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CHANGING LIFE AND CONSUMPTION STYLES WITHIN THE EUROPEAN 50+ MARKET – EVIDENCE FROM GERMANY AND POLAND

Introduction

The term "demographic transition" comprises the phenomenon of ageing in societies as a whole and the challenges associated with it. The magnitude and speed of the ageing process caused the U.N. (2007) to call it "unprecedented, without parallel in human history". This phenomenon is present on a worldwide scale, even though industrialized countries experience a much farther and accelerated stage in the process of demographic transition than developing countries typically do (United Nations, 2003). Even within industrialized countries the ageing process of societies seems to adopt a different pace as countries are unequally affected by the main drivers of demographic transition: low fertility rates and increased longevity. France, for example, shows one of the longest life-expectancies in Europe, but at the same time one of the highest birth rates. For the UK, in contrast, we find a much lower birth rate, but at the same time a much shorter life expectancy. Italy, Spain and Germany are hit by both ageing factors equally hard, e.g. in Spain the fertility rate dropped from nearly 3.0 in 1970 to 1.3 (Eurostat, 2004). The birth rate in Poland has dropped from 2.1 in the 1990ies to less than 1.3 in 2007, still the Polish exhibit a lower average age than most Western European countries (Figure 1). This indicates a less advanced stage in the process of demographic transition.

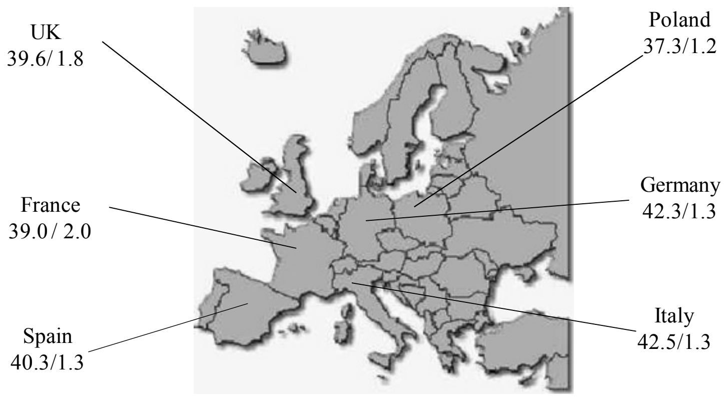

Figure 1. Average Age and Fertility Rates in Europe

Source: Based on data from Eurostat (2007).

When taking a closer look at Germany the country which represents the largest consumer market within the EU at the moment, we find that the population as a whole will shrink by at least 10% until 2050. At the same time Germany's 50+-

market will grow by 21% (Statistisches Bundesamt, 2005). Therefore, the share of the 50+-population in Germany will rise from 37% in 2005 to nearly 50% in 2035 and to over 50% in 2050 (Figure 2).

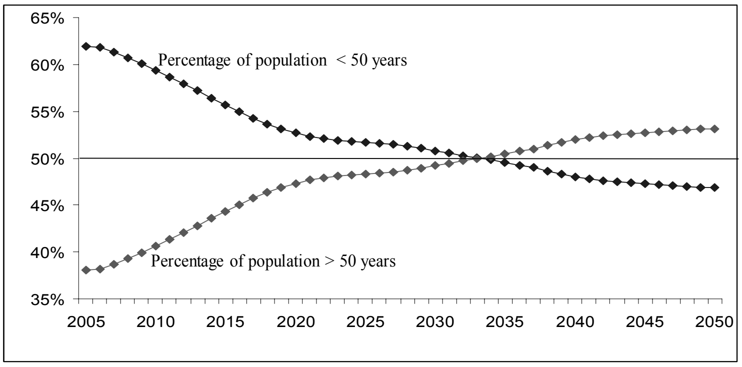

Figure 2. Development of 50+-population share in Germany

Source: Based on data from Statistisches Bundesamt (2007).

