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The cross-platform synergies of digital video advertising: Implications for cross-media campaigns in television, Internet and mobile TV

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ABSTRACT

This study examines the synergy effect of digital video advertising through television, mobile TV, and the Internet on general outcomes of advertising effectiveness. In a 3 (paired media conditions for ad repetition) × 2 (product involvement) mixed factorial design, we examined empirical outcomes of the cross-media synergy effect.

The results show that participants exposed to repetitive ads on paired media of television, Internet, and mobile TV have greater perceived message credibility, ad credibility, and brand credibility than counterparts exposed to repetitive ads from a single medium. The multiple-media repetition also generated more positive cognitive responses, attitude toward the brand, and higher purchase intention than the single-medium repetition. Finally, the cross-platform synergy effect remained robust for different levels of product involvement.

1. Introduction

Marketers have long used multiple channels to deliver impactful levels of reach to their campaigns. Each medium was carefully planned to optimize reach and frequency within that medium and then aggregated to deliver a total, synergistic impact to the consumer. Abernethy, Cannon, and Leckenby (2002) note that advertisers in this era of integrated marketing communications are making more effort to drive synergy across media campaigns.

The benefits of harnessing synergy across multiple media to build brand equity of products and services have been extensively examined in marketing research on media planning (Lin, Venkataraman, & Jap, 2013; Naik & Raman, 2003). With the advent of the Internet and satellite technology, the ability for advertising firms to engage with consumers who serially consume multiple media (Lin et al., 2013) is increasingly important. These consumption patterns have generated a variety of new media viewing habits ranging from a serial viewing of small, incomplete chunks of multimedia called media multiplexing (Lin et al., 2013) to a non-linear viewing of multimedia on portable devices such as mobile TV, tablets, and smartphones. The consumption of television and commercial messages these days increasingly takes place on non-linear media through mobile TV, a system that conveys the television content to the mobile phone via wireless or cellular networks (Jung, Perez-Mira, & Wiley-Patton, 2009). According to Nielsen's Cross-Platform Report for Q2 2014 (Nielsen, 2014), 72% of Americans own a smartphone and 39% own a tablet device. Total time spent watching video is increasing but driven solely by the increase in digital video viewing. The adoption of mobile TV is especially widespread in Asian countries where the smartphone penetration rate is greater than that of other countries and the mobile phone has become the dominant communication tool. Developed in South Korea in 2005 as the next-generation digital mobile television system, Digital Multimedia Broadcasting (DMB) has broadened a concept of mobility in consuming television content, allowing viewers to store the recipe while watching a cooking television program and to pay for the order made through home-shopping channels (Shin, 2009). In a study by Kim and Jun (2008), it was reported that about 80% of the South Korean population is equipped with DMB devices. As the importance of mobile advertising is growing, DMB is wielding considerable leverage as a key player for effective advertising on mobile platforms (Kim & Jun, 2008). Despite the importance of non-linear media in media and commercial message consumption, the relative impact of

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potential synergy between DMB, Internet, and traditional media is not well understood.

As with provision of new media, multiple uses of media have become increasingly common. Nowadays, one watches TV at home while he or she watches DMB on the move and can surf the Internet anytime and anywhere. As consumers are getting skillful at simultaneous media use, advertisers are growingly interested in the impact of synergy of effective cross-platform campaigns. As this shift is occurring, it is becoming increasingly imperative to understand how messages across these media interrelate.

The current study is interested in examining the effect of advertising synergies between linear (i.e., television) and non-linear (i.e., Internet and DMB) media platforms. Examining the effect of DMB in the context of synergy is important because previous research implied that the synergy effect could be affected by the screen size (Varan et al., 2013).

Although numerous studies (Chang & Thorson, 2004; Havlena, Cardarelli, & De Montigny, 2007; Jessen & Graakjær, 2013; Sheehan & Doherty, 2001; Stolyarova & Rialp, 2014; Varan et al., 2013; Voorveld, Smit, & Neijens, 2013) examined the synergy effect of advertising on cross devices, little is known about whether the synergy effect can also be found in cross-media advertising employing mobile devices (Bart, Stephen, & Sarvary, 2014). In a replication of Chang and Thorson's (2004) study, we examined the synergy effect of cross-advertising when an ad of both a high and a low-involvement product was repeated on a unichannel vs. on multiple channels of Internet, mobile TV (i.e., DMB) and television.

