

Stereotypes of Old People Persist

A Swedish “Facts on Aging Quiz” in a 23-year Comparative Perspective

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Abstract

In 2005, as well as in 1982, almost 90 percent of Swedes subscribed to the stereotype that retirement pensioners suffer from loneliness and more than half of Swedes also believed that pensioners suffer from boredom and dissatisfaction with life.

Little seems to have changed for the better, or even impaired with regard to the images of the psychological conditions of pensioners, at the same time as Swedes have become somewhat more knowledgeable about the physiological/material conditions associated with aging. This follows from a 2005 follow-up of a Swedish Facts on Aging Quiz, first given in 1982. The comparatively stable pattern of stereotypes over the 23-year period indicates that stereotypes – in old, well-known or permuted forms – will prevail as long as their ageist roots do. The changes observed indicate the possibility of a future pattern of stereotypes, which combines an exaggerated “positive” image of retirement pensioners’ health and wealth, with associated envy of the “greedy geezers”, and pity for their lonely and meaningless lives.

Keywords: attitudes, ageism, stereotypes, old people, discrimination, social gerontology, Sweden

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Background and Aim

How does knowledge about and images of old people change in societies where increasing information about certain age-related problems appears alongside massive information that is both positive and prejudice-reducing?

In a recent North American study, Abramson and Silverstein (2006) were able to compare the American knowledge level in 1994 and 2004, utilizing results from identical versions of the *Facts on Aging Quiz* at both points in time. At both occasions, they conducted telephone interviews with random samples of American citizens across the continental United States.

In their 10-year perspective, they found that the mean number of correct responses to the Quiz was exactly the same both years, although there was some variation in responses to individual items. On average, the American respondents gave correct responses to around 50 percent of the statements in the Quiz. In their reflections on this result, Abramson and Silverstein (op. cit.) posed the question of how new medical research findings, new stories or political debates might have affected the outcome of the Quiz. What, for example, is the impact of the extensive coverage of Alzheimer's disease on the knowledge level? And, we might add, what impact has the increasing amount of positive information had? Although it may seem impossible to disentangle these effects, the main question is still interesting: What long-term changes occur in knowledge about and images of old people in societies with this kind of double discourse in the information flow? Does it result in a generally increased or generally decreased knowledge level, or does it manifest itself in double discoursed knowledge about old people?

The aim of the present study is to examine whether and how there has been any change in knowledge/images during an observation period twice as long as that of the above North American study - in a country (Sweden) where considerable effort has been made to create a better life and more positive images of old people, at the same time as a great deal of attention has been given to, for example, Alzheimer's disease and

to predictions of an upcoming and for the whole of society problematic demographic boom in the senior population.¹

Given that, over this period of 23 years, Sweden has invested a great deal in gerontological research and campaign-like political efforts to create more positive images of aging and old age, we may expect Swedes in general to have become more knowledgeable and less stereotyped in their thinking regarding certain factual conditions of retirement pensioners, while the problem-oriented debate in society might have worked in the opposite direction – creating more negative images. Besides the above-mentioned focus on Alzheimer’s disease, we may also mention that the media in Sweden have been focusing, for at least a decade, old people’s unfulfilled needs for home help and rooms in nursing or residential homes, which together may lead to an image of retirement pensioners as being more frail and vulnerable than is actually the case.

Knowledge – Images – Stereotypes

The present focus on *knowledge, images and stereotypes* originates from an early work (Tornstam 1979a) on attitudes toward old people, where we observed that many of the studies at that time tapped a blurred mix of *knowledge* or lack of knowledge about old people, positive versus negative *emotions* toward old people, and actions or *behavior* directed toward

¹ Besides a substantial targeted governmental investment in gerontological research, there have been several political ventures aimed at elucidating the positive content of aging. Within the past decade, starting in 1998, an important commission worked under the heading “Riv ålderstrappan” [Tear down the age barrier SOU: 2002]. This work finally resulted in 100 political propositions in the report SOU 2003:91 [Senior Citizen 2005], which was given to the parliament. Before this, just about every important Swedish organization as well as all important voluntary organizations were supplied with a “pro-old-age report” SOU 2002:29 and asked for their opinions and additional suggestions on how to create a situation of better and more positive aging for Swedes – this also included attitudes toward and knowledge about aging and old people. Also, between 1982 and 2005, The National Board of Health and Welfare produced no less than 180 reports/publications/books aiming at better conditions for, and better understanding and knowledge of old people.

old people. Palmore (1982) also considered that many studies of what were described as attitudes toward old people confounded emotions concerning and knowledge about old people. The argument at that time was that we in gerontological studies needed to separate these dimensions, something that had long been suggested in more general and seminal works on the study of attitudes (e.g., Thurstone 1929; Kretch & Crutchfield 1948; Green 1954; Katz 1960).

