

Mass Media as information brokers: The impact of “type” on user behavior and content perceptions-a model

Abstract

Trust in advertising is a measure of message persuasiveness. Additionally, the frequency with which one uses mass media may signal familiar or close relationship between a user and a medium. The caveat being, not all media are alike in today’s technological age. This research asserts that mass media are devices that afford users unique experiences based on device form and function in order to examine how media use and message response vary across device. We find that media use frequency and trust in advertising; moderated by age, vary across certain media types. Theoretical explanations and managerial implications are further detailed.

Management Slant

- As more users migrate to mobile media, from more traditional media devices advertisers must confront a glaring lack of consumer trust.
- It is clear that younger adults use the internet much more frequently than all other media types. On the other hand, older adults use TV more and mobile less. By keeping this in mind advertisers can better target to relevant age groups.
- Findings support the proposition that media effects on trust in advertising may result from medium type, which is characterized by the devices attributes.

Media as an information broker: The impact of “type” on user behavior and content perceptions-a model

Today, not only are people surrounded by mass media in their homes, but due to innovations in technology, they are also connected to it almost anywhere. Portable mass media enable people to remain connected at home and away. This issue is not confined to the United States. Currently the U.S. is 11th in technology adoption behind ten other countries (Barnard, 2013). Whether sitting at home, in their car, at work, or in the gym, individuals are connected to media in some way. For this reason, mass media play a significant role in both the dissemination and reception of mediated content.

Advertising is progressing into a more integrated realm. Specifically, synergy is of great interest in marketing practice and scholarship. The utilization of integrated communication helps businesses grow and prosper, fosters relationships between an organization and the public, and strengthens the effectiveness of organizations (Schultz, 1992). The media mix (i.e., Internet and cell phones) affects the way communications are integrated, and can inform the type of messaging strategy organizations use (Naik & Raman, 2003). This research seeks to address questions concerning “how do audiences utilize mass media”, and “what factors might enable organizations to more effectively target messages about their products, services, or causes based on audiences’ relationship with mass media”? Understanding how frequently audiences engage different types of mass media, as well as how their evaluations of content might change across different types of mass media can have offer insight to managers.

Past research (e.g., Ewen and Ewen 1982; Miller 1988; Ogles 1987; O'Guinn, Faber, and Rice 1985; Schiller 1989; Hirschman & Thompson; 1997) has shown that mass media factors may influence audience's evaluation of an advertisement; however little empirical research has investigated the how different devices affect consumers' interaction with the media and response to advertising (Wright, 1974). Pinkleton and Austin (2002) suggest that because of the near ubiquity and prominence of mass media in everyday life, social scientists should focus on users' relationship with media in order to understand the role of the media in audience perceptions and decision-making. Accordingly, a conceptual model of media as an information broker is proposed. Additionally, we investigate the relationship between users' trust in advertising and their media use frequency across media types.

The structure of this article is organized as follows: relevant past research is reviewed on media use frequency and trust in advertising. Second, a model of media as an information broker, which integrates media use frequency and consumer trust in advertising across multiple media types, is presented. Third a description of the methodology is given that includes the repeated measure analysis and the survey design. Following, are the results, and lastly, the study's conclusion and areas of further research.

Background

The term mass media can mean many things. For the purpose of this research, it refers to a physical device. For example, a laptop is a physical device. Other identifications of mass media have included media as content (e.g., advertisements, TV shows, and editorials) and media as platform (e.g., Facebook, CBS, and Cosmo

Magazine). Though these are valid categorizations of media, they fail to emphasize the importance of the sensory and symbolic experience with the physical devices, as certain device types have their own unique form and functionality. Upon a laptop, users may surf the web, send email, view YouTube or shop on Amazon, however, the laptop itself offers a different experience with the content than that of another device (e.g., TV). A great deal of research has debated this concept, and more complex conceptualizations have emerged over the years. However, from macro and parsimonious perspective, the conceptualization of media as “device” not only provides insights from the sensory experiences afforded by its’ physical nature (form), but also offers insights based on the perceived usefulness signaled by its’ symbolic nature (function). For example, mobile devices, unlike that of newspapers, physically afford compact (visual size) and sensory rich (audio-visual) experiences (Daft & Lengel, 1986). Furthermore, mobile media unlike that of newspaper symbolically signal productivity and performance (Legris, Ingham & Collette, 2003).

In the communication process, the term “broker” is an adequate descriptor of the primarily transmissive role of media. Consequently, media as a device, functions as an information broker. Broker, a term often used in business (e.g., real estate, finance) to describe a facilitator of an exchange between a buyer and seller, reflects both the form and function of the media. Specifically, media devices, as brokers, facilitate the exchange of information from a sender to a receiver. Additionally, media from the perspective of the device enhances the gearlizable of the proposed model. In particular, the concept of media as a broker is applicable across earned, owned and shared

media. For example, the attributes of and experience afforded by magazines' does not differ across earned, owned and shared magazine media. However, earned media is central focus of this research. Additionally, the concept of media as a broker is applicable across advertising forms (e.g., social, viral, web, banner, video), though observing variations in audiences' trust at this level of analysis is less likely (Nielsen, 2013).

