Challenging the Culture-Free Hypothesis of Cognitive Age Among Older Consumers: Evidence From a Cross-National Survey

Florian Kohlbacher, German Institute for Japanese Studies (DIJ) Tokyo, Japan
Lynn Sudbury, Liverpool John Moores University, UK
Agnes Hofmeister, Corvinus University of Budapest, Hungary

Using data from an empirical study in four different countries (Japan, Germany, UK, and Hungary), we challenge the view of cognitive age as culture free. While we found the ‘young at heart’ philosophy to be true for older consumers in all four nations, major differences across the countries emerged.

[to cite]:

[url]:
http://www.acrwebsite.org/volumes/1009575/volumes/v39/NA-39

[copyright notice]:
This work is copyrighted by The Association for Consumer Research. For permission to copy or use this work in whole or in part, please contact the Copyright Clearance Center at http://www.copyright.com.
Challenging the Culture-Free Hypothesis of Cognitive Age among Older Consumers: Evidence from a Cross-National Survey

Florian Kohlbacher, German Institute for Japanese Studies (DIJ) Tokyo, Japan
Lynn Sudbury Riley, Liverpool John Moores University, UK
Ágnes Hofmeister, Corvinus University of Budapest, Hungary

INTRODUCTION

The current ageing of the world’s population is probably the most profound demographic change in the history of humankind. It is a pervasive and truly global phenomenon, without precedent or parallel, largely irreversible, and with the young populations of the past unlikely to occur again. Indeed, at the world level, the number of older persons will exceed the number of children by 2047, which has already occurred in many developed regions. The profusion of this demographic change will impact on economic growth, labor markets, pensions, health care, housing, migration, politics, and of course consumption (United Nations 2007). If the second half of the 20th century focused on the young, the 21st century will have to focus on the mature.

Despite the growing importance of the 50+ population and its perception as an attractive market segment, older consumers are still routinely neglected by many marketing and advertising practitioners (Niemelä-Nyrhinen 2007; Simcock and Sudbury 2006; Uncles and Lee 2006) and what is known about their consumer behavior still lags far behind what is known about other important segments (Williams et al. 2010; Yoon et al. 2005). This is particularly true of research conducted outside the USA, where there is a marked lack of a coherent body of knowledge pertaining to senior consumers which can guide international marketing decisions.

Self-perceived or cognitive age has emerged as a key variable in studying older people and their consumer behavior (Psychology & Marketing 2001; Wilkes 1992). The relatively sparse number of studies that have investigated this type of age identity in cross-national settings have concluded that cognitive age is “culture-free” (cf. also Barak 2009; Van Auken and Barry 2009; Van Auken, Barry, and Bagozzi 2006). Using data from an empirical study in four different countries, we challenge this view of cognitive age as culture free and thus aim to make a contribution to knowledge on older consumers on an international scale.

SELF-PERCEIVED AGE

Chronological age is a constant in daily life, in age related research, and in marketing. The use of chronological age as an objective measure that shapes the lives of individuals can be illustrated by the age restrictions imposed by the government. For example, chronological age dictates the point at which an individual can drive, vote, drink alcohol, marry, and claim a state pension. In research, chronological age is the most commonly used yardstick when studying the ageing process (Cunningham and Brookbank 1988). In marketing, chronological age is the most frequently used of all demographic variables to describe consumer behavior research and to segment consumer markets (Barak and Schiffman 1981).

Despite these numerous uses, the limitations of chronological age have long been acknowledged (Adams 1971; Heron and Chown 1967). Whilst chronological age may be a useful clue to performance during early life (Jarvik 1975), ageing does not perfectly coincide with chronological age (Bell 1972) so homogeneity in individual lifestyles and conditions among age groups cannot be assumed. Indeed, the number of years lived is a poor indicator of a person’s attitudes and consumer behavior (Chua, Cote, and Leong 1990; Van Auken, Barry, and Anderson 1993).

