

## **.SIAK-Journal – Journal for Police Science and Practice**



Matiasek, Hanns (2015):

### **Population Ageing and Safety. Selected aspects of a topical issue**

SIAK-Journal – Journal for Police Science and Practice (International Edition Vol. 5), 4-15.

doi: 10.7396/IE\_2015\_A

*Please cite this article as follows:*

Matiasek, Hanns (2015). Population Ageing and Safety. Selected aspects of a topical issue, SIAK-Journal – Journal for Police Science and Practice (International Edition Vol. 5), 4-15, Online: [http://dx.doi.org/10.7396/IE\\_2015\\_A](http://dx.doi.org/10.7396/IE_2015_A).

© Federal Ministry of the Interior – Sicherheitsakademie / NWV, 2015

Note: A hard copy of the article is available through the printed version of the SIAK-Journal published by NWV (<http://nwv.at>).

published online: 7/2015

# Population Ageing and Safety

## Selected aspects of a topical issue



**HANNS MATIASEK,**  
*Researcher at the Institute for  
Science and Research, Security  
Academy of the Austrian Federal  
Ministry of the Interior.*

Demographic change, i.e. alterations to the size and structure of the population, has been on the political, media and academic agenda for a number of years. Companies and organisations are also increasingly identifying demographic change, in particular ageing, as a challenge and are adapting their strategies in order to remain fit for the future. Police authorities are no exception. Demographic change and population ageing have three key properties that should be taken into account by players such as companies and authorities in their long-term strategic development and planning. (1) Long-term character: Demographic change is not a brief, transient phenomenon. It is a challenge with profound effects that by its very nature will continue over decades and keep increasing in scale. (2) Predictability: It is a challenge whose magnitude and trend can be predicted relatively accurately compared to most other challenges with which organisations are confronted. (3) Uncontrollability: Demographic development, like other fields (such as technology and communication) lies increasingly outside state control in a free society. This paper looks at key aspects of population ageing, some of which may be less well known than others, and points to their significance in the police context. It will conclude with a discussion of the security and safety of older people, their sense of safety and fear of crime, as well as the sometimes overlooked influence of health.

### 1. INTRODUCTION

Demographic change is one of the global mega-trends of our age. The third major challenge encompassed by that trend alongside migration and population growth is ageing. One of the features of a mega-trend is that it affects all societies and areas of society, though the given manifestations and secondary effects depend on many different factors and are not typically uniform. While the impact of population ageing on certain social functions such as pension, health and care systems has been addressed recurrently for decades, the discussion has been extended to additional

fields in recent years, including mobility, housing, education and law and order.

The aim of this paper is to highlight aspects of ageing in connection with safety that have been paid relatively little attention so far and to contribute to a better understanding of the topic. The guiding idea is that it will be more and more important for public players such as the police to be familiar with and understand the various target groups in increasingly heterogeneous societies in order to formulate adequate strategies and develop measures.

Before discussing some key aspects of population ageing in the main part of the

paper, the underlying terms should be clarified first. The customary account (in varying detail) of demographic change and population ageing using global and regional statistics will be omitted. These can be referenced in detail at statistical offices, such as Statistik Austria or Eurostat.

Demographic change is understood essentially as change to the population structure: “[The] components of demographic change are lower birth rates than death rates, leading to a decline in population unless immigration occurs; gain in average life expectancy, which together with the birth deficit results in the higher mean age of the population; increasing cultural and ethnic internationalisation and growing heterogeneity owing to the immigration of people of different ethnicities; decrease in the size of households owing to lower numbers of children and the social process of singularisation” (Leser 2011, 159).

Dinkel distinguishes between two approaches to defining population ageing. The first is based on the number or proportion of certain persons defined as old within a population. According to that approach, a population ages if the proportion of people aged over 65 increases over the course of time (Dinkel 2008, 98). The second approach, by contrast, looks at the age structure of the whole population and how it changes in specified time periods (ibid., 99). The mean age of the population is frequently used as the indicator (ibid., 100 et seq.). In terms of focusing on target groups, the first approach can be seen as more practical, since it looks at the size and structure of certain groups with given features (age groups).

For a long time demographic change was only associated with external, national or military security. The focus was on population size and migration, with population

ageing treated only as a side issue, if at all. Weiner and Russel (Weiner/Russel 2001, 8), for example, address the ageing populations of Japan and Europe in the context of national security and question what the impact on immigration policy will be. However, in recent years it can be seen that the strategies and concepts of the police and internal security authorities have increasingly looked at population ageing. It is typically tackled in a two-pronged way: First, the impact of population ageing is analysed in terms of changes to the environment in which security-related tasks are performed (e.g. Bundesministerium für Inneres 2014, 51–52; Bundesministerium des Innern 2011, 216–218). This paper also approaches the topic from that perspective. Second, the effects of population ageing on the organisation itself are noted and discussed in the context of HR development, generation management etc. (e.g. Bundesministerium des Innern 2011, 219–221).

