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HEPA Europe
European network for the promotion of health-enhancing physical activity

Data in physical activity promotion – How do we bridge the gap to our cross-sectoral partners and to policy makers?

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HEPA Europe, European network for the promotion of health-enhancing physical activity

7th International Conference on Diet and Activity Methods (ICDAM 7)
June 4–7, 2009, Washington, DC

Use of a hypothetical 20 million £ research fund

Suggestion by physical activity expert group:

"Application scheme focussing on the following topics:

- Development of measurement methods (standardisation, objective tools, applicability to low income countries)
- Role of the social and physical environment in different contexts and cultures
- Community and school interventions
- Research on national implementation programmes and policy research"

Suggestion summed up by Governor of Wellcome Trust:

„Methods... and some interventions"

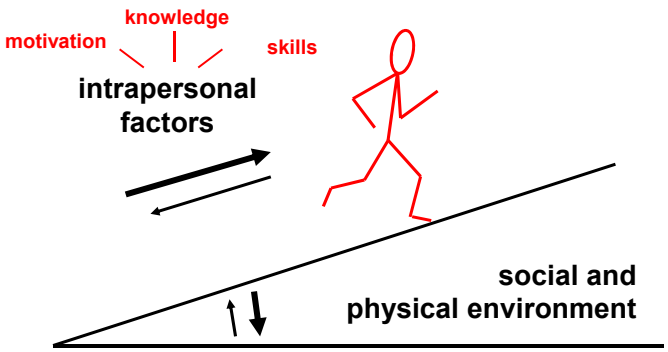
Communication with cross-sectoral partners and policy makers

- Tailor your messages to the recipient
  - Choose appropriate degrees of complexity
  - Take into account existing knowledge and concepts -> listen to people

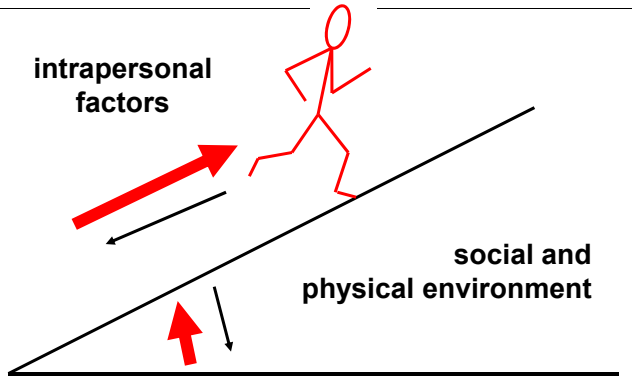
Selected statements by Governor of the Wellcome Trust

- (…)
- "Methods are boring anyway"
- "Also for complex problems there can be simple solutions"
- "We must learn something about the reasons why people are physically inactive or why they do not eat the right diet"
- "The possibilities of behavioural approaches must be explored"
- (…)

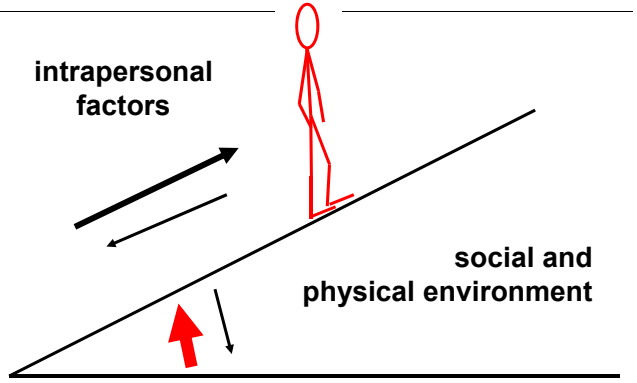
Determinants of (physical activity) behaviour



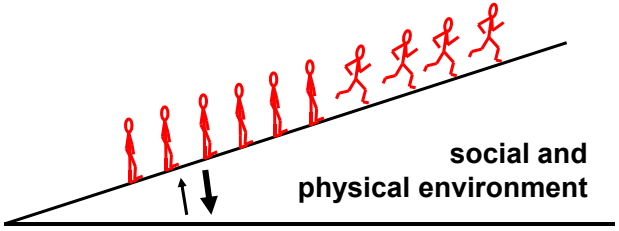
Determinants of (physical activity) behaviour