Given the limitations of chronological age, the implications of the cliché that a person is as young, or as old, as they feel may be more useful in understanding the behavior of older people. Research shows that the age a person perceives themselves to be, or identifies with, constrains them to recognize changes in themselves and to perceive that attitudes toward them have changed (Peters 1971). Thus, the age a person identifies with gives an insight into the behaviors that the individual thinks society expects from them (Guptill 1969). Likewise, an individual’s self-perceived age gives a better understanding of their likely consumer behavior than can chronological age alone (Barak and Schiffman 1981; Cleaver and Muller 2002; Schiffman and Sherman 1991; Stephens 1991). For this reason, self-perceived age has been used in research investigating older consumers and values (Kohlbacher and Chéron 2010; Sudbury and Simcock 2009b), attitudes toward senior sales promotions (Moschis and Mathur 2006; Sudbury and Simcock 2010; Tepper 1994), brand purchasing (Uncles and Lee 2006), innovative purchasing (Sherman, Schiffman, and Dillon 1988; Stephens 1991), information seeking (Barak and Rahtz 1990), interest in fashion (Wilkes 1992), complaining behavior (Dolinsky et al. 1998), media usage (Barak and Gould 1985; Johnson 1993), internet use (Eastman and Iyer 2005; McEllion, Schiffman, and Sherman 1997) and in segmentation studies (Sudbury and Simcock 2009a).

There are many different ways of measuring self-perceived age, and these methods fall into two major groups. The first, and oldest, is age identity (Cavan et al. 1949), concerning the age category (young, middle-aged, old) in which people perceive themselves to be, and is used extensively in gerontology studies. A second type of measure grew in response to the recognition that ageing is multidimensional (Birren 1968), comprising biological, psychological, and sociological dimensions, none of which can be understood without reference to the others (Riley 1985). The cognitive age scale (Barak and Schiffman 1981) is one such multidimensional scale, which incorporates the different dimensions of aging by asking people how old they think they look (biological), how old they feel (psychological and biological), and how old they rate their behavior and interests (social). This typology has its roots in the consensus reached by philosophers concerning the existential stances with regard to the human condition, which are knowing, feeling, and acting (Bengston, Reedy, and Gordon 1985). The cognitive age scale has become the most popular measure of self-perceived age in marketing research pertaining to seniors. The superiority of the cognitive age scale over other available instruments is due to its ease of administration and understanding by respondents (Stephens 1991), its validity (Van Auken and Barry 1995), and its multidimensionality. As a matter of fact, ease of administration and understanding are crucial issues in scale employment with samples of older people (Flynn Reinecke 1993).

The overwhelming finding from studies of age identity is that the vast majority of older adults do not identify with the age categories ‘elderly’ or ‘old’, preferring instead to consider themselves ‘middle aged’. This finding holds true even for people past retirement age (when, arguably, they are deemed old by society), and it is not until people are well into their seventies that more and more begin to admit to an old age status (Blau 1956). Those studies that have utilized the multidimensional scales to measure the self-perceived age of older people (for example Barak 1998; Barak and Gould 1985; Clark, Long, and Schiffman 1999; Goldsmith and Heiens 1992; Johnson
There is little agreement between self-perceived age and chronological age, although the two correlate.

There is a strong bias towards a more youthful self-perceived age in comparison to chronological age.

The look age dimension is closest to actual age than any of the other self-perceived age dimensions.

Whilst the majority of studies into self-perceived age, at least from a marketing perspective, have been conducted in the US, the relatively sparse and recent research conducted outside America tentatively suggests that self-perceived age is a universal concept that can be measured globally, in different languages, and in a reliable and valid manner (Barak 2009). Indeed, the cross-cultural research by Barak and associates suggests that the cognitive age scale is reliable and can be used in diverse cultures and that there is a universal nature of the way human beings - irrespective of culture - perceive and feel about cognitive age (Barak et al. 2001; Barak et al. 2003; Mathur et al. 2001). As a result, researchers have suggested that cognitive age is “culture free” (cf. also Barak 2009; Van Auken and Barry 2009; Van Auken et al. 2006).

Nevertheless, in a recent review of the literature Barak (2009: 8) concluded that that cross-cultural global age research is still in an early pioneering stage and that follow up and replication studies are needed. Indeed, validity is a dynamic process that results from the accumulation of evidence over time (Wells 1975) and the aggregation of results (Peter 1981), with Epstein (1980: 796) arguing that “there is no more fundamental requirement in science than that the replicability of findings be established”. In fact, replications play a valuable role in ensuring the integrity of a discipline’s empirical results and they are considered to be important for the advancement of science and for discovering empirical generalizations (Easley, Madden, and Dunn 2000; Hubbard and Armstrong 1994; Hubbard and Lindsay 2002). This is particularly important when researching consumers by age group as period and cohort effects play a crucial role in addition to age effects (Cole et al. 2008; Fukuda 2010; Palmore 1978; Rentz, Reynolds, and Stout 1983); this means that e.g. findings about older consumers 10 or 20 years ago may no longer hold true today. Given that the few cross-national studies on cognitive age have been conducted at least 10 years ago, our paper makes an important contribution to the literature by checking whether the culture-free assumption of cognitive age also holds true for the current cohorts of older consumers.

