

A socio-psychological analysis of the characteristics and needs for information and communication of EMF – Hypersensitives

Results of the BfS-Study
presented at the
International Workshop on
,Results from the *German Mobile Telecommunication Research Programme* related
to risk communication‘

Svend Ulmer
18.10.2006, GSF, München-Neuherberg

1. The study

General objective of the study

- to collect data on the constitution of HS and their need for information in order to improve communication with HS.
 - ...which implies:
Debates concerning the existence of EMF-Hypersensitivity and - dangers were taken as a influence on risk perception of HS (but not as objects of research).

Aim of the study

- Gaining a platform of understanding of the psychological and communicational constitution of HS as a basis for strategic recommendations for communication measures with HS.
 - Central questions:
 - Whether HS can be described as a sociodemographical and psychological homogeneous or heterogeneous target group
 - Which consequences these findings have for the (strategical) setting of communication measures.

Design

- a 4-step-combination of quantitative sociodemographic-psychometric and qualitative psychological data collection:
 1. prevalence and further information were established by a representative telephone survey.
 2. psychological ways of coping with the phenomenon of “EMF hypersensitivity” were analysed in morphological in-depth interviews with 40 HS.
 3. In a third step patterns of interpretation and factors influencing their formation were related to the societal framework.
 4. Based on these results, options for further action regarding the communication with HS were developed.

Definition of EMF-Hypersensitivity

- *In this study EMF Hypersensitives are defined as persons, who put down concrete health complaints (appearing more than one time) to the existence of electric, magnetic and electromagnetic fields (EMF).*

