

# On-line, interactive training course

## *The art of public opinion survey analysis: Surveying the public on Radon & NORM*

26 | April  
30 | 2021



This course is a must for all experts and authorities that are implementing BSS Directive in their national contexts and need to address people's awareness, attitudes and behaviour in Radon and NORM exposure situations. This training course will learn participants to prepare, conduct and analyse data according to the highest methodological standards.

This course in particular will give you:

- Valuable preparation and hands on **practice in preparation of public opinion surveys** for understanding the socio-psychological situation of affected populations and stakeholders
- Understanding on how to **measure latent constructs** such as awareness, subjective norms or efficacy, and behaviour such as conducting radon test or mitigate a house, **analyse** and **interpret results**.

## WHO SHOULD ATTEND IT?

- Representatives of authorities that plan awareness campaigns in the context of national Radon Action Plan according to BSS Directive.
- Representatives of organizations responsible for socio-economic studies related to NORM exposure situations.
- RadoNorm members conducting public opinion surveys.

### Only 15 places are available

Early career researchers and participants from EU MS have priority.

Participants need to have basic statistical knowledge and experience in using SPSS or STATA or any other statistical software

### ORGANISERS

H2020 RadoNorm project in collaboration with University of Antwerp and Belgian Nuclear Research Centre. The RadoNorm project has received funding from the Euratom research and training programme 2014-2018 under grant agreement No 900009.

**5 days**  
**6 hours/day**

**Morning session: 3 hours theory**

**Afternoon Sessions: 3 hours hands-on**

*(For optimal learning results follow the complete course)*

**The course is free of charge** since it is supported by the RadoNorm project.

**REGISTRATION open at**

[https://uantwerpen.eu.qualtrics.com/jfe/form/SV\\_bq4GMFAZcvghkaO](https://uantwerpen.eu.qualtrics.com/jfe/form/SV_bq4GMFAZcvghkaO)



# Detailed training course contents and activities

## DAY 1

### How to design a questionnaire in line with research questions?

- Construction of a nomological network
- The do's and don'ts of question wording
- How to construct new scales and how to evaluate existing scales
- Sequencing questions: Structuring, ordering and priming issues

**Hands on:** Learning from Radon and NORM related barometer and other radiological risk perception data (Belgium)

## DAY 2

### Lots of polls in the air: Sampling designs

- Random samples: What's in a name?
- Samples: The good, the bad, and the ugly
- RDD, CAPI, CAWI and CATI
- Process evaluation and interview delay

**Hands on:** Evaluating and screening offers of polling firms for surveys on radon and NORM risks

## DAY 3

### Analysis of survey data: A statistical primer

- Statistical quiz focussing on challenging concepts in univariate and multivariate statistics
- Questions on basic/intermediate and advanced level

**Hands on:** Filling the gaps, refreshing your knowledge. Remedial material will be made available

## DAY 4

### Analysis of survey data: Exploratory techniques

- Cleaning the data (recoding, missing value declaration, imputation)
- Assessing the validity and the reliability of data
- Constructing indexes or latent constructs
- Factor analysis – Principal components
- Cronbach's alpha: What's in a name?
- Cluster analysis
- Explanations based on factor regression coefficients

**Hands on:** Apply the techniques using computer program SPSS (Participants need to have SPSS installed on their computer, Radon and NORM related data base will be provided by the course organisation)

## DAY 5

### Analysis of survey data: Confirmatory techniques

- Confirmatory factor analysis
- Interpreting error covariance
- Integrating measurement and structural models
- Evaluating indirect effects
- Assessing and improving the fit of a model
- Making sexy explanatory graphs

**Hands on:** Apply the techniques using computer program Mplus

**COURSE DIRECTOR**  
Prof. dr.  
Peter Thijssen



A professor (full) in social statistics and public opinion research at the faculty of social sciences of the University of Antwerp (Belgium). For many years he teaches courses in introductory statistics, more advanced courses in applied statistics and structural equation modelling, as well as theoretical modules on public opinion and public participation. He is a coordinator, supervisor and steering committee member of many public opinion research projects, also related to ionizing radiation, including surveys in RadoNorm.

Contact: [peter.thijssen@uantwerpen.be](mailto:peter.thijssen@uantwerpen.be)

**COURSE CO-DIRECTOR**  
Dr.  
Tanja Perko



Obtained a PhD in risk communication about radiological risks and radiological risk perception. She leads the recent SCK CEN public opinion survey (2020-2021) related to societal aspects of radiological risks and nuclear technology. With the RadoNorm team she performs and coordinates empirical research on attitudes and behaviours related to Radon and NORM exposure situations and conducts empirical testing of communication interventions in different exposure situations.

Contact: [Tanja.Perko@sckcen.be](mailto:Tanja.Perko@sckcen.be)

**COURSE ASSISTANT**  
MSc.  
Melisa Muric



RadoNorm PhD candidate developing innovative methodology to study the socio-psychological situation of populations affected by Radon and NORM exposure. She obtained her MSc in political science at the Faculty for social sciences at the University of Antwerp.

Contact: [Melisa.Muric@sckcen.be](mailto:Melisa.Muric@sckcen.be)