Determinants of (physical activity) behaviour



The role of physical activity determinants at the population level



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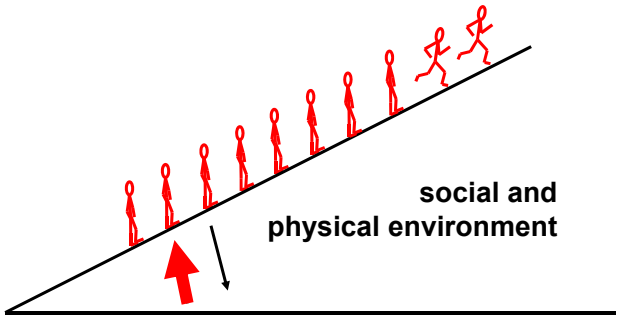
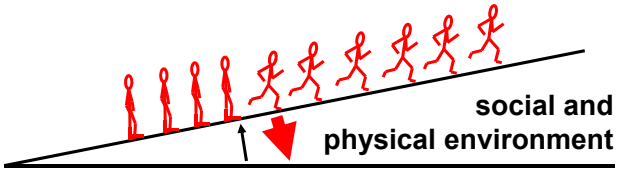
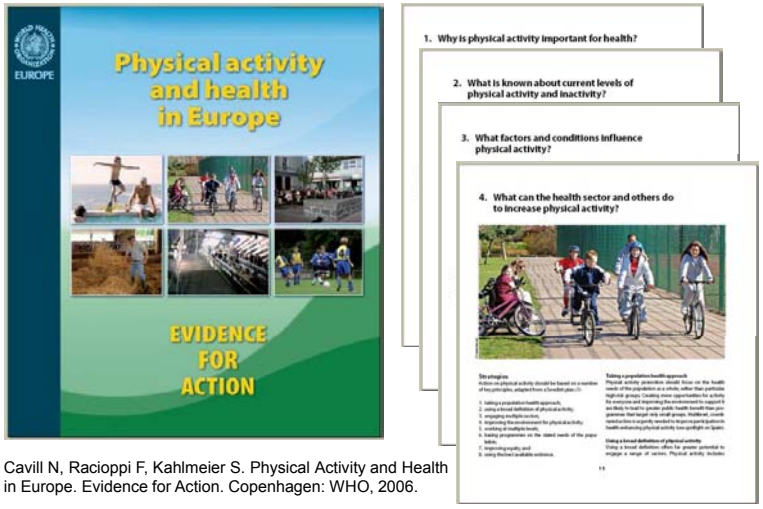


The role of physical activity determinants at the population level

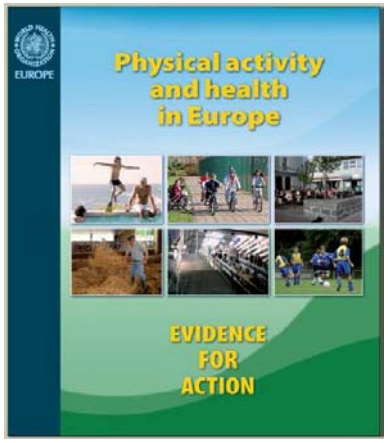


Communication with cross-sectoral partners and policy makers

- Tailor your messages to the recipient
- Provide authoritative background documentation
  - Accurate and evidence-based in content
  - Issued by respected institution
  - First draft developed by scientific experts
  - Wording and illustrations by communication specialists
  - Joint revision by both
  - Possibly adaptations after testing with target audience



Cavill N, Racioppi F, Kahlmeier S. Physical Activity and Health in Europe. Evidence for Action. Copenhagen: WHO, 2006.



Currently available in 6 languages

Russian

Danish

Italian

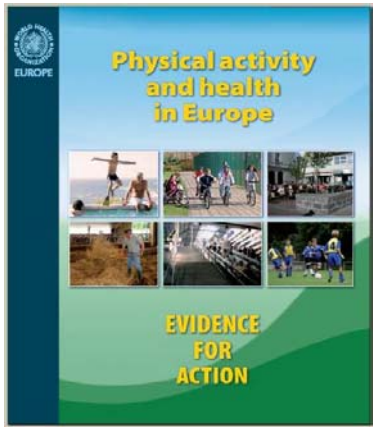
Portuguese

Slovenian

Production in progress:
French, Japanese, Spanish, Turkish
Translation planned: Swedish