Even if Kite et al. (2005) have presented a nice meta-analytic review of studies, that has appeared by April 2000, on attitudes toward younger and older adults, it is today difficult to find any fresh developments within studies on attitudes toward old people. Most related studies are now developed and conducted within the conceptual framework of "ageism". But, even if related contemporary studies have shifted their conceptual framework from "attitudes" to "ageism", the advice about making the above-mentioned distinctions still holds. In line with Kite and Smith-Wagner (2004), we consider that contemporary studies of ageist attitudes still need to separate the dimensions of *cognitions*, *emotions* and *behavior*, regardless of how the terminology may have developed. This remark about terminology is made because some contemporary writers seem to connect the term "attitudes" only with the emotional or evaluative dimension (e.g., Atchley 2000). However, the studies presented here focus entirely on the cognitive dimension, which has traditionally been regarded as part of the "attitude" concept, but which can just as well be understood as part of "ageism". Palmore (1998, 2005) states that his *Facts on Aging Quiz* can be understood and used as an indirect measure of ageism.

However, since we are working with a cognitive "knowledge" concept embedded in other concepts such as attitudes and ageism, we cannot equalize this knowledge with for example knowing or not knowing how to solve a mathematical equation. The "knowledge" we are talking about is bordering to *images* about retiremet pensioners, which in turn borders to the concept of *stereotypes*.

It was Walter Lippman (1922) who first used this term to refer to 'the picture in the head' people generally have of social groups. Stereotypes are often, but not necessarily, negative and far from reality. In theory, a stereotype could be both positive and in tune with reality, but when we

social scientists use the term, we are mostly referring to perceptions that are both negative and inaccurate (Haslam 2004). Thus, when we find that almost 90 percent of Swedes falsely believe that one in two retirement pensioners suffer from loneliness, we can safely call this belief or image a stereotype.

Stereotypes are however not simple and homogeneous, but complex and multiple (Hummert 1990; Hummert et al. 1994). But, as pointed out by Palmore (1990), even if stereotypes can be both “positive” and “negative”, underlying them is always the ambition to belittle old people. Expressions such as “the lonely retirement pensioner”, “the senile fool” and the “sweet old lady” all tell us that old people are worthy only of our contempt or pity. Viewed in this way, all stereotypes, both “positive” and “negative”, constitute ways of exerting power (Fiske 1993; Pickering, 2001).

Inspired by the first *Quiz on Aging* presented by Palmore (1977), we began in 1982 with a study on what Swedes knew, or thought they knew, about old people. The first version of the Swedish Quiz (which was not a mere translation of Palmore’s Quiz) (Tornstam 1979b) included 26 well-evidenced factual statements; these were reduced to 13 statements in the second and final version. Selection of statements for the final Quiz was based on an analysis of the discriminatory power of each statement, that is the power each statement had to distinguish between individuals with good and poor knowledge. In 1982, the final 13 statements were then used in a representative Swedish mail survey, which was replicated in 2005.

The Quiz

Below is a list of the 13 statements together with comments on their factual content. A series of critical points against the Quiz follows the presentation of the Quiz.

1. More than 10 percent of retirement pensioners are bed-ridden.

The statement is false. SOU 1977 [Retirement Investigation] found that, at that time, 2.8 percent of retirement pensioners were partially bed-ridden and an additional 0.9 percent totally bed-ridden. Given that health conditions among old people have improved since the seventies, we have rea-

son to believe that these percentages are even lower today, but no contemporary comparable data are available.

2. Half of retirement pensioners have impaired hearing, that is, difficulties understanding a conversation between several persons.

The statement is false. SOU 1977 [Retirement Investigation] showed that only 30 percent of retirement pensioners experienced hearing difficulties at that time, and Statistics Sweden On Line shows that today's corresponding percentage is 28 percent.

3. Older workers have accidents at work more often than younger workers do.

The statement is false. Current statistics and statistics from 23 years ago show just the opposite. Older workers tend to have fewer accidents at work (Statistics Sweden On Line 2006).

4. Almost three quarters of retirement pensioners often visit with relatives and friends.

The statement is true. Almost every Swedish gerontological study shows this (SOU 1977 [Retirement Investigation]; SOU 1993:111, 1993; SOU 2003:91).

5. Almost half of retirement pensioners often feel lonely.

The statement is false. Data from 1977 show that 8–10 percent of retirement pensioners *often* feel lonely (SOU 1977). More recent data also reveal the same figures (based on a sample of 1,771 Swedes in the age range 65–104 years – gathered for another purpose in 2001 and accounted for in Tornstam, 2005.)

6. Almost half of retirement pensioners feel bored and unsatisfied with their life at present.

The statement is false. A large majority, around 75 percent, of retirement pensioners feel quite or very satisfied with life (SOU 1977). In the above-mentioned sample from 2001, only 3 percent of respondents in the age range 65–104 feel quite or very dissatisfied with their current life in general. A large majority, 87 percent, feel quite or very satisfied.

7. More than 25 percent of retirement pensioners live in apartments that lack modern conveniences.

The statement is false. Already in 1977, 80 percent lived in fully modern apartments according to the standards of that time (SOU 1977 [Retirement

Investigation]). Today, few if any retirement pensioners live in apartments without modern conveniences (personal communication with The Institute for Housing Research at Uppsala University). We have no statistical data on this after 1990, however, as this type of individual household level information has been dropped for reasons of integrity.