The results of demographic transition will affect nearly all areas of life in society. For the consumer markets this means that the sheer number and share of 50+-consumers will rise to a degree never experienced before. Besides the increase in quantitative matters, we find qualitative aspects which contribute to the importance of the 50+-markets. The war-generation coined the picture of a poor pensioner generation, that even if given the money they would rather hand it down to their children than consume and indulge themselves. This view may have to be revised. In the U.S., for example, where some 78 million babyboomers are approaching retirement age (Smith & Clurman, 2007), the 50+-population does not only account for a considerable part of the overall population. They are also said to own up to 80% of the financial assets (Dychtwald, 1997; Leventhal, 1997). Numbers in Europe might be not quite as high, yet the buying power of the 50+-population has increased to become a non-negligible factor for companies in the business-to-consumer markets (Sudbury & Simcock, 2009, p. 251). In some industries like health care or travel, however, the 50+-consumer expenditures have reached dominating shares (e.g. Jang & Ham, 2008; Sherman, Schiffman & Mathur, 2001, p. 1073).

1. Purpose of this research

The rising importance of the 50+-market can no longer be ignored by marketing scholars and practitioners. However, there seems to be some hesitation to segment this market further. For younger age groups, the necessity of market segmentation would not be questioned. Yet, as people grow older they are viewed to become more homogeneous, probably as physical abilities decline. The fact that the main drivers of consumption behavior, i.e. psychological personality traits exert an increasing influence with rising age is often ignored. This is especially true for the European market and might be due to the fact that marketing managers seldom belong to this age group. Therefore, it seems a predicament to closely scrutinize life- and consumption styles to be or to become aware of changes in the 50+-market.

This article specifically draws on insights from the works of Schiffman and Sherman (1991) as well as Mathur, Sherman and Schiffman (1998) that have identified an age-subcultural segment within the 50+market. This segment seems substantial in size and does not correspond to the stereotypical view of traditional seniors which are often considered frugal and an unattractive part of the market due to a lack in means and interest in new products (Mathur, Sherman & Schiffman 1998, p. 265). In contrast to the traditional elderly, the subsegment of the new-age elderly is described by looking and feeling younger – regardless of their chronological age – being more self-confident and seeking new experience and challenges and remaining open to change (Schiffman & Sherman, 1991, p. 192). These differentiating characteristics in the aging market are indicative of changing consumption pattern. The new-age elderly were, for example, found to be "selectively innovative" with regards to new products and services (Mathur, Sherman & Schiffman, 1998, p. 265). This new segment is considered highly attractive to marketers and is often associated with the baby-boomer generation in the U.S.

In Europe, however, this research topic seems to have received much less attention among marketing scholars. Segmentation studies for the 50+ market are rare for European countries and to the best of the author's knowledge specific analyses on traditional seniors vs. new-age elderly are not available as well as comparisons of age-segments on a cross-country level. This research aims at filling this void by identifying and describing traditional seniors and new-age elderly with the latter group representing changing life-styles and consumption patterns within the European 50+-market.

This research builds on insights from the existing research especially those focusing on traditional seniors vs. new-age elderly. Discriminating and describing factors from previous research are employed into an empirical study that was conducted in two European countries: Germany, representing the "old" EU-member states and Poland as example for a newer EU member. In both countries the existence of the two age segments is examined. For this purpose more than 350 personal interviews were conducted with consumers in the 50+- markets in Germany and Poland. Quota sampling was used to assure representativeness of the interviewees according to the corresponding gender and age-group distributions. A two-cluster solution corresponds to the segments described in the literature: the traditional senior representing rather traditional consumption patterns and the new-age elderly which represent a rather new type of 50+-consumer with attitudes, interests and behaviors that traditionally were not associated with older consumers. The analysis of the two age segments in terms of demographics, psychographics and consumption aspects for Germany and Poland is followed by implications for research and management.

2. Consumer groups within the 50+-market

Historically, it was a common approach to divide the grey market, as it is often referred to, into two broad categories based on chronological (i.e. biological) age or life-stages, like "younger elderly" and "older elderly" (e.g. Neugarten & Hagestad, 1976; Moschis, 1992; Sherman, Schiffman & Mathur, 2001) or people in their third and fourth life-stages respectively. Especially, the research on cognitive age (e.g. Barak, 1987; Barak & Gould, 1985; Barak & Schiffman, 2001) has drawn attention away from the biological to the psychological dimension of ageing, suggesting that younger cognitive age coincides with differences in life- and consumption styles. Cognitive age as a part of the self-concept is often defined as an individual's perception of himself in terms of age (Mathur & Moschis, 2005, p. 972). It builds on the insight that many people perceive themselves to be five to ten years younger than their biological age would suggest.