The topic of demographic change has also featured in police trend studies for a number of years. The study “55 Trends Now Shaping the Future of Policing” (Cetron/Davies 2008), which is based on a survey of police chiefs in the USA, lists the fact that people in developed countries are living increasingly longer among the ten most critical trends for the future of policing. The following developments, for example, are conjectured as a consequence of population ageing: (1) More crime against elderly people and the emergence of new forms of crime owing to the greater vulnerability and lack of technical savvy of elderly people. (2) A growing proportion of elderly criminals. (3) Owing to their fear of becoming victims, elderly people will make greater demands of the police. (4) In regions with a higher proportion of elderly people, the police will be required to provide other and/or additional services,

such as crime prevention (information, awareness raising), programmes for elderly road users, combating of financial crime and various forms of deception. (5) The police will increasingly come into contact with social services issues and cooperate more with social services providers since it can be assumed that there will be more cases of missing or helpless elderly people – most likely also in connection with the increase in dementia (Cetron/Davies 2008). Police organisations in Europe also believe that demographic change will have a considerable (negative) influence in the future, as shown, for example, by the PESTL analysis<sup>1</sup> performed as part of the COMPOSITE project (Born/Witteloostuijn 2011, 80; Gruschinske et al. 2012, 24).

It is important to be aware in regard to such trend studies that population ageing is a development that has never been seen in this form in human history before (United Nations 2007, 46). Despite modern scientific methods, statements on its consequences tend to be unchecked hypotheses or assumptions. Even the results of sophisticated studies that deal, for example, with the question of the effect of demographic change on crime, are subject to limitations and uncertainties, since the magnitude and direction of many influence factors are undetermined (cf. Hanslmaier et al. 2014, 247; Kemme 2011, 10–11).

Based on the above, the reasons why public organisations tasked with security need to take population ageing, in the sense of a change in environment, into account can be summarised as follows: First, elderly adults are a growing group. That means that the police, as it is conjectured, will have more dealings with older people on an operative level and will need to pay greater attention to their needs. Second, elderly people, especially the very old and those in need of care, are a particularly vulnerable group with a strong

and extensive need for protection. Third, elderly people constitute an increasingly influential group, whose interests and needs need to be taken (even) more into account by political actors and decision-makers on a strategic level in the future. It is apparent that demographic development and fairness of distribution will therefore remain significant topics in the discourse on social peace in Austria (Matiasek 2012, 33–34).

## 2. ASPECTS OF POPULATION AGEING

### 2.1. “The elderly” do not exist as a group any more

In the past and often still today elderly people who have reached the statutory pension age have been classed together in an apparently homogeneous group of “seniors”, “pensioners” or “60+”. While such lumping together may partially be justified in practical terms, it is less useful when it comes to understanding a target group better or developing and implementing accurate strategies and measures.

Growing life expectancy means that today the period of “old age” or “retirement” can last 20, 30 or more years. In other words, the period of old age can form up to a third of a person’s total lifetime, which means distinctions are necessary (cf. Thieme 2007, 36; *ibid.*, 164; Hörl et al 2009, 21; *ibid.*, 25). By comparison, barely anyone would class together young infants and late teens, since the differences in mental and physical development are too great. The same, however, is true of those who have retired owing to age. The predominant position in age research can be summarised as follows: “If only because physical health and the possibility to participate in social life are very different today, it makes sense to speak of several age groups” (Thieme 2008, 26).

After answering in the affirmative to the question of whether delineation is necessary, precise sub-division of the period of “old age” can be made based on study of literature on this topic and available reports. There is no consensus among researchers as to where the cutoff values lie (Thieme 2008, 35). The start of old age is generally based on the statutory pension entitlement age and rounded to 60 or 65 years, with the trend being toward 65 years.

Since ageing, however, is an individual process, any categorisation can only serve as a rough guide. Every division into life periods is selected arbitrarily. The same incidentally applies to other legally and socially constructed age limits. e.g. the age of majority (cf. Kaufmann 2008, 123). What is understood by “young” and “old” is also subject to constant change. Table 1 (see above) provides an overview of the distinctions made in gerontology. Essentially there are two tendencies: sub-division into two or three age groups. The key criteria are physical and mental health. 65 and 85 are the lower and upper cutoff values according to both subdivisions. However, the trend seems to be for the cutoff value for very old age to be heading towards 85 years (Thieme 2008, 100).

While delineation within the 60/65+ group could be neglected until now, that is no longer the case as that age group, and in particular the group of very old people, is increasing rapidly. It is forecast, for example, that the number of people in Austria aged over 85 will grow between 2015 and 2030 from around 212,000 to some 329,000 (Statistik Austria 2014).

## 2.2. Geographical differences in development

Austria’s demographic development shows significant regional differences. Study of demographic development at the federal

Source: Matiasek, based on Thieme 2008, 36–37

Sub-division of the period of “old age”				
		Characteristics	Age	Other designations
3 <sup>rd</sup> Age	Young old	No debilitation	65–74	„best agers“, „silver surfers“
	Middle old	Slight debilitation, frailty	75–84	“old”
4 <sup>th</sup> Age	Very old	Severe debilitation, disability, need for care, frailty	85+	“oldest-old”

**Table 1: Possibilities of delineation within the period of “old age”**

state level, however, only provides limited information, since regionally distinct processes occur. These can only be detected and used for planning if the geographical division is as fine-grained as possible (NUTS-3 regions<sup>2</sup>, districts, municipalities) Population ageing is also subject to regional differences in development. For serious interpretation of statistics and forecasts, it is necessary to distinguish between absolute and relative values and between absolute and relative change over time.

