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AN EMPIRICAL INVESTIGATION INTO SELF-PERCEIVED AGE AND MEDIA USAGE AMONG SENIOR CONSUMERS

Abstract

Older adults are an increasingly important market segment, yet there are still major gaps in knowledge pertaining to their consumer behaviours. One gap that is particularly marked is media consumption, which is important to aid media planning. Moreover, media usage among UK seniors has not been considered in relation to self-perceived age – a construct which has been shown to be particularly useful in understanding older consumers. This study reports a survey (n = 650) of older adults' media usage in the UK, with particular emphasis on self-perceived age.

Senior Consumers

As the United Nations' analysis of world population statistics reveals, increases in older adults and accompanying declines in the number of younger people is unprecedented in human history, and will result in the old outnumbering the young by 2050. The number of older persons has already tripled over the last 50 years, and is forecast to more than triple again over the next 50 years (United Nations, 2005). In developed regions, older adults are also getting healthier and wealthier (Van Auken *et al.*, 2006). People are living longer and thus, when considering the lifetime value of consumers, adults spend longest at the later adulthood stage than in any other traditional marketing life stage (Nielson and Curry, 1997). In addition, seniors are willing to spend. Analysis of household expenditure by age in the UK reveals that 50-64 year olds spend more per head on cars, foreign holidays, and recreation and culture, including cinema and theatre admissions, than any other age group. At the same time people over 50 have fewer debts than do younger age groups (ONS 2004a, b). Thus, in terms of sheer size, longevity of demand and willingness to spend the older consumer market is an increasingly important one.

Despite this importance, there is evidence to suggest that many marketers appear to still be reluctant to target seniors (Niemelä-Nyrhinen, 2007; Simcock and Sudbury, 2006). Various authors have suggested a number of reasons why this might be the case, ranging from specific segment characteristics (Hauser and Scarisbrick-Hauser, 1995), to the fact that marketing practitioners-young themselves and obsessed with youth-are unable to empathize with older consumers (Thompson and Thompson, 2007). Another possible reason, relatively unexplored, why some companies have historically been reluctant to target older consumers is that there is a lack of valid and reliable research available to help formulate and guide marketing strategies. Indeed, although there is a growing corpus of literature pertaining to older consumers, the attention given to them, particularly outside the US, is still insufficient (Niemelä-Nyrhinen, 2007) and this, coupled with the diversity of these consumers and subsequent difficulties in targeting them (Reisenenwitz and Iyer, 2007), may well be another reason for this relative neglect.

Seniors and Media Usage

Whilst there are large research gaps in many areas pertaining to older consumers, one which is particularly marked is media usage, where the evidence is both inconclusive and, with the exception of a few recent studies into internet use, is also dated. Studies which focus on information sources used by older consumers report somewhat conflicting results (Lumpkin, 1985) although it is generally suggested that older people are heavy users of mass media. For example, in the UK the use of television increases with age (Bennett, 1990), the majority of people aged 50-80 in Britain read at least one newspaper every day (Buck, 1990), and although Buck (1990) suggests that radio is less effective for reaching this market because it primarily listens to the British Broadcasting Company (BBC), Gunter (1998) reports a more recent movement towards commercial stations.

The relative importance of mass media in comparison to other information sources for aiding product choice among older people is also unclear. On the one hand, some

suggest that informal sources (friends, family, and neighbours) are more important than mass media (Lumpkin *et al.,* 1989). In contrast, Wolfe (1992) suggests that although older consumers do consult friends, they are more likely to rely on prior experience and internal sources to make their own minds up rather than external sources such as word of mouth or advertising, a view supported by Schiffman and Sherman (1991) in their description of the new age elderly. Still others suggest that older consumers are highly dependant on mass media (Stephens, 1982; Tongren, 1988). Indeed, Lumpkin and Festervand (1988) found that older adults rely more heavily on advertiser-supplied information when forming price/quality evaluations, and were *not* more reliant on their own experience or that of significant others for purchase related information as previous research suggests: rather, they too found that older consumers rely more heavily on mass media than their younger counterparts.

