Underrepresented, Positively Portrayed: Older Adults in Television Commercials

Abhik Roy and Jake Harwood

ABSTRACT This paper reports a content analysis of 778 television commercials. Commercials were examined for the presence of older adults. Commercials featuring older adults were then examined more closely to describe the nature of the portrayals. Consistent with previous research, older adults were shown to be underrepresented in the commercials examined, as compared to their presence in the population. This effect was particularly strong for older women and for members of ethnic minorities. However, older adults were found to be presented in a relatively positive light—as active, happy, and strong. In addition, older adults were shown to be least underrepresented in advertisements for financial services and retail chains, and most underrepresented in advertisements for automobiles and travel services. The results are discussed in terms of the changing position of the older adult consumer in the marketplace. Suggestions for future research are provided.

The "graying" of America, caused by the declining birthrate and increasing life expectancy rate in the United States, is a significant issue in business marketing strategies for consumer goods and services (Balazs, 1995). By the year 2000 there will be 35 million people over 65 years of age in the USA (Treas, 1995). Although the number of older adults between the ages of 55 and 74 is expected to grow by only 5% by the year 2000, this group will control over 40% of the nation's discretionary income (Anderson, 1990; "Economics of aging," 1994). As the population ages, per capita discretionary income for elderly will reach an all-time high, making this group the most affluent in marketing history in the next twenty years (Light, 1990). Factors such as medical benefits, tax benefits, social security benefits, pensions, and reduced non-discretionary expenditures have helped stretch their discretionary income (Balazs, 1995; Burnett, 1991; Smith, Moschis, & Moore, 1982; Treas, 1995).

All correspondence should be sent to Abhik Roy who is an Assistant Professor in the Department of Marketing at Metropolitan State University, 730 Hennepin Avenue, Minneapolis, MN 55043. Jake Harwood is an Assistant Professor in the Department of Communication Studies at the University of Kansas, where the first author is a doctoral candidate. Appreciation is expressed to Gwen Grafft Roy who assisted in the coding of the data. In addition, we are grateful to Dave Seibold and two anonymous reviewers for their constructive and insightful comments on an earlier draft of this manuscript.

Despite its size, growth potential, and affluence, the senior citizen market has been given limited attention by marketers and advertisers (Balazs, 1995; French & Fox, 1985). Advertisers, in particular, have portrayed this group in stereotypical roles or not portrayed them (Milliman & Erffmeyer, 1989; Schewe & Balazs, 1990; Winski, 1992). Marketers need to be aware that "consumers age 65 and over are becoming more numerous, more affluent, and younger in mind and body" (Gelb, 1982, p. 42). They are, in other words, a market worth cultivating. In the words of Davis and Davis (1985), the elderly market is a "growing one and, contrary to popular opinion, it is one that is economically significant" (p. 103). Thus, it is important for advertisers and marketers to take the older adult population seriously.

Several researchers have found elderly people to be heavy users of the mass media (Real, Anderson, & Harrington, 1980; Simmons Market Research Bureau, 1991). They rely on television for news, entertainment, and product-related information (Davis & Westbrook, 1985; Kubey, 1980; Schreiber & Boyd, 1980; Stephens, 1982). According to Davis and Davis (1985), the elderly spend a significant portion of their time watching television, especially news programs. For this group, television news and public affairs programs offer them a "special window to the world" (p. 85) characterized by accessibility, convenience, and utility. Television is a major source of information and entertainment for this group. For those who may simultaneously be experiencing problems with vision and hearing, television is a natural choice. The redundancy of the visual and audio channels means that understanding television is easier than purely visual (e.g., newspapers) or audio (e.g., radio) media. Television may also provide a means by which older adults can remain engaged with society, rather than isolated from it (Schramm, 1969).

Television's function in a "parasocial role" as a companion for older adults has also been emphasized. In this parasocial role television lends familiarity and acquaintance status to the characters who appear regularly on television (Davis & Davis, 1985). Such acquaintance may partially compensate for the decline in older adults' relational networks, occupational roles, and family roles (Nussbaum, Thompson, & Robinson, 1989; Smith, Moschis, & Moore, 1984).

Despite the importance of the senior citizens' market, and their heavy media use, this group is generally underrepresented by advertisers. Gantz, Gartenberg, and Rainbow (1980) described the depiction of elderly people in magazine advertisements as "approaching invisibility" (p. 56). Similarly, Kvasnicka, Beymer, and Perloff (1982) indicated that senior citizens were underrepresented even in

magazines that had high elderly readerships.

Hollenshead and Ingersoll (1982) found few examples of older women in advertisements in *Time, Good Housekeeping,* and *The Journal of American Medical Association,* although they did find some positive changes in the portrayal of older women in the first two magazines. Smith's (1976) content analysis on the depiction of older adults in prescription drug advertisements in *Medical Economics* and *Geriatrics* found that older adults were portrayed as active. However, the verbal descriptions of this group were found to be negative. Similar negative findings have emerged in research by Bramlett-Solomon and Wilson (1989), Langmeyer (1983), and Peterson (1992). One study appears to show a positive trend. In a longitudinal study on the portrayal of elderly individuals in magazine advertising, Ursic, Ursic, and Ursic (1986), found that the proportion

FEBRUARY 1997

IACR

of older adults in commercials increased between 1950 and 1980. However, the presence of elderly characters in these magazine commercials still remained below the actual level in the population.

Senior citizens have not only been underrepresented in magazines, but also in television. According to Davis and Davis (1985), "the numbers of older people appearing on television do not correlate with the numbers of older people in society" (p. 45). Bell's (1992) research on the portrayal of older adults in five primetime television programs indicated that there was a "continuing wide gap between TV demographics and the real demographics of the American population" (p. 311). Likewise, Elliot's (1984) study of the portrayal of elderly people on daytime soap operas revealed underrepresentation. Recent data suggest that this situation is not improving (Harwood, in press; Robinson & Skill, 1995; see Vasil & Wass, 1993, for a review).

Although older adults have been found to be underrepresented in almost all previous research, there seems to be little consensus on the image and role of elderly characters in the media. Some research findings indicate that they are negatively and often stereotypically portrayed. Aronoff (1974) examined data pertaining to the ages of 2,741 characters in primetime network television drama sampled between 1969 and 1971. His research showed that aging was associated with "increasing evil, failure and unhappiness . . . only 40% of older males and 10% of older female characters [were] seen as successful, happy, and good" (pp. 86–87). In their study of depictions on Saturday morning television, Bishop and Krause (1984) found that elderly individuals were portrayed negatively and stereotypically. Similar findings have emerged from a plethora of other research (Davis & Kubey, 1982; Harris & Feinberg, 1977; Hilt, 1992; Northcott, 1975; Signorielli & Gerbner, 1978; Swayne & Greco, 1987).