Such regionally distinct development can be illustrated representatively for other federal states by the example of Styria. Styria is developing demographically in two directions. This “demographic dichotomy” in Styria represents a sustained development and can be summarised as follows: population growth in Graz and the Graz basin, and population stagnation or decline in the peripheral and outlying regions, in particular in Upper Styria. A similar development can also be observed in a pronounced form in Lower Austria, for example.

Based on the 2009 local population forecast of the Österreichische Raumordnungskommission for the period until 2050, Styria presents the following picture: in 2030 around a third of all Styrians aged over 65 will live in Graz or the surrounding area. The 65+ age group will grow numerically in the (former) districts of Deutschlandsberg, Feldbach, Fürstenfeld, Graz-Umgebung, Hartberg, Leibnitz

and Weiz by more than 50 %. The highest proportions of people aged 65+ will be in the (former) districts of Mürzzuschlag, Judenburg, Radkersburg and Murau (all over 29 %) in 2030. The greatest proportional changes for the 65+ group are forecast for the (former) districts of Murau, Radkersburg and Hartberg. Despite a general shift in the age structure and increase in the groups of old and very old people, the Graz conurbation remains demographically younger than the peripheral regions.

Within the group of old people, residents of homes represent a distinct, rapidly growing and particularly vulnerable group geographically and in terms of living environment. In Austria today around 60,000 people aged over 60 are in homes and the number is set to grow to 100,000 by 2030.<sup>3</sup> That fact will gain in importance, especially in respect to phenomena such as violence in care.

In addition to the population development described above with regard to age structure, it also makes sense to include household structure in the analysis. Forecasts concerning household structure attract less attention, but are relevant to the topic in question, since they provide information about the housing and social environment of the population.

In Styria the proportion of single-person households and multi-person households where the head of the household is aged 55 or older will rise significantly by 2030. The number of multi-person households where the head of the household is aged 85 or older will increase from 2013 to 2030 by around 65 %. More than a third (195,200) of all Styrian households are forecast to be single-person households by 2030, around half (90,044) of which will be accounted for by people in the 65+ age group. The federal trend reveals similar patterns.

### 2.3. Individualisation and pluralisation of lifestyles

“The elderly are not a homogeneous group!” As generally binding values, norms and traditions have declined in importance and rapid technical and social change have been experienced, the current trend of social individualisation has long also reached the elderly” (Thieme 2008, 164). Education, career, income, social capital etc. are key individualisation factors. Individualisation can be perceived in many areas of life: housing, mobility, leisure behaviour, social relations, consumption, media use, communications habits, travel habits etc. To structure the unlimited variations in preferences (pluralisation of lifestyles), the concept of lifestyle, which can be defined as the “totality of the behaviour, orientations and values of people” (Thieme 2008, 234), is used in the social sciences.

Lifestyle research today recognises a series of possible categorisations of lifestyles. There are differing research findings on the lifestyles of older people, especially those in the third age. Here, for example, geographical preferences can also be deduced from lifestyles. In current research projects, lifestyles tend to be regarded according to a certain (economically relevant) perspective (media consumption, health-related behaviour, housing etc.).

Being informed about the lifestyles of the target group is naturally critical in the fields of marketing and advertising in the private sector, while in the police context knowledge of the lifestyles of the target group(s) can be important, for example, for public relations work on crime prevention. The focus on lifestyle-defined target groups is of increasing importance and contributes to targeted prioritization and use of resources. While very many elderly adults could only be reached to date via few information channels, that will gradually change. With the change in lifestyles, the role and use of the Internet and

associated technologies and communities is undergoing a progressive increase in importance that can already be observed now. The regular survey on ICT use in households of the Austrian Statistical Office provides a rough overview of this change. The clear difference in the proportions of users with the age groups 55–64 (2013: 65.2 %) and 65–74 (2013: 33.9 %) is striking (Statistik Austria 2013b). In addition, there are clear differences in the large 65+ group: A US study on the topic of seniors and the Internet that analyses age more precisely shows that the proportion of internet users falls rapidly in the 80+ group. 74 % use the Internet in the 65–69 age group, while 37 % do so in the 80+ age group (Pew Research Center 2014, 7).

#### 2.4. The “elderly people of tomorrow” are not (necessarily) like the “elderly people of today”

The change in lifestyle and behavioural habits over time is closely related to the above section. Currently we seem to be in a generational transition phase: The wartime generation, which comprises people who are today aged 75 or older and actively experienced the Second World War or the interwar period, will decrease significantly in the coming ten years owing to natural mortality. That generation, however, still strongly shapes views of old age and of old people. At the same time, the group of young old people, who have been discovered by the private sector in recent years and are called “silver surfers”, “best agers” etc. and defined as consumers, is growing. Finally, the first baby boomers (born in 1955 to 1965) are only a few years away from retirement. In addition to the aforementioned age-related differences (mental and physical state of health), various generation-related and cohort-related lifestyles and types of behaviour occur within this juxtaposition of different generations.