More recently, studies in this area have focused solely on internet usage, and have suggested that health, lifestyle, and self-perceptions may be important variables in determining internet use. Thus, there is some evidence to suggest that internet use among older adults may be related to attitudes toward technology (McMellon *et al.,* 1997); mobility limitations (McMellon and Schiffman, 2000); the nature of social relations and reference group affiliation (Trocchia and Janda, 2000); levels of nostalgia proneness and innovativeness (Reisenwitz *et al.*, 2007); and self-perceived age (Eastman and Iyer, 2005).

Self-perceived Age

Eastman and Iyer's (2005) study into internet use and self-perceived age is particularly noteworthy, because although chronological age is still widely used in both marketing research and segmentation practice, its limitations as an indicator of values, attitudes and behavior have long been known (Adams, 1971; Chua, Cote and Leong, 1990). These limitations are acknowledged in everyday parlance -'he's got an old head on young shoulders', 'she's still very young at heart'- and it may well be that the adage that one is as young or as old as one feels provides more useful insights into the behavior of older people. American gerontologists have long known that many older people do not accept the label of old or elderly (Cavan *et al.*, 1949), and

marketing academics in the USA (Barak and Schiffman, 1981) and more recently in the UK (Sudbury, 2004) have shown that older consumers across several countries perceive themselves to be, on average, 10 years younger than their actual chronological age.

In addition to the usefulness of self-perceived age for segmentation and targeting older consumers (Sudbury and Simcock, 2006) research has found self-perceived age to be associated with a range of consumer behavior variables, including propensity to try new brands (Stephens, 1991), information seeking (Gwinner and Stephens, 2001), fashion consciousness (Wilkes, 1992), satisfaction with complaint outcomes (Dolinsky, 1997), and attitudes toward both senior promotions (Sudbury and Simcock, 2007) and advertising (Smith and Moschis, 1984). Finally, a few studies have focused on self-perceived age and media usage, but whether or not self-perceived age is related to wider media usage is still unknown. On the one hand, some studies have failed to find any relationship between self-perceived age and mass media interaction (Smith and Moschis, 1984), TV viewing (Barak, 1979), radio listening (Barak and Gould, 1985), and newspaper and magazine reading (Barak and Gould, 1985). On the other hand, an inverse relationship with radio listening (Barak, 1979) and a positive relationship with TV usage (Barak and Gould, 1985; Johnson, 1993) have also been reported. Furthermore, although Johnson (1993) questioned the usefulness of self-perceived age over chronological age for explaining TV viewing due to small differences in correlation coefficients, she nevertheless did find that self-perceived age was more highly correlated with television orientation and usage than was chronological age. Finally, Eastman and Iyer (2005) found that older American's with younger self-perceived ages used the internet more than those with an older self-perceived age.

Given the lack of consistency across studies, and the fact that many of these studies are rather dated and were thus performed on a previous cohort to the one comprising today's seniors, it is clear that further research to establish the value of self-perceived age to media planning is needed.

Method

Measures

A self-administered questionnaire was used in the study. Two major was of measuring self-perceived age were utilised. The first was age identity (Cavan *et al*., 1949), which is concerned with the age category (young, middle-aged, old) in which people perceive themselves to be, and is the most popular technique amongst gerontologists for measuring self-perceived age (Barak, 1987). The second was cognitive age (Barak and Schiffman, 1981) which recognizes that ageing is multidimensional (Birren, 1968), has had the greatest impact on marketing to older adults, and is superior to other available instruments on the basis that it is easy to administer, easy to understand by respondents (Stephens, 1991) and has been shown to be a valid instrument (Van Auken and Barry, 1995). Additionally, respondents were asked their actual chronological age. Data pertaining to media usage were gathered with a series of questions regarding the frequency and amount of time spent each weekday and each weekend watching television, listening to the radio and reading a newspaper, the number of magazines read each month, and the frequency of internet usage over the previous three month period.

Sample

The lower age parameter of 50 was chosen on the basis that this is the starting point for many age related services offered to older consumers. An age-quota sample was employed, using several non-probability sampling techniques, including cluster and snowballing. The sample was drawn from senior clubs, church groups, retirement apartments, and a holiday resort, and potential respondents were asked to take a self-complete questionnaire and were given a pre-paid envelope in which to return it. All were also given a chocolate biscuit, with the suggestion that they sit down and enjoy the chocolate whilst filling in the questionnaire.