However, other studies focusing on the portrayal of elderly people on television programs point to their positive portrayal. Petersen (1973) looked at a sample of 30 half hour time slots from primetime commercial television and found that elderly people were favorably depicted. However, the elderly women were outnumbered by elderly males. Cassata (1985) and Waters and Huck (1985) also found older adults to be presented in a more positive manner on television than they had been in the past. Similarly, Dail (1988) found that older people were positively portrayed on family-oriented television programs. For Dail, the message on primetime television was "life can get better as people grow older... [refuting] the stereotype of a negative, difficult old age, at least on the surface" (p. 705). However, Dail also found elderly women to be portrayed as weaker than elderly men. In a study of presentation of elderly characters on five primetime network shows, Bell (1992) indicated that elderly characters were typically portrayed as being extremely healthy and active. Bell also found that elderly women "appeared to be presented a little better than they used to be" (p. 310).

Although, as described above, there have been a number of studies on how elderly people are portrayed in magazine advertisements and television programs, there is a dearth of current research on how they are portrayed on *television commercials*. Commercials are a particularly important area to study due to the active and selective nature of television viewers (Blumler & Katz, 1974; Rosengren, Wenner, & Palmgreen, 1985; Zillman, 1988; Zillman & Bryant, 1985). There is evidence, for instance, that older viewers actively avoid media underrepresentation by seeking out television shows featuring a good representation of elderly

ROY & HARWOOD

OLDER ADULTS

characters (Harwood, in press; Mares & Cantor, 1992). However, even the most active viewer will find this much harder to do with commercials, given their brief and unscheduled nature. Hence, examination of a sample of commercials is more likely to render an impression of any particular viewer's exposure than is a sample

There have been five studies focusing on television commercials in the United States (Atkins, Jenkins, & Perkins, 1990; Francher, 1973; Harris & Feinberg, 1977; Hiemstra, Goodman, Middlemiss, Vosco, & Ziegler, 1983; Swayne & Greco, 1987), as well as one study on the representation of older adults in Canadian television commercials (Moore & Cadeau, 1985). Francher (1973) examined a sample of 100 television commercials for aging content and found only two commercials with any elderly characters. His study revealed an overwhelming majority of the commercial messages focusing on youth and youthful appearance. Harris and Feinberg (1977) examined 80 commercials and found that 10.6% of the total characters were over 60. Unlike other studies on television and aging, they found that elderly people were represented in numbers close to their population make-up at that time. However, these authors were troubled by the quality of their depiction. The older adults were portrayed as "essentially unflattering, unhealthy, unstylish, uninteresting" and the depiction of older women was "particularly harsh" (p. 467).

Hiemstra et al. (1983) analyzed 136 commercials to determine how older persons were depicted in television commercials. Out of 358 human characters, Hiemstra and his colleagues found only 11 to be 60 years or older, and 41 characters to be 50 years or older. In addition, the elderly characters were depicted primarily as "nondescript adults with no observable family ties" (p. 117). Their study also found an unrealistic portrayal of both sex and ethnicity. Females were outnumbered by males, and there was only one African-American above 50 years old.

Swayne and Greco's (1987) study on the portrayal of elderly people in television commercials also indicated that elderly people were underrepresented in network programming (i.e., ABC, NBC, CBS), although they also noted some positive elements of portrayal (e.g., elderly characters frequently cast as advisors). Similarly, Atkins et al. (1991) found elderly Americans to be underrepresented (over 50 year olds were present in 11.8% of commercials—the percentage of *characters* is unstated but probably lower, and the percentage of those over 60 would certainly be lower). In a study of commercials on Canadian television, Moore and Cadeau (1985) found that fewer than 2% of all commercials included elderly persons as central characters. These studies all make note of a gender gap whereby women are particularly underrepresented.

Content analytic work such as that described above is important in that it reflects society's attitudes toward the aging process. Underrepresentation of older adults reflects their marginalization and low status, and the lack of interest that advertisers (and hence commercial programmers) have in older consumers. Moreover, underrepresentation may be crucial in terms of the impact such programming may have on viewers, and particularly elderly viewers. Kubey (1980), among others, has suggested that the mass media, and particularly advertising, have been a major cause of negative self-concept among this group. Francher (1973) is of the opinion that television, especially commercials, may contribute to cognitive impairments in older adults. He proposes that by focusing

on youth in television commercials, advertisers alienate elderly people and cause them anxiety and tension. These, in turn, may encourage cognitive impairment, senility, and emotional breakdowns (Oberleder, 1969). Korzenny and Neuendorf (1980) found that among older viewers "the perception of the elderly on TV as portrayed as hindrances was found to be a negative predictor" of self concept (p. 80). Research findings of Hess (1974) support the hypothesis that negative television portrayals of old age have a negative impact on senior citizens. Mares and Cantor's (1992) study also supports this finding, at least for happy and active elderly viewers.

Both Cooley (1902) and Mead (1934) have established that social validation is crucial in developing one's self-esteem. Cooley developed the concept of the "looking-glass self" to suggest that we put ourselves in the position of others and view ourselves as we imagine others perceive us. For Mead, our self is constructed primarily through communication and role-playing. Since we are essentially social animals, we do role-playing by taking on the perspectives of others and seeing things as others do. Television may be one way in which we infer what others see of us. Viewing few and frequently negative portrayals of older adults could lead elderly people to the conclusion that others see them as unimportant and in a negative light. More frequent portrayals would give older adults the impression that they are a significant and recognized presence in the population.

In tandem with these predicted effects on older adults, Gerbner and his colleagues have shown that heavy viewers of television underestimate the population presence of older adults (and other groups that are underrepresented in the media) compared to individuals who watch less television (Gerbner, Gross, Signorielli, & Morgan, 1980). In addition, heavy viewers appear to have more stereotypical attitudes toward older adults than light viewers (Gerbner et al., 1980; although, see Passuth & Cook, 1985, for an alternative analysis).