In time, it may be possible to acknowledge the phenomenon as a useful marketing tool that is truly global. On this basis, the present study contributes to the small but growing body of knowledge pertaining to self-perceived age outside the USA, and for these reasons four countries which have little or no previous research in this field have been selected.

METHODOLOGY

The study comprised part of a major piece of international research into older consumers across several culturally disparate nations, and utilized questionnaires. The lower age parameter of 50 was selected on the basis that this is the starting point for many age-related services offered to older consumers (for example, SAGA, Age UK, Seniorsurfers.net). Besides, previous research has called for including middle-aged respondents in order to better understand aging mechanisms and their impact on consumer behaviour (e.g. Cole et al. 2008). The two self-perceived age instruments, both age identity and cognitive age, were used. Additionally, respondents completed a battery of socio-demographic questions.

The four nations selected are Japan, Germany, UK, and Hungary. Japan is ranked number one in every international league table that considers population ageing, with 28% of its population already age 60 or over and a median age of 43 years (United Nations 2007). Despite the fact that it is the country most severely affected by the megatrend that is population ageing only two previous studies have considered self-perceived age from a marketing perspective, and both found Japan’s older population to feel about 8 years younger than their actual age (Kohlhacker and Chéron 2010; Van Auken et al. 2006).

Germany is ranked 3rd in the league tables produced by the United Nations (2007) with 25.3% of its population already 60 or above. Despite this, there has never been a marketing study into the self-perceived ages of German’s senior consumers, although a previous gerontological study suggests that Germany’s older population feel about 12 years younger than their chronological age (Smith and Baltes 1999). Data from the German Aging Survey in 1996, however, found their age identity about 6.5 years younger than their chronological age (Westerhof and Barrett 2005; Westerhof, Barrett, and Steverink 2003).

The UK is ranked 17th from a total of 192 countries with 22% of its population already 60 or over. The three previous studies conducted in Britain (Sudbury 2004; Sudbury and Simcock 2009b; Szmigin and Carrigan 2000) suggest older British consumers feel about 10 years younger than their actual age. Finally, Hungary is ranked 19th in the league tables and has more than 21% of its population already aged 60 or above. Despite this, and the fact that Hungary is an important market that has made a major transition from communism to a market that has attracted much inward investment, no previous study has been conducted into the self-perceived ages of its older consumers. Overall, our sample thus consists of the following four countries in three regions: 1) Japan, the most aged society in the world, and – in our sample – the representative of Asia, 2) Germany and 3) Hungary as the representatives from continental Europe, one being the largest and oldest of the Western economies on the Continent and the other a recent member of the European Union with a communist past, 4) the UK as a representative of the Anglo-Saxon European culture.

The questionnaire was translated and back translated by teams in Japan, Germany, and Hungary before being piloted across all four countries. Several changes were made on the basis of the pilot study. Three lists were purchased, one German (n = 6000), one British (n = 5000), and one Japanese (n = 1044) that contained randomly selected names and addresses of people aged 50+, and a questionnaire and pre-paid envelope was posted to them all. Piloting in Hungary demonstrated the difficulties of self-completion among many older Hungarian adults, thus the distribution strategy was adapted in that country, where a team of trained researchers administered the questionnaire face-to-face to 200 adults aged 50+.

A total of 1368 usable questionnaires were received. After removing cases with missing values for the scales used in this paper, 1293 questionnaires remained in the data set. Table 1 details the final sample by age and country.
The reliability of the cognitive age scale was found to be acceptable (Cronbach’s alphas ranged from .88 for the UK sample to .91 for the Hungarian and Japanese samples). A confirmatory factor analysis (CFA) using AMOS 18 led to composite reliabilities ranging from .88 for the UK to .91 for Hungary and Japan and average variances extracted ranging from .65 in the UK to .72 in Japan. While we are able to establish partial measurement invariance, the model fit for scalar invariance was only marginally satisfactory, but judged sufficient given the exploratory nature of this research.