Source: Matiasek, based on the Statistik Austria 2013a; Statistik Austria 2010

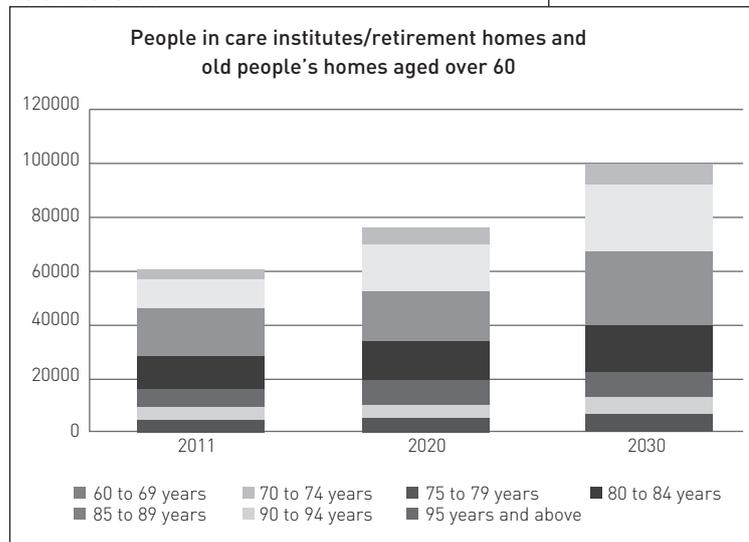


Figure 1: Persons (60+) in care institutes/retirement homes and old people's homes

One example in this context are savings and payment habits, which are particularly significant in connection with crimes such as confidence tricks and theft after observing the victim withdrawing cash at the bank. For instance, the 65+ group is the age group that keeps most cash at home (EUR 455 on average) (Österreichische Nationalbank 2013). The 60+ group leads in terms of withdrawing cash at the bank counter, with around half of those belonging to this group withdrawing money in that manner at least once a month. An average of around EUR 400 is withdrawn at the bank counter (Österreichische Nationalbank 2013). In terms of saving and payment habits, the “generation change” taking place could result in changes among the older population that are also relevant to situational crime prevention, since these, for example, affect opportunities for crime (e.g. increased use of cashless means of payment and options such as bank cards, NFC (near field communication), e-banking etc. by elderly people, together with a decrease in cash payments). Further development, accordingly, should be monitored in light of the generation change described.

Source: Statistik Austria 2013b

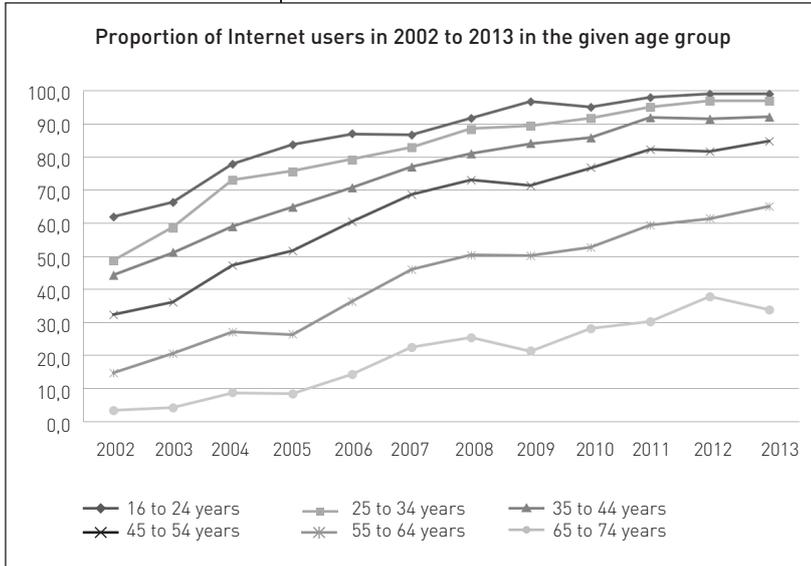


Figure 2: Age distribution of Internet users 2002 to 2013, proportion of Internet users in the given age group

**2.5. Possibilities and limits of situational crime prevention in the case of elderly people**

Owing to increasing sensory deficits, reduced agility etc. elderly people are at greater risk of becoming victims of certain crimes. Emphasis is placed here in particular on crime prevention, provision of information and raising the awareness of elderly people. These efforts come up against the problem that very old people, especially those needing care, with some exceptions, can no longer be reached directly for the purpose of crime prevention, even if the large majority can be reached in technical terms, e.g. through television (approx. 70 % of older people can be reached through the early-evening programme schedule, which does not, however, necessarily mean that information broadcast then will have an effect on behaviour). Reduced mental capacities make the perception and implementation of new information, including prevention advice, increasingly difficult. That is also significant in light of Article 25 (1) of the Sicherheitspolizeigesetz, which assumes

the willingness and ability of individuals to inform themselves of crime-related topics, since this target group lacks at least this ability as a rule and in many cases also the willingness to do so.

Essentially there are two approaches that are aimed at defusing this problem: First, start early, i.e. take targeted measures in the third age for increased awareness in the fourth age (cf. Görgen 2010, 430). The question of increasing provision for old age (securing a “good life” during retirement) could also potentially be addressed. That makes sense given that today some 10 to 15 % of elderly people live in social isolation or are withdrawn from society (cf. js\_studien+analysen; Kräußlich 2008, 121) and a rise in the single-person households of elderly people is forecast.