Schiffman and Sherman (1991) identified a number of other variables that differentiate the cognitively young among the elderly from the cognitively old. Especially, self-confidence, the feeling of control and good health as well as selective innovativeness are considered to differentiate well the subgroup of the new-age elderly from the traditional seniors (Schiffman & Sherman, 1991, p. 189 ff.). Other approaches for subdividing the grey markets were proposed in the literature, some conceptual in nature (e.g. Ahmad, 2003; Bone, 1991; Metz, 2006). Among the empirically-based studies, we can differentiate between a-priori segmentation approaches, which conceptually define the segments and assign the consumers on the grounds of their empirical profile to them, e.g. Weijters & Geuens (2003) for the Belgium 45+-market or Moschis (1992) for the American senior market. In contrast to a-priori segmentation post-hoc segmentation procedures identify homogeneous subgroups of a given data set by means of data analysis, e.g. clustering algorithms. Examples for post-hoc-segmentation studies in the grey market are Mathur, Sherman & Schiffman (1998) for the U.S. travel market; Guiot (2001) for the French senior women market and Sudbury & Simcock (2009) for the British market of older consumers.

Cross-national segmentation studies on the senior market seem to be rare. As the purpose of this research is to identify new-age elderly vs. traditional seniors in the European market, a post-hoc segmentation analysis based on the differentiating criteria identified by former research seems appropriate. We presume that the profiles of these two segments can be identified in the European Market, i.e. for this study in Germany and in Poland (H1). Taking the different stages of the two countries within the demographic transition process into account, we further assume that the percentage of new-age elderly will be larger in Germany than in Poland (H2). It furthermore seems plausible to assume that if these segments (new-age elderly and traditional seniors) can be identified they do not only differ in terms of their defined profiles, but also in terms of socio-demographics (H3a), psychographics (H3b) and buying aspects (H3c).

3. Methodology of research

For identifying traditional seniors and new-age elderly in Europe constructs and scales from previous research were employed. A preliminary study containing in-depth interviews with 50+ consumers was conducted in Germany. The results led to a questionnaire with multi-item scales for construct measurement, the validations of which are documented in the literature (Bearden & Netemeyer, 1999).

Cognitive age is among the psychological constructs that have received a lot of attention within the gerontology literature. There seems to be agreement in the literature that cognitive age is a good predictor of consumption patterns (Clark, Long & Schiffman, 1999; Moschis & Mathur, 2006; Szmigin & Carrigan, 2001; Wilkes, 1992) specifically better than chronological age or other psychological age constructs (e.g. Barak & Gould, 1985; Bone, 1991; Mathur & Moschis, 2005; Schiffman & Sherman, 1991). Cognitive age is widely recommended as a basis for building segments within the mature market (Gwinner & Stephens, 2001). This is especially true for differentiating between new-age elderly and traditional seniors (Mathur, Sherman & Schiffman, 1998, p. 270). Furthermore, international validations of the construct exists for France (Guiot, 2001), for Japan (Van Auken, Barry & Bagozzi, 2006), as well as for China, Korea and India (Barak et al., 2001).

For operationalising cognitive age, various basic approaches exist, of which the age decade scale that was development by Barak and Schiffman (1981) based on the works of Kastenbaum et al. (1972) is typically recommended (Stephens, 2001). The age-decade scale includes the dimensions of feel-, look-, interest-, do-age (Barak & Schiffman, 1981) and was extended later on by think- and health-age (Clark, Long & Schiffman, 1999). However, this approach implies that the age a person feels, thinks etc. is measured in decades ("as though I am in my ___ 'ies"). This scale strictly speaking only delivers categorical data – even though these are typically interpreted as being interval-scaled (Stephens, 2001) – and averages are calculated. In the following the 6-dimensional way of measuring cognitive age is used – yet not on a decade but on a precise age-scale to obtain ratio-scaled results. Furthermore, it is refrained from calculating an index from the six dimensions because of the reflective nature of the construct.