8. Less than half of retirement pensioners can handle an unexpected expense of SEK 3,000 (SEK 14,000 in the 2005 study²).

The statement is false. In 1982, 80 percent of retirement pensioners could handle an unexpected expense of SEK 3,000, and in 2002–2003, 90 percent could handle an unexpected expense of SEK 14,000, which is today's equivalent when adjustments are made according to the price index (Statistics Sweden On Line 2006).

9. More than a fourth of retirement pensioners own or have access to a summer cottage.

The statement is true. According to SOU 1977 [Retirement Investigation], at that time 30 percent of retirement pensioners owned or had access to a summer cottage. The corresponding figure for 2002–2003 was 37 percent (Statistics Sweden On Line 2006).

10. More than half of retirement pensioners have poor eating habits.

The statement is false. SOU 1977 [Retirement Investigation] showed that the quality of the food eaten by retirement pensioners was equal to that eaten by the rest of the population. According to Health in Sweden (2001), eating habits have generally improved among Swedes, and old people do not stand out as a “risk group” with regard to eating habits.

11. More than one in five retirement pensioners live in confined quarters.

The statement is false. According to SOU 1977 [Retirement Investigation], 7 percent lived in confined quarters at that time. The situation has improved. Statistics Sweden On Line 2006 reports that in 2002–2003 only 3 percent of the population 65–84 years of age lived in confined quarters.

² SEK 14,000 = USD 1,988 (November, 2006).

12. More than one in three retirement pensioners live in their own small, self-contained house.

The statement is true. In 1980, 43 percent of all households with at least one person 65+ lived in small self-contained houses. The corresponding figure for 2002–2003 is 54 percent (Statistics Sweden On Line 2006).

13. More than one in five retirement pensioners live in an institution (nursing or residential home, geriatric ward, etc.).

The statement is false. In 1980, the proportion of retirement pensioners living in an institution was 8.2 percent. In 2004, the corresponding figure was 7.2 percent (Äldreprojektet 2000 [Questions and Answers on Older People and Care]; Socialstyrelsen 2005 [National Board of Health and Welfare]).

Objections to the Quiz

With some justification, statements of the type used in this quiz have been criticized for their leading character. It is often said that it is easier to agree with the content of a statement than to disagree. This type of criticism, however, is more relevant when different kinds of emotional attitudes are the target. In our case, respondents were expressly asked to decide whether the content of the statement agreed with reality or not – if the statement was true or false – emphasizing that each statement was either true or false.

Another objection to statements such as these is that their wording sometimes makes the boundary between true and false quite narrow. For example, statement 1 is false, because only 3.7 percent of retirement pensioners are fully or partially bed-ridden, but the distance to the “More than 10 percent” in the statement is only 6.3 percentage points. An objection to the objection is that the quiz asks whether it is true or false that *more than* 10 percent are bed-ridden. It does not ask whether a specific percentage is true or false. In other statements, the difference between the wording of the statement and the key limit value is larger, as in statement 5, where respondents had to decide whether it was true or false that almost 50 percent of retirement pensioners often feel lonely. In this case, the distance to the “key value” is 40 percentage points, as no more than 8–10 percent of Swedish retirement pensioners often feel lonely.

Yet another objection is that the respondents are requested to express their understandings of "retirement pensioners" as a homogeneous category, which of course they are not. Other results would probably be obtained if the statements were related to people in different phases of aging, as suggested by some stage theories (e.g., Atchley 1997). The outcome of the Quiz would probably also be more nuanced if the statements were consistently worded so that the task was to decide whether the statement is representative of a majority of retirement pensioners. Shonfeld (1982) found that the stereotyped image of, for example, loneliness was significantly less common when the respondents had to decide whether a statement was representative of at least 80 percent of retirement pensioners.

Furthermore, the wordings of some statements may be unclear. How have, for example, the respondents interpreted "Older worker" in statement 3, and what misinterpretations might have been caused by beginning statements with the word "almost"? Respondents may have answered right or wrong, but for the wrong reason. For example (statement 6), when stated that "almost half of retirement pensioners feel bored and unsatisfied with their life at present", someone may have answered that this is wrong because he or she believes that the figure is even higher.

A final objection may be that only three of the thirteen statements are true, which may lead to an increased number of incorrect responses. The average number of correct responses might have been higher if more of the statements had been true. Thus, the knowledge level as measured by the thirteen statements cannot be interpreted in any absolute sense. However, comparisons between groups and points in time are nevertheless meaningful, because we are comparing responses to identical items.

To sum up, a quiz such as this is not without its flaws, but when comparing results from two points in time and focusing on change, much of the above criticism is not pertinent, as we are comparing responses to the very same written stimuli. However, we should take care not to attribute any absolute value to the percentages of respondents who have responded in one way or another to the statements, nor to the average levels of correct responses. We must look upon the Quiz as an instrument that provides a rough picture of the nature of knowledge about and

images of retirement pensioners, of common conceptions and how these have changed during the 23-year period under study.