From the discussion above, it can be seen that the underrepresentation of older adults on television is a double-edged sword for senior citizens. It may foster negative self-concept for members of that group, potentially causing the social, psychological, and physical problems that can ensue from lowered self-esteem and a lack of perceived control (Ryan, Giles, Bartolucci, & Henwood, 1986; Rodin & Langer, 1977). These effects are particularly likely with older adults, because, as described earlier, they tend to be heavy consumers of mass media, particularly television. In addition, older adults may be harmed through a less direct process. Gerbner et al.'s (1980) work suggests that younger adults may develop negative attitudes toward older adults, and believe that there are fewer older adults' in the population, as a result of media representations. If this is the case, then underrepresentation may damage older adults through their interpersonal exposure to younger adults who have adopted these representations from television. There is considerable evidence that younger adults' stereotypes can have pernicious effects on their communication with elderly individuals (see Giles, 1991; Hummert, Shaner, & Garstka, 1995, for a review). In addition, the lowered estimates of older adults' demographic strength may lead to less support for social programs and legislation to assist the older population. These multiple negative effects of media underrepresentation make detailed examination of the place of elderly people in television programs and commercials particularly important.

Based on the preceding discussion, it is clear that there is a paucity of research on the portrayal of older adults in television commercials. The most recent data on this subject were published in 1991, and relate to shows from the 1989–1990 season (Atkins et al., 1991). In addition, it is evident that the quality of portrayals has been assessed on a restricted range of variables (e.g., positive-negative). In the current research, we performed a content analysis to update and refine our knowledge of the presence and portrayal of older adults in television commercials. A corpus of commercials was coded for baseline demographic features, and for a number of more subtle character presentations. We were aiming to investigate two hypotheses and two research questions.

First, given the consistency of previous research we proposed two hypotheses concerning the numeric representation of older adults. These were to be tested by comparing the proportion of older adults (and various subcategories of older adults) in television commercials with their proportion in the population (based on census figures). The representation of elderly women and elderly ethnic minorities was included as an element of these two hypotheses. This builds on previous research demonstrating particular underrepresentation of these groups. Such underrepresentation is important to track in terms of understanding the ways in which age-based underrepresentation may tie in with other forms of underrepresentation (and we would argue, discrimination).

H1: Older adults are underrepresented in television commercials as compared to their presence in the population.

H2: Older women and older ethnic minorities are particularly underrepresented as compared to older men and older whites.

In addition, given the mixed findings in previous research, we proposed a research question concerning the nature of portrayals.

RQ1: What is the nature of character portrayals of older adults in television commercials? Can they be broadly characterized as positive or negative?

In order to answer this question, a coding scheme was developed which coded older adults on a number of character dimensions, discussed in more detail below. The frequencies of older adults portrayed in different ways were analyzed.

Finally, we were interested in examining what types of products older adults were associated with when they were present in television commercials. Little research has examined whether particular products have elderly characters associated with them in higher, or lower, than expected quantities.

RQ2: Are older adults associated with commercials for particular types of products?

Methods

The data for this study were generated from a content analysis of all television commercials from 30 hours of network television programming taped between October 2–9, 1994. The commercials were recorded from 5:30 p.m. to 10:30 p.m. (CST) on six week day evenings from ABC, NBC, and CBS (2 nights from each network). The viewing times incorporated primetime as well as local and national news programs bracketing primetime. News programming is particularly popular among older adult viewers (Goodman, 1990; Kubey, 1980). Fox programming was excluded due to its relatively low ratings at the time of the study, the absence of news and late night programming, and the fact that Fox was oriented toward younger adult viewers ("Fox raids," 1994). All of these factors implied that Fox

might skew our sample—particularly in comparing our results to those from earlier studies. Neither the week nor the year of taping was randomly selected, therefore we do not explicitly claim generalization across time, programming schedules, or indeed to any other networks. However, given that viewers are repeatedly exposed to many commercials, we suspect that our sample is not dissimilar to much network-style evening advertising.

778 commercials were recorded, including 46 political commercials from the 1994 mid-term elections. Based on previous research, the duplication of commercials was not controlled (Swayne & Greco, 1987). The rationale behind Swayne and Greco's inclusion of duplicate commercials was the strong likelihood that viewers have to view a commercial several times before an impression is created. Regular television viewers see commercials repeatedly, therefore, the duplicated sample reflects reality. This repetition is obviously used by advertisers to achieve brand recognition and preference.

Two coders independently coded all the commercials for the presence of people. Body parts and bodies without faces were not classified as people. Commercials not featuring any people were discarded (142 commercials, 18.25% of all commercials taped).

Once commercials featuring people had been identified, older adult characters were identified through direct mention of chronological age (60 years old or above), mention of belonging to the older adult category ("elderly," "old," etc.), extensive gray hair, extensive wrinkling of the face and/or hands, use of ambulatory aids (e.g., cane, crutches, wheelchairs, etc.), any reference to being retired, being a grandparent, and/or having a son or a daughter who was middle-aged or older. A person was coded as being an older adult if s/he met a majority of these criteria. Twelve individuals who were borderline cases were classified as older adults. Each character in the commercials was coded as older or younger, and only commercials including older adult characters were retained for further coding. 123 commercials (19.3% of all commercials featuring people) contained at least one older adult (total number of older adult characters = 246). 513 (80.6%) contained no older adults. All older adult characters' gender and ethnicity were coded. Atkins et al. (1991) found underrepresentation of ethnic minorities, however, it was deemed important to replicate their findings with a more recent, and larger data set. Swayne and Greco (1987) did not examine the ethnic minority of characters. In addition, each of the commercials was assessed on the character variables described below. These variables were derived in part from Swayne & Greco (1987); however, they build on Swayne and Greco's dimensions by incorporating new character dimensions (strong/weak; humorous/ serious, happy/sad, and lucid/confused). It was hoped that these would provide a deeper and more complete understanding of older adult character portrayals.

Size of Role. If an older person was a spokesperson, was on camera and spoke the whole time in the commercial, or was the main character in the commercial, they were coded as having a major role. An older person was considered to be cast in a minor role if s/he did not speak much and was on camera for less than one-half of the commercial, or clearly played a supporting role in the commercial. A background role was classified if the older person did not speak at all, was seen for a very brief period, and was in a situation where s/he was depicted merely as a backdrop.

Information Provider/Receiver. The role of advisor was assigned if the older person(s) was providing information to others present in the commercial or the audience. An older adult who received information about a product or service either verbally or non-verbally, was considered an information receiver. Characters not clearly portrayed in either role were characterized as 'neither'.