Furthermore, social activity (Chua, Cote & Leong, 1990) or sociability and perceived health as well as self-confidence, control over one's life and adventure are considered to be relevant variables for identifying new-age elderly (Mathur, Sherman & Schiffman, 1998, p. 269 f.). For measuring these constructs, 6-point Likert-scales are used ranging from "1 = totally disagree" to "6 = totally agree". Exemplified items are "I enjoy having people around" (Wilkes, 1992, p. 295) for sociability, "I am perfectly satisfied with my health" for health perception, "I am still finding new challenges and interests in my life" for adventure, "I am capable of almost everything if I really want it" for control (all from Mathur, Sherman & Schiffman, 1998, p. 269 f.), and "I think I have a lot of personal ability" (Wilkes, 1992, p. 295) for self-confidence. Other psychographic variables, buying behavior and socio-demographics (e.g. gender, age, marital status, income, and employment status) were included in the questionnaire.

The questionnaire was translated and backtranslated (Craig & Douglas, 2005) and deviations from the original version were double-checked by professional translators. Income and education categories were formed on the country level, yet in a corresponding way. Pre-test results led to minor adaptations of the questionnaire. Data was gathered through personal interviews with 50+-consumers. The sample was quoted according to the age-gender-stratification based on the data of the national statistic offices. The male population share in the age-range 50-54 years, for example, is 9.6% of the German 50+-population. Subsequently, the quota for the share of this group in the German sample was set to meet this number. With minor deviations the shares sought were achieved for the sample (see Appendix 1) and therewith representativeness in terms of the age-group-gender distribution for the countries. The average interview time was around 40 minutes. Pretest interviews reached up to 3,5 hours.

A total of 358 interviews with 50+-consumers were completed. The German sample held 252 interviews with a share of 45.6% male respondents and 54.4% female respondents. The Polish sample included 106 respondents, 43.4% of which were males and 56.6% females. The German sample was gathered primarily within the Saarland region in the South-West of Germany and the Polish sample in the region of Silesia in Southern Poland.

Reliability and explorative factor analysis were conducted for the country samples individually using SPSS 19.0. Self-confidence, control and adventure items were found to load on one factor. Cronbach alphas reached the 0.7 threshold and one-factor solutions were obtained for the constructs. Missing values were deleted listwise which led to a reduction of the data set by 33. The factor scores of the four constructs (cognitive age, sociability, perceived health and self-confidence/adventure) were saved on the country level and used as segmentation variables.

For the clustering procedure Punj and Stewart (1983) recommend combining the Ward- and k-means-algorithm. The hierarchical Ward procedure is used to obtain a starting solution for the partitioning cluster algorithm of k-means (Arabie & Hubert, 1994) that serves to optimize the Ward-solution. As the ward algorithm is known for being rather sensitive to the existence of outliers (Milligan, 1980), those were to be identified by employing a single-linkage clustering algorithm as the first step in the cluster analysis. The single-linkage procedure pointed to 4 outliers that were deleted from the data set, leaving 321 data sets for the further cluster analysis. The within-cluster sum of squares (Hair et al., 2006, p. 594) pointed to a two cluster solution (see Appendix 2) that was refined with k-means algorithm. The two-clusters were characterized using cross-tabulation and t-tests on the country level.

4. Empirical results

The cluster solution obtained identifies two 50+-segments with strongly divers profiles. The first segment displays by far lower cognitive age and much higher factors scores for sociability, perceived health as well as self-confidence/adventure than the second one. This segment corresponds to the profile of the new-age elderly as depicted by Schiffman and Sherman (1991) for the U.S. Market. The second segment exhibits a profile of high values for cognitive age, very low values for self-confidence, and low values for perceived health and sociability. This segment seems to correspond with traditional seniors and is named accordingly (see Figure 3).