Cavill N, Racioppi F, Kahlmeier S. Physical Activity and Health in Europe. Evidence for Action. Copenhagen: WHO, 2006. www.euro.who.int/hepa

Possibilities for national adaptations



www.euro.who.int/hepa

www.physicalactivityandhealth.ch/documents

Swiss Federal Office of Sports, Swiss Federal Office of Public Health, Health Promotion Switzerland, Network HEPA Switzerland: Health-Enhancing Physical Activity. A Base Document. Magglingen: Swiss Federal Office of Sports, 2006. www.physicalactivityandhealth.ch/documents

www.euro.who.int/hepa

www.physicalactivityandhealth.ch/documents

Communication with cross-sectoral partners

Promoting and creating built or natural environments that encourage and support physical activity

NICE guidance development as a multi-step process (similar to CDC community guide) including stakeholder involvement and fieldwork testing.

www.nice.org.uk

Communication with cross-sectoral partners

Qualitative study with 79 individuals from different sectors on the usefulness of the 2008 NICE guidelines.

"There is a risk of stating the bleeding obvious for our cross-sectoral partners"

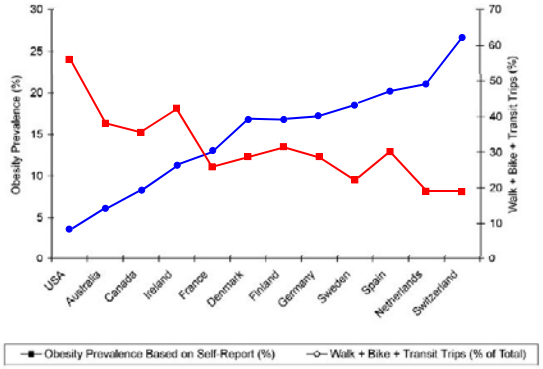
→ issue of differences in experiences, knowledge and standards between sectors

Nick Cavill. Turning evidence into guidance: exploring the views of stakeholders. In ICPAPH08 Symposium: Producing evidence-based guidelines on physical activity: a look behind the scenes

Communication with cross-sectoral partners and policy makers

- Tailor your messages to the recipient
- Provide authoritative background documentation
  - Reasonably successful in communicating with public health partners at different levels
  - Communication with partners in other sectors seems more challenging

Walking, Cycling, and Obesity Rates in Europe, North America, and Australia



Bassett DR, Pucher J, Buehler R, Thompson DL, Crouter SE. J Phy Act Health 2008, 5: 795-814.

Communication with cross-sectoral partners and policy makers

- Tailor your messages to the recipient
- Provide authoritative background documentation
- For communication with cross-sectoral partners, try to use their tools and standards
  - Economic assessment tools for transport planners
  - HEAT Cycling: very successful
  - HEAT walking as next step

The Health Economic Assessment Tool HEAT for Cycling

www.euro.who.int/hepa

The Health Economic Assessment Tool HEAT for Cycling

Step 1: enter your data (all users must fill in the red fields)	
Number of trips per day	10'000
Mean trip length (km)	4

Step 2: check the parameters	
Mean number of days cycled per year	124
Proportion of trips that are one part of a return journey (or 'round trip')	0.9
Proportion undertaken by people who would not otherwise cycle	0.5
Mean proportion of working age population who die each year	0.005847
Value of life (in Euros)	EUR 1'500'000
Discount rate	5.0%

Population parameters used to calculate results	
Population that stands to benefit	2750
Mean proportion of working age population who die each year	0.005847
Expected deaths in the local population	16.08
Protective benefit, according to actual distance traveled	0.17
Lives saved	2.81

The Health Economic Assessment Tool HEAT for Cycling

Step 1: enter your data (all users must fill in the red fields)	
Number of trips per day	10'000
Mean trip length (km)	4

Step 3: read the economic savings resulting from reduced mortality	
Maximum annual benefit	**EUR 4'209'000**
Savings per km cycled per individual cyclist per year	EUR 0.81
Savings per individual cyclist per year	EUR 765
Savings per trip	EUR 3.39
Mean annual benefit:	**EUR 3'136'000**
Present value of mean annual benefit:	**EUR 2'283'000**

Based on the following assumptions (see user guide for details)

5% discount rate
5 year build-up of benefit and 1 year build-up of uptake, averaged over 10 years