The second approach involves addressing capable guardians directly. These potential capable guardians are relatives, friends, neighbours and certain professional groups (e.g. bank employees); they can be targeted and made aware of relevant crime phenomena (Görgen 2010, 431). Under this approach, public relations work on crime prevention could focus on the socially desirable topics of “supporting others”, civil courage” and “inter-generational solidarity”, which have positive associations.

**3. SECURITY, SENSE OF SAFETY AND FEAR OF CRIME AMONG ELDERLY PEOPLE**

Safety changes in importance with age and plays a different role for younger adults and for elderly people. In addition to the threat of crime, elderly people have worries concerning health problems, the need for care or the risk of falling. That means that safety must also be understood in a broad sense owing to the extensive vulnerability of elderly people. Of the many fields that are of importance for the safety of older people, in most countries there are two that

can be put in charge of the police: crime protection and safety on the streets. Since a range of players are involved in ensuring safety, safety concepts for elderly people, as in many other fields, can only be developed and implemented across sectors. i.e. cooperatively.

A (socio-)political concept and goal that is growing in popularity is to maintain comprehensive quality of living even in old age. The aim is to create an enabling environment. That also has implications for safety and security as aspects of the quality of life of elderly people. This development and the resulting expectations are politically significant in all western democracies given the increasing voting influence of elderly people and the predicted increase in the articulation of their interests.

### 3.1. Sense of safety and fear of crime

Sense of safety and fear of crime have come to the attention of the police and other security players in recent years for the purpose of measuring the success and efficacy of police measures under the label of subjective safety. Low fear of crime and a high sense of safety can be understood as part of a person’s quality of life. Today research results make clear that the question of sense of safety and fear of crime of older people needs to be viewed in a nuanced way and general findings such as “the older people are, the greater the fear of crime” or “the lower their sense of safety” cannot be shown empirically to be in a linear relationship. The findings of various studies show that measurement of the fear of crime and sense of safety depends to a significant degree on operationalisation and context. That means that we need to speak here about perception(s) of safety and fear of crime in a range of contexts. The differing operationalisation and undifferentiated analysis in a range of studies seems also to be the reason why findings

seem to partly contradict one another and often cannot be combined into a coherent overall picture. Depending on the operationalisation/aspect of fear of crime/sense of safety (cognitive, affective, conative – individual and social) differing results can be expected (cf. Reuband 2009, 234). The same applies to the regional, temporal and practical context, as well as types of crime.

In connection with the sense of safety of older people, it is hypothesised in scientific literature that sense of safety is influenced to a significant degree by physical and mental health and other subjective factors. Thieme (Thieme 2008, 166) addresses the influence of everyday pessimism in connection with old people’s sense of safety. Based on analysis of the relationship between sense of safety, age and health, G6rger (G6rger 2010, 157) notes: “The

Source: Statistik Austria 2007

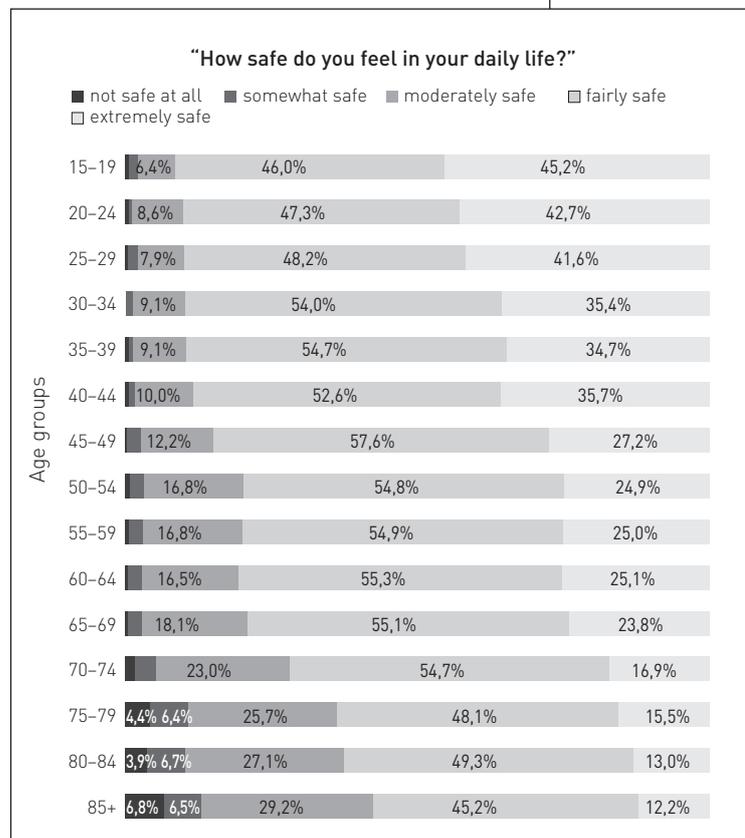


Figure 3: Sense of safety in a breakdown by age groups (ATHIS)

negative correlation between age and sense of safety measured using the “standard question” – which fits with outdated notions of irrationality and fears of crime in old age – decreases significantly if the linear influence of subjective health is eliminated from the bivariate correlation. By contrast, the correlation between sense of safety and health essentially remains stable, even if the influence of age is used as a control variable.”