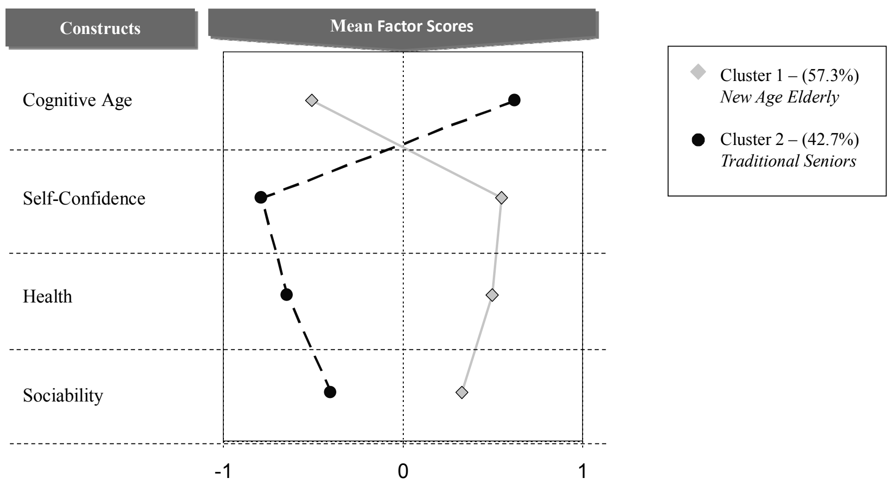

Figure 3. Cluster profiles of the new-age elderly and the traditional seniors

As assumed the size of the segments varies considerably by country. Whereas more than 60% of the German respondents correspond with the new-age elderly profile, the same is true for only 50% of the Polish respondents. With Poland proceeding farther in the process of demographic transition the size of this segment may approximate the German counterpart.

In terms of socio-economic description of the segments (see Table 1) we find traditional seniors in Germany with an average chronological age of 70 years, in Poland of approximately 68 years, significantly older than their new-age elderly counterparts with about 62 years in Germany and around 60 year of average in Poland. More obvious than the differences in chronological age are the differences in feel-age, especially when differential age (chronological age minus feel-age is calculated. Here we find 5 to 9 years of difference for traditional seniors in Germany and Poland, respectively, compared to 11 to 13 years of difference for new-age elderly in both countries. These findings are in line with the results of the existing literature on these segments in the U.S.

Table 1

Socio-economic profile of the segments

	Germany		Poland	
	traditional seniors	new age elderly	traditional seniors	new age elderly
Average Age	70.1	62.3	67.9	59.6
Feel Age	65.3	51.0	59.4	46.5
Differential Age	-4.8	-11.3	-8.5	-13.1
Sex (%)				
Male	46.4	45.0	41.5	45.3
Female	53.6	55.0	58.5	54.7
Marital Status (%)				
Single	8.3	5.3	0.0	1.9
Married	48.8	55.7	66.0	73.5
Divorced	9.5	10.7	7.5	5.7
Widowed	31.0	19.1	26.5	17.0
Remarried	2.4	9.2	0.0	1.9
Employment Status (%)				
Full-time position	25.0	40.5	13.2	41.5
Part-time position	3.5	10.7	3.8	9.4
Retired	65.5	34.4	77.3	34.0
Unemployed	0.0	1.5	1.9	3.8
Never employed	6.0	12.2	3.8	9.4
Other	0.0	0.7	0.0	1.9
Size of Household (%)	1.9	2.0	2.6	2.8
Number of Children	2.0	1.9	2.8	2.3
Number of Grandchildren	2.3	2.1	3.7	1.7
Income (%)				
<500 €/SL	2.8	1.2	15.1	3.8
500-999 €/SL	5.6	7.2	35.8	32.1
1000-1499 €/SL	18.3	12.0	26.4	30.1
1500-1999 €/SL	23.9	10.8	15.1	9.4
2000-2499 €/SL	22.7	9.6	5.7	3.8
2500-2999 €/SL	7.0	14.5	0.0	1.9
3000-3499 €/SL	8.5	13.3	1.9	1.9
3500-3999 €/SL	4.2	9.6	0.0	3.8
>4000 €/SL	7.0	21.8	0.0	13.2

It seems striking that in Poland regardless of segment, the divorce rate seems much lower than in Germany. We also find income categories to be generally lower than in Germany, yet in both countries higher income categories are more common for the new-age elderly than for the traditional seniors. This is most certainly due to the fact that a much higher percentage of new-age elderly are employed whereas a large percentage of the traditional seniors are retired. Household sizes seem to differ by country. The traditional seniors in Poland have on average many more children and grandchildren than any other segment depicted here.

For the psychographic and behavioral items, highly significant differences between the segments in both countries are obvious (see Table 2). New-age elderly favor more information and make more use of cell phones, computers and the internet, even though purchases on the internet are at a rather low level. However, computer, internet and cell-phone usage among the new-age elderly is higher in Poland than in Germany.