The Surveys in 1982 and 2005

In 1982, a mail survey was sent to a random sample of 2,040 Swedish inhabitants in the age range 15–75 years. The net sample after deaths, emigration, etc., was 2,025 individuals, of which 1,293 returned the questionnaire. This corresponds to a response rate of 64 percent of the net sample.

In 2005, a mail survey was sent to random sample of 2,001 Swedish inhabitants in the age range 16–85 years. The net sample after deaths, emigration, etc., was 1,918 individuals, of which 1,015 returned the questionnaire and an additional 265 were interviewed by telephone. In all, 1,280 individuals participated, which correspond to 67 percent of the net sample. At both points of time the official register of the whole Swedish population constituted the population universe, from which the sample was drawn.

As a simple test of demographic representativity of the respondent groups in each study, they have been compared with the whole Swedish population with regard to age distribution within the age span studied. In both 1982 and 2005, the age distribution of the respondent groups matched the corresponding age distribution in the Swedish population at the corresponding time, as tested by χ^2 for goodness of fit. Since the respondent groups mirror the corresponding whole Swedish population as to the age distribution, we know for sure that they are representative in this regard, and can by way of precaution assume that they not are selective in other regards.

The questionnaires sent out in 1982 and 2005 contained the same Quiz. For each statement, the respondent was asked to decide whether the statement was true or false. In addition to the Quiz, the questionnaires also requested information on a common set of background variables.

Whenever the results from the two surveys are directly compared, the age span is restricted to 16–75 years in both studies. Statistical differences between the two points of observation have been done with a sim-

ple mean difference test (M1-M2), as described by e.g. Bohrnstedt and Knoke (1982). Within-years comparisons have been done with ANOVA.

Comparative Overview

Table 1 provides, statement by statement, a summarizing comparison of the Quiz results in 1982 and 2005. Because one of the aims of both the 1982 study and the 2005 study was to identify stereotyped attitudes toward old people, the percentages in the table reflect the proportions of respondents who gave *incorrect* responses to the true/false questions. Thus, in 1982, 56 percent of respondents wrongly believed that more than 10 percent of retirement pensioners were bed-ridden. In 2005, the proportion of these “less knowledgeable” respondents dropped significantly to 46 percent.

Taking an overall look at Table 1, we can observe three patterns. First, after 23 years of research on social gerontology, governmental investments in the area and political efforts, a large proportion of Swedes still seem to subscribe to false images of retirement pensioners. Although, for example, there has been a significant drop in the proportion who have a “bed-ridden image” of retirement pensioners (statement 1), almost half of the population still seem to subscribe to this image. Remember, however, that all percentages in a quiz such as this must be taken with several grains of salt.

Second, some statements seem to show that Swedes have become more knowledgeable. For statement 12, for example, we note a considerable drop in the proportion of Swedes who seem unaware of the fact that more than one in three (in fact one in two nowadays) retirement pensioners live in their own small, self-contained house. This particular unawareness has dropped from 74 to 51 percent during the 23-year period.

Considerable drops in unawareness are also seen for the images of retirement pensioners as having poor eating habits, living in institutions, and having poor social contacts.

On the other hand, there is also one false image that seems to be more widely spread today. This is the image of bored retirement pensioners who experience no life satisfaction. As shown in Table 1, acceptance of the false statement 6 has increased from 54 to 64 percent during the 23-year period.

Table 1. Comparing Quiz results in 1982 and 2005.

	Statement	True or false	Percentage incorrect responses 1982	Percentage incorrect responses 2005	Difference in percent -age points
1	More than 10 percent of the retirement pensioners are bed-ridden.	false	56%	46%	- 10**
2	Half of the retirement pensioners have impaired hearing, that is difficulties to participate in a discussion with several persons	false	69%	63%	- 6**
3	Older workers more often meet with accidents at work in comparison with younger workers	false	30%	27%	- 3 ^{ns}
4	Almost three quarters of the retirement pensioners often meet with relatives and friends	true	57%	45%	- 12**
5	Almost half of the retirement pensioners often feel lonely	false	87%	86%	- 1 ^{ns}
6	Almost half of the retirement pensioners feel bored and unsatisfied with their life at present	false	54%	64%	+ 10**
7	More than 25 percent of the retirement pensioners live in apartments without modern conveniences	false	42%	44%	+ 2 ^{ns}
8	Less than a quarter of the retirement pensioners can handle an unexpected expense of 3,000 kr (14,000 kr in the 2005 study)	false	56%	61%	+ 5*
9	More than a fourth of the retirement pensioners themselves own, or have in another way access to a summer cottage	true	58%	51%	- 7**
10	More than half of the retirement pensioners have poor eating habits	false	65%	51%	- 14**
11	More than every fifth retirement pensioner live in confined quarters	false	29%	29%	0 ^{ns}
12	More than every third retirement pensioner live in their own small self-contained houses	true	74%	51%	- 23**
13	More than every fifth retirement pensioner live in an institution	false	49%	37%	- 12**

Year 1982: 1.245 Swedes 16–75 years. Year 2005: 1.174 Swedes 16–75 years

* p<.05 ** p<.01 ^{ns} not significant.