Cognitive age was found to be highly correlated with chronological age (ranging from r=.6 in Hungary to r=.81 in Japan, p<.01) and with age identity (ranging from rho=.46 in Germany to rho=.68 in Hungary, p<.01).

**FINDINGS**

Table 2 details the age identities of the sample by country, where it can be seen that the vast majority of older adults, regardless of their nationality, consider themselves to be middle aged. Conversely, few people still feel young, although these differ slightly between nationalities, with only 2.4% of Germans feeling young, compared to almost 8% of older UK adults. This is despite the fact that the UK sample is older than the German sample by almost 3 years. Nevertheless, particularly noteworthy are the differences in those who admit to an old identity. In the UK and Germany less than 15% of older adults admit to feeling old, in comparison to one quarter of Hungarians and more than 30% of Japanese respondents. Indeed, a Chi-square test for independence indicated that there is a significant association between nationality and age identity ($\chi^2= 57.315$, df = 6, p < .001), with fewer than expected British and Germans, and greater than expected numbers of Japanese and Hungarians, admitting to an old age identity.

Consistent with previous research, our multi-national sample found little agreement between cognitive and chronological age, although a strong and positive correlation was found between the two ($r = 0.71$, n = 1293, p < .01). Indeed, across the sample as a whole only 125 (9.7%) respondents had cognitive ages that were greater than their actual age. In contrast, the vast majority (87.2%) perceived themselves to be younger than their actual age. There were, however, comparisons between the nations. Table 3 classifies the differences in actual and cognitive age by country, where it can be seen that greater numbers of Hungarians (28.5%) felt older than their age, while only 3.8% of Germans felt older. Indeed, at least 87% of seniors from the UK, Japan and Germany felt younger than their actual age, while this figure drops to 66.5% for older Hungarians.

Table 4 details the mean chronological and cognitive ages by country, as well as the youth bias (defined as the difference between chronological and cognitive age) where it is clear that there is a bias towards a more youthful self-perceived age. In all four samples paired-samples t-tests demonstrated that chronological and cognitive age are significantly different.

### Table 1: Total Sample by Chronological Age and Country

<table>
<thead>
<tr>
<th>Country</th>
<th>N</th>
<th>Response Rate (%)</th>
<th>Mean Age</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>456</td>
<td>3.5</td>
<td>66.24</td>
<td>8.21</td>
</tr>
<tr>
<td>Germany</td>
<td>211</td>
<td>9.1</td>
<td>63.50</td>
<td>8.41</td>
</tr>
<tr>
<td>Japan</td>
<td>426</td>
<td>40.1</td>
<td>64.11</td>
<td>8.56</td>
</tr>
<tr>
<td>Hungary</td>
<td>200</td>
<td>N/A</td>
<td>58.66</td>
<td>5.63</td>
</tr>
<tr>
<td>Total</td>
<td>1293</td>
<td></td>
<td>63.92</td>
<td>8.39</td>
</tr>
</tbody>
</table>

The reliability of the cognitive age scale was found to be acceptable (Cronbach’s alphas ranged from .88 for the UK sample to .91 for the Hungarian and Japanese samples). A confirmatory factor analysis (CFA) using AMOS 18 led to composite reliabilities ranging from .88 for the UK to .91 for Hungary and Japan and average variances extracted ranging from .65 in the UK to .72 in Japan. While we are able to establish partial measurement invariance, the model fit for scalar invariance was only marginally satisfactory, but judged sufficient given the exploratory nature of this research.

Cognitive age was found to be highly correlated with chronological age (ranging from r=.6 in Hungary to r=.81 in Japan, p<.01) and with age identity (ranging from rho=.46 in Germany to rho=.68 in Hungary, p<.01).

**FINDINGS**

Table 2 details the age identities of the sample by country, where it can be seen that the vast majority of older adults, regardless of their nationality, consider themselves to be middle aged. Conversely, few people still feel young, although these differ slightly between nationalities, with only 2.4% of Germans feeling young, compared to almost 8% of older UK adults. This is despite the fact that the UK sample is older than the German sample by almost 3 years. Nevertheless, particularly noteworthy are the differences in those who admit to an old identity. In the UK and Germany less than 15% of older adults admit to feeling old, in comparison to one quarter of Hungarians and more than 30% of Japanese respondents. Indeed, a Chi-square test for independence indicated that there is a significant association between nationality and age identity ($\chi^2= 57.315$, df = 6, p < .001), with fewer than expected British and Germans, and greater than expected numbers of Japanese and Hungarians, admitting to an old age identity.