2. Theoretical background

2.1. From mere exposure theory to two-factor theory

The question that repeated exposure to the advertising message without involvement or learning process would result in sales via attitude change has been the long-sought research agenda (cited more than 1817 times) in advertising (Belch, 1982; Campbell & Keller, 2003; Hawkins & Hoch, 1992; Krugman, 1965; Malaviya, 2007) since Krugman's arresting question in his address to the American Association for Public Opinion Research in 1965. The main thesis in Krugman's thought-provoking question was how advertising could change consumer attitude followed by purchase behavior despite the fact that most messages are easily forgotten over time. This big question was followed by a groundbreaking study in which Zajonc (1968) demonstrated what Krugman (1965) described as the effect of "much of advertising content ... learned as meaningless nonsense material" (p. 351) in his mere repeated exposure experiment. This seminal study by Zajonc (1968) in fact provided theoretical grounds on the persuasive effect of mere exposure in inducing positive attitude change.

In proposing the two-factor theory, however, Berlyne (1970) demonstrated that an exposure to a noble message initially increased attitude toward the product due to the positive learning factor. But repeated exposures to a homogenous stimulus resulted in diminished positive attitudes. The first positive affect results from positive habituation, while the decreased affect is due to the boredom factor. Several studies that examined the relationship between repetition and attitudes found that the inverted U-relationship between the ad repetition and attitudes could be moderated by a message's complexity (Anand & Sternthal, 1990; Cox & Cox, 1988), an audience's cognitive responses (Batra & Ray, 1986), and brand familiarity (Machleit & Wilson, 1988). Other researchers (Cacioppo & Petty, 1979; Rethans, Swasy, & Marks, 1986) showed that the repeated exposures to an ad could generate more cognitive responses that eventually mediated the repetition effect on persuasion.

Chang and Thorson (2004) changed the course of ad repetition research by addressing the synergistic effects of ad repetition on general outcomes of advertising effectiveness. This line of research on the synergy effect is increasingly important as the scope and reach of cross-media advertising is ever increasing.

2.2. The synergy effect of cross-media advertising

Synergy is a fundamental concept in media planning (Lin et al., 2013) and understanding the impact of synergy has become increasingly important in the age of media convergence (Voorveld et al., 2013). Sheehan and Doherty (2001) once asserted that the "strategic synthesis of strategy and tactics across multiple channels is the hallmark of integrated marketing communication (IMC)" (p. 48). The synergy effect is important because IMC fundamentally pursues the maximization of "the benefits of harnessing synergy across multiple media to build brand equity of products and services" (Naik & Raman, 2003, p. 1).

Media synergy arises when the combined effect or impact of a number of media activities creates added value beyond the sum of their individual effects on individual consumers (Schultz, Block, & Raman, 2011). Among such media synergies, television and Internet advertising synergies are regarded as the most popular fit. In the case of the Internet, advertisers are starting to exploit the communication potential of this technology. This is because the Internet is most effective in motivating consumers to participate in information processing with a lot of cognitive effort (Sheehan & Doherty, 2001). On the other hand, television is most effective in influencing consumers without a lot of cognitive effort. Such complementary traits of two different media can contribute to create a synergy effect.

In this regard, Chang and Thorson (2004) examined the advertising effect when the ad was simply presented with repetition as opposed to when it was presented in synergistic conditions such as an Internet ad followed by a television ad. For instance, participants in their experiment were exposed to either an Internet or television ad only twice while counterparts in the synergetic conditions viewed the same ad on television followed by on the Internet or vice versa. They found that individuals who were exposed to the ad on the synergetic conditions paid more attention to the ad than those who viewed it in repetition. The synergy effect was also found across different measures such as message credibility and the number of cognitive thoughts. However, they failed to find the direct effects of television–Internet ad synergy on brand credibility, ad credibility, and attitude change. Rather, the effect of television–Internet synergy on persuasion occurred as a result of differential processing routes. In other words, participants in the synergy condition exhibited attitude change via central processing of the ad message in that the persuasive ad effect from the multiple media was mediated by increased attention and cognitive responses to the message itself. In contrast, attitude change among participants exposed to repetitive ad conditions (i.e., only to Internet ads or television ads with repetition) was observed through the focus on a peripheral cue (i.e., advertiser credibility) instead of message credibility. These results support Harkins and Petty's (1987) theoretical assumption that the multiple sources would enhance message-centric processing and ultimately lead to persuasion via central processing of the message.

A substantial body of empirical research provided theoretical underpinnings of the potential effect of the cross-media synergy (Naik & Peters, 2009; Naik & Raman, 2003; Voorveld, 2011; Voorveld & Valkenburg, 2014). They are (1) the multiple-source effect, (2) differential attention hypothesis, (3) forward encoding hypothesis, and (4) repetition-variation theory.