On the other hand, in light of the Swedish debate on Alzheimer's disease and on the unfulfilled needs for home help and sheltered housing, we might expect the false statements regarding retirement pensioners being bed-ridden, hard of hearing and living in institutions to have received more incorrect responses, yet they have not. On the contrary, the proportion of incorrect responses to these items dropped by 7–12 percentage points from 1982 to 2005. This would seem to indicate that the connection between information flows in society and knowledge level/images is not a simple one.

The third general observation that may be made from Table 1 is that the profile or rank order of false images or stereotypes has changed. If we accept the operational definition that a stereotype exists when more than half of the population incorrectly accepts the content of an item, the Table 2 can be said to show the top five stereotypes of 1982 and 2005.

In both rank orders, the image of the lonely retirement pensioner is at the top, and during the studied period there has been no change in the proportion of Swedes who believe this – almost 90 percent. This corresponds quite well with what was found in an early Swedish study, where a number of Swedes were asked to name the kinds of everyday problems people of different ages have to deal with. Out of the 684 participants in the study, 90 percent mentioned loneliness as a particular everyday problem for old people (Tornstam 1981).

Both top five rank orders display a mixture of images including psychological, social, physiological, material and housing deficiencies. In the 1982 rank order, four of the five images are of the physiological/material kind, whereas three are of this kind in the 2005 top five rank order. In other words, psychological problems – loneliness together with lack of life satisfaction – are given more prominence in the 2005 rank order. This may indicate a slight shift in the balance between images of the psychologically miserable retirement pensioner, on the one hand, and the physiologically/materially less miserable pensioner, on the other.

Within the pattern of, generally speaking, slightly better knowledge in 2005, Swedes are somewhat less ignorant of physiological/material conditions, while the false images of psychological deficiencies seem to be the same or more prominent than in 1982. The proportion of Swedes who falsely believe that one in two retirement pensioners is bored and

Table 2. Rank order of stereotyped images. Percent Swedes believing in the false image in parentheses.

	Year 1982	Year 2005
1	Loneliness (87%)	Loneliness (86%)
2	Not living in self-contained houses (74%)	No life satisfaction (64%)
3	Impaired hearing (69%)	Impaired hearing (63%)
4	Poor eating habits (65%)	No money for unexpected expenses (61%)
5	No access to summer cottage (58%)	Not living in self-contained houses (51%)

unsatisfied with life has increased from 54 to 64 percent during the 23-year period.

The above observation can be illustrated by comparing how the respondents on average have responded to the two types of items at the two points in time. Since the items regarding loneliness and lack of life satisfaction have increased in relative rank order importance, and since they logically belong to the same type of inner psychological conditions, we have found it appropriate to single these two items out and comparing them with the rest of the items, which all target conditions possible to more or less objectively observe – they are not psychological.

In Table 3, for simplicity we have switched our focus to the number of correct responses. Table 3 shows that the total mean of correct responses was slightly higher in 2005 than in 1982. In 1982, respondents on average were able to provide 5.6 correct responses to the 13 statements, and 23 years later, the average number of correct responses increased to 6.3. When this is expressed in percentages, it corresponds to an increase from 43 to 48 percent correct responses. This is a statistically significant difference, but certainly not a great increase. And, at the same time, the differences in the number of correct answers *within* the respondent groups were quite considerable at both points in time, as measured by standard deviation, which at both points in time was 2.6.

The average slight increase in the average number of correct answers not only hides the considerable variation at both points of time, but also the differences between individual statements as described in Table 1,

Table 3. Average number of correct responses to statements on psychological versus other matters in 1982 and 2005. Average percent correct responses^a in parentheses for better comparability.

	Year 1982	Year 2005
Mean number of correct responses to statements tapping psychological matters (statements 5,6, Range 0-2)	0.6 (30%)	0.5*** (25%)
Mean number of correct responses to statements tapping other matters (statements 1-4, 7-13, Range 0-11)	5.0 (45%)	5.8*** (53%)
Total mean of correct responses (all 13 statements, Range 0-13)	5.6 (43%)	6.3*** (48%)

^a (Mean value divided by number of items) x 100 ^{ns} not significant *** p<.001.

and the differences between the above-mentioned two groups of statements.

Table 3 shows that the mean number of correct responses to the statements tapping knowledge of psychological matters (statements 5 & 6) is somewhat lower in 2005 than in 1982,³ while the mean number of correct responses to the remaining statements, basically tapping knowledge of physiological/material conditions, is higher in 2005. Thus, generally speaking, we find that with regard to images of the physiological/material conditions of retirement pensioners, Swedes seem to have become slightly more knowledgeable over the 23-year period. On the other hand, as mentioned above, regarding knowledge of the psychological conditions of retirement pensioners, Swedes have become somewhat less knowledgeable. The result of this, as Table 3 also demonstrates, is that the gap between the knowledge level regarding psychological matters and other matters has increased. The knowledge level, relatively speaking, is much lower regarding psychological matters in comparison with others, and this difference has increased from 15 percentage units in 1982 to 28 percentage units in 2005. Thus, it seems as though the joint

³ The standard deviation for these two items taken together is smaller - around 0.68 at both points in time.

impact of the aforementioned double discourse information flow in Swedish society may have been an increase in knowledge of the more easily observed physiological/material conditions and a decrease in knowledge of the more difficult-to-observe psychological conditions of retirement pensioners.