The Concept of Media Type

Little research exists that provides a formal typology for differentiating one mass medium from another, but based on its form and function, theories emerge that offer sound explanations for possible differences across media type. In practice, mass media as content and channel are all subject to the form and function of the device. For example, *msnbc* news on TV affords quite a different experience than *msnbc* news on a smart phone or laptop. This is greatly due to the devices form (e.g., shape, size, feel) and function (interactivity, control, organization). A proposal based on this perspective is that the physical nature of the device differs across mass media type, and these differences can affect both media behavior and content evaluations. According to Eveland (2003), six attributes might explain and differentiate a device

Eveland's (2003) proposed attributes, which include the sensory and symbolic experience with a medium, are useful for differentiating one mediums' form and function from another. This mix of attributes, which are assumed to be measureable across multiple mass media types, include: *Interactivity* (e.g., the extent to which the communication can be reflexive); *Organization* (e.g., the medium's ability to display content in a linear or nonlinear fashion); *Control* (e.g., the amount of control, afforded to

the user by the medium); *Channel* (e.g., the senses (sight, hearing, touch) activated by the medium). *Textuality* (e.g., the medium's reliance on text or alphanumeric characters, instead of non-text based messages) and *Content* (e.g., the relationship between the aforementioned attributes and the content communicated through the medium). For example, Internet, framed as non-mobile computer devices connected to the World Wide Web, provides moderate interactivity, linear organization of content and high user control. Conversely, TV provides low interactivity, non-linear organization of content and very low control (Eveland 2003). Both provide the audio/visual channel, but internet enables more proximal touch than TV. Though a formal typology does not exist, this framework supports the hypothesis that mass media, as an information broker can be differentiated by form and function, and these differences may affect media use and trust in advertising across media type.

A mix of attributes approach makes a distinction between a certain media based on their form and function. Companies can stream television shows using the internet, (e.g., Netflix and Hulu), and even though the content transfers across medium, the form and functions do not. In other words, social networks can be accessed on smart-phones, tablets, or computers. Similarly, newspaper and radio content can be accessed via the Internet devices. However, richness, interactivity and organization afforded by the media may change across media types, and thereby provide different experiences to the audience.

Consumers Relationship with Media

Users' relationships with mass media are an essential aspect of a consumer's evaluation of advertising (Wright, 1974). However, this relationship differs across media in concert with evaluations of advertising. Forms of advertising, can described in more specific terms, however, for this research they are categorized as TV advertising, Internet advertising, Mobile advertising, Radio advertising, Magazine advertising and Newspaper advertising (Nielsen, 2013). The user-media relationship can also be classified in many ways. One of the more prominent signals of this relationship is that of media use frequency (i.e., or how often you use a media in a certain period) (Pinkleton, & Austin, 2002). Frequency relates to perceptions of utility, usefulness, and familiarity (Legris, Ingham, & Collette, 2003). A review of the literature on interpersonal and para-social relationships supports that media use frequency, as a signal of perceived usefulness of and familiarity with the medium, may impact subsequent evaluations of content from that medium (Rubin, Perse & Powell, 1985). In particular, results from a study that examined the relationship between mass media use political perceptions and participation suggests that TV media use frequency is positively associated with political participation (Pinkleton, & Austin, 2002). How use frequency might differ across media types is not the focus of Pinkleton et al. (2002), though its findings supports that media use frequency signals the type of relationship that exists between media and user, in that higher frequency resulted in a greater participation.

Alternatively, Uses and Gratifications Theory (U&G) offers another perspective for understanding how consumers' media usage and response to advertising may change

depending on the device. U&G is an audience-centered approach in which media behaviors are seen as volitional and selective, and gratifications result from exposure and use (Blumler, 1979; Ruggiero, 2000). Discrete selection, specific use and initial evaluation of media occur (Ruggiero, 2000). Therefore, U&G posits that media differ based on their uses, and that consumers may form unique relationships with each. This relationship, similar to interpersonal relationships, may affect consumers' media use and response to advertising.

Interestingly, research regarding media habits and addictions challenge the prevailing U&G view of media consumption (e.g., Palmgreen, Wenner, & Rosengren, 1985). This is of note because half of all media use is believed to be habitual (LaRose, 2010; Wood, Quinn, & Kashy, 2002). Where habitual or ritualistic use is the biased and unconscious selection of media, media addictions are irrational out of control behaviors, and neither quite conforms to the notions of volition in the U&G literature (Rubin, 1984; Rosenstein & Grant, 1997; Stone & Stone, 1990). Thus, necessary general consensus regarding the totality of media behaviors (e.g., volitional, motivations, habitual and addictive) is lacking, and complicates further study across media. Consequently, media use frequency may offer stronger theoretical support for the consumer-media relationship model, since habits as well as volitional behaviors can affect repeated use and be affected by the functionality or perceived utility of the device. We therefore propose the following hypothesis:

H1: Media use frequency will change across different media types.