Communication with cross-sectoral partners and policy makers

- Tailor your messages to the recipient
- Provide authoritative background documentation
- For communication with cross-sectoral partners, try to use their tools and standards
- Be open to innovative approaches
  - Participatory development of measures (Swiss Council for Accident Prevention)
  - Cybernetic determinant models for policy makers (Diet and Physical Activity Programme canton of Aargau)

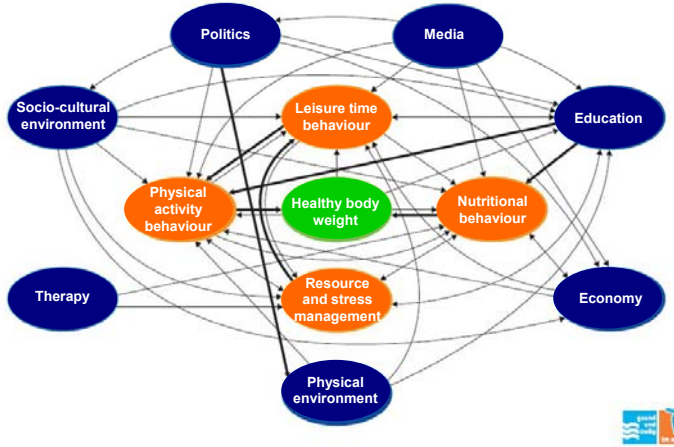
bfu Accident prevention in water activities

- Detailed analysis of deadly accidents, risk factors and individual causes (-> anonymised case sheets) by Swiss Council for Accident Prevention
- Development but not yet presentation of preliminary ideas for implementation
- Stakeholder meeting with 40 potential partner institutions:
  - Plenary presentation of evidence
  - Working groups on settings (schools, political authorities, adventure offers, public pools), re-focussing on evidence and case sheets
  - Participatory development of recommendations and measures

bfu Accident prevention in water activities

- According to Frank Hofer and Othmar Brügger (Swiss Council for Accident Prevention) first experiences very promising
- Re-focussing on evidence in working groups improved was appreciated and fruitful
- Considerably greater support from partners for specific measures
- Same approach will be used for bicycle accidents
- Applicability to physical activity promotion?

Determinant model of the canton of Aargau, Switzerland

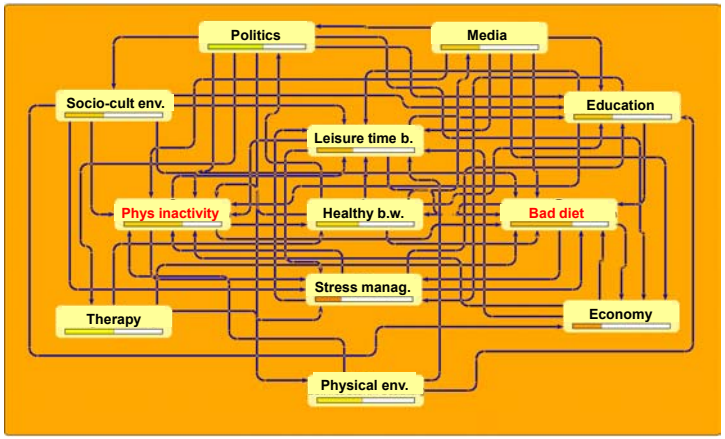


Cybernetic determinant model

- Economic, not epidemiological model
- Situation concerning the determinants is assessed in a consensus-based, not in an evidence-based process (range from 0 to 30; 15 being the neutral position; yellow: neutral; green: desirable; orange-red: undesirable)
- Strength of relationships is defined in a consensus-based, not in an evidence-based process
- The period time is assumed to be 1 year

Illustrations courtesy of Thomas Fischer, Institute of Management Sciences, University of Applied Sciences of Northwestern Switzerland

Cybernetic determinant model, stakeholder assessment



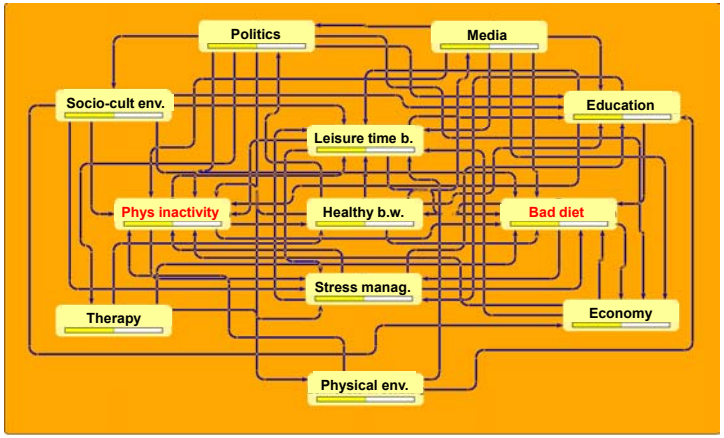
Illustrations courtesy of Thomas Fischer, Institute of Management Sciences, University of Applied Sciences of Northwestern Switzerland