Who Are the Less Knowledgeable?

In the study from 1982, we found some simple and some puzzling correlations to the level of knowledge about retirement pensioners. Easy to understand, and echoing Abramson and Silverstein's (2006) results from 2004, is the fact that older respondents gave more correct responses than did younger respondents – the statements are, after all, about a category to which they themselves belong or are at least nearer. Less easy to understand was the fact that, in 1982, the younger and better educated respondents were *less* well-informed. This result is not in line with what Abramson and Silverstein (2006) found.⁴ At both points in time, they found that knowledge level correlated positively with educational level.

Back in 1982, our tentative explanation for the negative correlation we found was that much of higher education at that time had a problem orientation to reality (Tornstam 1983). You learned to see various kinds of problems everywhere. In addition, Swedish social gerontology at that time had much the same outlook – a tendency to search for and project various kinds of problems onto old age, thus creating a misery image.

This is in contrast to today's tendency to apply a salutogenic perspective, inspired by Antonovsky (1987) and others.

However, as can be seen in Table 4, the 2005 study gives another result. As in the 1982 study, the older respondents score higher on the "total number of correct responses scale", regardless of educational level.

Educational level, however, is no longer inversely related to the knowledge scale among the younger respondents, as it was in 1982. On the contrary, regardless of age, the respondents with a longer education

⁴ In line with the findings of Abramson & Silverstein (2006), however, is that women seem to be slightly less informed than men are. But, the difference is so small ($\eta = .075$) that we have chosen to disregard it in the analysis.

Table 4. Average number of correct responses in 1982 and 2005, controlling for age and education. Percentage correct responses in parentheses.

		1982		2005	
		16-45*	46-75 ^{ns}	16-45*	46-75*
Education	Less***	5.4 (42%)	6.2 (48%)	5.6 (43%)	6.6 (51%)
	More***	4.9 (38%)	6.2 (48%)	6.0 (46%)	7.1 (55%)

* p<.05

*** p<.001

^{ns} not significant

score slightly higher than do those with a shorter education.⁵ The difference is minimal, but still in the opposite direction in comparison with the younger respondents in the 1982 study. We shall take a closer look at this by distinguishing the two above-mentioned types of images – the images of psychological matters and the images of basically physiological/material matters.

In the above, we have demonstrated that the level of knowledge regarding retirement pensioners seems to depend on the direct experiences that come with age, but also, in part, on the knowledge that comes, directly or indirectly, with education. In order to find the relative importance of these two sources of knowledge, we have performed a series of MCA analyses⁶ on the datasets from 2005 and 1982, where also gender has been controlled for.

⁵ In Table 4, the education variable has been dichotomized as to create a 60/40 percent split of respondents with less/more education, in 1982 resulting in a split between 9 and 10 years of education, and in 2005 between 12 and 13 years of education. Applying the 1982 split between 9 and 10 years of education on the 2005 data creates a very skew and technically difficult distribution, but principally the same outcome as that presented in Table 4.

⁶ Multiple Classification Analysis (MCA) is a type of variance analysis (ANOVA) that allows any kind of data, even categorical data. As with an ordinary regression analysis, it produces beta values showing the relative importance of an independent variable when the others are controlled for.

Table 5. Relative importance of age and education to knowledge according to MCA analysis.

	Beta values on scale measuring number of correct responses to the items on psychological matters (statements 5,6)		Beta values on scale measuring number of correct responses to items on other matters (statements 1-4, 7-13)		Beta values on scale measuring number of correct responses to all 13 statements.	
	Year		Year		Year	
	1982	2005	1982	2005	1982	2005
Age	.27***	.27***	.16***	.26***	.20***	.28***
Education	(-).05 ns	.09*	(-).07 ns	.13***	(-).07 ns	.14***
Gender	.03 ns	.02 ns	.05 ns	.08*	.05 ns	.08*
R ²	.09***	.07***	.04***	.07***	.06***	.08***

ns not significant * p<.05 *** p<.001.

An overall view of Table 5 reveals that, relatively speaking, age per se is generally twice as important as educational level with regard to predicting knowledge about retirement pensioners, and the influence of gender negligible. Also education seem with this kind of analysis negligible in 1982, which we above, in table 4, have shown that it for the younger respondents is not. In the MCA analysis the non correlation for the older respondents has swallowed this.

Table 5 also shows that, if our intention is to fully explain the variation in knowledge, the mission is unsuccessful when using the three independent variables. At most, 8 percent of the total variance can be explained by these three variables. Now, the purpose here is not to fully explain all the variance, but to take a closer look at the relative importance of age versus education, which we can still do.