A Note on Generational Differences

One prominent area in media research is that of generational (e.g., age group) differences, both in the United States, and globally (Australian Communications and Media Authority, 2011; Dou, W., Wang, G., & Zhou, N., 2006; Media Consumption, 2011). A number of studies concerned with noticeable differences between the baby boomers and the millennials generation have established glaring differences in prioritization of goals and subsequent decision-making behavior between these two same groups. According to Socioemotional Selectivity Theory, as time horizons shrink (e.g. get older), people become increasingly selective (Carstensen, L. L., 1992). In one study selection styles of social relationships were shown to differ across age groups. Older adults systematically shape their social networks in such a way that available social connections predominately satisfy their emotional needs, whereas younger adults do not show this type of selection bias (Carstensen, Isaacowitz, & Charles, 1999). Therefore it is expected that media use frequency will differ between age groups, across media type, because they older adults have different salient motivations than younger adults. Industry research has heavily focused on two specific generations of the population, millennials (age 18-24) and baby-boomers (50-64). Pew Internet American Life Project and Nielsen both report major changes in consumer behavior and social media use between these two groups (Lenhart, Purcell & Zickuhr, 2010; Madden, 2010, Nielsen, 2012). Therefore, this study hypothesizes that older adults will differ from younger adults as to their frequency of media use. Specifically:

H2: Media use frequency will differ between older and younger adults

H3_a: Media use frequency by younger adults groups will differ across media types.

H3_b: Media use frequency by older adults groups will differ across media types.

Consumer Trust in Advertising

Trust is an important, but not sufficient construct in advertising as demonstrated in interpersonal (Golembiewski & McConkie, 1975) and consumer (White, 2004) research. A rational model of advertising assumes that an advertisement will not be effective unless trusted; additionally, recent research has attached trust to affective concepts as well (Soh, Reid & King, 2007). If consumers do not judge that the message is valid, but rather that it is untrue, that message is not useful in their decision process (Schudson, 1984; Pollay, 1986). Thus, Trust is one underlying assumption that drives advertising practice. In addition, studies indicate that while consumers' general trust in advertising is low, levels of trust vary across media (Schudson, 1984; Soh, Reid & King, 2007; Soh et al. 2009). Lewis and Weigert, 1985 define trust as a combination of cognitive, affective and behavioral dimensions. Cognitive dimensions include thinking and perceptual evaluation of people, products, or information (i.e., the ad is useful). Affective dimensions include emotional responses to stimuli such as "liking" (i.e., the ad is enjoyable), and behavior dimensions are considered the "acting" dimension from which consumers initiate intentions and subsequently action (McKnight, Choudhury, & Kacmar, 2002). Consequently, this research adapts a concept of trust in advertising to reflect a consumer's belief that advertising is a stable, useful and likable source of product or service information that consumers are willing to act on in some way. Because media differ from one another in form and function, which affects consumers'

relationship with it, then consumers' willingness to act on communication from a medium may vary across device.

This study, therefore, proposes the following hypotheses:

H4: Trust in advertising will change across different media types.

Additionally, a past study investigating advertising memorability between older and younger adults found that persuasive messages were preferred and better remembered by older adults than by younger adults when they appealed to emotionally meaningful goals, (Fung & Carstensen, 2003). Certain functions and media forms may appeal to certain goals over others. Based on these findings baby boomers may have different evaluations of trust in advertising than millennial based on the type of media

H5: Trust in advertising will differ between older and younger adults.

H6_a: Trust in advertising of younger adults will differ across specific media types.

H6_b: Trust in advertising of older adults will differ across specific media types.

The proposition that differences will exist in media use frequency across media type, may provide an indirect explanation for how media type affects trust in advertising. This relationship is proposed to be indirect based on the prior literature reviewed on media behaviors. Though media use frequency signals a relationship with the media, it does not signal what is about the media inspires such a relationship. Because this use frequency reflects an aspect of the consumer-media relationship, it may indirectly influence trust in advertising. Therefore the following additional research question is proposed in addition to the aforementioned hypotheses.

RQ 1: Is there a relationship between use frequency and trust in advertising?

RQ2: What is the relationship between media use frequency and trust in advertising?

