### **COST Action TD0804**

## Core ideas, tasks & workplan of WG-3

Chair: Peter Lercher

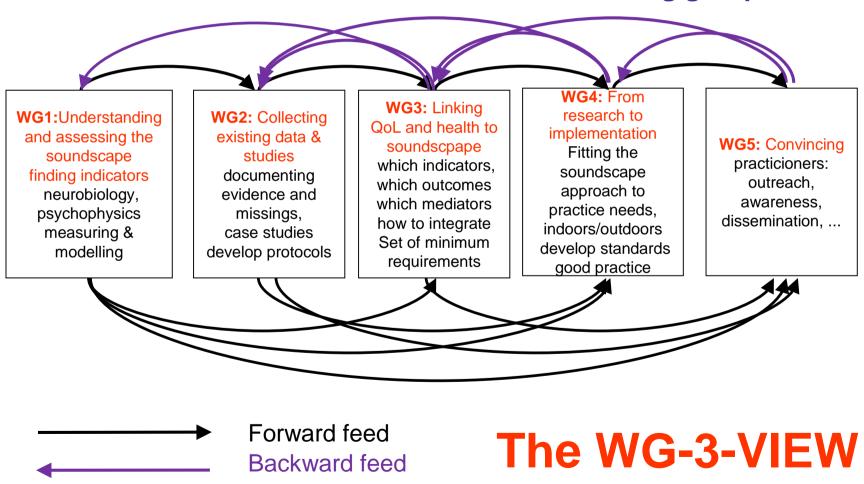
Co-Chair: Brigitte Schulte-Fortkamp

## Soundscape research is about relationships between the ear, human beings, sound environments and society\*

- Sound measurement, modelling and use of sound: outdoor & indoor
  - Assessing & understanding by classical & psychoacoustic means
- Sound perception (subjective & objective)
  - Using the appropriate indicators
- Effects of sound on humans ("environmental sound health")
  - Understanding positive and adverse impacts and resources
  - Using the appropriate indicators for effects assessment
- Sound in different contexts
  - Geography/climate (nature, topography, sea, mountains ...
  - Built environment, architecture (land use, layout, visual appearance.
  - Other environmental impact (air pollution, vibration ...
  - Social ecology (lifestyle, relationships, safety ...
  - Cultural context (importance, meaning ...
- Implementation of soundscape vision into regular planning processes and corrective adaptations
  - Integration

### SOUNDSCAPE OF EUROPEAN CITIES AND LANDSCAPES COST Action TD0804

#### Basic tasks and interactions of the 5 working groups



### The main ideas & tasks of WG-3

- Description and use of sound
  - Input from & interaction with WG-1 & WG-2
- Descriptors of effect -> planned workshops
  - Environmental quality of life
  - Health related quality of life
  - Restorative potential
  - Vulnerable people
- Context indicators -> planned workshop
  - Minimum set of single descriptors
  - Integrative descriptors
  - Vulnerable context descriptors
- Implementation of soundscape vision
  - Feed forward and interaction with WG-4 & WG-5