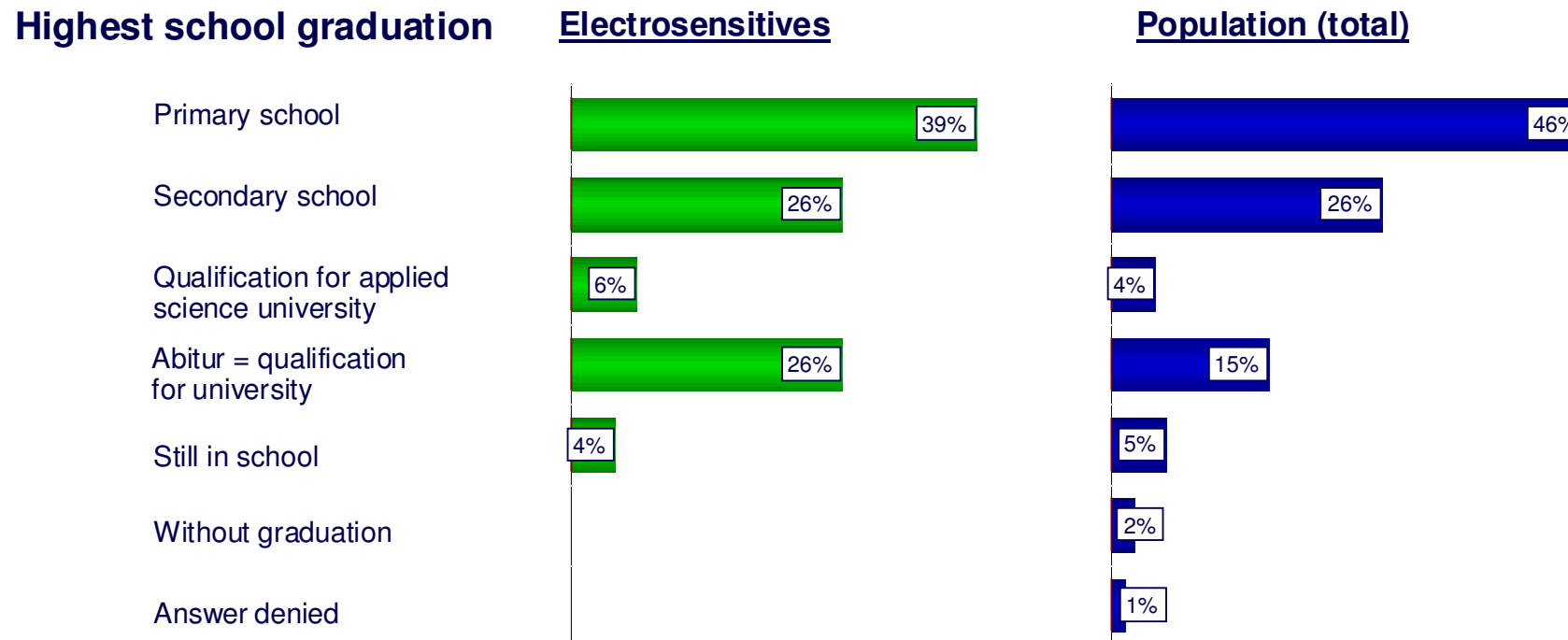
2. Quantitative survey

Results of the Screening - Sampling distribution

	<u>Distribution of cases in the Screening</u>		<u>Distribution in %</u>	
	unweighted	weighted	unweighted	weighted
Completed screening interviews	2.406		100%	100%
Health complaints due to electric, magnetic and electromagnetic fields (EMF)?	Yes, recently 102	Yes, in the past 81	No / Don 't know 2.186	7,6% 6,4%
Concrete complaints mentioned?	Yes 177	No / Don 't know 6	7,4% 6,3%	
Complaints occurring more than once?	Yes 167	No 10	6,9% 6,0%	
Number of EMF-Hypersensitives	167	144		
Willing to participate in-depth-interviews	98	80		

Telefonical Screening of the german population and survey of EMF-Hypersensitives, between October and November 2004;
2.406 Screening-Interviews and 167 Survey-Interviews with EMF-Hypersensitives

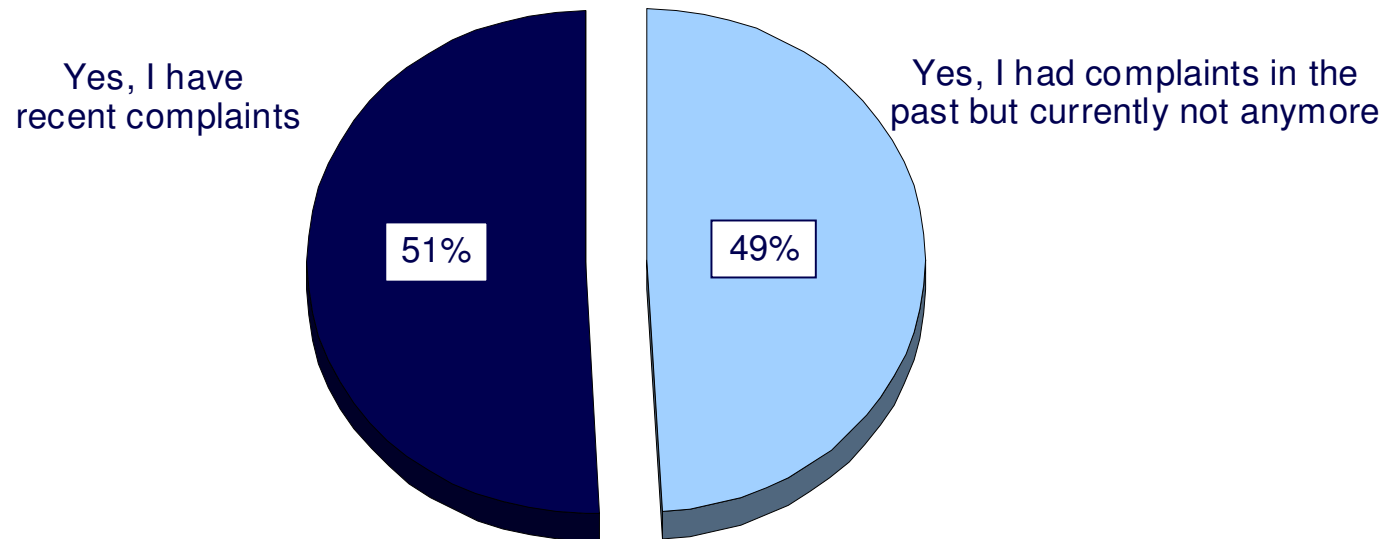
Comparison: EMF-Hypersensitives and population sample II



EMF-Hypersensitives: Structure of the sample

Basis: EMF-Hypersensitives

Distribution of interviewees with health complaints due to electric, magnetic and electromagnetic fields (EMF)