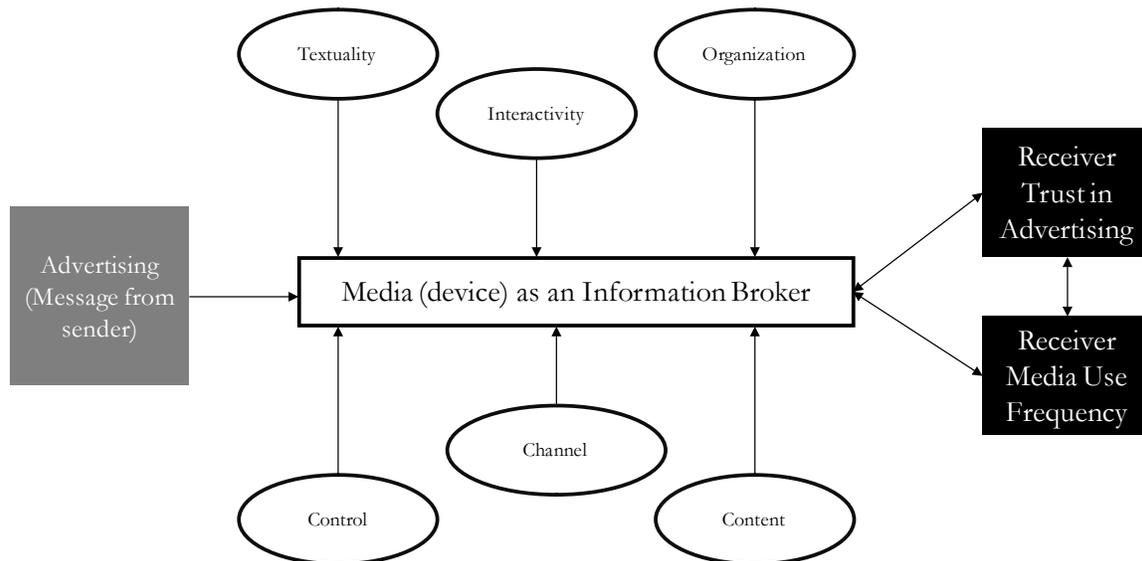
Summary of Media as an Information Broker Model

In accordance with device distinction on form and function, the Media as an Information Broker model first asserts that mass media affords access to both organizations and consumers for the exchange of information about goods, services and ideas. Information exchange has become readily available through mass media technologies. Second, the physicality of the device is spotlighted in this research, while symbolically assumptions are referenced, this physical media model below centers on communication theory and outcomes. Face-face communication or word-of-mouth is a “primary” reference from which mass communication is measured (Morris & Ogan, 1996). Even the model below can be applied to more interpersonal situations where the individual acts as the medium. Thus, for this study, no actual physical devices were presented. Instead the respondents are verbally primed with text that activates a concept of a device (Roskos-Ewoldsen, Roskos-Ewoldsen, & Carpentier, 2008). Past study support the assumption that the device that comes to mind, when primed, is one represented spatially, semantically and perceptually as “one’s own device”.

Last, consumers’ trust in advertising is an essential outcome, though not sufficient, in measuring advertising effectiveness as a function of media factors. As demonstrated with interpersonal communications, many antecedents can instill trust in content, including characteristics of the “source”; while trust can lead to positive

subsequent outcomes, such as a willingness to depend on or acceptance of a message (McKnight, Choudhury & Kacmar, 2002).

Figure 1. Media as an information broker model



With the media being a proximal source to the message, similar to humans in interpersonal communications, trust in “what” the media conveys is proposed to be affected by a sources form and function including but not limited to: richness, interactivity, control and channel. Specifically, the media model centers on communication theory and outcomes between consumer and media similar to theory’s the explain face-face communication, (Morris & Ogan, 1996). The model proposes that the physical (e.g., encompassing spatial, perceptual and semantic elements) medium influences user behavior and ad evaluations, in part, due to the mix of attributes and level richness. A graphic representation of this conceptual model can be seen in figure one.

Methods

A survey was designed to assess respondents' trust in advertising and frequency of media use across all six media types (TV, Internet, Mobile, Radio, Newspaper, and Magazine). The study manipulated one within-subject factor media types (TV, Internet, Mobile, Radio, Newspaper, Magazine), and accounted for one exogenous between-subjects factor age (younger adults, older adults). The dependent variables are: trust in TV advertising information, trust in Internet advertising information, trust in mobile media advertising information, trust in radio advertising information, trust in magazine advertising information, and trust in newspaper advertising information; as well as daily media use frequency of TV, Internet, mobile media, radio, newspaper, and magazine.

Procedure

A blind survey was administered using Qualtrics. Questions were randomized within the survey across participants. Participants were not informed of the actual purpose of this survey nor its sponsor. Participants received credit points from the panel for their participation. The selected sample consisted of males (48.2%) and females (51.8%) classified by age. The sample was made up of younger adults (18-24 = 48.9%) and older adults (50-64 = 51.1%). The logic behind a stratified sample comes from Nielsen's industry research that showed these two groups differ in media consumption. In addition, Socioemotional Selectivity Theory supports the assumption that significant insights will be gained from comparing these two groups.

Measures

The survey consisted of a demographic profile, followed by questions regarding the average number of hours participants spend on each medium in an average day. Lastly, participants took the ADTRUST Scale adapted for 6 different advertising forms (TV, internet, mobile media, radio, newspaper, and magazines).