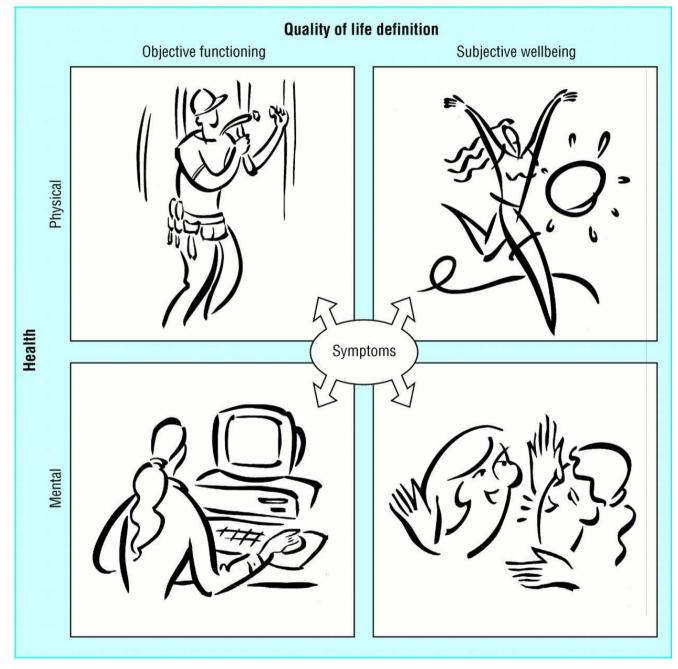
### Change of workplan

WG3	Concepts, models, goals	Year							
		1	1	2	2	3	3	4	4
WG3.1		у	у						
	soundscapes; common								
	sense and expert languages								
	for soundscapes								
WG3.2	Soundscape indicators:			У	У	У			
	physical, physiological,								
	human (symbolic,								
	behavioural, verbal,								
	semantic), etc								
WG3.3	Health and Quality of Life			У	У	У			
	outcome indicators used in								
	soundscape (including								
	moderators/mediators)								
WG3.4	Combination techniques				У	У	У	У	
	(data triangulation,								
	methodological triangulation)								
WG3.5	Conclusion: Towards						у	у	
	soundscape method								
	standardization/harmonization								

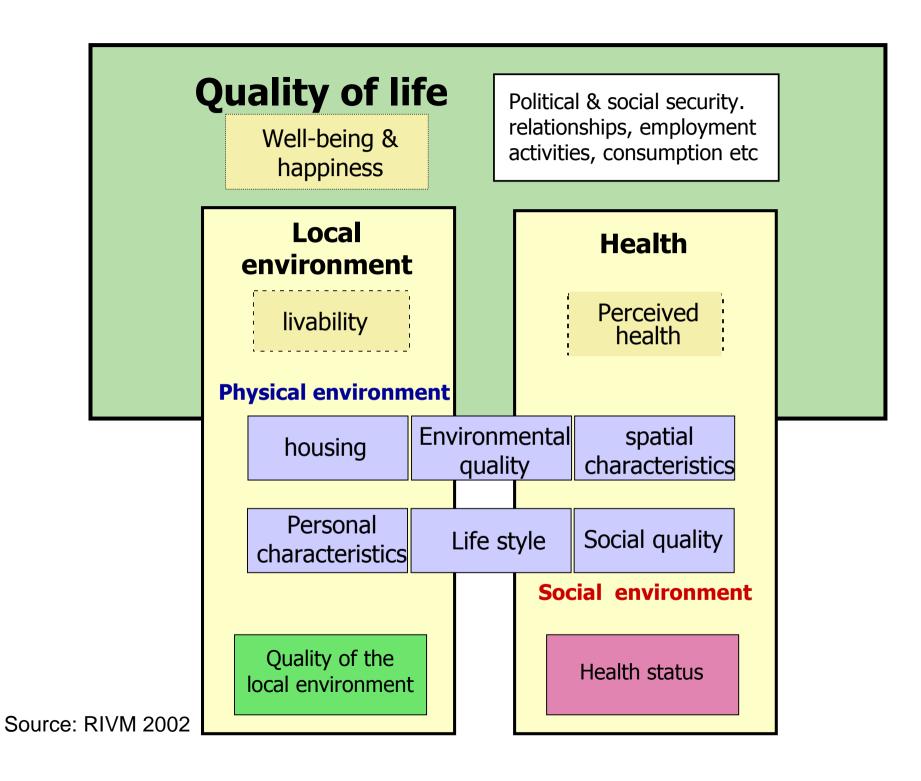
### **COST Action TD0804**

## WG-3 Quality of life and Health related Quality of Life concepts and examples of applications Peter Lercher

# related quality of life (HRQoL) Classical dimensions of health



BMJ 1998;316:542-545 <u>ਰ</u> et Muldoon



### A general quality of life model

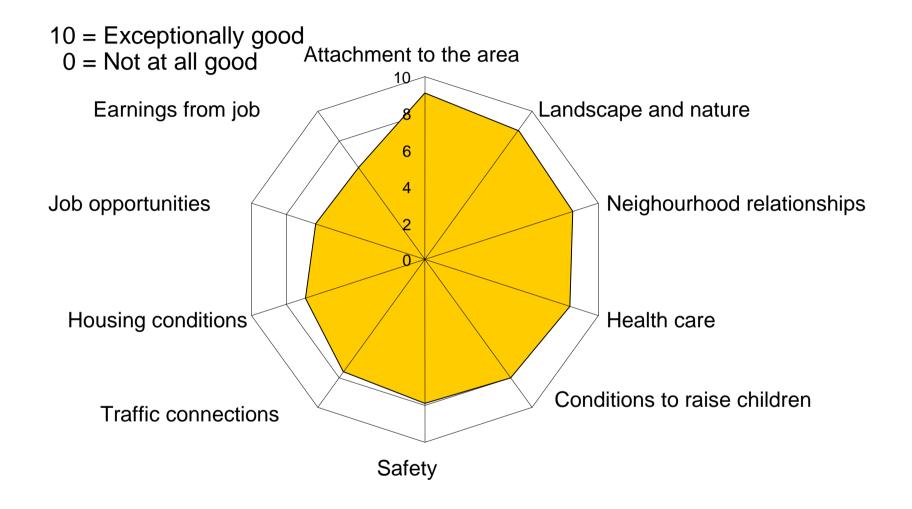
Spheres	Dimensions (obj./subj.)	Examples
Global	<ol> <li>Macro environment</li> <li>Human rights</li> <li>Policies</li> </ol>	Clean environment Democratic rights Culture
External	<ol> <li>Work</li> <li>Economy</li> <li>Housing</li> </ol>	Employment Income Type of housing
Interpersonal	<ul><li>1. Family</li><li>2. Intimate</li><li>3. Extended</li></ul>	Structure and function of social relationships
Personal	<ul><li>1. Physical</li><li>2. Mental</li><li>3. Spiritual</li></ul>	Growth, development, activity, self-esteem, meaning of existence