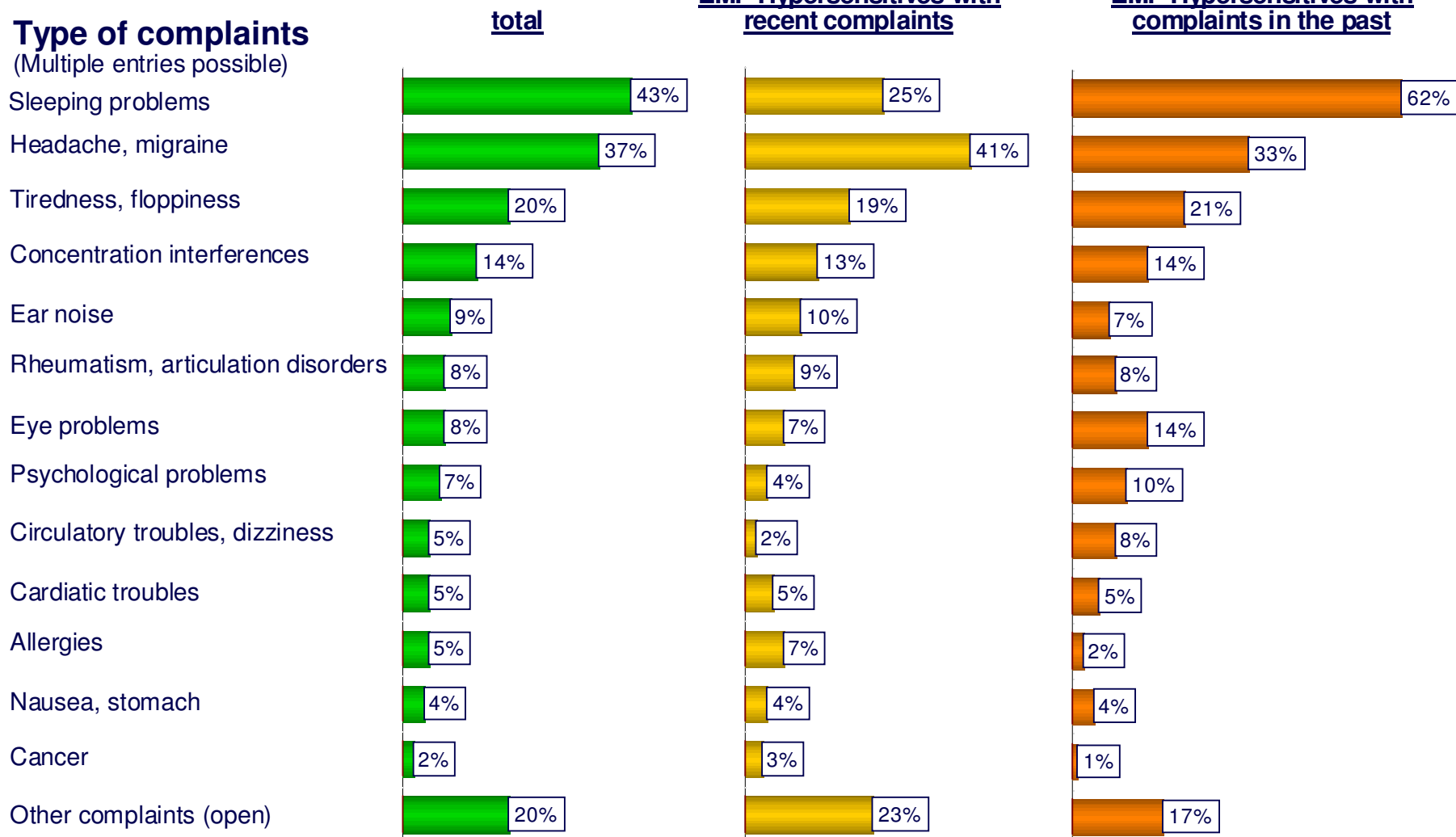


Type of complaints

Basis: EMF-Hypersensitives

Type of complaints

(Multiple entries possible)