Trust. The ADTRUST Scale is a 20-item 7-point likert measure that assessed trust in advertising as previously conceptualized. The ADTRUST measures trust with four distinct factors aligning with the three dimensions earlier conceptualized (i.e., cognitive: reliability (9-item), usefulness (4-item); affective: affect (3-item), and behavioral: willingness to rely on (4-item). The ADTRUST scale, sufficiently represent the four trust factors, and exhibits high reliability (e.g., $\alpha_{\text{factor 1}} = .93$; $\alpha_{\text{factor 2}} = .81$; $\alpha_{\text{factor 3}} = .73$; $\alpha_{\text{factor 4}} = .84$). This study was adapted across media as demonstrated in a prior study (Soh, Hyeonjin, Reid, Leonard & King, Karen Whitehill, 2007). These factors were indexed into a single trust variable reflecting a high degree of reliability (e.g., $\alpha_{\text{TV}} = 86\%$; $\alpha_{\text{IN}} = .91$; $\alpha_{\text{MO}} = .93$; $\alpha_{\text{RA}} = .95$; $\alpha_{\text{MA}} = .65$ and $\alpha_{\text{NP}} = .91$).

Media use Frequency. To measure media use frequency participants were asked about average media usage in a day (e.g., what is the average number of hours of television you watch in an average day?). The responses asses using a five point scale in which responses varied among never (1) to over 6 hours (5). Unlike prior studies in media effects, which evaluate media use frequency by asking questions about media preference, this study uses a more congruent measure that diverges from exposure or preference and targets the nature of the user-medium relationship.

Results

Repeated measures ANOVA, and Pearson correlation were used to test hypotheses (1-6), which proposed an impact of the media, the device, on trust in advertising and media use frequency. Following is a discussion of the findings for each set of hypothesis.

Media Type and Age Effects on Media use frequency

Hypothesis 1 proposed a main effect of media type on media frequency of use and hypotheses 2 proposed a main effect of age. A repeated measures ANOVA design was employed to assess the impact of media type (TV, Internet, Mobile Media, Radio, Magazines, and Newspaper) and age on media frequency of use. The analysis tests the between-subjects main effect of age and the within-subjects main effect of media type on frequency of use. Furthermore, H3 a,b proposed an interaction between age and media type.

Consistent with H1 and H2, a repeated measures ANOVA with a Greenhouse-Geisser correction (Mauchy's test indicated that the assumption of sphericity had been violated, $\chi^2(14)=189.563, p<.001$) determined a significant difference of frequency of media use across media types $F(4.346, 1777.475) = 309.865, P < .001$ (Table 1).

Table 1. Repeated Measure ANOVA of Media Use Frequency

Source	df	F	η	p
Media Types	4.346	309.865	0.43	<.001
Age	1	5.598	0.014	0.018
Age x Types	4.346	54.301	0.117	<.001
^a This was a within subject test between daily media use frequency across 6 different media and the between subject effects of older and younger adults				
^b A Greenhouse-Geisser correction was used because the Maulchy's sphericity test was violated				

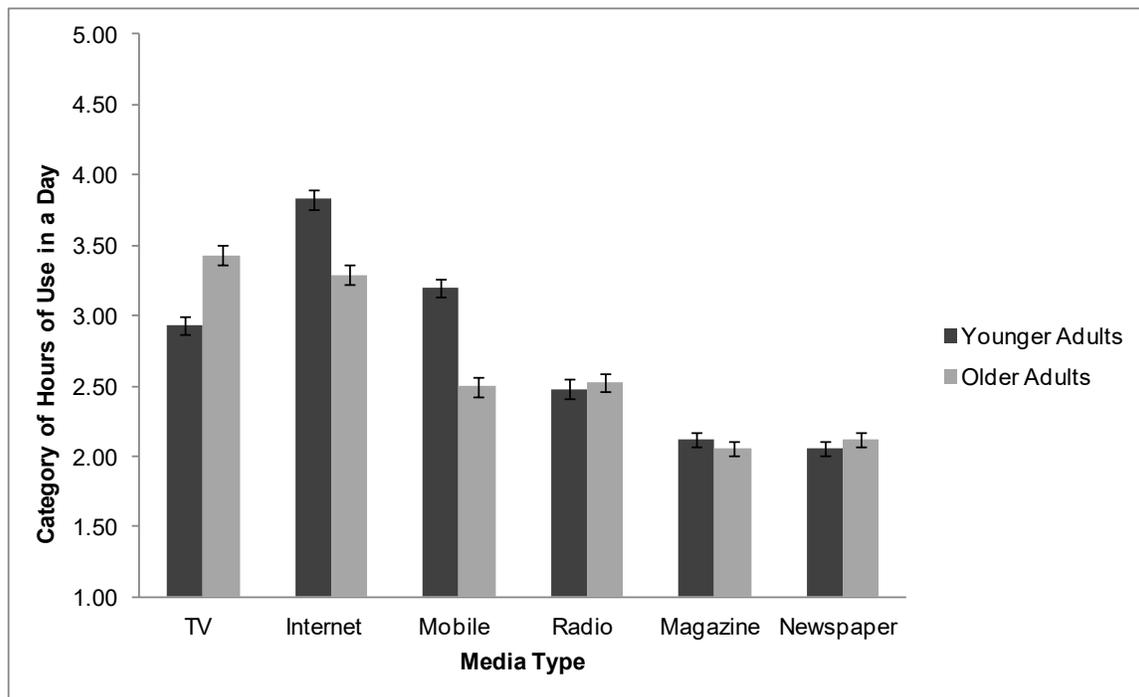
Furthermore, age has a significant main effect on media use frequency $F(1, 309) = 5.598$, $P < .05$. A post hoc tests using the Bonferroni correction revealed that media use frequency comparisons between each medium was significant except for the comparison between magazine and newspaper. Table 2 shows the mean differences for media use frequency across media types (TV, internet and mobile media).