Source: Lindstroem 1992

### **Conceptual Model: Environment & Health**

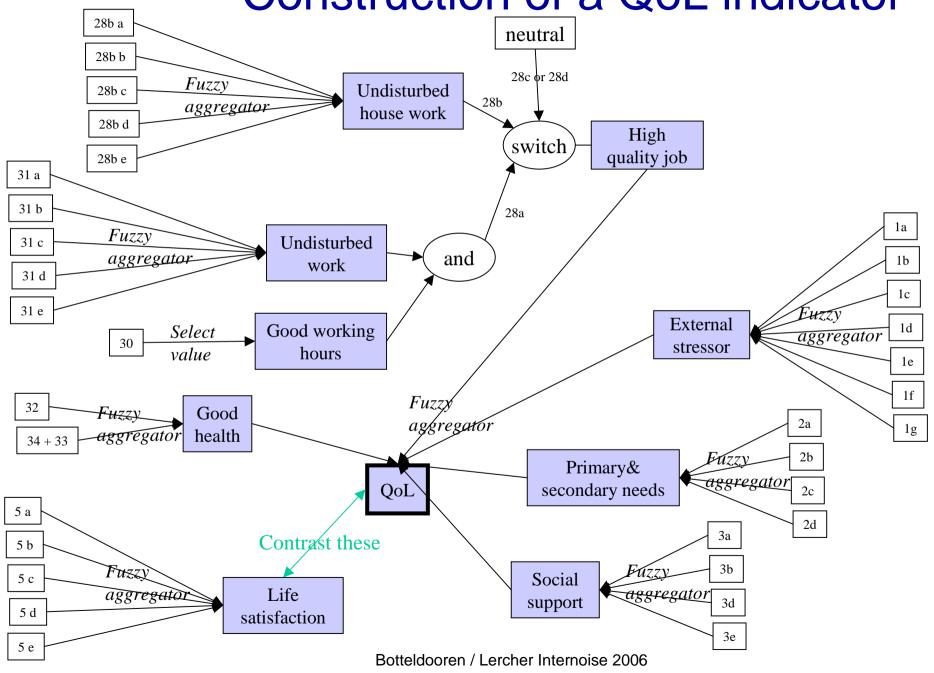
**Exposure Moderator Mediators Outcome** control stressors ressources sociosocial stressdemographic level support controlvariables lifebelief environment events perception of the lifeenvironment environment quality controlsymptoms belief health healthrisk pro status factors factors