In this context a possible explanation for the greater fear of crime and lower sense of safety of very old people lies in the concept of vulnerability. That means that people who perceive their physical and mental health as bad (worse), also perceive themselves as being more vulnerable to attacks or repercussions of victimisation, for example. And, vice-versa, they rate their own ability to resist, defend themselves against and overcome attacks/victimisation and other extreme situations lower.

The Austrian health survey ATHIS (Statistik Austria 2007) enables relationships between sense of safety, age and (perceived) health to be studied. ATHIS is an extensive, large-scale representative study on the health and health-related behaviour of the Austrian popu-

lation that was conducted in 2006/2007. General sense of safety was surveyed using the question: “How safe do you feel in your daily life?” Safety was not limited to any particular field (safety from crime, social security etc.) Analysis of sense of safety broken down by age groups shows that the proportion of those who feel extremely safe falls from 23.8 % in the 65–69 age group to 12.2 % in the 85+ age group (see Figure 3, page 11). And, vice-versa, the proportion of those who do not feel safe at all in their daily life rises from 0.6 % in the 65–69 group to 6.8 % in the 85+ group. The overall trend can be observed that as age increases the response “extremely safe” is given less often and the responses “moderately safe”, “somewhat safe” and “not safe at all” are given more frequently. That is illustrated by a comparison of the mean values (see Table 2): While the 65–74 group has a mean of 3.92 (5=extremely safe; 1=not safe at all), the sense of safety in the 85+ group is 3.5 on average. The difference between the mean values of the two groups is statistically significant.

In addition to the sense of safety described above, a number of other items were surveyed within the health survey that can be used to check the correlation with health. There is a low ( $r=-0.245$ ) correlation between age and sense of safety.<sup>4</sup> That indicates that the older the respondent, the lower their reported sense of safety. However, if a partial correlation of age and sense of safety is calculated using selected items that can measure vulnerability and subjective perception of health as control variables, the results are as follows.

If the correlation between age and sense of safety is studied with health satisfaction used as a control variable, the correlation decreases to  $r=-0.124$ ; if “satisfaction with ability to manage everyday tasks” is used as a control variable, the correlation falls to  $r=-0.084$ . If the correlation between

Source: Statistik Austria 2007

How safe do you feel in your daily life? (1=not safe at all; 5=extremely safe)			
Age group	15-64	N	5592715
		Mean	4.17
		Standard deviation	.738
	65-74	N	748911
		Mean	3.92
		Standard deviation	.786
	75-84	N	505633
		Mean	3.62
		Standard deviation	.950
	85+	N	144633
		Mean	3.50
		Standard deviation	1.016

Table 2: Sense of safety means of different age groups (ATHIS)

age and sense of safety is measured with “reliance on medical treatment” as a control variable, the correlation decreases to  $r=-0.095$ . If, finally, the influence of quality of life, satisfaction with health, “To what extent can you enjoy life” and “How meaningful is your life?” are controlled for, then there is almost no correlation ( $r=-0.036$ ). Use of other items from this topic as control variables generates very similar results.

The correlation between sense of safety and satisfaction with health is low at 0.392, but stronger than correlation with age. If age is used as a control variable, the correlation remains stable or is only insignificantly lower ( $r=0.363$ ). Overall it can be seen that the level of sense of safety is correlated with perceived health, agility, vitality, life quality and (in)ability to manage everyday life.<sup>5</sup>

For police authorities, influencing factors such as subjective perception of health or psychosocial state mean that sense of safety can only be influenced by the police to a degree. That phenomenon could mean that as the very old population increases, the proportion of the population with a generally worse (perceived) physical and mental state of health will grow, leading in turn to a lower sense of safety and higher fear of crime among the population. That presupposes, however, that the subjective factors will remain at least stable in degree. Yet that will not necessarily be the case. A changed understanding of the role of old people (agile, active old people)

and health being perceived as good until well into old age could lead to a different scenario (Reuband 2010, 177–178).

#### 4. SUMMARY

The aspects of population ageing discussed in this paper in the context of safety are cornerstones for the strategic focus on the rapidly changing demographic environment in which police and law enforcement authorities operate in all developed countries. It will be increasingly important for the elderly population not to be seen as a homogeneous group, but for phenomena such as population ageing that differ geographically, phases of old age, pluralisation of lifestyles and generational changes to be taken into consideration in order to better understand and reach target groups for the purposes of crime prevention. Safety does not have the same significance for younger adults as it does for older people owing to their vulnerability. It can be seen that other factors besides fear of crime, such as perception of one’s own health, influence sense of safety. The conclusion follows that general sense of safety declines sharply at the threshold to very old age. However, since surveys often make no distinction between age groups aged above 70, the data in Austria can be described as limited at the least. Strategies from a range of countries show that police organisations have recognised the population ageing trend. That results in a series of challenging questions and tasks for researchers.

<sup>1</sup> Acronym for political, economic, social, technological, legal.