Physical Ability. A character was categorized as being *strong* if the older person(s) was physically competent. Characters were classified as *weak* if they were clearly disabled (e.g., confined to a wheelchair) or noticeably frail.

Humor. A humorous characterization was one where the older person(s) was depicted as lighthearted, having fun, or joking with other persons in the commercial or with the audience. The essence of being coded in this category was the presence or absence of a comedic tone. Non-humorous characterizations were coded as *serious*.

Happiness. A happy characterization was one where the older adult(s) was shown as content and enjoying themselves. The presence of comedy was not required here. On the other hand, an older person was characterized as being sad if s/he was crying or looking depressed or negatively pensive.

Mental Lucidity. A lucid portrayal was coded if the older person(s) involved was articulate about his/her thoughts and feelings and did not look disoriented. The categorization *confused* was reserved for characters who were portrayed as disoriented or mentally unclear.

Social Context. This category concerned how older characters were portrayed with other age groups. Characters were coded based on whether they were shown alone, just with other older individuals, just with children, or in a mix of age groups.

Setting. Finally, each character was coded based on the setting in which they were shown. Possible categories were in the home, outdoors, in a business, in a

hospital/care-taking setting, or other.

For this final phase, only one coder coded all of the characters. The primary coder was an associate of the authors who donated her time. Initial training occurred through coding of a separate sample of 30 commercials and discussion of discrepancies between the primary coder and the first author. Then the primary coder coded the entire sample of commercials and the first author independently coded a subset of 40 commercials (32.5%). Reliability was assessed from these codings. Reliabilities for almost all measures were acceptable (see Table 1). Reliabilities were very low for the "mental lucidity" variable. This variable was retained for subsequent analyses, but its low reliability was considered in interpreting results. Final codes were decided by discussion between the primary coder and the first author.

Results

For the first set of analyses the individual character was the unit of analysis. Characters were coded according to their age, and then *older adult* characters were

TABLE 1
Reliabilities for Coding Variables

Variable Variable	Cohen's Kappa	Variable	Cohen's Kappa
Number of people in com-		Information provider/	
mercial	.89	receiver	1.00
Number of older adults	.93	Comical/serious	.82
Ethnicity	.95	Strong/weak	.84
Sex	1.00	Happy/sad	1.00
Social context	.79	Active/inactive	1.00
Size of role	.82	Mental lucidity	.47
Setting	.82	, and the second se	

coded according to their sex and ethnicity. The "demographic analyses" reported below compare the relative representations of older adults, older women, and older African-Americans to their presence in the U.S. population. Following these, analyses of non-demographic characteristics of the older adults are reported.

Demographic Analyses

Older adults constituted only 6.9% of the characters in our data set (246 older characters of a total 3547 characters), whereas 16.74% of the US population are over 60 years old (U.S. Bureau of the Census, 1994). Treating 16.74% as the expected value in a chi-square analysis reveals the underrepresentation quite clearly (χ^2 (1) = 244.64, p < .001; test of difference of proportions, z = -15.64, p < .001). This provides support for Hypothesis 1 which predicted that older adults would be underrepresented compared to their presence in the population, and reflects the previous research outlined in the discussion.

Table 2 shows the number of older adults in commercials by gender and race. The table demonstrates that the older adult population in television commercials is biased toward men: Women constitute 56.9% of the older adult population, but only 38.2% of older characters on television commercials ($\chi^2(1) = 35.03, p < .001$). This number reflects a slight improvement over the 29% figure reported by Atkins et al. (1991), although these authors were examining characters over 50 years of age. In addition, our content analysis found only two (.8%) African-American older adults from a total sample of 246 older characters. Based on the U.S. Bureau of the Census (1994), the ratio of African-American to European-American older adults is approximately 1 to 10. Hence, the ratio of 1 to 123 in our sample is, again, a clear underrepresentation (χ^2 (1) = 19.41, p < .001). This figure is notably lower than findings from previous research (e.g., Atkins et al., 1991, and Hiemstra et al., 1983, reported 10.8% and 2.4% respectively). The current study had over three times the sample size of older characters as these earlier studies. These findings provide support for Hypothesis 2, which predicted underrepresentation of women and ethnic minorities within older adults in television commercials.

Character Portrayals

38.2% of older adults were featured in major roles in the commercials, 19.5% portrayed minor roles, and 52.8% played background roles. The following analysis excludes the commercials which featured older adults in purely background roles. As a product of the coding scheme, the commercial is the unit of

TABLE 2
Number of Older Adult Characters in Commercials by Sex and Ethnicity

	Character Ethnicity			
Character Sex	White	Black	Other	
Male	152	0	0	152 (61.8%) 94 (38.2%)
Female	92 244 (99.2%)	2 (.8%)	0 (0%)	246

analyses for all subsequent analyses. Any particular code indicates that at least one older adult with that characteristic was present in the commercial. All percentages are out of a total of 64: the number of commercials featuring at least one older adult in more than a background role.

Older adults were generally depicted positively in this data set. As shown in Table 3, commercials featured older characters as information providers (45.3%) more than information receivers (12.5%). In addition, the majority of the commercials featured strong (96.9%), active (100%), happy (93.7%), and lucid (not confused) (100%) older characters (although it should be reiterated that reliability for the mental lucidity variable was low). A slight majority of characters were portrayed as serious (51.6%). These serious portrayals were seen as potentially positive representations of older adults, since the role of older adults in comical roles has been criticized in previous research (Barrick, Hutchinson, & Deckers, 1990; Harwood & Giles, 1992; see Discussion section for more detail). The social context of older persons in the commercials is shown in Table 4. These findings indicate that the majority of the commercials featured older adults in contexts with other age groups (76.4%), as was the case with Swayne and Greco's (1987) analysis. Commercials featuring older adults with children were infrequent, as were commercials featuring older adults alone. This information leads us to tentatively conclude, in response to Research Question 1, that older adults are portrayed more positively than negatively in the corpus of commercials examined.