Consistent with previous research, our multi-national sample found little agreement between cognitive and chronological age, although a strong and positive correlation was found between the two ($r = 0.71$, n = 1293, p < .01). Indeed, across the sample as a whole only 125 (9.7%) respondents had cognitive ages that were greater than their actual age. In contrast, the vast majority (87.2%) perceived themselves to be younger than their actual age. There were, however, comparisons between the nations. Table 3 classifies the differences in actual and cognitive age by country, where it can be seen that greater numbers of Hungarians (28.5%) felt older than their age, while only 3.8% of Germans felt older. Indeed, at least 87% of seniors from the UK, Japan and Germany felt younger than their actual age, while this figure drops to 66.5% for older Hungarians.

Table 4 details the mean chronological and cognitive ages by country, as well as the youth bias (defined as the difference between chronological and cognitive age) where it is clear that there is a bias towards a more youthful self-perceived age. In all four samples paired-samples t-tests demonstrated that chronological and cognitive age are significantly different.
Table 4: Mean Chronological and Cognitive Age by Country

<table>
<thead>
<tr>
<th>Country</th>
<th>Mean Chronological Age</th>
<th>Mean Cognitive Age</th>
<th>Youth Bias</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>66.24</td>
<td>56.00</td>
<td>10.24</td>
</tr>
<tr>
<td>Germany</td>
<td>63.50</td>
<td>54.42</td>
<td>9.08</td>
</tr>
<tr>
<td>Japan</td>
<td>64.11</td>
<td>57.61</td>
<td>3.67</td>
</tr>
<tr>
<td>Hungary</td>
<td>58.66</td>
<td>54.99</td>
<td>3.67</td>
</tr>
<tr>
<td>Total</td>
<td>63.92</td>
<td>56.11</td>
<td>7.81</td>
</tr>
</tbody>
</table>

Noticeably, however, the youth bias ranges from less than 4 years for Hungarians to over 10 years for UK seniors. One-way ANOVA showed these differences to be significant (Welch (3, 1289) = 55.596, p < .001). Post-hoc comparisons revealed Hungary to have a significantly lower youth bias than any other country, while the UK has a significantly greater youth bias than Japan. Conversely, no significant differences emerged between Germany and the UK. Finally, table 5 shows the percentages of seniors by nation who feel younger than their actual age by cognitive age dimension, whilst table 6 provides the mean cognitive age dimensions by country.

Table 5: Youthful Self-perceived Age by Dimensions of Cognitive Age (per cent)

<table>
<thead>
<tr>
<th>Country</th>
<th>Feel age</th>
<th>Look age</th>
<th>Do age</th>
<th>Interests age</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>86.84</td>
<td>80.92</td>
<td>89.91</td>
<td>89.25</td>
</tr>
<tr>
<td>Germany</td>
<td>85.31</td>
<td>81.52</td>
<td>85.78</td>
<td>86.26</td>
</tr>
<tr>
<td>Japan</td>
<td>75.35</td>
<td>78.40</td>
<td>81.22</td>
<td>81.46</td>
</tr>
<tr>
<td>Hungary</td>
<td>56.00</td>
<td>59.50</td>
<td>65.50</td>
<td>71.50</td>
</tr>
</tbody>
</table>

Consistent with previous research, for the sample as a whole, look age is the dimension closest to chronological age. Once again, however, there are contrasts between the nations, as the difference between look age and the other dimensions are greater in the UK and Germany in comparison to Japan and Hungary. In these latter countries, there is little difference between look age and other dimensions, and indeed in Hungary the mean look age is actually marginally higher than feel age.

Table 6: Mean Actual and Cognitive Age Dimensions

<table>
<thead>
<tr>
<th>Country</th>
<th>Actual age</th>
<th>Feel age</th>
<th>Look age</th>
<th>Do age</th>
<th>Interests age</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>66.24</td>
<td>55.09</td>
<td>60.29</td>
<td>54.17</td>
<td>54.45</td>
</tr>
<tr>
<td>Germany</td>
<td>63.50</td>
<td>54.95</td>
<td>57.13</td>
<td>53.10</td>
<td>52.49</td>
</tr>
<tr>
<td>Japan</td>
<td>64.11</td>
<td>58.36</td>
<td>59.32</td>
<td>57.51</td>
<td>55.23</td>
</tr>
<tr>
<td>Hungary</td>
<td>58.66</td>
<td>56.25</td>
<td>56.15</td>
<td>54.55</td>
<td>53.00</td>
</tr>
<tr>
<td>Total</td>
<td>63.92</td>
<td>56.32</td>
<td>58.81</td>
<td>55.15</td>
<td>54.16</td>
</tr>
</tbody>
</table>