If we start by looking at the scale based on all 13 items in the Quiz, the rightmost part of Table 5, we observe that the beta value of education has increased from 1982 to 2005. As already mentioned above, underlying this change is the interesting fact that the relative impact of education has not only increased, but also changed from a negative to a positive one. Remember that back in 1982, the younger respondents with more years of

education were slightly *less* knowledgeable. In 2005, the pattern is the opposite. The respondents with more years of education are slightly *more* knowledgeable. Essentially the same pattern is observed regarding the sub-scales measuring the physiological/material matters and the psychological matters. The relative importance of education has reversed and increased, but never reaching the same level of impact as age.

The Cohorts

Related to the question of what impact education versus age may have on knowledge level is the question of cohort development. Each generation/cohort has been influenced by the particular experiences of that generation – including differences in educational level and possible differences in norms and values, together with the impact of the aforementioned double discourse information flow in society. An interesting question is how each cohort has developed regarding the type of knowledge/images dealt with in this study. Is there, for example, an increased or decreased average knowledge level, or a steady state, among those who were young in 1982 and who have reached middle age in 2005? Table 6 helps us answer these kinds of questions.

In Table 6, we can examine how four cohort groups have performed at the two points in time. Group 1, for example, consists of respondents born between 1920–1935, who in 1982 were between 46–62 years. They are compared with respondents in the 2005 study who were born in the same interval, years 1920–1935, i.e. the same cohort group, who in 2005 were between 70–85 years.

As already demonstrated in the above analysis, table 6 also displays at both points in time a cross-sectional pattern in which the younger respondents are less knowledgeable. Table 6, however, also shows certain differences in intra-cohort developments, where the two younger cohort groups (3 & 4) exhibit no statistically significant knowledge increase regarding psychological matters, while the other cohorts do, and the pattern otherwise is intra-cohort increases in the knowledge level.

Even if the younger cohorts have aged from youth and young adulthood to middle age, and just as the other cohort groups been affected by the information flow in society, the average knowledge level regarding psy

Table 6. Knowledge development in four cohort groups, and whole data sets. Average number of correct responses. Percentage correct responses in parentheses.

Cohort	Born within years:	Age in 1982	Age in 2005	Number of correct responses to whole scale (Items 1-13)		Number of correct responses to statements on psychological matters (Items 5,6)		Number of correct responses to statements on other matters (Items 1-4, 7-13)	
				Year 1982	Year 2005	Year 1982	Year 2005	Year 1982	Year 2005
	1907-19	63-75	not in sample	6.1	not in sample	0.88	not in sample		not in sample
1	1920-35	47-62	70-85	6.3 (48%)	7.0*** (54%)	0.74 (37%)	0.89* (45%)	5.6 (51%)	6.2*** (56%)
2	1936-45	37-46	60-69	5.3 (41%)	6.9*** (53%)	0.45 (23%)	0.63** (32%)	4.9 (45%)	6.3*** (57%)
3	1946-55	27-36	50-59	5.3 (41%)	6.5*** (50%)	0.49 (25%)	0.54 ^{ns} (27%)	4.8 (44%)	6.0*** (55%)
4	1956-66	16-26	39-49	4.8 (37%)	6.1*** (47%)	0.31 (16%)	0.35 ^{ns} (18%)	4.4 (41%)	5.8*** (53%)
	1967-89	not in sample	16-38	not in sample	5.8	not in sample	0.39	not in sample	5.4
	Total average within ages 16-75			5.6 (43%)	6.3*** (48%)	0.6 (30%)	0.5*** (25%)	5.0 (45%)	5.8*** (53%)

^{ns} not significant * p < .05 ** p < .02 *** p < .001 .

chological matters has not increased, as is the case with the two older cohort groups.

This deviation from an otherwise increasing knowledge level signals that the observed intra-cohort differences not only can be interpreted as an historical effect, but also as an intra-individual developmental phenomenon. It could be that, with respect to the knowledge about psychological matters, maturation beyond middle age is necessary. The impact of the information flow in society might not be enough. It seems necessary to have aged beyond middle age – to be closer to the category of retirement pensioners or to be part of this category oneself.

The observant reader might be puzzled by the fact that none of the intra-cohort differences show any decline regarding the psychological matters, while the comparisons of the whole data sets show such a decline from 1982 to 2005. Reason for this is that, doing the intra-cohort comparisons, we have only been able to use selections of the data sets, as shown in table 6. The full comparison, which shows a decline, include the older and relatively more well-informed respondents in 1982, plus the younger and relatively more ignorant respondents in 2005, both of which are excluded from the intra-cohort comparison since these groups do not exist in both samples.

Discussion

At average Swedes seem, as we have demonstrated in this 23-year follow-up, slightly better informed about the situation of retirement pensioners, and on the move away from the image of old age as merely disease and misery. At the same time, however, it is the relatively stable response patterns that is striking when looking at the results from a birds eye view. In only four of the 13 items the proportion of correct answers in 2005 is more than 10 percent points away from the results in 1982, and large proportions of Swedes still seem to subscribe to prejudiced stereotyped images. This result has yet to be interpreted considering the criticism of the Quiz. But even when the aforementioned objections to the Quiz are considered, one cannot avoid being struck by the prevalence and persistence of certain stereotypes. It is an intriguing fact that almost 90 percent of Swedes continue to subscribe to the loneliness stereotype – despite various kinds of political, academic and educational efforts during the years.