Table 5 indicates the number of older and younger characters in commercials, categorized by the type of product the commercial was advertising. Numerical underrepresentation was present for all product type categories (i.e., representa-

TABLE 3
Characterization of Older Adults in Commercials

ype of Character Portrayed	Frequency
Advisor	29 (45.3%) 8 (12.5%)
Information receiver Neither of the above	27 (42.2%) 62 (96.9%)
Strong Weak	2 (3.1%)
Lucid Confused	64 (100%) 0 (0%)
Нарру	60 (93.7%) 4 (6.3%)
Sad Serious	33 (51.6%)
Comical	31 (48.4%) 64 (100%)
Active Inactive	0 (0%)

TABLE 4
The Social Context of Older Adults in Television Commercials

Elderly Character shown with	
Others of multiple ages	94 (76.4%)
Only other elderly characters	16 (13.0%)
Nobody else	13 (10.6%)
Only children	0 (0%)

tion of older adults did not reach the population level for any of the product types). A chi-square analysis was performed to examine the relative level of underrepresentation across the various product types. A significant chi-square indicated that the level of underrepresentation was not equal across advertisements for different products, $\chi^2 = 49.44$, p < .001. Examination of the adjusted standardized residuals indicated that advertisements for automobiles and travel services underrepresented older adults more strongly than the general level of underrepresentation. In contrast, advertisements for retail chains and financial services underrepresented older adults less harshly. Hence, while underrepresentation is ubiquitous across the categories of commercials, its degree varies quite sharply.

This contrasts with Atkins et al.'s (1991) finding that older adults were featured in commercials for health products, food products, consumer services and household products. However, Atkins et al. did not provide a clear indication of whether older adults were more or less underrepresented in commercials for these products. Our data concur with elements of Greco's (1988) finding that older adults were targeted in advertisements for financial services. However, Greco also claimed targeting in the area of travel services, and Ursic et al. (1986) claimed good representation in the area of automobiles (in magazine advertising). Our data suggest that these two areas may underrepresent older adults to a significant degree. Some of these other studies used a different age threshold for "older adults" (Atkins et al., 1991; Swayne & Greco, 1987), and it is possible that characters aged 50–60, for instance, are more visible in commercials for these

TABLE 5
Frequency of Characters by Product Type and Age

Product Category	Elderly	Non-elderly
Food/Restaurants	71 (1.5)	809 (-1.5)
Retail	50 (3.8)	396 (-3.8)
Health/Beauty	34 (3)	478 (.3)
Political	17 (-1.2)	300 (1.2)
Financial Services ^a	26 (2.8)	200 (-2.8)
Phone/Communication	10 (.8)	104 (8)
Cars/Car Dealerships	10 (-4.0)	419 (4.0)
Health Care	4 (9)	83 (.9)
PSAs	11 (.5)	128 (5)
Travel/Airlines	0 (-2.9)	112 (2.9)
Otherb	13 (-1.6)	272 (1.6)
Total	246	3301

NOTE: Adjusted standardized residuals are shown in parentheses.

^aIncluding banking and insurance.

^bThe 'other' category includes all commercials which could not be coded reliably into any of the other categories (e.g., car rental, plastic, plant food). This includes some categories which achieved only low frequencies of characters (household cleaning supplies, electrical appliances).

products. Our data are the first to indicate the precise distribution of older adults, and to compare the relative levels of underrepresentation, across product types.

In answer to Research Question 2, we would argue that age is associated with product type. Older adults are more present in commercials for financial services and retail chains, and are least represented in ads for travel services and automobiles.

Discussion

Based on this research, several generalizations can be suggested, although it should be noted that the sample was not strictly random, hence generalizability is limited. First, elderly individuals are underrepresented in evening commercials on ABC, CBS, and NBC. Only 6.9% of the people in our corpus of commercials were older adults, whereas over 16% of the American population is 60 years of age or older (U.S. Bureau of the Census, 1994). This supports earlier findings of underrepresentation (Atkins et al., 1991; Hiemstra et al., 1983; Swayne & Greco, 1987), although the exact level of underrepresentation in commercials varies quite dramatically between studies, probably due to systematic and random error associated with the sampling process and the definition of "elderly." It is important to reiterate that our study constituted a somewhat conservative assessment of underrepresentation. We deliberately included some programming popular among older adults (i.e., evening news broadcasts), and excluded some programming oriented toward younger viewers (the Fox network). As discussed in the Introduction, it is curious that advertisers continue to underrepresent older adults, given their affluence and demographic vitality (Fisher, 1992; Treas, 1995).

As argued in the Introduction, this underrepresentation in advertising is likely to have a negative effect on elderly individuals' self-concept. It may lead elderly viewers to believe that they are not appreciated as consumers by advertisers and possibly by society in general. In addition, it may cause younger viewers to conceive of older adults as a less significant presence in the population. Naturally, a content analytic study provides only the evidence that these effects are possible, not that they occur. However, in combination with the literature on the effects of media representations of older adults (Gerbner et al., 1980; Mares & Cantor, 1992), the present data support claims that the current nature of media representations of older adults is problematic.

The predominance of elderly men over elderly women in the commercials reflects the social stereotype of a stronger, more involved male by the advertisers, even though elderly women outnumber elderly men in the population (U.S. Bureau of the Census, 1994). The low visibility of older women in television commercials provides further evidence that societal sexism extends, indeed perhaps intensifies, through the life span (Kogan & Mills, 1992; Shaner, 1995). The underrepresentation of older women compared to older men may be the most consistent finding throughout the content analytic literature on older adults (see Vasil & Wass, 1993). Also consistent with previous research (Atkins et al., 1991), the current research found an abysmally low percentage of African-American older adults (.06%), and no older adults from other ethnic groups. This suggests that ethnic minorities may be particularly marginalized. The double standard by which white men are allowed to age gracefully and *publicly*, while others are invisible (Gantz et al., 1980), and perhaps "unwatchable" (Woodward, 1991), is an

area of extreme concern that deserves more attention (Hummert, Garstka, & Shaner, in press; Kogan & Mills, 1992; Sontag, 1979).

In the present study, although older adults were underrepresented, they were portrayed in a positive light. The older adults that were present were depicted as strong, happy, and active. In addition, most of the commercials featured them in a business or outdoor setting, thus contradicting the stereotypical view that elderly people are homebodies. These findings replicate and update previous research (Atkins et al., 1991; Swayne & Greco, 1987), while providing more depth and reliability regarding the character of the positive representations.