Table 2. Pos Hoc Test of Media Types Effect on Frequency of Use

	M	SD
Hours of use of TV media in a day	3.180	0.86
Hours of use of Internet media in a day	3.556	0.91
Hours of use of Mobile media in a day	2.846	0.9
Hours of use of Radio media in a day	2.502	0.8
Hours of use of Magazine media in a day	2.088	0.65
Hours of use of Newspaper media in a day	2.091	0.65

H3 a,b proposed a significant interaction effect between age and media types on frequency of media use. The analysis confirmed this effect $F(4.346, 1104.645) = 54.301$, $P < 0.001$. Therefore we can conclude that media use frequency is significantly affected by the interaction between media type and age. Figure 2 shows a graphic comparison of media use frequency by media types across two age groups (older and younger adults). The interaction between age and media types depicted in figure 2 shows that radio, magazine and newspaper are frequency of use are not affected by the interaction.

Figure 2. Media Use between Older and Younger Adults across Device



Consistent with H3 a,b, it would appear that age interacts with media types to affect media use frequency, however these effects appear to be stronger for TV, Internet and mobile media. In other words, younger adults use internet and mobile more frequently than older adults, yet older adults use TV more frequently. Figure 2 is a graphic illustration of the findings for hypotheses 3 a,b. Media use frequency among older adults significantly differed across all media types tested except between radio and mobile, and between magazine and newspaper. However, media use frequency between older and younger adults significantly differed across all media types tested except radio, magazine and newspaper.

Younger adults appear to use internet and mobile media more frequently. In addition, the frequency with which they use TV and radio is significantly greater than

that of print media. Increased use of mobile media and decreased use of print media among younger adults support a growing trend of increased use of newer paid mass media versus that of more traditional paid mass media types. This is further supported by the generally low frequency with which older adults' use of print media forms compared to TV and internet.

Media Type and Age Effects on Trust in Advertising

H4 proposed a main effect of media type on trust in advertising and H5 proposed a main effect of age on trust in advertising. Furthermore, H6 a, b proposed an interaction effect between age and media types on trust in advertising. Consistent with H1, a repeated measure ANOVA with a Greenhouse-Geisser correction, (Mauchly's test indicated that the assumption of sphericity had been violated, $\chi^2(14)=241.004, p<.001$) determined that trust significant different across media types $F(3.91, 1599.14) = 74.944, P < .001$ (Table 3).

Post hoc tests using the Bonferroni correction revealed that mobile media ($M=3.44, SD =1.34$) elicits a lower level of trust in advertising, than TV ($\Delta = -.757$), Internet ($\Delta = -.719$), radio ($\Delta = -.622$), magazine ($\Delta = -.773$) and newspaper ($\Delta = -.840$). This comparison is statistically significant ($p < .001$). Also, radio ($M=4.07, SD =1.19$), elicits a significantly lower trust in advertising than magazine ($\Delta = -.151$) and newspaper media ($\Delta = -.218$).