Results

Eventually, a usable sample size of 650, whose ages ranged from 50 to 79 years (mean age 62.4, SD 8.4), that mirrored the UK age demographic of this sector of the population was attained. A profile is shown in table 1.

Table 1: Breakdown of Ages of Sample Compared to Census

Age	Sample		UK Census	
	n	Percent	n (000s)	Percent
50-54	144	22.2	3847.2	22.2
55-59	137	21.1	3653.7	21.1
60-64	109	16.8	2888.5	16.7
65-69	99	15.2	2621.4	15.2
70-74	88	13.5	2343.1	13.5
75-79	73	11.2	1941.3	11.2
Total	**650**	**100.0**	**17295.2**	**99.9**

The majority (70%) of respondents felt middle aged, with 17% still feeling young and only 10% admitting to feeling old. The cognitive age scale was found to be reliable (alpha .89) and consistent with previous studies, in that the average cognitive age was 52.7 years, almost 10 years younger than the average chronological age of 62.4 years. A *t*-test confirmed the difference between chronological and cognitive age to be significant ($t = 38.2$, df $= 649$, $p < 0.001$).

As can be seen from figure 1, while a small minority watch television less than 1 hour per day, the majority (51%) of respondents watch between 1 and 3 hours , a further quarter watch between 4 and 5 hours, while almost 13% watch 5 hours or more on an average weekday. During the weekend, more than 40% of respondents watch between 4 and 5 hours per day, while over 30% watch 5 hours or more. In contrast, almost one in four of respondents spend less than an hour listening the radio on an average day. Nevertheless, 42% listen between one and three hours, and relatively high levels of

radio listening were found among remaining respondents, with 11% spending at least 4 hours per day, and a further 7% spending more than 5 hours per day tuned in.

Figure 1: Average Daily TV viewing & Radio listening (per cent)
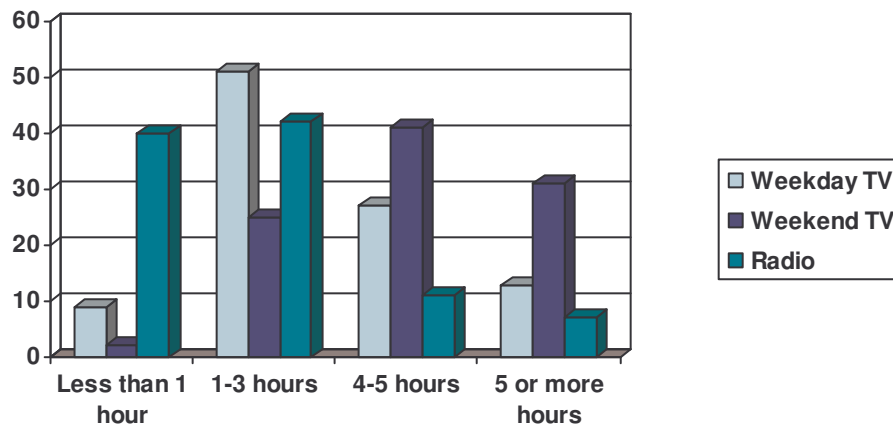

Table 2 shows the average newspaper and magazine usage, where it can be seen that the majority (62%) of respondents read a newspaper at least 5 days per week, and less than 7% do not read a newspaper at all. One in three does not read magazines, while the majority read between 1 and 4 per month. Less than one in ten read 5 or more magazines during an average month.

Table 2: Average Print Media Usage

	None	1-3	4-5	5 +
	Per Cent			
How many days read newspaper per week	6.5	19	12	62.5
How many magazines read per month	29	41.5	20	9.5

Respondents were also asked how long they spent reading a newspaper, and it was found that more than one third spend at least half an hour per day, and a further 31% spend at least 20 minutes per day in this activity.

Finally, respondents were asked how often they had used the internet in the previous 3 months. Results revealed 3 distinct groups: regular users, comprising 31.5% of the sample, who used the internet at least 5 times per month, occasional users (13%), who had logged on between 1 and 4 times in the previous 3 month period, and 54.5% who never use the internet.

Turning to age, no relationship between magazine reading and any age variable was found. In contrast, as table 3 shows, chronological age was found to be significantly related to media usage. Inverse relationships between chronological age and the time spent watching television on both weekdays and weekends, radio listening, frequency of newspaper reading and the length of time spend reading a newspaper show that media usage increases as the age of respondent increases. At the same time, a negative correlation was found with internet usage, suggesting that younger respondents use the internet more than older respondents.

