

Subjective Risks Assessment in Safety of Elderly Persons in Cities

Abstracts

Formally we can say that risk culture “as the set of norms and forms of behavior that are adapted naturally when a situation that is considered as risky or important is faced”. It consists of shared beliefs, values, knowledge and experience level of the individuals in a group, especially of elderly persons in cities. There are wide variation of risk assessment methods ranging from qualitative to complex and mathematical models. Applicability and effectiveness of methods and tools depend on characteristics of research group.

There are two fundamentally different ways to see the concept of risk: objective and subjective view. From the subjective perspective risks are social constructs and estimates concerning their probabilities and impacts are always subjective and dependent on the context and assessing persons. The aim of this study was to analyze the subjective risk of assessing elderly persons in cities based on available data.

Key words: objective risk, subjective risk, elderly in cities
JEL J11, C50, C53

Introduction

The demographic background for this paper were some facts about World Population. The most significant changes and future trends can be written down as follows:

1. The share of the global population aged 65 years or above is projected to rise from 10 per cent in 2022 to 16 per cent in 2050.
2. By 2050, the number of persons aged 65 years or over worldwide is projected to be more than twice the number of children under age 5 and about the same as the number of children under age 12.
3. Because of the female advantage in life expectancy, women outnumber men at older ages in almost all populations. Globally, women comprised 55.7 per cent of persons aged 65 or older in 2022, and their share is projected to decline slightly to 54.5 per cent by 2050.

4. Countries with ageing populations should take steps to adapt public programmes to the growing proportion of older persons, including by improving the sustainability of social security and pension systems and by establishing universal health care and long-term care systems.(1)

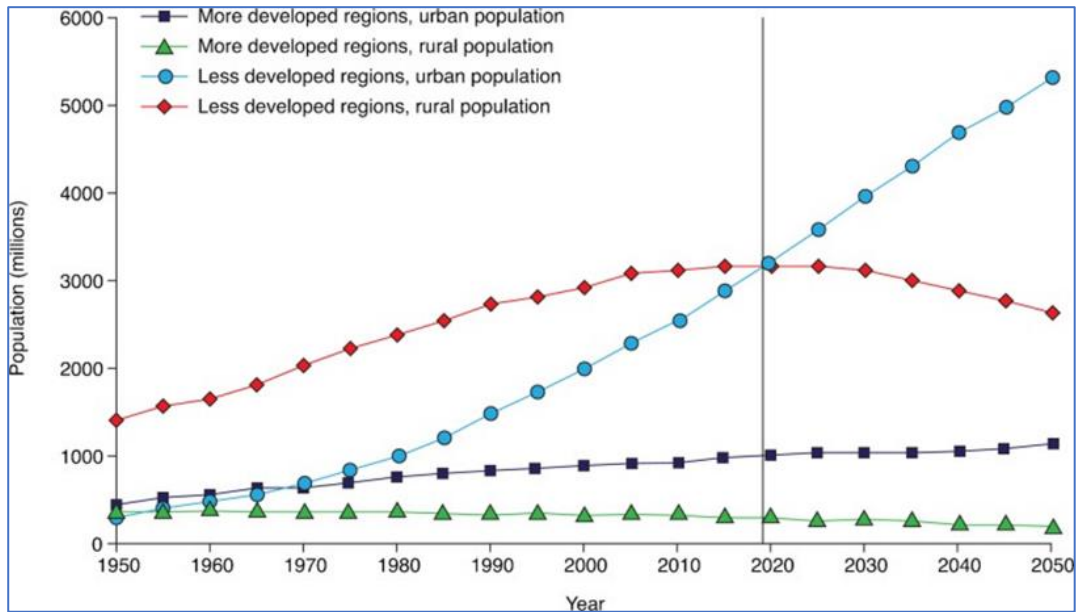


Fig. 1. World Urban Population – projection to 2050 (1)

1. Risk theory - dichotomy in the perception

In the recent literature of risk theory, we find the following description: “Risk is a calculation. Risk is a commodity. Risk is capital. Risk is a technique of power. Risk is objective and scientifically knowable. Risk is subjective and socially constructed. Risk is a problem, a threat, a source of uncertainty. Risk is pleasure, thrill, source of income and freedom. Risk is our way of colonising and controlling the future. The risk society is our late-modern world rapidly spiralling out of control” (3). There are two fundamentally different ways to see the concept of risk: objective and subjective view. From the subjective perspective risks are social constructs and estimates concerning their probabilities and impacts are always subjective and dependent on the context and assessing persons. This dichotomy in the perception of risk measurement additionally overlaps with the area of risk measurement.

