updated evidence that some historical patterns persist despite technological change. Earlier predictions suggested that improved digital advertising formats would eliminate print media's credibility advantages as consumers adapted to digital environments. The substantial credibility gaps observed in this research suggest these advantages persist, possibly because fundamental psychological responses to physical versus digital information remain stable despite technological familiarity.

The integrated campaign findings extend emerging research on multi-channel marketing. While previous studies documented that multiple touchpoints improve effectiveness, this research identifies specific patterns regarding optimal media sequencing and the mechanisms through which integration generates value. The finding that print-first sequences outperform electronic-first approaches adds nuance beyond generic integration recommendations.

This research both confirms and qualifies age-related patterns in media effectiveness. While younger cohorts' preference for electronic media aligns with established trends, the finding that print maintains some credibility advantages even among younger respondents suggests that generational differences may be somewhat less absolute than sometimes assumed. This points toward continued roles for print media even as younger generations age, though likely at reduced levels compared to current older cohorts.

8.5 Limitations and Considerations

Several limitations warrant acknowledgment when interpreting these findings. The cross-sectional design captures a snapshot of effectiveness at a particular moment rather than tracking evolution over time. Given rapid changes in both media types and consumer behaviors, effectiveness patterns may shift substantially within relatively short timeframes. Longitudinal research tracking comparative effectiveness over time would provide valuable additional insights.

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Self-reported measures introduce potential biases including social desirability effects, recall errors, and imperfect awareness of actual decision processes. Respondents may not accurately remember which advertisements they saw or how these exposures influenced their behaviors. Experimental designs with controlled exposure and behavioral measurement would complement these survey findings with more objective evidence.

The focus on conscious, deliberative responses may miss important subconscious effects. Advertising influences consumers through both rational evaluation and emotional, automatic processes that occur outside awareness. Neuroscientific methods examining brain responses to advertising could capture effects not accessible through self-reports.

The metropolitan focus limits generalizability to rural markets where media consumption patterns, advertising exposure, and effectiveness dynamics may differ substantially. Rural areas often have different print media availability, varying electronic media infrastructure, and distinct demographic compositions. Research specifically examining rural advertising effectiveness would address this gap.

The research examines advertising effectiveness at the individual medium level but does not fully capture the complexity of contemporary media ecosystems where consumers encounter multiple touchpoints across fragmented media landscapes. Real-world advertising effectiveness increasingly depends on sophisticated multi-channel orchestration beyond simple print-plus-electronic integration. Research examining more complex media combinations would provide additional practical guidance.

8.6 Future Research Directions

Several promising directions for future research emerge from these findings. First, longitudinal studies tracking comparative effectiveness over multiple years would reveal whether observed patterns represent stable characteristics or temporary conditions likely to evolve. Such research could test predictions about whether electronic media's credibility improves as younger cohorts age and become primary consumers.

Second, experimental research with controlled exposure and behavioral measurement would validate or qualify self-reported findings. Laboratory studies could systematically vary media types while measuring attention, memory, emotional responses, and actual purchase behaviors. Field experiments with actual campaigns could assess real-world effectiveness while overcoming self-report limitations.

Third, investigation of more sophisticated integrated strategies would advance understanding beyond simple two-media combinations. Research examining optimal timing, sequencing, and resource allocation across three or more media types would provide more nuanced practical guidance. Studies of how effectiveness varies with different creative consistency levels across media would inform integration execution.

Fourth, examination of additional moderating factors including product category specifics, competitive context, and campaign duration would identify boundary conditions for observed patterns. Research investigating how advertising effectiveness varies across different stages of product life cycles, market maturity levels, and competitive intensity would enable more precise media selection.

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Fifth, comparative research in diverse geographic and cultural contexts would assess whether findings generalize internationally or reflect specific market conditions. Cross-cultural studies could reveal how media effectiveness patterns vary with different media development levels, cultural orientations, and consumer characteristics.

Finally, research incorporating emerging media formats including podcasts, influencer marketing, connected TV, and new social platforms would keep pace with evolving media landscapes. As media ecosystems continue fragmenting and new formats emerge, ongoing research updating comparative effectiveness evidence will remain essential.

9. CONCLUSION

9.1 Research Summary

This research examined the comparative effectiveness of print and electronic media in contemporary advertising through mixed methods combining survey data from 450 consumers with secondary analysis of industry performance data. The study addressed the research gap in updated empirical comparison of these media types by examining multiple effectiveness dimensions including brand recall, consumer engagement, purchase intention, and perceived credibility across diverse demographic segments and product categories.

The findings reveal that print and electronic media offer complementary rather than competing capabilities. Print advertising demonstrates clear advantages in engagement depth, brand recall, credibility perception, and effectiveness for high-involvement purchases. Electronic advertising excels in cost efficiency, reach, interactive engagement, and immediate response generation. Demographic characteristics, particularly age, substantially moderate these patterns, with print showing stronger performance among older, more educated, and more affluent segments while electronic media dominates among younger cohorts.