This positive portrayal is interesting for a number of reasons. First, it may represent a novel manifestation of the complexity-extremity effect (Linville, 1982). Linville argues that when we have limited knowledge of a particular group, we tend to evaluate members of that group in an extreme fashion—either very positively or very negatively. This effect is a product of the limited information which we possess about certain groups. With little direct contact with older adults, the moderating influence of diverse experience is lacking and we may tend to rely on rather crude, and generally extreme, representations of the group. Extremely negative conceptions of older adults (e.g., as lonely, frail, unhealthy, despondent—Hummert, 1990) would rarely constitute good marketing tools. Hence, when older adults do appear it is only in one of the extreme manifestations—extremely positive. We would hypothesize that in situations where a negative portrayal is appropriate or required, it would manifest as an extreme negative presentation. The tendency of commercials to engage in hyperbole to convey a point in 30 seconds will likely only exacerbate this effect.

Second, we need to remain aware that the positive portrayals, while appearing complimentary according to our coding scheme, may reflect subtle messages of ageism. For instance, a humorous portrayal of an active, healthy, dynamic older adult may resonate with viewers precisely because this character violates their stereotypical expectations of elderly people. The humor may convey the message that "real" older adults are not this way. We would argue that such a portrayal will serve to reinforce the very stereotypes that it violates. This point has been argued in some detail with regard to the TV show "The Golden Girls" (Harwood & Giles, 1992). The fact that almost half of the older characters in our data set were coded as "comical" may support this contention.

Third, and more pragmatically, a small number of positive portrayals may represent advertisers' desire not to alienate older consumers. Explicitly negative portrayals would be likely to offend older adults and possibly cause them to boycott a product (individually or collectively). Hence, such portrayals would only be expected with products that are very rarely purchased by older adults. This desire not to alienate may represent a first step along a road to actually seeking out and attracting older consumers, although given the underrepresentation in our data set, there is a long way to go along that road. Advertisers may have learned not to estrange older adults, but still appear unwilling to directly target them with peer portrayals.

Finally, we should note that a positive presentation is not necessarily counterstereotypical. A number of authors (Hummert, 1990; Schmidt & Boland, 1986; Brewer, Dull, & Lui, 1981) have demonstrated that multiple stereotypes of older adults exist in society, some positive and some negative. While positive stereotypes may appear, on the surface, to be better than negative stereotypes, the ways OLDER ADULTS ROY & HARWOOD

in which they function to restrict the behavior of older adults may be equally harmful. For instance, older adults who are perceived as "warm," "kind," and "loving" are probably perceived "positively," but they may not be seen as cognitively alert, knowledgeable, or sophisticated. This will have clear consequences for the ways in which older adults are allowed to view themselves, and how others view them.

The final aspect of the analysis reflected the particular products with which different age groups are associated. It appears that older adults are being targeted by financial service corporations and retail chains, and particularly ignored by automobile manufacturers and travel services. Particularly surprising is that representation in political commercials was no higher than the "average" underrepresentation. Older adults tend to be one of the most politically active groups (Coombs & Holladay, 1995). However, political candidates do not appear to be targeting this population. A closer examination of the ways in which older adults respond to political advertising and their portrayals in political advertisements is suggested by this analysis.

The findings regarding the types of commercials in which older adults are not underrepresented are also important. It appears that financial institutions, for example, are coming to realize the value of older adult customers, and are paying closer attention to this group. It will be interesting to see whether the increasing visibility of older adults in one sector of advertising leads to an increase in other sectors. Is it possible that advertisers will start to understand new ways in which older characters in commercials may be used to appeal not only to older consumers, but to all age groups. As discussed earlier, there are some deeply ingrained positive stereotypes of older adults in society that might form powerful emotional images on which advertisers might capitalize (Hummert, 1990). The extent to which advertisers do this, and the extent to which they can do so in a way which dignifies, rather than alienates, the older adult population, may be a bellwether of the ways in which the next generation of Americans is seen to and allowed to age. The rewards for marketers who pay attention to this population and define a clear positive image for themselves among older adults may be substantial.

To gain a more complete understanding of the portrayal of older adults in television commercials, additional research is needed. First, we would suggest examining older adults to understand how this group perceives themselves as being depicted in television advertising, and whether the portrayals outlined in the present research are having particular effects on these consumers. Second, we would advocate more careful examination of commercials featuring products targeted to the older consumer (e.g., particular medications, vitamins, health care services). Informal observation during our research indicated that spokespersons in these commercials were generally in their fifties (i.e., not "elderly" by most definitions). Is it possible that these advertisers are consciously avoiding the association with old age to avoid "turning off" older adult consumers (see, Balazs, 1995; Campanelli, 1991)? Third, we would suggest critical analyses of portrayals of older adults in commercials. The nature of the portrayals is inherently contextual, and content analytic techniques have limited scope in uncovering multiple meanings in such texts (Fiske & Hartley, 1990). We do not discount the possibility that strong, happy, lucid, and active portrayals of older adults can be deconstructed to reveal underlying ageism. This will only be possible with

fine-grained qualitative analyses of particular commercials. Finally, we would advocate continued examination of the portrayal of older adults in particular segments of commercials. Is there a growing presence of older adults in commercials in the financial and retail sectors? Does this lead to more differentiated and realistic portrayals of older adults in this sector, and/or does it lead to changes in the portrayal of older adults in commercials for other consumer goods and services?

Endnotes

1. Adjusted standardized residuals (ASRs) indicate whether a frequency in a given cell differs from its expected value, and indicate the direction of that difference (negative residuals indicate a lower than expected frequency). ASRs are standardized scores, hence residuals with an absolute value greater than 1.96 are of particular interest (Haberman, 1973; Reynolds, 1977).