1.1. Research Problem - Objective vs subjective risks

We can say that risk is a potential hazard but it can be defined also as risk is social because:

1. As it relates to social or political problems [*Ulrich Beck and Anthony Giddens*].
2. It is associated with a socio-cultural context (people perceive risk differently because they come from different backgrounds and cultures) [*Mary Douglas*].
3. Is constructed in strategies and discourses, and through them social control is exercised and society is shaped [*Michel Foucault*].

Among the various exposures in groups of adults citizens we can distinguish different level of both risks. We can looking for:

- Social risk (Public safety, Unemployment, Policy, The way of realizing and securing life functions, The way of realizing and securing social functions etc.)
- Technical / technological risks - challenges and risks (Communication tracts, Crossing of communication tracts, The way to overcome differences in levels, Shade and access to water and toilets, Opportunities for rest while moving (e.g., on a bench), etc.)
- Natural risks (Nature, environment, ecology (air, water, soil, viruses, bacteria), etc.).

1.2. Research data - conducted survey

To achieve the objectives of the study, a survey was conducted among seniors senior citizens of cities in Poland. The fundamental research question addressed was: Can the cities you live in be categorised as senior-friendly? The idea is that these are cities where senior citizens do not feel excluded, have a friendly environment and are accepted, which means that their interests are also taken into account in the city's activities. All variables was were measured on the ordinal scale. The survey questionnaire included 99 variables in 15 indicators:

P1 Place of residence

P2 Open space of the city

P3 Financial issues

P4 Adult education

P5 Culture, physical culture, sport

P6 Health services

- P7 Public transport
- P8 Personal mobility (other than public transport)
- P9 Neighbourhood
- P10 Safety in the neighbourhood
- P11 Public safety
- P12 Acceptance and tolerance
- P13 Social support
- P14 Social participation
- P15 Public space

Sample : N = 389 senior citizens of cities in Poland

2. Research methods - risks grouping

Hierarchical methods of clustering were used (Euclidean distance and Ward's method). For interpretation of all graphs, for all 15 groups: P1- P15 we used following rules:

- The greater the agreement in views/opinions, the smaller the field of choice (external/legal constraints) - thus, in the case of a desire/need to change (reduce or eliminate) the unfavourable development of a phenomenon, the area of possible solutions is very narrow - a given phenomenon can be treated as objectively difficult to change.
- Objective risks occur when, for a given phenomenon, described by individual indicators, the distance between objects in groups is small.

2.1. Selected results based on the survey

1. Indicator P3 Financial issues (Euclidean distance/Ward's method) consisted of six variables:

- W17 Opportunities for work in paid employment
- W18 Advice and placement in obtaining work
- W19 Easiness of changing jobs
- W20 It is very easy to start one's own business
- W21 Municipal support provided to entrepreneurs
- W22 There are opportunities for low-cost shopping and other forms of savings in the city

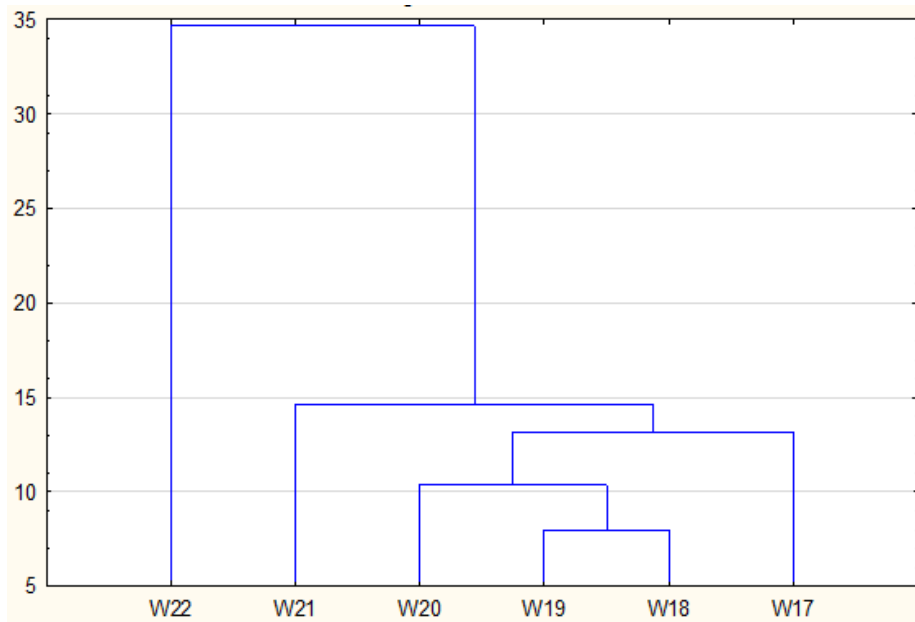


Fig. 2. Diagram for indicator P3 Financial issues (Euclidean distance/Ward's method)

So the clear objective risks into P2 criteria occur is between W18: Advice and placement in obtaining work and W19: Easiness of changing jobs.