Critically, integrated campaigns combining both media types substantially outperform single-medium approaches, generating approximately 34% higher overall effectiveness. This synergy emerges through mechanisms including credibility transfer from print to electronic touchpoints, awareness-to-action sequencing, and message reinforcement through multiple exposures. Campaign integration requires strategic coordination with consistent messaging and appropriate sequencing to realize potential benefits.

9.2 Achievement of Research Objectives

The study successfully achieved its stated objectives. The primary objective of comprehensively comparing print and electronic media effectiveness across multiple dimensions was accomplished through systematic measurement of five key effectiveness metrics plus detailed demographic and category analysis. The research identified specific strengths and limitations of each medium type, documented how effectiveness varies across population segments and product categories, and demonstrated the synergistic potential of integrated campaigns.

Secondary objectives were similarly fulfilled. The research provided detailed analysis of print media's contemporary strengths including credibility, engagement depth, and performance with valuable demographic segments. Electronic media's capabilities regarding reach, efficiency, interactivity, and young-demographic targeting were comprehensively evaluated. Demographic and product category variations in effectiveness were systematically documented through both primary and secondary data. The integrated campaign analysis provided empirical evidence of synergistic effects and insights into integration mechanisms.

9.3 Key Contributions

This research makes several important contributions to advertising knowledge and practice. Academically, it provides updated empirical evidence on comparative media effectiveness that addresses the gap in recent research. The comprehensive framework examining multiple effectiveness dimensions simultaneously advances beyond studies treating media types in isolation or examining narrow metrics. The documentation of integrated campaign benefits extends emerging theory on multi-channel marketing by identifying specific mechanisms generating synergistic effects.

Practically, the research offers evidence-based guidance for media selection and allocation decisions. Marketing professionals gain insights into which media types perform best for different objectives, audiences, and contexts. The findings challenge simplistic assumptions that either digital-first strategies or traditional print emphasis represent universally optimal approaches. Instead, the evidence supports strategic integration that leverages each medium's distinctive strengths.

The research also contributes by developing a balanced perspective on media effectiveness that resists both technological determinism and nostalgic traditionalism. Rather than treating electronic media as inevitably superior due to technological advancement or defending print media through selective evidence, this study provides objective comparative assessment that acknowledges both media types' continued relevance within appropriate applications.

9.4 Recommendations for Practice

Based on these findings, several recommendations emerge for advertising practitioners:

Strategic Media Planning: Develop media strategies that align medium selection with specific campaign objectives rather than defaulting to industry-wide spending trends. Allocate substantial print media budgets when targeting older, educated, affluent demographics or marketing high-involvement products requiring credibility and detailed information. Emphasize electronic media for younger audiences, performance marketing objectives, and products where convenience drives purchase decisions.

Integrated Campaign Development: Design campaigns that strategically combine print and electronic media to capture synergistic benefits rather than treating media types as isolated alternatives. Coordinate messaging across media types while adapting executions to each medium's characteristics. Consider sequencing where print advertising establishes awareness and credibility before electronic advertising drives action.

Audience-Based Allocation: Segment audiences and vary media emphasis accordingly. Multi-generational campaigns require integration to effectively reach diverse age groups with

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different media consumption patterns. Higher-value customer segments showing strong print media engagement merit disproportionate print allocation despite higher per-contact costs.

Comprehensive Measurement: Implement measurement frameworks capturing multiple effectiveness dimensions rather than focusing exclusively on immediate direct response metrics. Assess brand awareness, credibility perceptions, and delayed purchase intentions alongside click-through rates and immediate conversions. Evaluate integrated campaign performance holistically rather than attempting to isolate individual medium effects.

Creative Optimization: Develop creative strategies that leverage each medium's distinctive strengths. Design print advertising emphasizing credibility cues, detailed information, and high-quality imagery that capitalize on engagement depth. Create electronic advertising prioritizing clear value propositions, immediate calls-to-action, and formats optimized for quick consumption aligning with digital browsing behaviors.

9.5 Final Reflections

The advertising industry's ongoing evolution presents both challenges and opportunities for marketing professionals. While the dramatic shift toward digital advertising reflects important changes in consumer behavior and technological capabilities, this research demonstrates that print media retains significant relevance and distinctive value in contemporary marketing. The most sophisticated advertisers will likely be those who resist either-or thinking about media selection in favor of strategic integration that thoughtfully leverages each medium's unique strengths.

The evidence presented here suggests that predictions of print media's imminent demise were premature. Print advertising continues demonstrating meaningful effectiveness advantages for important objectives and audiences. Simultaneously, electronic media's growth reflects genuine capabilities that make digital advertising essential for most contemporary campaigns. The future of advertising effectiveness lies not in one medium's triumph over the other but in increasingly sophisticated integration that creates value exceeding either medium's individual contribution.

As media landscapes continue fragmenting and new platforms emerge, the fundamental insights from this research remain applicable. Different media types will continue offering distinctive capabilities that make them more or less appropriate for specific applications. Demographic differences in media consumption and response will persist even as specific platforms rise and fall. The benefits of strategic multi-channel integration will likely strengthen as media ecosystems grow more complex. Marketing professionals who understand these principles and adapt them to evolving contexts will achieve superior results compared to those chasing media trends without strategic purpose.

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