Cybernetic determinant model

- The following slides show a simulation
- All determinants as well as “healthy body weight” are in a hypothetical neutral position (yellow situation bars)
- The simulation is started by an arbitrary change in the socio-cultural environment (recent changes in indicated by gray bars)
- Changes in determinants and “healthy body weight” are indicated in the situation bars (desirable: green ; undesirable: orange-red)
- The period time is assumed to be 1 year

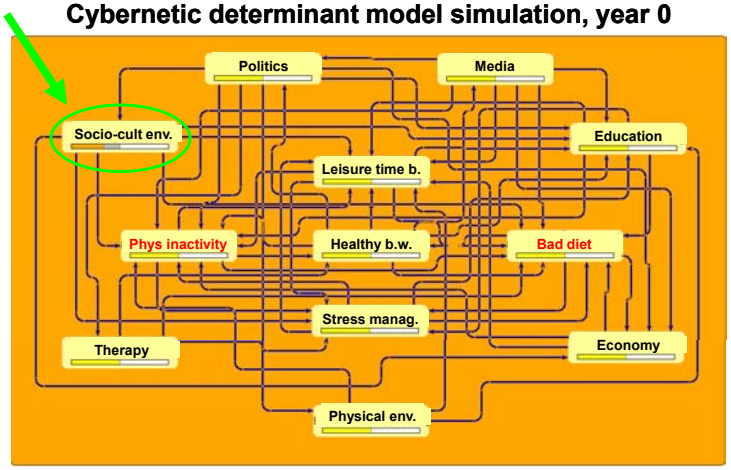
Illustrations courtesy of Thomas Fischer, Institute of Management Sciences, University of Applied Sciences of Northwestern Switzerland

Cybernetic determinant model simulation, neutral position



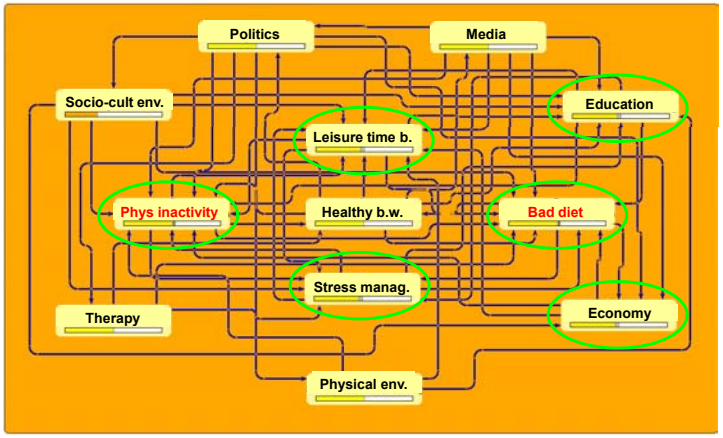
Illustrations courtesy of Thomas Fischer, Institute of Management Sciences, University of Applied Sciences of Northwestern Switzerland

Cybernetic determinant model simulation, year 0



Illustrations courtesy of Thomas Fischer, Institute of Management Sciences, University of Applied Sciences of Northwestern Switzerland