2. Indicator P6 Health services consisted of eight variables:

- W34 Accessibility to health units
- W35 Quality of health services provided
- W36 Efficiency of services
- W37 Accessibility of rehabilitation
- W38 Cost of treatment (in private medical practices)
- W39 Possibility to use the services of community nurses
- W40 Possibility of geriatric treatment
- W41 Possibility to receive specialised hospital treatment

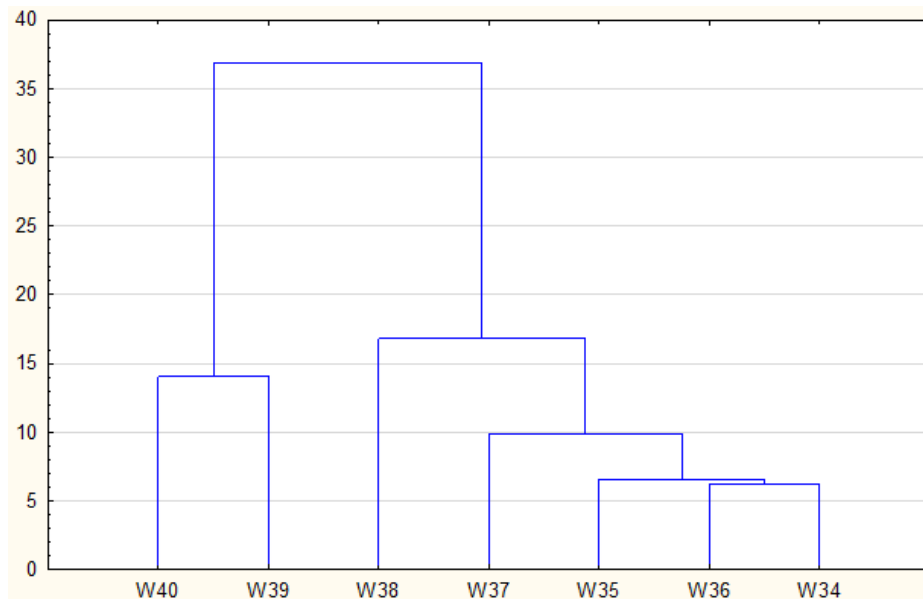


Fig. 3. Diagram for indicator P6 Health services (Euclidean distance/Ward's method)

We can observe two group of risk. So the clear objective risks into P2 criteria occur is between W18: Advice and placement in obtaining work and W19: Easiness of changing jobs.

2.2. Taxonomy of risks – final results

Risk is social. People perceive risk differently, so the dimension of risk is personal. Risk can be objective or subjective in the personal assessment of everyone who perceives it. The more objectively a person perceives a risk, the less scope there is for action to mitigate the negative effect of an event occurring. Risks for senior citizens in cities do not generally differ from those identified by other population groups, but they are assessed in the context of age-related considerations - health status, financial status, views and habits - and may therefore differ from the assessment of other demographic groups(4) .

A hierarchical method was used to obtain a taxonomy of risks in the set of all studied 99 indices in 15 groups. Not all can be clearly classified in one of the risk groups subjective or objective. The groups: P2 Open space of the city, P12 Acceptance and tolerance and P14 Social participation were not explicitly assigned to any rating assigned to the risk under study.

Tab. 1. Taxonomy of risks for senior citizens

Subjective risks	Objective risks
SOCIETY	
P3 Financial issues P4 Adult education P5 Culture, physical culture, sport P10 Safety in the neighbourhood P12 Acceptance and tolerance	
HEALTH	
P6 Health services P13 Social support	
ENVIRONMENT	
P1 Place of residence P8 Personal mobility P9 Neighbourhood	P7 Public transport P11 Public safety P15 Public space
P2 Open space of the city P12 Acceptance and tolerance P14 Social participation	

Conclusions and new fields of research

Governance techniques based on risk discernment in municipalities can be more effective with good recognition of the nature of risks. Recognizing the risks and their nature makes it possible to formulate the strategy of Municipal Government Units in such a way as to more effectively improve the quality of life of seniors in the city.

References

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