DISCUSSION

This research has found the ‘young at heart’ philosophy to be true for older consumers in all four nations under study. The vast majority of seniors feel middle-aged, and are not yet ready to admit they feel old. Moreover, many of the patterns to emerge have some similarities to American research in that there is little agreement between cognitive and chronological age, with a strong youth bias. Likewise, the expectation that the look age dimension would be closest to actual age than any of the other self-perceived age dimensions emerged in all the samples with the exception of Hungary.

However, despite some similarities to previous research and across countries, the significant differences found between the nations in this study are its most important contribution to knowledge. We thus successfully challenged the view of cognitive age as “culture-free”. Clearly, Japanese and Hungarian seniors are more likely to admit to being old than are their British and German counterparts, and this pattern was repeated in the cognitive age results. Wahl and Kruse (2003) argue that research into older adults should be designed and interpreted with a consideration of the social and cultural contexts in which these adults live.

The tendency for older people to report younger self-perceived ages has been viewed as a form of denial in the United States, where it has long been noted that youth is valued over old age (Guy, Rittenburg, and Hawes 1994). Such an ideology is not limited to American culture: British writing provides overwhelming support for the contention that in the UK old age is associated with negative characteristics; indeed in contrast to some other European countries Britain still has age discrimination built into the fabric of its society, and ageing is often portrayed in negative ways in the media (Joseph Rowntree Foundation 2004; Williams et al. 2010). In a similar vein, Catterall and Maclaran (2001) argue that the underpinning assumptions inherent in the concept of cognitive age reflect a Western preoccupation with youthfulness. However, given that the youth bias also exists in non-western nations, this view is challenged.
While the UK sample demonstrates similarities to American studies which typically report an age bias of between 8 and 12 years (Barak 1998; Sherman, Schifferman, and Mathur 2001), a number of studies conducted outside the US show the bias to be less pronounced. Chua, Cote and Leong (1990) conducted their cognitive age study in Singapore and found that English-speaking respondents were more likely to feel younger than their actual age in comparison to Chinese-speaking respondents. This difference was interpreted as a result of differing cultures, and as such was one of the first known studies to speculate that cultural forces may impact self-perceived age. However, given the much larger body of knowledge that suggests otherwise, this consideration appears to have been forgotten, neglected, or ignored in much subsequent research. Moreover, Chua, Cote and Leong (1990) interpreted their differences as a result of age being more respected in Eastern as opposed to Western cultures. However, it is not just Eastern cultures that have been found to have a less pronounced youth bias, as older Finnish adults have also been found to have a greater acceptance of their actual age in comparison to older Americans (Uotinen 1998). Thus, particularly in view of the significance of the European Union, it would seem that more research is needed across European nations before seniors markets are targeted with a pan-European marketing strategy. A recent meta-analysis, using data from 598 studies conducted over 30 years, into cultural value dimensions found that cultural values were more strongly related to older adults in comparison to younger people (Taras, Kirkman, and Steel 2010). Clearly, then, the life-experiences of individual nations needs to be considered.

The nations selected here are very different with regards to the life-experiences of older adults. Older Germans have experienced re-unification (and before that the separation), migration of younger adults from Eastern to Western Germany which has affected older people’s social networks and integration, war guilt and a lack of focus on war veterans that is in stark contrast to the UK and US, and different social welfare arrangements which produce continuity of income in old age (Wahl and Kruse 2003). Language is an important part of culture, and interestingly the Hungarian language belongs to the Finno-Ugric family and is one of the few languages spoken within the European Union that are not of Indo-European origin. Moreover, older Hungarians have lived through the collapse of communism and the transition to a market economy, and a large study into the formulation of a consumer society and on the development of local identities in Central Europe found that a special type of consumer society came into being into these countries, with Hungary being one of them (Wessely 2000). From a consumer values perspective, the socialist system in Hungary which emphasized altruism and concern for the community has been replaced with more materialistic values, but there are still major generational differences (Hofmeister Toth and Neulinger 2009). Finally, older Japanese seniors have – just like their German counterparts – experienced the post-war efforts to rebuild their country and finding a new national identity. American occupation during the post-war years and the subsequent globalization have led to an acculturation process that has had a strong impact on Japanese values, thinking and consumer behavior (cf. also Francks 2009).