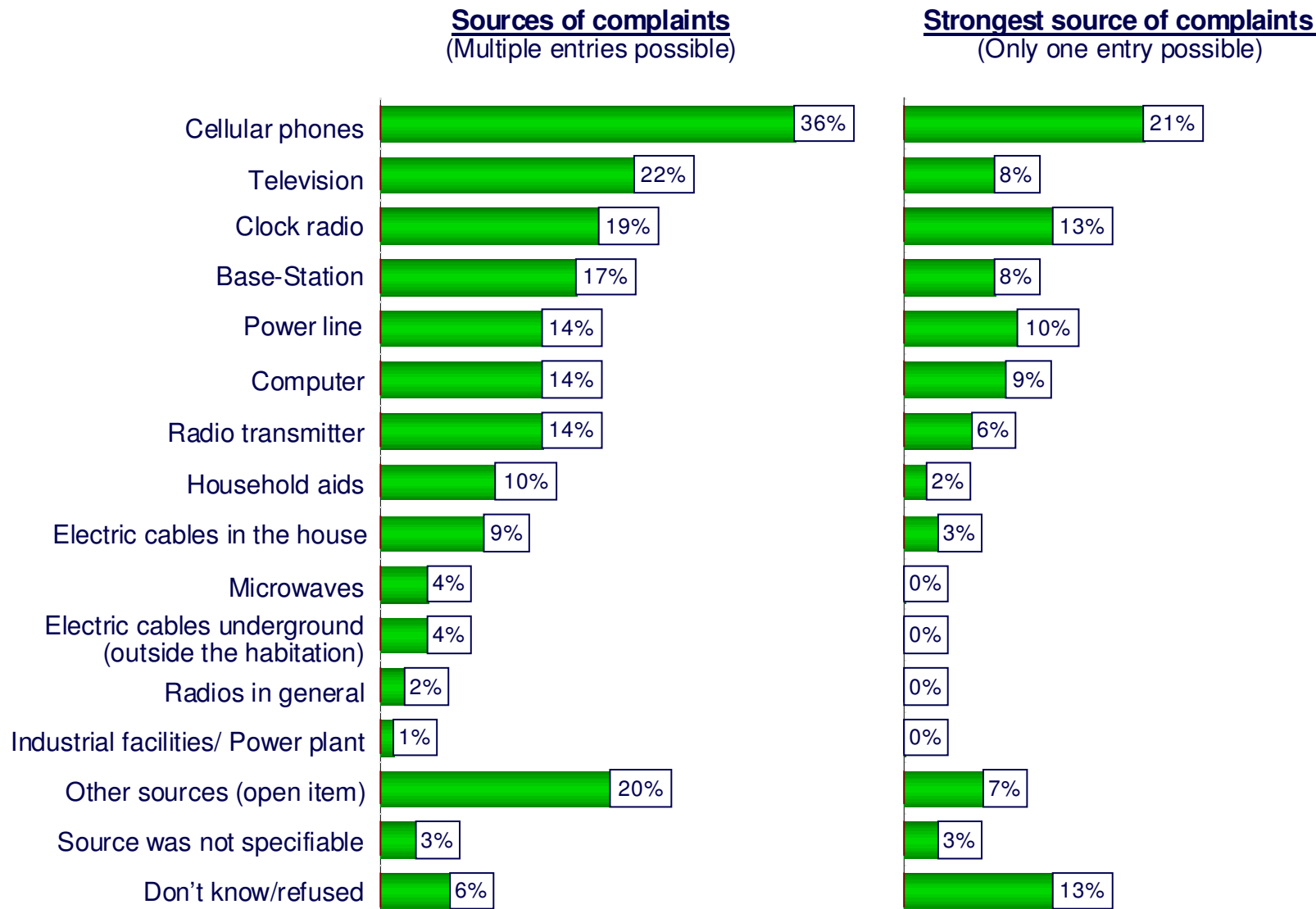


Telefonical Screening of the german population and survey of EMF-Hypersensitives, between October and November 2004;
2.406 Screening-Interviews and 167 Survey-Interviews with EMF-Hypersensitives