Table 3: Chronological Age and Media Usage

Media Usage	n	tau-b
How long watching TV on average weekday	646	.171**
How long watching TV in average weekend	641	.167**
How long listening to radio	634	.077*
How many days read newspaper	649	.117**
How long reading newspaper	628	.211**
How often use internet	643	-.379**

**Correlation is significant at the .01 level

*Correlation is significant at the .05 level

Turning to self-perceived age, at the bivariate level similar results were found when media usage measures were correlated with age identity and cognitive age. However, when chronological age was held constant, no associations with age identity remained significant. Similarly, whilst several significant relationships were found with cognitive age, once chronological age was held constant the only significant association to remain was between cognitive age and internet usage ($r = -.1770$, n = 593, $p < 0.001$). Clearly, internet usage decreases with increasing cognitive age, even when chronological age is held constant.

Table 4: Internet Use by Chronological and Cognitive Age

Internet usage	n	Mean chronological age	Mean cognitive age
Never	354	66.0	56.5
Occasionally	84	59.0	50.5
Regularly	205	57.5	47.0

This association is illustrated in table 4, where it can be seen that those who never use the internet are older, both chronologically and cognitively, than occasional users. In contrast, regular users are only slightly younger than occasional users. One-way ANOVA confirmed this to be true, and even when chronological age was treated as a covariance it was found that the groups have significantly different cognitive ages ($F_{(2,639)} = 10.741$, $p < 0.001$).

Discussion and Conclusions

This study provides a starting point for media planning when targeting seniors, a topic for which very little knowledge was available. Results revealed that older adults can be reached by television, and this is especially true at weekends. That the highest rates of television viewing are during weekends may have been expected, given the age profile of the sample, as many respondents are still of working age. Moreover, radio

as a medium to target seniors should be seriously considered, given that 60% of this sample listens to the radio each day: indeed, almost one in five listens to the radio for at least 4 hours per day. Another important finding is that the majority of seniors are regular newspaper readers, whilst magazines (perhaps with the exception of specialist magazines such as SAGA) may not be a suitable media choice for targeting this age group. Further, results have clearly shown that senior consumers are not homogeneous with regards to internet usage. Instead, 3 distinct groups (non-users, occasional users, and regular users) emerged.

Importantly, this study has found that, with the exception of magazine and internet usage, media consumption increases as chronological age increases. This may be partly due to retirement and partly due to lifestyle effects. For example, an empty nest or mobility problems may contribute to increased media usage, and more research needs to be done to highlight those drivers of media consumption in order to better understand this important market.

Perhaps the most important findings of this study are those pertaining to self-perceived age, of which several emerge. First, the fact that associations between self-perceived age and media consumption were found, but further analysis holding chronological age constant resulted in most of these associations disappearing, raises an important question regarding previous studies: was chronological age considered in these studies? If not, then the conclusions of some previous studies may need to be questioned.

Second, whilst on the one hand it is clear that neither age identity nor cognitive age are useful variables for media planning using traditional media, cognitive age is certainly important when internet usage is considered. The fining that those with a younger cognitive age are heavier users of the internet than are those with older cognitive ages lends support for Eastman and Iyer's (2005) research. Moreover, the current study has identified a large segment of the UK's older consumer market which does not use the internet at all, and this has implications for education and support.

Finally, these results should not be interpreted as questioning the usefulness of cognitive age *per se* when targeting seniors. Indeed, cognitive age is likely to be of

utmost importance when considering the design and execution style of an advertisement. Seniors view themselves as about 10 years younger than their chronological age, thus portraying them and communicating with them on the basis of their cognitive age is likely to give more positive results than if their true chronological age is portrayed. The important finding, however, is that in terms of traditional media usage, chronological age may be a better indicator than self-perceived age.

Clearly, more in-depth research is needed to pinpoint the exact newspaper titles and television and radio shows in which to place advertisements targeted at seniors. Moreover, more research is needed into wider lifestyle variables and media usage. Nevertheless, this study has filled a small but nevertheless important gap in recent literature pertaining to older adults, and provides some guidance in an area for which there was previously very little.

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