Table 2

Psychographic Profiles and Behavioral Patterns of the Segments

	Germany		Poland	
	new age elderly	traditional seniors	new age elderly	traditional seniors
1	2	3	4	5
Information/Communication (Technical usage)				
The more information the better	4.7*	3.9	4.3*	3.4
I regularly use my cell/mobile phone	3.5*	2.2	4.7*	3.8
I use my mobile phone for sms/photography	2.9*	1.8	4.1*	2.9
I am quite good at using a computer	3.3*	2.2	3.5*	2.2
I regularly use the internet	3.3*	2.1	3.5*	2.2
I often make purchases via the internet	2.3*	1.7	2.1*	1.4
I think computers are too complex to get involved (R)	3.0*	4.0	2.9*	3.9
Spending				
I am quite happy with the things I have, at my age you don't need as many things anymore	3.8*	4.5	3.7*	4.6
I have been a great saver all my life, now it is time to indulge myself	4.2*	3.5	3.9 (n.s.)	3.6
I would like to hand down to my children as much as possible	4.0 (n.s.)	3.8	4.5 (n.s.)	4.9
I would like to enjoy my life now and I am ready to spend a good share of my money on that	4.6*	3.7	4.3*	3.6
I regard quality to be very important when buying something	5.1**	4.8	5.1**	4.6
I always try to maximize the quality I get for the money I spend	5.4*	4.9	5.1**	4.6
When I buy something, I like to be sure I am getting my money's worth	5.6*	5.2	5.2 (n.s.)	4.9

Table 2 (continued)

1	2	3	4	5
Buying Experience				
When it comes to making buying decisions I often worry about making a mistake (R)	2.7 (n.s.)	2.9	2.9 ***	3.4
Even under pressure I make the right decisions regarding to what to buy	4.5*	3.4	4.3 ***	3.8
I have a lot of shopping experience	4.9*	4.0	4.7*	3.9
I am frequently doing new things that I haven't done before	3.6*	2.4	3.8*	1.9
At my age, new experiences are rare (R)	2.8*	3.6	9.4*	3.8
I am more independent than most people are	4.7*	3.6	4.8*	3.7
I have more control over my life than ever before	4.7*	3.7	4.2**	3.6
Innovativeness, Look, and Fashion				
I like to introduce new brands and products to my friends	3.2*	2.2	2.8 (n.s.)	2.3
I don't like to buy new products before other people do (R)	3.9*	4.6	3.4 (n.s.)	3.7
I like to try new products to see what they are like	3.8*	2.7	2.8 (n.s.)	2.6
The changing styles especially in clothes are a waste of money (R)	3.5***	3.9	3.2 **	3.9
I tend to be a fashion leader rather than a fashion follower	3.9*	2.7	3.3 (n.s.)	3.1
I am very concerned about the way I look	4.6*	3.5	4.3*	3.6
To me it is very important to always make a well-tended impression	5.1*	4.4	5.0**	4.6
I don't care so much about my appearance (R)	1.8*	2.5	2.4**	3.0
I usually have one or more outfits that are of the very latest style	4.4*	3.1	4.3*	2.9
When I choose between the two, I usually dress for fashion – not for comfort	3.7*	3.0	3.4**	2.8
I am proud that people can't tell my age	4.4*	3.4	4.7*	3.9
I think I look younger than other people my age	4.5*	3.2	4.2*	3.5

* $p < 0.01$
** $p < 0.05$
*** $p < 0.1$
(n.s.) = not significant

Scales see Bearden & Netemeyer (1999).

In terms of spending-related items, the degree of frugality seems significantly higher for traditional seniors than for new-age elderly. The latter like to indulge, enjoy their lives and are ready to spend quite some money on that. These differences are highly significant in Germany, for Poland the results rather indicate tendencies. We also find a stronger emphasize on quality purchases for the new-age elderly than for the traditional seniors in both countries. There are no significant differences in both countries as to the aim of handing down as much as possible to one's children. This may indicate that in spite of considerable changes in life-and consumption style, some values within the 50+-market seem to be carried forward to a certain extend.

The degree of self-confidence, independency and new experience is much higher for the new-age elderly in both countries – in a general as well as within a shopping context. In contrast, the degree of innovativeness among the new-age elderly is only in Germany significantly higher than that of their traditional counterparts. It seems rather surprising that the Polish new-age elderly are not so curious about new product-trial. They exhibit innovativeness values at about the level of the traditional seniors. Yet, in both countries, new-age elderly are more fashion-oriented and care much more about their look and appearance than the traditional seniors.