In sum, this research has answered a recent call for replication studies to be undertaken in the field of cross-cultural global age research, which is still in an early pioneering stage (Barak 2009). The study also adds to the small but growing amount of empirical evidence pertaining to seniors outside the US. Results lend support for the claim that the concept of cognitive age is reliable and can be used in diverse cultures, and that there is a universal way that human beings perceive and feel about self-perceived age (Barak 2009; Barak et al. 2001). However, the latter holds only true as far as the general tendency to feel younger than one’s actual age is concerned, but not to the degree and magnitude of the youth bias. Indeed, our findings seem to challenge the assumption of cognitive age as culture free. This is actually not all too surprising given the disparate cultures and life-experiences that these seniors have experienced. Some previous studies have also found some indications that culture may play at least some role in the perception of age (Chua et al. 1990; Mathur et al. 2001; Uotinen 1998), but the prevailing view in the cross-national literature on cognitive age saw it as culture free and universal. This view will now have to be changed.

LIMITATIONS AND NEED FOR FURTHER RESEARCH

We cannot know for sure if culture is the (sole) explanation for the differences we have found across the four countries surveyed. Other factors on the individual or sample level may be confounding our results. Indeed, previous research has identified various antecedents and correlates of cognitive age (Barak and Stern 1986; Mathur and Moschis 2005; Ong, Lu, and Abessi 2009) and further research will necessary to disentangle cultural effects from those of other correlates. Besides, subjective age might also be a social phenomenon and in that case the usefulness and applicability of the cognitive age concept could change along with changing social attitudes such as the one towards aging for example (cf. e.g. Catterall and Maclaran 2001). Thus, it is impossible to explain why the young-at-heart bias differs across the nations studied here, but these results do set a clear research agenda, in that further research into the underlying antecedents of cognitive age, particularly across nations outside America (and especially across the European Union) is needed.

It is hoped that the different sampling methods which were needed due to cultural differences did not impact the results, but we note that Hungary, where the administration of the questionnaires was different, has emerged as significantly different to the other nations from a self-perceived age perspective. Future research will have to address data equivalence and measurement issues in greater detail (Barak 2009; Hult et al. 2008; Reynolds, Simintiras, and Diamantopoulos 2003; Singh 1995). Further research needs to delve into the antecedents of the concept of self-perceived age, and consider different life experiences and cultures as potential antecedents.

Finally, employing cohort analysis on longitudinal or repeated cross-sectional data may help to shed further light on older consumers (Cole et al. 2008; Fukuda 2010; Rentz et al. 1983).

MANAGERIAL IMPLICATIONS

This study has important implications for marketing practice. In advertising, for example, the use of “cognitive-age congruent” models or spokespersons should prove fertile as a consumer’s self-perceived age interacts with the perceived age of the model or spokesperson seen in an ad, and can subsequently influence the response to the advertising message (Chang 2008; Van Auken and Barry 2009). This may also explain why older people are often underestimated in advertising, a fact that also holds true for TV commercials in the UK (Simcock and Sudbury 2006), Germany (Kessler, Schwender, and Bowen 2010), and Japan (Prieler et al. 2009). Research has also shown the importance of understanding motivational differences that underlie the effects of aging on attitudes toward and recall of advertisements (Drolet, Williams, and Lau-Gesk 2007) and heeding to the cognitive age of the target group will likely be an additional, crucial factor.

From an international marketing perspective, the study lends support to the usefulness of self-perceived age as a way of segment-
ing and targeting senior consumers across the globe. In the same way as a youth segment represents an example of a universal global common segment (Kjeldgaard and Askegaard 2006), there is growing evidence that a ‘young at heart’ senior global market exists (Barak 2009) and this study lends further support to that. That is not to suggest that older adults can be treated as an undifferentiated monolith. Indeed, the differences between the nations suggest that local differences still need to be considered in advertising and positioning strategies. Nevertheless, it provides a starting point for marketers wishing to target this growing and important global phenomenon that is the senior market.

REFERENCES

Cleaver, Megan and Thomas E. Muller (2002), “I Want to Pretend I’m Eleven Years Younger: Subjective Age and Seniors’ Motives for Vacation Travel,” Social Indicators Research, 60 (1-3), 227-41.