References

- Anderson, R. (1990, January). Yo, marketers, get hip. Marketing & Media Decisions, p. 88.
- Atkins, T. V., Jenkins, M. C., & Perkins, M. H. (1991). Portrayal of persons in television commercials age 50 and older. *Psychology, A Journal of Human Behavior, 28,* 30–37.
- Aronoff, C. (1974). Old age in prime time. Journal of Communication, 24, 86-87.
- Balazs, A. L. (1995). Marketing to the elderly. In J. F. Nussbaum & J. Coupland (Eds.), *Handbook of communication and aging research* (pp. 263–284). Mahwah, NJ: Lawrence Erlbaum.
- Barrick, A. L., Hutchinson, R. L., & Deckers, L. H. (1990). Humor, aggression and aging. *The Gerontologist*, 30, 675–678.
- Bell, J. (1992). In search of a discourse on aging: The elderly on television. *The Gerontologist*, 32, 305–311.
- Bishop, J. M., & Krause, D. R. (1984). Depictions of aging and old age on Saturday morning television. *The Gerontologist*, 24, 91–94.
- Blumler, J. G., & Katz, E. (Eds.) (1974). The uses of mass communications: Current perspectives on gratifications research. Beverly Hills, CA: Sage.
- Bramlett-Solomon, S., & Wilson, V. (1989). Images of the elderly in Life and Ebony, 1978–1987. Journalism Quarterly, 66, 185–187.
- Brewer, M. B., Dull, V., & Lui, L. (1981). Perceptions of the elderly: Stereotypes as prototypes. *Journal of Personality and Social Psychology*, 41, 656–670.
- Burnett, J. J. (1991). Examining the media habits of the affluent elderly. *Journal of Advertising Research*, 31, 33–41.
- Campanelli, M. (1991). The senior market: Rewriting the demographics and definitions. Sales and Marketing Management, 143, 63-69.
- Cassata, M. (1985). *Images in transition: Television looks at aging.* New York: Television Information Office.
- Cooley, C. H. (1902). Human nature and the social order. New York: Charles Scribner's Sons.
- Coombs, W. T., & Holladay, S. J. (1995). The emerging political power of the elderly. In J. F. Nussbaum & J. Coupland (Eds.), *Handbook of communication and aging research* (pp. 317–342). Mahwah, NJ: Lawrence Erlbaum.
- Dail, P. W. (1988). Prime-time television portrayal of older adults in the context of family life. *The Gerontologist*, 28, 700–706.
- Davis, R. H., & Davis, J. A. (1985). TV's image of the elderly: A practical guide for change. Lexington, MA: Lexington.
- Davis, R. H., & Kubey, R. W. (1982). Growing old on television and with television. In D. Pearl, L. Bouthilet, & J. Lazar (Eds.), *Television and behavior: Ten years of scientific progress and implications for the eighties* (pp. 201–208). Washington, DC: GPO.
- Davis, R. H., & Westbrook, G. J. (1985). Television in the lives of the elderly: Attitudes and opinions. Journal of Broadcasting & Electronic Media, 29, 209–214.
- The economics of aging: Why the elderly won't bankrupt America. (1994, September). Business Week, pp. 60–68.

OLDER ADULTS ROY & HARWOOD

Elliott, J. (1984). The daytime television drama portrayal of older adults. The Gerontologist, 24, 628-633

- Fisher, C. (1992, November 16). Boomers bringing buying power. Advertising Age, p. S-2.
- Fiske, J., & Hartley, J. (1990). Reading television. London: Routledge.
- Fox raids the chicken coop. (1994, June). U.S. News and World Report, p. 60.
- Francher, J. S. (1973). 'It's the Pepsi generation' . . . Accelerated aging and the television commercial. International Journal of Aging and Human Development, 4, 245–255.
- French, W. A., & Fox, R. (Winter, 1985). Segmenting the senior citizen market. *Journal of Consumer Marketing*, 2, 61–72.
- Gantz, W., Gartenberg, H. M., & Rainbow, C. K. (1980). Approaching invisibility: The portrayal of the elderly in magazine advertisements. *Journal of Communication*, 30, 56–60.
- Gelb, B. D. (May-June, 1982). Discovering the 65+ consumer. Business Horizons, 25, 42-46.
- Gerbner, G., Gross, L., Signorielli, N., & Morgan, M. (1980). Aging with television: Images on television drama and conceptions of social reality. *Journal of Communication*, 30, 37–47.
- Giles, H. (1991). "Gosh, you don't look it!" The Psychologist, 4, 99-106.
- Goodman, I. R. (1990). Television news viewing by older adults. Journalism Quarterly, 67, 137–141.
- Greco, A. J. (1988). The elderly as communicators: Perceptions of advertising practitioners. *Journal of Advertising Research*, 28, 39–46.
- Haberman, S. J. (1973). The analysis of residuals in cross-classified tables. Biometrics, 29, 205–220.
- Harris, A. J., & Feinberg, J. F. (1977). Television and aging: Is what you see what you get? *The Gerontologist*, 17, 464–468.
- Harwood, J. (in press). Viewing age: Lifespan identity and television viewing choices. *Journal of Broadcasting and Electronic Media*.
- Harwood, J., & Giles, H. (1992). 'Don't make me laugh': Age representations in a humorous context. Discourse and Society, 3, 403–436.
- Hess, B. (1974). Stereotypes of the aged. Journal of Communication, 24, 76-85.
- Hiemstra, R., Goodman, M., Middlemiss, M. A., Vosco, R., & Ziegler, N. (1983). How older persons are portrayed in television advertising: Implications for educators. *Educational Gerontology*, 9, 111–122.
- Hilt, M. L. (1992). Television news and elderly persons. Psychological Reports, 71, 123-126.
- Hollenshead, C., & Ingersoll, B. (1982). Middle-aged and older women in print advertisements. Educational Gerontology, 8, 25-41.
- Hummert, M. L. (1990). Multiple stereotypes of elderly and young adults: A comparison of structure and evaluations. *Psychology and Aging*, *5*, 182–193.
- Hummert, M. L., Garstka, T. A., & Shaner, J. L. (in press). Stereotyping of older adults: The role of target facial cues and perceiver characteristics. *Psychology and Aging*.
- Hummert, M. L., Shaner, J. L., & Garstka, T. A. (1995). Cognitive processes affecting communication with older adults: The case for stereotypes, attitudes, and beliefs about communication. In J. F. Nussbaum & J. Coupland (Eds.), *Handbook of communication and aging research* (pp. 105–132). Mahwah, NJ: Lawrence Erlbaum.
- Kogan, N., & Mills, M. (1992). Gender influences on age cognitions and preferences: Sociocultural or sociobiological? *Psychology and Aging, 7,* 98–106.
- Korzenny, F., & Neuendorf, K. (1980). Television viewing and self-concept of the elderly. *Journal of Communication*, 30, 71–80.
- Kubey, R. W. (1980). Television and aging: Past, present and future. The Gerontologist, 20, 16–35.
- Kvasnicka, B., Beymer, B., & Perloff, R. M. (1982). Portrayals of the elderly in magazine advertisements. Journalism Quarterly, 54, 656–658.
- Langmeyer, L. (1983). Age role portrayals in magazine advertisements: A content analysis. In J. H. Summey, R. Viswanathan, R. D. Taylor, & K. Blynn (Eds.), *Marketing: Theories and concepts for an era of change* (pp. 286–289). Carbondale, IL: Southern Marketing Association.
- Light, L. (1990). The changing advertising world. Journal of Advertising Research, 30, 30–35.
- Linville, P. W. (1982). The complexity-extremity effect and age-based stereotyping. *Journal of Personality and Social Psychology*, 42, 193–211.
- Mares, M. L., & Cantor, J. (1992). Elderly viewers responses to televised portrayals of old age: Empathy and mood management versus social comparison. *Communication Research*, 19, 459–478.
- Mead, G. H. (1934). Mind, self and society. Chicago: University of Chicago Press.
- Milliman, R. E., & Erffmeyer, R. C. (1989). Improving advertising aimed at seniors. *Journal of Advertising Research*, 29, 6, 31-36.

