Correlates of cognitive age in Japan

Emmanuel Chéron
Sophia University, Tokyo

Florian Kohlbacher
German Institute for Japanese Studies (DIJ) Tokyo
Background

- Demographic change and its business implications (Drucker, 2002; Dychtwald, 2000)
- Older consumers still under-researched and still often not included in a range of marketing practices (Gunter 1998; Sudbury & Simcock 2009)
- Japan – the most severely affected country by the demographic shift with a rapidly ageing as well as shrinking population – widely neglected
This presentation

• Attempts to get a better understanding of self-perceived age of older consumer through
  • Health condition
  • Financial status
  • List of Values
  • Sociability
  • Time away from home and hobbies

• Our empirical study the first one to employ these variables together and test this approach on a sample of 316 older Japanese consumers
Self-perceived age

- Use of chronological age is particularly problematic for research that examines the attitudinal or behavioral patterns of older consumers (Barak & Schiffman, 1981: 602)
- Self-perceived or cognitive age – as a form of self-concept – proved important in gerontology and marketing
Personal values

• “Values are both a powerful explanation of and influence on human behavior” (Homer & Kahle 1988: 638)

• Widely used in trying to understand and predict the behavior of people in their roles as consumers, employees etc. (e.g. Burroughs & Rindfleisch 2002; Homer & Kahle 1988)

• Personal values also used in marketing studies as a basis for market segmentation and product positioning (Kahle and Kennedy 1988; Schiffman et al. 2003).

• Kahle’s (1983) List of Values (LOV):
Research aims

• Exploring self-perceived age among Japanese older consumers by:
  • 1) Examining the magnitude of the difference between actual age and self-perceived age in comparison with previous studies
  • 2) Finding the relative importance of several antecedents of self-perceived age to better understand the consumption behavior of older consumers in Japan
Sample

- Data collection in February/March 2009 face to face by a team of Japanese speaking trained research assistants in the main commercial street of the Sugamo district in northeastern Tokyo
- A total of 316 completed surveys for a response rate of 45.6%
- Objective of this research was to replicate and extend previous research with the use of a different sample in a different country and to test for relationships between theory-driven concepts
Measures I

• Four-item cognitive age scale (Barak & Schiffman 1981)
  – respondents were asked to select a decade from 20s to 90s for:
    • 1) How they **feel** for body age and state of health
    • 2) How they **look** for appearance
    • 3) In relation to things they mostly **do**
    • 4) In relation to their **interests**
Measures II

• Self-perceived health level: rate state of health as “Well”, “Fairly well”, “Somewhat poor” and “Poor”
  – Objective health measures are difficult to obtain
  – Past research showed positive congruence between self and physicians’ assessments of health status of older people (Maddox and Douglass 1973)

• Financial status: rate present financial situation as “Financially well off”, “Relatively financially well off”, “Having a bit more than needed for their daily life”, “Enough to afford their daily life”, “Only enough to be able to live their daily life” and “Not enough to afford their daily life”
  – Checked for consistency with responses on income
Measures III

- LOV scale (Kahle 1983)
- requested respondents to read all nine statements carefully before giving their answer on a scale of importance of 1-5
  - Warm relationships with others
  - Security
  - Fun and enjoyment in life
  - A sense of accomplishment
  - Self-respect
  - Being well respected
  - Self-fulfillment
  - Sense of belonging
  - Excitement
## Results I

**Actual age, cognitive age and difference between actual age and cognitive age**

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std</th>
<th>T and p values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual age</td>
<td>Females</td>
<td>207</td>
<td>70.63</td>
<td>9.01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Males</td>
<td>109</td>
<td>71.72</td>
<td>9.01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>316</td>
<td>71.01</td>
<td>9.01</td>
<td>$T = 1.02; p = .31$</td>
</tr>
<tr>
<td>Self-perceived age</td>
<td>Females</td>
<td>193</td>
<td>62.93</td>
<td>11.48</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Males</td>
<td>102</td>
<td>63.73</td>
<td>10.83</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>295</td>
<td>63.20</td>
<td>11.24</td>
<td>$T = 0.58; p = .56$</td>
</tr>
<tr>
<td>Difference</td>
<td>Females</td>
<td>193</td>
<td>7.88</td>
<td>7.07</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Males</td>
<td>102</td>
<td>8.08</td>
<td>7.33</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>295</td>
<td>7.95</td>
<td>7.15</td>
<td>$T = 0.22; p = .82$</td>
</tr>
</tbody>
</table>
Discussion I
Self-perceived Age

• Average difference of 8 years between self-perceived age and actual age found in Japan
• This is a slightly lower age difference than in Europe
• Confirms previous findings of no significant difference between genders (Barak et al. 2001)
• Results in Japan refute criticism by those who doubt its universal applicability
• However, self-perceived age may be a social phenomenon subject to change with attitudes towards aging (cf. also Catterall & Maclaran 2001)
## Results II

List of Values and Correlations with Self-perceived Age (N=314)

<table>
<thead>
<tr>
<th>Values</th>
<th>Mean score*</th>
<th>Standard deviation</th>
<th>Bi-variate correlation with Self-perceived Age**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warm relationships with others</td>
<td>4.73</td>
<td>0.63</td>
<td>-.085</td>
</tr>
<tr>
<td>Security</td>
<td>4.71</td>
<td>0.63</td>
<td>-.069</td>
</tr>
<tr>
<td>Fun and enjoyment in life</td>
<td>4.69</td>
<td>0.77</td>
<td>-.179</td>
</tr>
<tr>
<td>A sense of accomplishment</td>
<td>4.24</td>
<td>1.10</td>
<td>-.238</td>
</tr>
<tr>
<td>Self-respect</td>
<td>4.22</td>
<td>1.09</td>
<td>-.070</td>
</tr>
<tr>
<td>Being well respected</td>
<td>4.02</td>
<td>1.20</td>
<td>-.075</td>
</tr>
<tr>
<td>Self-fulfilment</td>
<td>4.01</td>
<td>1.17</td>
<td>-.093</td>
</tr>
<tr>
<td>Sense of belonging</td>
<td>3.72</td>
<td>1.43</td>
<td>-.063</td>
</tr>
<tr>
<td>Excitement</td>
<td>3.71</td>
<td>1.35</td>
<td>-.269</td>
</tr>
</tbody>
</table>