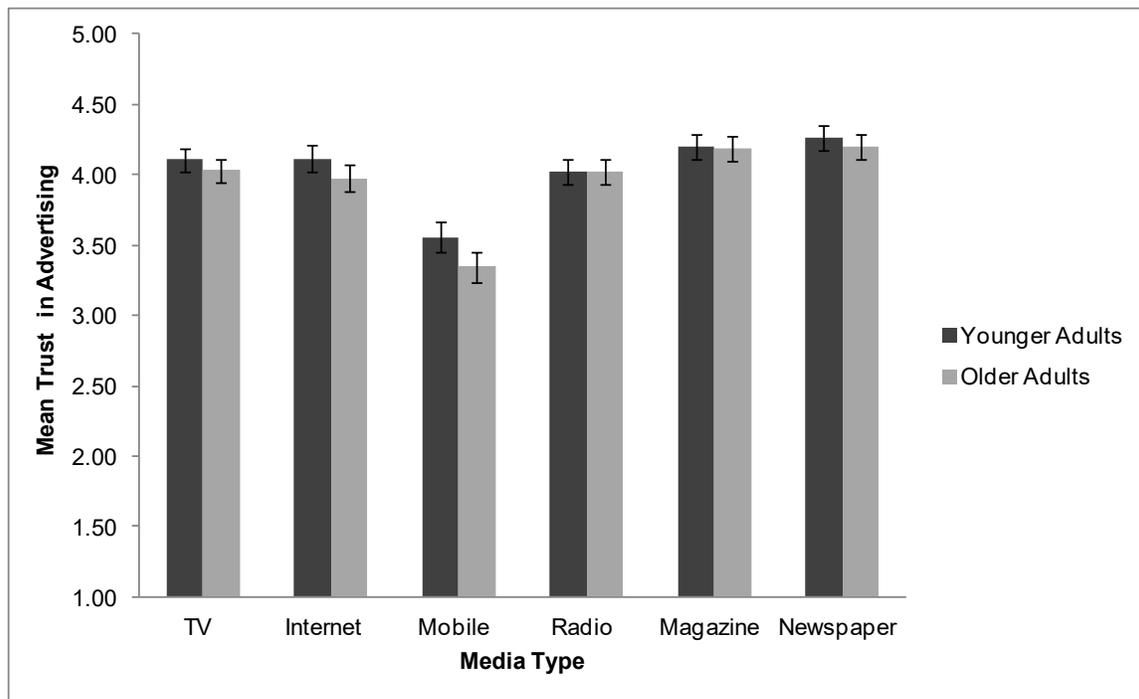
Table 3. Repeated Measure ANOVA of Media Types, Age and Trust in Advertising

<i>Source</i>		<i>df</i>	<i>F</i>	<i>η</i>	<i>p</i>
Type		5	74.944	0.015	<.001
Age		1	0.307	0.001	0.58
Age X Media Type		5	2.694	0.007	0.031
Variable			Mean	SD	
Media Type	TV		4.200	1.07708	
	Internet		1.161	1.18672	
	Mobile		3.440	1.33735	
	Radio		4.066	1.19473	
	Magazine		4.217	.92884	
	Newspaper		4.282	1.10350	

However, there is no significant difference in trust in advertising across other media types (TV, internet, radio, magazine and newspaper) (Table 3). Therefore, we can conclude that trust in mobile advertising is lowest among the media measured; however trust in advertising was quite consistent across the other forms types.

Inconsistent with H5, a repeated measure ANOVA with a Greenhouse-Geisser correction showed that there was no statistical difference ($p = .580$) in trust in advertising between older adults and younger adults (Table 3). However, there is a significant interaction between age and media type therefore. Therefore, we conclude that the effect of media type on trust differs between older vs. younger adults $F(3.910, 1599.142) = 2.694, P < .05$, indicating that the moderating effect of age was greater for mobile, radio, and magazine. Younger adults showed higher levels of trust in advertising via mobile media than older adults did, while older adults showed higher levels of trust in magazine advertising than younger adults did (Figure 3).

Figure 3. Trust in Advertising between Older and Younger Adults Across Device



Therefore it appears that trust in mobile advertising, when compared to all other types, is significantly lower comparatively, while trust in radio and magazine advertising is significantly higher comparatively. Figure 3 is a graphic illustration of these findings. It is clear from figures 3 that trust in mobile advertising differs significantly from other media types measured, and that trust in radio advertising differs between older and younger adults.

The Relationship between Media Use Frequency and Trust in Advertising

These findings support earlier theories that propose differences among media, and lend credence to the media as an information broker perspective. Research question 1 and 2 sought to understand the relationship between daily media use frequency and trust in advertising. Pearson's correlations between media use frequency and trust in advertising showed generally significant positive linear relationships. No significant

relationship existed between internet frequency of use and trust in internet advertising (Table 4). Therefore, we conclude that the relationship between these two variables (media use frequency and trust in advertising) is both moderate and positive in nature.

Table 4. Correlation Analysis of Frequency of Use and Trust in Advertising

Measure	TV use Frequency	Internet use frequency	Mobile use frequency	Radio use frequency	Magazine use frequency	Newspaper use frequency
Trust in TV ad	.187**					
Trust in Internet adv		.069				
Trust in Mobile adv			.244**			
Trust in Radio adv				.160**		
Trust in Magazine adv					.229**	
Trust in Newspaper adv						.229**
Note. *p<.05, **p<.01, ***p<.001						

Results show a significant ($p<.05$) positive association between trust TV advertising and TV use frequency, trust mobile advertising and mobile use frequency, trust radio advertising and radio use frequency, trust magazine advertising and magazine use frequency, and trust newspaper advertising and newspaper use frequency.