Cybernetic determinant model simulation, year 1



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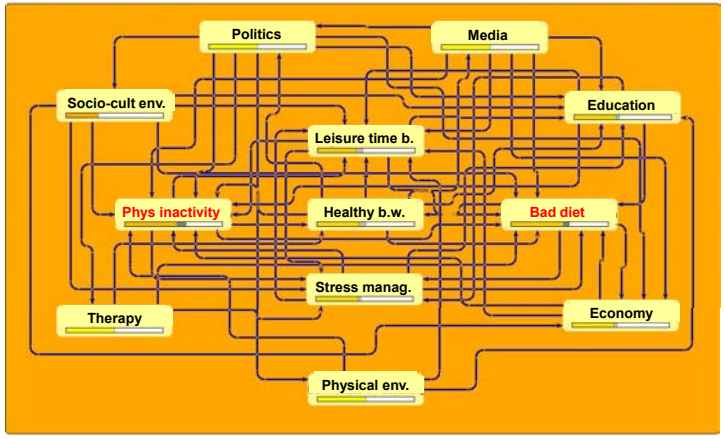
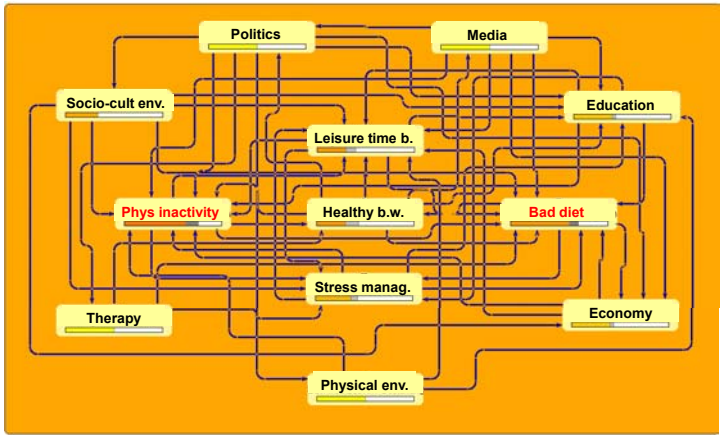
Cybernetic determinant model simulation, year 2



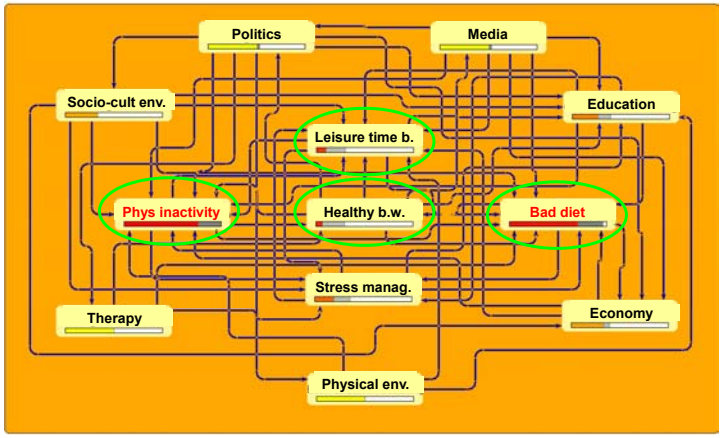
Illustrations courtesy of Thomas Fischer, Institute of Management Sciences, University of Applied Sciences of Northwestern Switzerland

Cybernetic determinant model simulation, year 3



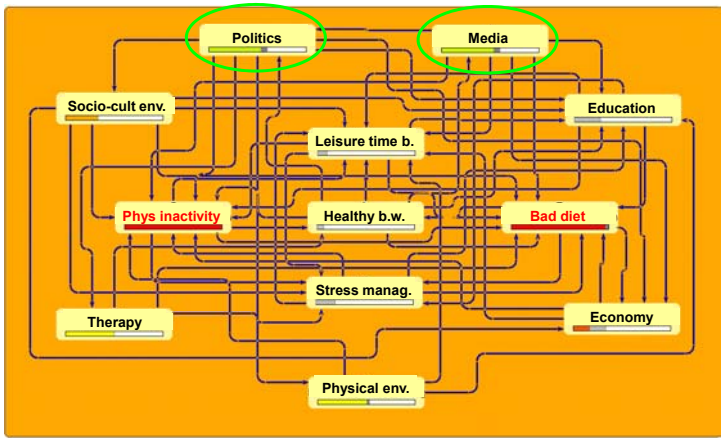
Illustrations courtesy of Thomas Fischer, Institute of Management Sciences, University of Applied Sciences of Northwestern Switzerland