- Moore, T. E., & Cadeau, L. (1985). The representation of women, the elderly and minorities in Canadian television commercials. *Canadian Journal of Behavioral Science*, 17, 215–225.
- Northcott, H. C. (1975). Too young, too old—Age in the world of television. *The Gerontologist*, 15, 184–186.
- Nussbaum, J. F., Thompson, T. L., & Robinson, J. D. (1989). *Communication and aging.* San Francisco, CA: Harper and Row.
- Oberleder, M. (1969). Emotional breakdown in elderly people. *Hospital and Community Psychiatry, 20,* 191–196.
- Passuth, P. M., & Cook, F. L. (1985). Effects of television viewing on knowledge and attitudes about older adults: A critical re-examination. *The Gerontologist*, 25, 69-77.
- Petersen, M. (1973). The visibility and image of old people on television. *Journalism Quarterly, 50,* 569–573.
- Peterson, R. T. (1992). The depiction of senior citizens in magazine advertisements: A content analysis. *Journal of Business Ethics*, 14, 701–706.
- Real, M. R., Anderson, H. L., & Harrington, M. H. (1980). Television access for older adults. *Journal of Communication*, 30, 81–88.
- Reynolds, H. T. (1977). The analysis of cross-classifications. New York: Free Press.
- Robinson, J. D., & Skill, T. (1995). The invisible generation: Portrayals of the elderly on prime-time television. *Communication Reports*, 8, 111-119.
- Rodin, J., & Langer, E. J. (1977). Long-term effects of a control-relevant intervention with the institutionalized aged. *Journal of Personality and Social Psychology*, 35, 897–902.
- Rosengren, K. E., Wenner, L. A., & Palmgreen, P. (Eds.) (1985). *Media gratification research: Current perspectives*. Beverly Hills, CA: Sage.
- Ryan, E. B., Giles, H., Bartolucci, G., & Henwood, K. (1986). Psycholinguistic and social psychological components of communication by and with the elderly. *Language and Communication*, 6, 1–24.
- Schramm, W. (1969). Aging and mass communication. In J. Riley & M. Johnson (Eds.), *Aging and society*, (Vol. 2, pp. 352–375). New York: Russell-Sage.
- Schewe, C. D., & Balazs, A. L. (1990, April). Playing the part. American Demographics, pp. 24-30.
- Schmidt, D. F., & Boland, S. M. (1986). Structure of perceptions of older adults: Evidence for multiple stereotypes. *Psychology and Aging*, 1, 255–260.
- Schreiber, E. S., & Boyd, D. A. (1980). How the elderly perceive television commercials. *Journal of Communication*, 30, 61-70.
- Shaner, J. (1995, November). Grumpy old men versus life on widows' peak: A comparison of elderly portrayals. Paper presented at the annual meeting of the Speech Communication Association, San Antonio.
- Signorielli, N., & Gerbner, G. (1978). The image of the elderly in prime-time network television drama. Generations, 3, 10–11.
- Simmons Market Research Bureau (1991). The 1990 study of media and markets. New York: Simmons Market Research Bureau.
- Smith, M. C. (1976). Portrayal of the elderly in prescription drug advertising: A pilot study. *The Gerontologist*, 16, 329-334.
- Smith, R. B., Moschis, G. P., & Moore, R. L. (1984). Effects of advertising on the elderly consumer: An investigation of social breakdown theory. In R. W. Belk, R. Peterson, G. S. Albaum, M. B. Holbrook, R. A. Kerin, N. K. Malhotra, & P. Wright (Eds.), *American Marketing Association educators' proceedings* (pp. 1–5). Chicago: American Marketing Association.
- Smith, R. B., Moschis, G. P., & Moore, R. L. (1982). Some advertising effects on the elderly consumer. In J. H. Summey, B. J. Bergiel, & C. H. Anderson (Eds.), A spectrum of contemporary marketing ideas: Proceedings of the Southern Marketing Association (pp. 149–152). Chicago: American Marketing Association.
- Sontag, S. (1979). The double standard of aging. In J. Williams (Ed.), *Psychology of women* (pp. 462–478). San Diego, CA: Academic Press.
- Stephens, N. (1982). The effectiveness of time-compressed television advertisements with older adults. *Journal of Advertising*, 11, 22.
- Swayne, L. E., & Greco, A. J. (1987). The portrayal of older Americans in television commercials. Journal of Advertising, 16, 47-54.
- Treas, J. (1995). Older Americans in the 1990s and beyond. Population Bulletin, 50, 2-47.
- Ursic, A. C., Ursic, M. L., & Ursic, V. C. (1986). A longitudinal study of the use of the elderly in magazine advertising. *Journal of Consumer Research*, 13, 131–133.

- U.S. Bureau of the Census (1994). Statistical abstract of the United States: 1993 (114th edition). Washington, DC: U.S. Bureau of the Census.
- Vasil, L., & Wass, H. (1993). Portrayal of the elderly in the media: A literature review and implications for educational gerontologists. *Educational Gerontology*, 19, 71–85.
- Waters, H. F., & Huck, J. I. (1985, November 18). A new golden age. Newsweek, pp. 107-108.
- Winski, J. M. (1992, November 16). Admen fail to learn: All 50-plus people are not equal. Advertising Age, pp. S-1-S-2.
- Woodward, K. (1991). Aging and its discontents: Freud and other fictions. Bloomington, IN: Indiana University Press.
- Zillman, D. (1988). Mood management: Using entertainment to full advantage. In L. Donohew, H. E. Sypher, & E. T. Higgins (Eds.), *Communication, social cognition, and affect* (pp. 147–172). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Zillman, D., & Bryant, J. (1985). Selective exposure to communication. Hillsdale, NJ: Lawrence Erlbaum.

Copyright © 2003 EBSCO Publishing