<sup>2</sup> Eurostat's spatial classification system; it is also used by the Austrian Statistical Office and divides Austria into 36 regions at the 3<sup>rd</sup> level (e.g. Wiener Umland/Nordteil, Weinviertel).

<sup>3</sup> Own calculation based on Statistik Austria 2013a.

<sup>4</sup> The correlation coefficient  $r$  (Spearman's rho) is a measure of the linear relationship between variables and always lies between -1 and 1. The closer the value is to 1 or -1, the stronger the correlation. All the findings show statistical significance. However, the possibility of a type I error must be noted since the sample is very large owing to weighting ( $N=6,991,892$ ).

<sup>5</sup> Further analysis (regression) building on the broad outline of this topic would be necessary to determine the influencing factors and their degree more accurately.

#### Sources of information

Born, Arjan van den/Witteloostuijn, Arjen van (2011). *Policing Opportunities and Threats*. Brochure WP 1.2. COMPOSITE-Projekt, Online: [http://www.composite-project.eu/tl\\_files/fM\\_k0005/download/Brochure%20WP1.2\[1\].pdf](http://www.composite-project.eu/tl_files/fM_k0005/download/Brochure%20WP1.2[1].pdf) (24.05.2014).

Bundesministerium des Innern (2011). *Demografiebericht. Bericht der Bundesregierung zur demografischen Lage und künftigen Entwicklung des Landes*, Berlin.

Bundesministerium für Inneres (2014). *Innen. Sicher. Die Zukunftsstrategie des Innenministeriums*, Wien.

Cetron, Marvin J./Davies, Owen (Eds.) (2008). *55 Trends Now Shaping the Future of Policing. The Proteus Trend Series*, Online: <http://www.au.af.mil/au/awc/awcgate/army/proteus-55-policing.pdf> (05.04.2014).

Dinkel, Reiner H. (2008). *Was ist demografische Alterung*, in: Staudinger, Ursula/Häfner, Heinz (Eds.) (2008). *Was ist Alter(n)? Neue Antworten auf eine scheinbar einfache Frage. Schriften der Mathematisch-naturwissenschaftlichen Klasse der Heidelberger Akademie*

*der Wissenschaften, Band 18, Berlin/Heidelberg, 97–117.*

Görgen, Thomas (Ed.) (2010). *Sicherer Hafen oder gefährliche Zone? Kriminalitäts- und Gewalterfahrungen im Leben alter Menschen*, Frankfurt a.M.

Gruschinske, Mario/Hirschmann, Nathalie/Stein-Müller, Susanne (2012). *Europas Polizeien im Wandel. Vergleichende Polizeistudien in der Europäischen Union*, SIAK-Journal – Zeitschrift für Polizeiwissenschaft und polizeiliche Praxis (2), 46–58, Online: [http://dx.doi.org/10.7396/2012\\_2\\_E](http://dx.doi.org/10.7396/2012_2_E).

Hanslmaier, Michael/Kemme, Stefanie et al. (2014). *Kriminalität im Jahr 2020. Erklärung und Prognose registrierter Kriminalität in Zeiten des demographischen Wandels*, Wiesbaden.

Hörl, Josef/Kolland, Franz/Majce, Gerhard (Eds.) (2009). *Hochaltrigkeit in Österreich. Eine Bestandsaufnahme*, Bundesministerium für Soziales und Konsumentenschutz, Wien, Online: [http://www.sozialministerium.at/cms/site/attachments/8/5/7/CH2233/CMS1218112881779/hochaltrigen\\_kleine\\_datei.pdf](http://www.sozialministerium.at/cms/site/attachments/8/5/7/CH2233/CMS1218112881779/hochaltrigen_kleine_datei.pdf) (12.04.2014).

js\_studien+analysen (2011). *Typische Formen der Lebensführung von Senioren*, Online: [http://js-studien.ch/js-studien/var/tcms/file/Typische\\_Formen\\_der\\_Lebensfuehrung.pdf](http://js-studien.ch/js-studien/var/tcms/file/Typische_Formen_der_Lebensfuehrung.pdf) (12.05.2014).

Kaufmann, Franz-Xaver (2008). *Was meint Alter? Was bewirkt demographisches Altern?*, in: Staudinger, Ursula/Häfner, Heinz (Eds.) (2008). *Was ist Alter(n)? Neue Antworten auf eine scheinbar einfache Frage. Schriften der Mathematisch-naturwissenschaftlichen Klasse der Heidelberger Akademie der Wissenschaften, Band 18, Berlin/Heidelberg, 119–138.*

Kemme, Stefanie (2011). *Kriminalität und demografischer Wandel. Entwicklungen in Deutschland seit Mitte der 1990er Jahre*, SIAK-Journal – Zeitschrift für Polizeiwissenschaft und polizeiliche Praxis (3), 4–13, Online: [http://dx.doi.org/10.7396/2011\\_3\\_A](http://dx.doi.org/10.7396/2011_3_A).

Kräußlich, Bernhard (2008). *Lebensstile und Raumpräferenzen älterer Menschen. Dissertation*, Online: <http://d-nb.info/1000790924/34> (12.05.2014).