Source: Bullinger 1997

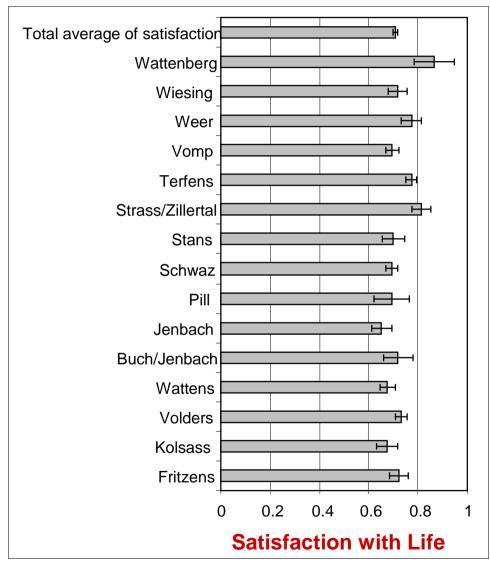


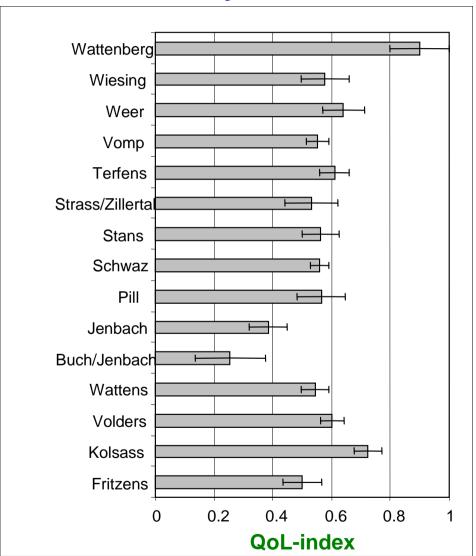
### General judgement of living conditions by category: means

### Construction of a QoL indicator



### Satisfaction with Life versus Qality of Life Quite different variation at community level





Botteldooren & Lercher, 2006 BBT-study

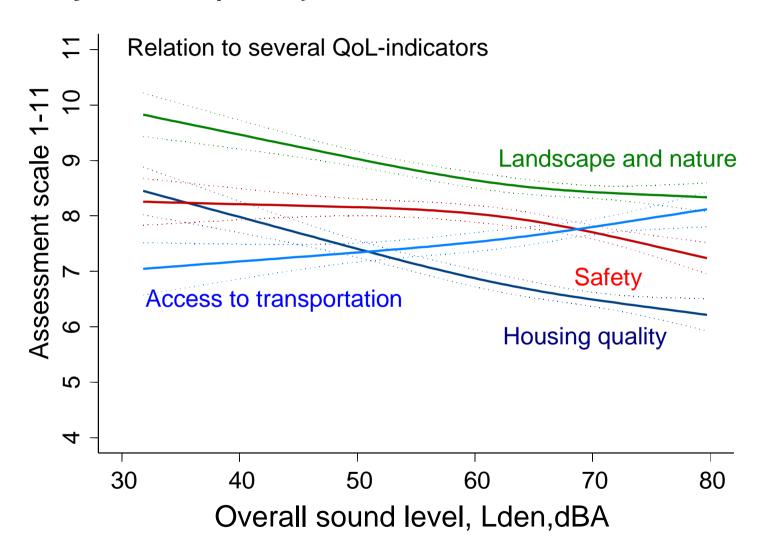
### Selected examples of contextual factors known to influence response to noise

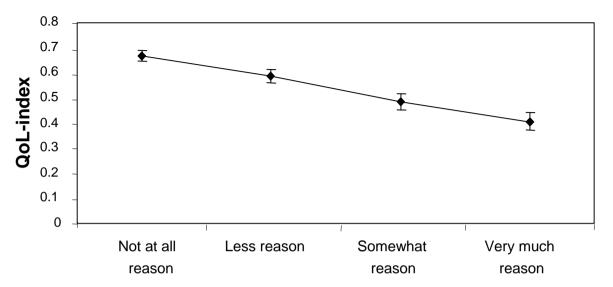
Climate	Geography Architecture	Environ- ment	Social ecology	Culture
cold, hot or moderate	nature/topography flat, hilly, valley, lake, sea	vibration air pollution odours	land use: residential mixed	habits and life style
seasons	area layout: the built environment	visual appearance	neighbour- hood relationships	meaning of living
prevailing winds	housing: type of house, common green, garden	density, room design	access to services recreation, safety	meaning of place

Source: Lercher P. Environmental noise: A contextual public health perspective.

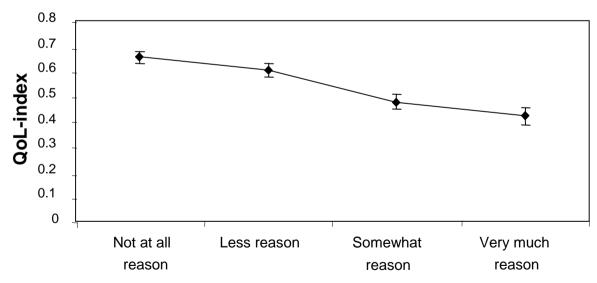
In: L. Luxon & D. Prasher (eds) Noise and its effects: pp 345-377. London: Wiley, London 2007.

### Subjective quality of life: its relation to noise





Reasons to complain about noise exposure\*



Reasons to complain about air pollution\*

<sup>\*</sup> Eurobarometer question