Cybernetic determinant model simulation, year 4



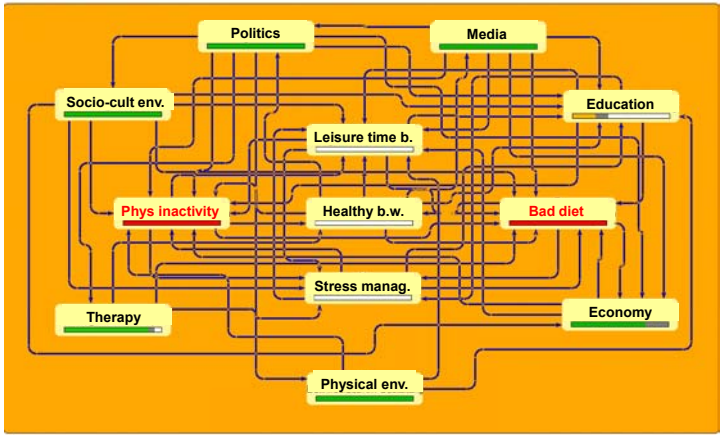
Illustrations courtesy of Thomas Fischer, Institute of Management Sciences, University of Applied Sciences of Northwestern Switzerland

Cybernetic determinant model simulation, year 5



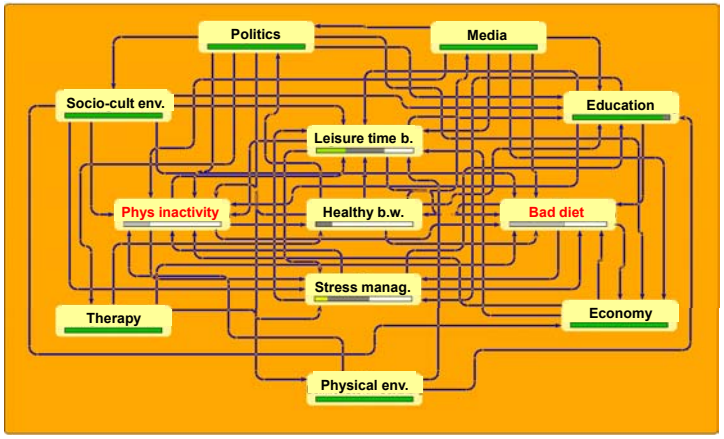
Illustrations courtesy of Thomas Fischer, Institute of Management Sciences, University of Applied Sciences of Northwestern Switzerland

Cybernetic determinant model simulation, year 14



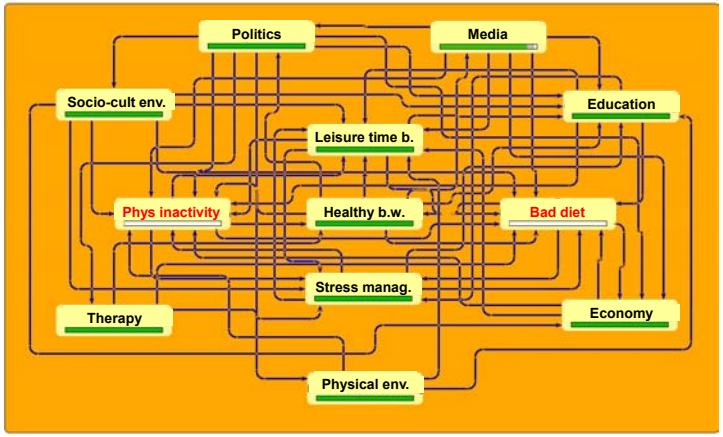
Illustrations courtesy of Thomas Fischer, Institute of Management Sciences, University of Applied Sciences of Northwestern Switzerland

Cybernetic determinant model simulation, year 19



Illustrations courtesy of Thomas Fischer, Institute of Management Sciences, University of Applied Sciences of Northwestern Switzerland

Cybernetic determinant model simulation, year 22



Illustrations courtesy of Thomas Fischer, Institute of Management Sciences, University of Applied Sciences of Northwestern Switzerland

Cybernetic determinant model

- Not an evidence-based model, but based on a number of assumptions to be negotiated with policy-makers and other stake-holders
- Sufficiently robust and complex to avoid manipulation
- Very useful for illustrating complexity of interactions
- Very useful for illustrating time lags involved
- Compatibility with epidemiological evidence?

Illustrations courtesy of Thomas Fischer, Institute of Management Sciences, University of Applied Sciences of Northwestern Switzerland

Conclusions

- Tailor your messages to the recipient
- Provide authoritative background documentation
- For communication with cross-sectoral partners, try to use their tools and standards
- Be open to innovative approaches
- Don't give up, re-assess the situation and try again!

Handout at www.physicalactivityandhealth.ch/presentations