- Leser, Hartmut (Ed.) (2011). *Diercke. Wörterbuch Geographie*, Braunschweig.
- Matiasek, Hanns (2012). Sozialer Frieden. Annäherung an einen aktuellen Begriff, *SIAK-Journal – Zeitschrift für Polizeiwissenschaft und polizeiliche Praxis* (2), 30–39, Online: [http://dx.doi.org/10.7396/2012\\_2\\_C](http://dx.doi.org/10.7396/2012_2_C).
- Reuband, Karl-Heinz (2009). Kriminalitätsfurcht. Erscheinungsformen, Trends und soziale Determinanten, in: Lange, Hans-Jürgen/Ohly, H. Peter/Reichert, Jo (Eds.) *Auf der Suche nach neuer Sicherheit. Fakten, Theorien und Folgen*, Wiesbaden, 233–251.
- Reuband, Karl-Heinz (2010). Kriminalitätsfurcht im höheren Lebensalter: Widerspiegelung von Viktimisierungserfahrungen, altersspezifischer Vulnerabilität oder psychosozialen Lebenslagen?, in: Frevel, Bernhard/Bredthauer, Rüdiger (Eds.) *Empirische Polizeiforschung XII: Demographischer Wandel und Polizei*, Frankfurt a.M., 148–181.
- Pew Research Center (2014). *Older Adults and Technology Use*, Online: [http://www.pewinternet.org/files/2014/04/PIP\\_Seniors-and-Tech-Use\\_040314.pdf](http://www.pewinternet.org/files/2014/04/PIP_Seniors-and-Tech-Use_040314.pdf) (12.06.2014).
- Statistik Austria (2007). *Österreichische Gesundheitsbefragung 2006/2007 (ATHIS)*.
- Statistik Austria (2010). *Ausführliche Tabellen zur kleinräumigen ÖROK-Bevölkerungsprognose 2009–2050*. Online: [http://statistik.gv.at/web\\_de/static/ausfuehrliche\\_tabellen\\_zur\\_kleinraemigen\\_oerok-bevoelkerungsprognose\\_2009\\_051901.xlsx](http://statistik.gv.at/web_de/static/ausfuehrliche_tabellen_zur_kleinraemigen_oerok-bevoelkerungsprognose_2009_051901.xlsx).
- Statistik Austria (2011). *Haushaltsprognose 2010 (ÖROK-Regionalprognose)*, Online: [http://statistik.gv.at/web\\_de/static/ausfuehrliche\\_tabellen\\_zur\\_kleinraemigen\\_haushaltsprognose\\_2009\\_bis\\_2050\\_057082.xlsx](http://statistik.gv.at/web_de/static/ausfuehrliche_tabellen_zur_kleinraemigen_haushaltsprognose_2009_bis_2050_057082.xlsx).
- Statistik Austria (2013a). *Personen in Anstalts Haushalten nach Typ der Einrichtung und Altersgruppen, 2011*, Online: [http://statistik.gv.at/web\\_de/static/personen\\_in\\_anstalts Haushalten\\_nach\\_typ\\_der\\_einrichtung\\_und\\_altersgruppen\\_035114.xlsx](http://statistik.gv.at/web_de/static/personen_in_anstalts Haushalten_nach_typ_der_einrichtung_und_altersgruppen_035114.xlsx).
- Statistik Austria (2013b). *Internetnutzerinnen oder Internetnutzer 2002 bis 2013*, Online: [http://www.statistik.at/web\\_de/static/internetnutzerinnen\\_oder\\_internetnutzer\\_2002\\_bis\\_2013\\_053946.xlsx](http://www.statistik.at/web_de/static/internetnutzerinnen_oder_internetnutzer_2002_bis_2013_053946.xlsx).
- Statistik Austria (2014). *STATcube – Bevölkerung zum Jahresschnitt 1952 bis 2075*.
- Thieme, Frank (2008). *Alter(n) in der alternden Gesellschaft*, Wiesbaden.
- United Nations (Ed.) (2007). *World Population Ageing 2007*, Online: <http://www.un.org/en/development/desa/population/publications/pdf/ageing/WorldPopulationAgeingReport2007.pdf> (23.05.2014).
- Weiner, Myron/Rusell Sharon S. (Eds.) (2001). *Demography and National Security*, New York/Oxford.

#### Further literature and links

- Bundesministerium des Innern (2011). *Demografiebericht. Bericht der Bundesregierung zur demografischen Lage und künftigen Entwicklung des Landes*.
- Matiasek, Hanns (2014). *Demographische Alterung und Sicherheit. Ausgewählte Aspekte eines aktuellen Themas*, *SIAK-Journal – Zeitschrift für Polizeiwissenschaft und polizeiliche Praxis* (4), 4–16, Online: [http://dx.doi.org/10.7396/2014\\_4\\_A](http://dx.doi.org/10.7396/2014_4_A).
- Statistik Austria. *Bevölkerung*. Online: [http://www.statistik.at/web\\_de/statistiken/bevoelkerung/index.html](http://www.statistik.at/web_de/statistiken/bevoelkerung/index.html).
- Eurostat. *Bevölkerung*. Online: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/introduction>.
- United Nations – Department of Economic and Social Affairs, Population Division: <http://www.un.org/en/development/desa/population/>.