* On a scale of 1 to 5 where 1 is “Not important at all” and 5 is “Extremely important”.
** Underlined correlations are significant at level .05.
Discussion II
LOV ranking

• Warm relationships, security and fun and enjoyment are the three top values for elderly Japanese

• Need for harmony and uncertainty avoidance are important values for Japanese, but interest for fun and enjoyment is less well-known

• Values below the third top in importance show lower std deviations, less consensus
## Results III

**Bi-variate correlations of selected antecedents of self-perceived age (N=290)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Self-perceived age (1)</td>
<td>63.10</td>
<td>11.27</td>
<td>1.00</td>
</tr>
<tr>
<td>2. Financial situation (2)</td>
<td>3.82</td>
<td>.89</td>
<td>-.008</td>
</tr>
<tr>
<td>3. Health level (3)</td>
<td>4.56</td>
<td>.69</td>
<td>-.255*</td>
</tr>
<tr>
<td>4. Sociability (3)</td>
<td>3.66</td>
<td>.96</td>
<td>-.211*</td>
</tr>
<tr>
<td>5. Sense of accomplishment (4)</td>
<td>4.23</td>
<td>1.09</td>
<td>-.245*</td>
</tr>
<tr>
<td>6. Fun and excitement (4)</td>
<td>4.18</td>
<td>.85</td>
<td>-.296*</td>
</tr>
<tr>
<td>7. Time away from home (5)</td>
<td>3.31</td>
<td>1.04</td>
<td>-.199*</td>
</tr>
<tr>
<td>8. Time for hobbies (6)</td>
<td>3.67</td>
<td>1.70</td>
<td>-.163*</td>
</tr>
</tbody>
</table>

(1) Average of self-perceived age mid-point decades.
(2) On a scale from 1 “I cannot afford daily life” to 6 “I consider myself financially well off”.
(3) On a scale of 1 “totally disagree” to 5 “totally agree”.
(4) On a scale of 1 “not important at all” to 5 “extremely important”.
(5) On a scale of 1 to 6 in hours per day.
(6) On a scale of 1 to 6 in hours per week. * Significant at level .05
Results III

Multiple stepwise regression analysis with self-perceived age as dependent (N=289)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Standardized Coefficients</th>
<th>T values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fun and excitement</td>
<td>-.221</td>
<td>-3.93**</td>
</tr>
<tr>
<td>Health level</td>
<td>-.195</td>
<td>-3.53**</td>
</tr>
<tr>
<td>Time away from home</td>
<td>-.149</td>
<td>-2.72**</td>
</tr>
<tr>
<td>Sociability</td>
<td>-.112</td>
<td>-1.99*</td>
</tr>
</tbody>
</table>

Adjusted $R^2 = .157$ F value = 14.43, p = .000

Durbin Watson = 2.00

** Significant at level .00; * Significant at level .05
Discussion III
Correlates of self-perceived age

• Four variables were retained with fun and excitement and health level being the most important.
• Time away from home and sociability were also found significantly related to self-perceived age but financial wealth was not.
• Low $R^2$ values typical in previous research (Novak and MacEvoy, 1990) do not reduce the exploratory value of finding differences across consumer groups (Mathur, Moschis, and Lee, 2003).
Conclusions

• Further evidence to support the assumption that self-perceived age may be culture-free
• Antecedents of self-perceived age such as: fun, health condition, time away from home and sociability help us better understand older consumers in Japan
• Further data analysis based on self-perceived age measures may help finding meaningful sub-segments of the silver market in Japan
• Companies following this approach should become able to better meet the needs of older consumers by increasing
  – business marketing opportunities
  – well-being of the fastest growing age group in the world
Q&A

self-perceived

age affected

Older

Japanese

lower

change

using

consumers

regression

older variables

Findings

studies

Japan
Japanese Consumer Dynamics

Edited by: Parissa Haghriar

Japanese consumers have changed dramatically over the past fifteen years. From the big spenders of the late 80s bubble economy, they have become price-conscious, wealthy and sophisticated shoppers, demanding the world’s best service and most innovative products. A number of major shifts in Japanese society further led to the emergence of whole new consumer groups, such as the baby boomers, the single market, the new rich and otaku (enthusiastic) consumers. Today Japan is still the second largest and most important consumer market in the world: the economic crisis has not changed this. These major changes however, are still receiving insufficient coverage in management and marketing research. "Japanese Consumers" fills this gap and discusses the development of Japanese consumerism, particularities of Japanese consumer behavior and consumer rights, new consumer groups and emerging trends in the Japanese market.

Contents:

PART I: JAPANESE CONSUMERISM
Japanese Consumerism - Introduction
Historical Development of Japanese Consumerism
Particularities of Japanese Consumer Behaviour
Japanese Consumers Rights and Protection
Ethnocentrism of the Japanese Consumer

PART II: JAPAN'S NEW CONSUMER GROUPS
The New Rich
The Silver Market
Working Women
Young Japanese Men
The Single Market
Foreigners in Japan, Kid's Marketing, Otaku

PART III: JAPANESE CONSUMER TRENDS
Beyond Sushi; The Japanese Food Market
Are the Japanese Eco-Consumers?
Mobile Consumption and Social Networks