In terms of actual spending behavior and intention, the questionnaire held some specific categories like refurbishment, buying a new car or computer. Respondents were asked to which categories they contributed major spendings within the last four years and for which they are planning to do so within the next four years (percentages given in Figure 4). Especially future spending seems country- as well as segment-specific. For the last four years, in both countries refurbishment, car and travel were named most often for major spending by both segments. New-age elderly typically named more often the three major spending categories with the exception of refurbishment. Whereas, the smaller spending like computers or bikes were mostly bought to a larger percentage by traditional seniors. For the spending planned in the future, travel dominates the spending of the German 50+-consumers, yet for new-age elderly to a much larger degree. In contrast, refurbishment prevails as major spending among the Polish 50+-consumers, followed by a considerable percentage of Polish new-age elderly that plan to buy cars. In general, the Polish new-age elderly seem to be the most promising segment in terms of future spending here – except for travel.

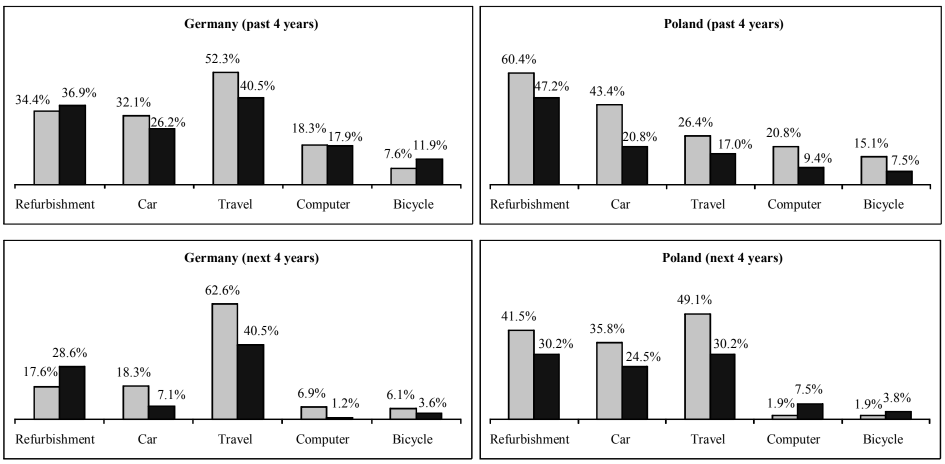

Figure 4. Percentages of respondents that have spent or are willing to do so per category

Conclusion

It was the aim of this study to analyze whether the segments described in the American 50+-literature, namely the traditional seniors and the new-age elderly that represent traditional vs. newer life- and consumption styles, could also be identified for the European market. Based on the works of Schiffman and Sherman (1991) and Mathur, Sherman and Schiffman (1998), the characterization of these segments led to a multi-item scaled questionnaire that was pretested, refined and eventually used for personal interviews amongst 50+-consumers in Germany and Poland. A sample of 352 respondents representative in terms of gender and age-group was gathered in both countries. By means of cluster analysis two segments were identified. In support of hypothesis 1, their profiles correspond to the segments described in the U.S. literature. This leads to the assumption that traditional seniors and new-age elderly can also be identified for other countries within the European market. In support of hypothesis 2, the new-age elderly segment was considerably smaller in Poland than in Germany. Moreover, the analysis produced clear profiles of the segments in both countries in terms of socio-demographics, psychographics and buying aspects (hypotheses 3a-3c). Thus, this study provides some evidence for the cross-national existence of the two segments named new-age elderly and traditional seniors contributing to the statement by Wedel and Kamakura (2002, p. 181): "Consumers in different countries often have more in common with each other than with other consumers in the same country."

More research is needed in the area of 50+-segmentation studies, especially with reference to the European market. Empirical evidence on the existence of traditional seniors vs. new-age elderly would be valuable for all EU-member states. The size of the new-age elderly segment in the German market may lead to the question if this approach is refined enough to depict the diversity of the 50+-market with a two-segment approach. A closer look at subgroups that might exist and that are able to contribute to explaining more variance in buying behavior among the 50+-consumers in Europe would contribute to research and management insight alike.