Discussion and Conclusion

The present findings show that media use frequency, as well as trust in advertising, differ across media types. Furthermore frequency of use differs significantly among older adults and younger adults. With regard to trust in advertising, the findings indicate that older and younger adults do not differ as to their level of trust in advertising. However, when a comparison was made between trust in mobile advertising and trust in

TV, internet, radio, newspaper and magazine advertising, trust was significantly lower for mobile advertising.

While these findings remain informative in terms of trust in advertising among media types, they are also disconcerting. As more users migrate to mobile media, from more traditional media devices advertisers must confront a glaring lack of consumer trust. Could we assume that increases in use frequency of mobile media could weaken advertising effectiveness due to low consumers' trust in advertising? While these survey results do not warrant such a conclusion the question remains open to consideration.

Mobile media, framed as phones, can be said to differ from television and internet (e.g., non-mobile computer on connect to the World Wide Web) based on textuality. Furthermore, mobile media can be said to differ from newspaper and magazine based on the level of control and perceived usefulness. These finding, therefore support the proposition that media effects on trust in advertising may result from medium type, which is characterized by the devices attributes.

Secondly, this study shows significant differences in frequency of media use between older and younger adults. Socioemotional Selectivity Theory (SST) offers a plausible explanation for this. SST explains that as time perspective shrinks; people become increasingly selective and employ different strategies for investing their resources. This study relied on SST's assumptions in order to test differences in consumers' beliefs (e.g., trust in advertising); however, this extension appears to be beyond the theory's scope. Instead, consistent with SST, differences in media use frequency between older and younger adults were found. TV and Internet may fulfill

more emotionally meaningful goals than mobile media, and therefore become more appealing to older adults.

Mobile media is assumed to afford unique experiences to users, compared to other media types, because of its transportability. In addition, its interactivity and ability to convey sound, motion and written communication make it quite functional. SST states that older adults tend to prioritize their choices based on emotionally meaningful goals as opposed to younger adults. This study demonstrates how these choices may extend to media use frequency, as older adults are shown to use mobile media less frequently than younger adults. It is expected that younger adults will prefer efficiency-related emotionally salient communication provided by mobile media as opposed to interactive and functional types. Content and targeting of mobile advertising must continue to connect with the younger mobile users. However, advertising may look to understand what drives older adult's mobile media use, target older adults through different sources, or adapt current mobile executions to reflect those of magazine or radio for older adults.

The lower trust in advertising found among mobile media users may also be reflective of the fact that advertising per se is not an interactive tool. On the other hand, as shown in table 4, as the mobile frequency of use increases, trust in advertising also increases (though moderately). Increased functionality and dexterity in the use of mobile media may influence the level of trust and acceptance of advertising carried by mobile media.

Lastly, this study shows that frequency of media use and trust in advertising are potentially related. Could these findings be extended to new and emerging media

devices? Could we assume that as 3D media types become popular and are frequently used trust in 3D advertising will increase? While this study does not warrant such a conclusion, it is clear that media use frequency reflects trust in advertising. Therefore, as more consumers change media preferences, so should advertising dollars. Typically media allocation has lagged behind media usage. This study suggests such a pattern should give way to more responsive ways of advertising investments.

Conclusion

This study's findings therefore, have significant implications for advertisers, agencies and advertising researchers. First, the research offers support for an alternative perspective of media effects that may inform future academic media studies and research. In addition, these results support the assumption that differences between media type impact media use frequency and trust in advertising, therefore advertisers should consider how advertising dollars are allocated towards different media, because some media are clearly more conducive for higher levels of trust in advertising.

Furthermore, medium type affects media use frequency. This may provide significant insight on exposure when correlated with media and behavioral metrics. It is clear that younger adults use the internet much more frequently than all other media types. On the other hand, older adults use TV more and mobile less. By keeping this in mind advertisers can better target to relevant age groups. The results of this study show that different media types produce different usage frequencies and different levels of trust in advertising. Therefore, suggesting that a complex interaction may take place between the medium and user.

Limitation & Future Research

It is important to note that the perspective of this paper assumes differences in medium form and function in accordance with TAM, a mix of attributes approach, and media richness. Further research is needed to empirically understand and quantify these differences. Evland (2003) as well as Daft and Lengel (1984) have proposed multiple factors useful in categorizing a medium by form, however no consistent typology currently exists and the attributes included are in no way comprehensive. Future research is need in this area might further our understanding of media effects from this perspective.

Specific behaviors were not measured in this study. Specifically, might habits or motivated behaviors mediate the relationships between media type, media use frequency and trust in advertising? Further, this research does not limit advertising effectiveness to trust, but rather contends that trust is one of many important factors when considering ad effectiveness as a function of the media mix, thus other outcomes are subject to study. Additionally, age is a central component of this research. Past research has clearly demonstrated differences between older adults in media behaviors and younger adults. Future research should investigate how age moderates structural models that include content variables (e.g., banner vs. video internet ads), situational variables (e.g., occasion) and media variables, such as specific use behaviors (e.g., habits) and form variables (e.g., senses/richness and mobility) in conjunction with media use frequency.

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