These efforts seem to have had some slight moderating effect on respondents' knowledge of e.g. the physiological and housing conditions of retirement pensioners, but no effect at all on stereotypes regarding psychological conditions. Today's Swedes, as compared with 23 years ago, subscribe to the same degree to the false image of the lonely, bored and dissatisfied retirement pensioner, but not quite as much to the negative images regarding health, housing and social interaction.

One explanation for the latter result may be that these conditions have in fact improved over the years, at the same time as they are more visible in comparison with subjective psychological conditions, where the responses to the items perhaps also may reflect personal fears of aging.

Moreover, the content of educational programs today may be less focused on finding and projecting problems onto old people. As mentioned, yet another way of understanding our findings may be that they are an interactive result of several parallel processes. As described above, Sweden has experienced a double discourses flow of information, simultaneously elucidating both certain problems and certain benefits of old age. This may have led to a slight increase in knowledge of objective observable conditions (basically the physiological/housing statements in the Quiz), while knowledge of subjective and difficult-to-observe psychological conditions have become somewhat more stereotyped, expressing pity for older people. The rather massive investments in research and political/governmental efforts probably also provide an explanation for the fact that Swedes, with longer educational careers nowadays, are slightly better informed. Education helps, but do not forget, not as much as "learning by aging".

Now, returning to the birds eye impression that, particularly regarding some stereotypes, relatively little seems to have changed during the 23-year period under study, despite various efforts and changes in society, the previously mentioned power perspective (Fiske 1993; Pickering, 2001) comes to the fore. One way of making this stability intelligible is to understand it as an aspect of the power an ageist society exerts in the form of stereotypes. As long as ageist roots persist, stereotypes will exist. In a nutshell, the roots of an ageist society can be said to be its value system, which glorifies youth, strength, independence, efficiency and productivity. Thus, as long as these roots persist, we will have stereotypes of old people - despite various efforts to obliterate them. Perhaps not stereotypes in the same old forms, but permuted to new forms.

Thus, following this somewhat speculative line of thought, in a future where the increase in the proportion of old people in the population is described as a ticking demographic bomb, and where education and information have supposedly made a real difference in knowledge of

the easier-to-observe physiological/material conditions of old people, but not of their psychological conditions, we may perhaps expect a scenario in which not only the still remaining misunderstandings of the physiological/material conditions of retirement pensioners are erased, but in which they are reversed to “positive” stereotypes, at the same time as negative stereotypes of psychological conditions remain the same. An exaggerated and stereotyped image of wealthy and healthy retirement pensioners may be combined with an equally exaggerated and stereotyped image of psychologically miserable retirement pensioners. Stereotyping in a permuted form.

The negative stereotype of seedy retirement pensioners with no money and poor housing may turn into a new type of negative stereotype of fit, wealthy, spoiled and greedy retirement pensioners, who wrongly and greedily cling to their overly large houses much too long. This is of course quite speculative and maybe somewhat contradicted by the fact that Swedes during the 23 years have been marginally more inclined to wrongly believe that pensioners can't afford to pay for an unexpected expense.

However, we have in fact already seen some of the aforementioned new type of stereotyping in Sweden, where one housing researcher (Turner 2005) declared that the increasingly healthy old people distort the natural sequence of moves from their own self-contained houses to smaller flats, thus creating a housing shortage for younger families in need of more space in a self-contained house. Turner (op. cit.) suggested that this problem might be solved by imposing a new “stay tax” on retirement pensioners who wrongly cling to their houses. In future research on stereotypes and ageism, we should be observant of this possible new kind of attitude, which combines an exaggerated “positive” image of retirement pensioners' health and wealth with a patronizing attitude.

We have in fact (Tornstam 2006) empirically observed a category of Swedes who, relatively speaking, are quite well informed (or have positively biased images of old people) and who at the same time have somewhat negative attitudes concerning what role old people should be given in society. This category, which seems to be as large as 30 percent of the population, is not in favor of increasing the proportion of retirement pensioners among political decision-makers. The category also does

not consider old people underrepresented in Swedish politics, or that old people should be given more authority. This category of Swedes seems to think something like “why coddle all the well-to-do elderly?”

If this kind of attitude is combined with the persistent pitying negative stereotypes regarding loneliness, boredom and dissatisfaction with life, we may perhaps see in the future a new pattern of powerful stereotyping, where old people are pitied for loneliness and boredom with life, while their physiological/material conditions are “positively” stereotyped and they are disdained as spoiled and greedy. The stereotyping may persist, but in new shapes – thus alluding to the notion that behind any specific pattern of stereotyping lies the deeper purpose of exerting power. Interpreted in this way, the persistent pattern of stereotyping old people, in its old or new forms – ‘positive’ or ‘negative’ – is in reality the ageist society’s way of controlling and exercising power over old people. And as long as the values underlying ageism are strong, stereotypes will exist – in old, well-known forms or in new permuted ones.

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Homepage of the Social Gerontology Group: <http://www.soc.uu.se/research/gerontology/>.

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