Marketing managers might hesitate to further segment the 50+-market but as pointed out at the onset the sheer volume of consumers might already justify this attempt. When taking the buying power ratio of this market into account marketing managers should be eager at specifically targeting subgroups. Moreover, when analyzing the whole of the European 50+- market, one might find a larger number of cross-national segments on a more refined level. Cross-national segments would render the question of standardization vs. adaptation within international marketing management obsolete. If marketers succeed in identifying cross-national segment profiles, they should be able to suit customers' needs and at the same time implement their marketing program efficiently on an international basis. However, this study has shown, that even when cross-national segments exist, there might be some country-specific differences in their profiles. Why the Polish new-age elderly lack the degree of innovativeness that this segment exhibits in other countries is a question that has to be left to further research. Companies might want to refrain from introducing new products and services targeted to the new-age elderly into the Polish market first.

Besides the question of cross-national segments, the level of segmenting a market needs to be tackled. This study offered a general – in terms of non-product specific − approach to segmenting the 50+-market. For specific industry needs further product- or category-specific segmentations might be added to characterize the segments further with regard to their product-specific attitudes and product-specific buying behavior.

Eventually, longitudinal studies in the field of 50+-market segmentation are needed to analyze segment stability over time. Findings in this area could possibly shed more light on the question of how to differentiate between ageing and cohort effects. This would contribute largely to projections of 50+-life- and consumption styles in the more distant future.

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Appendix 1

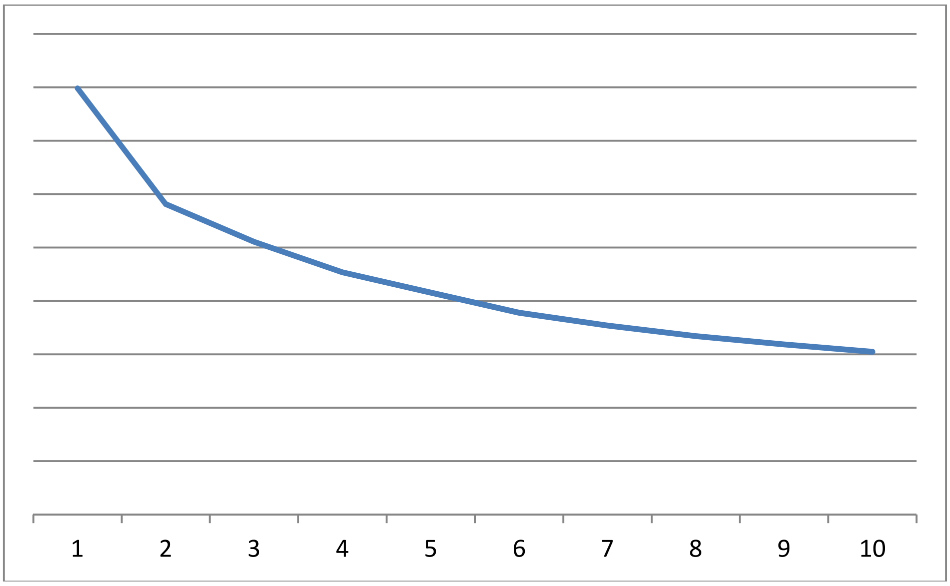
Quotas for the country samples and deviations

Country	Age	Male				Female			
		% in population[1]	sample quota	sample gathered	deviation	% in population[1]	sample quota	sample gathered	deviation
Poland	50-54	11.6%	12	12	0	12.2%	13	13	0
	55-59	10.1%	11	11	0	11.3%	12	12	0
	60-64	6.6%	7	7	0	7.9%	8	7	1
	65-69	4.9%	5	4	1	6.4%	7	7	0
	70-74	4.3%	5	5	0	6.5%	7	7	0
	70-79	3.3%	4	4	0	5.8%	6	6	0
	80-84	1.8%	2	2	0	4.0%	4	4	0
	85+	0.9%	1	1	0	2.5%	3	4	-1
Germany	50-54	9.1%	23	24	1	9.1%	23	23	0
	55-59	8.2%	21	21	0	8.3%	21	21	0
	60-64	6.6%	17	15	-2	6.8%	17	15	-2
	65-69	8.0%	20	20	0	8.7%	22	22	0
	70-74	6.1%	15	15	0	7.2%	18	18	0
	75-79	4.0%	10	11	1	5.6%	14	16	2
	80-84	2.3%	6	6	0	4.6%	12	13	1
	85+	1.4%	4	3	-1	4.0%	10	9	-1

[1] Sources: National Statistic Offices for the countries.

Appendix 2

Elbow-Criterion for determining the number of clusters within-cluster sum of squares



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