infas

Sources of health complaints

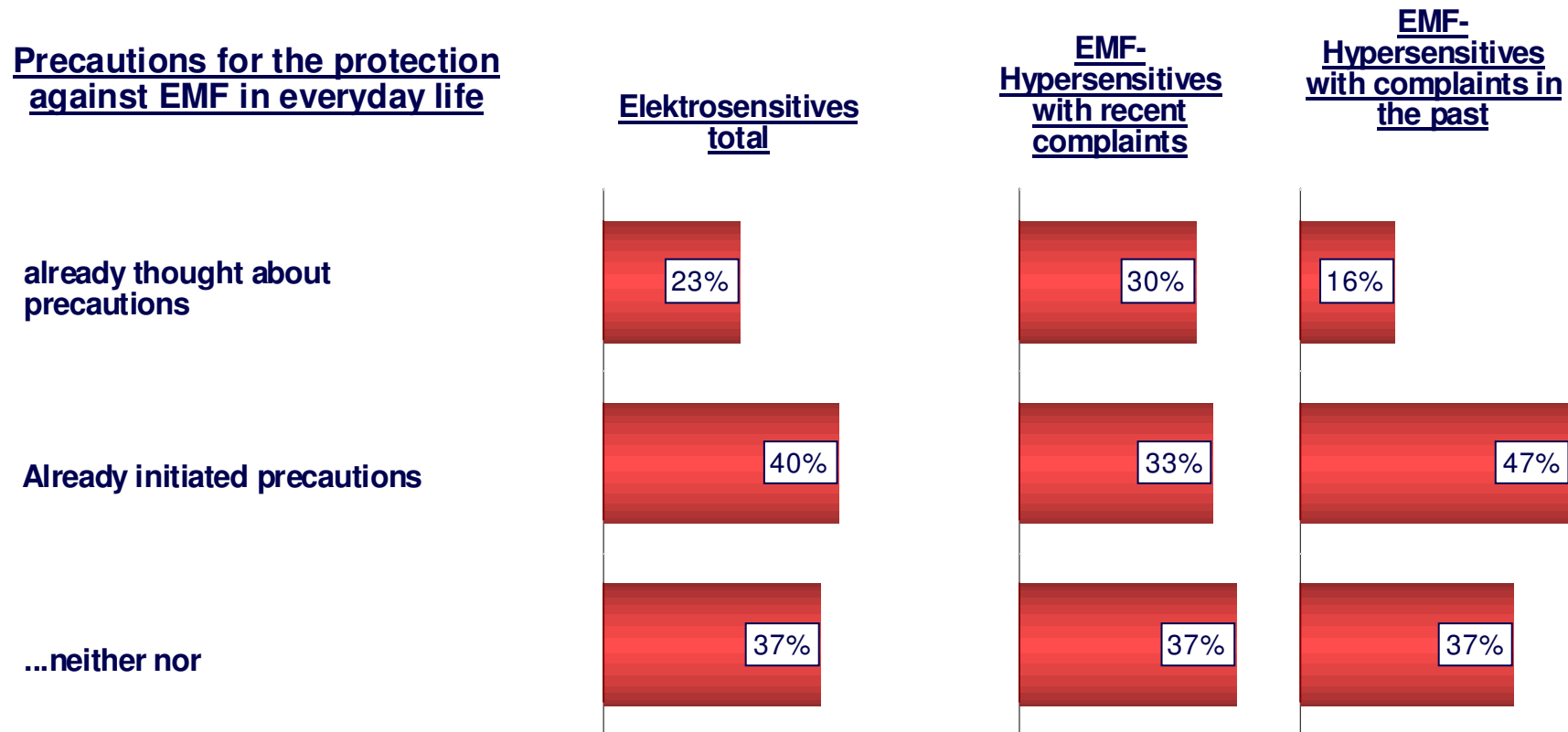


Telefonical Screening of the german population and survey of EMF-Hypersensitives, between October and November 2004;
2.406 Screening-Interviews and 167 Survey-Interviews with EMF-Hypersensitives



infas

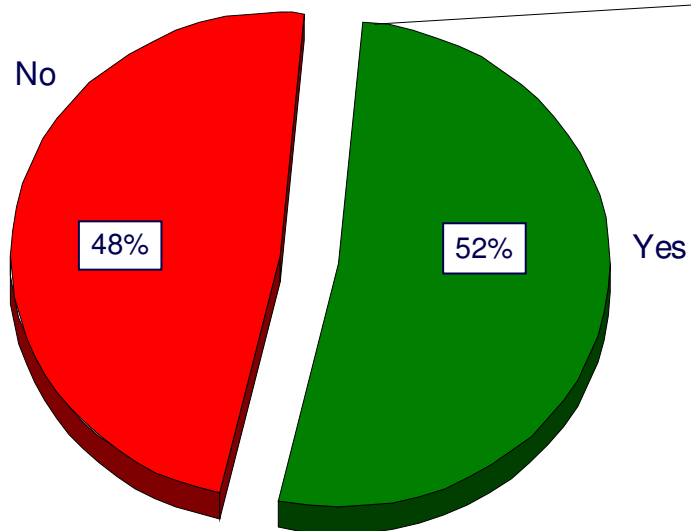
Precaution to EMF



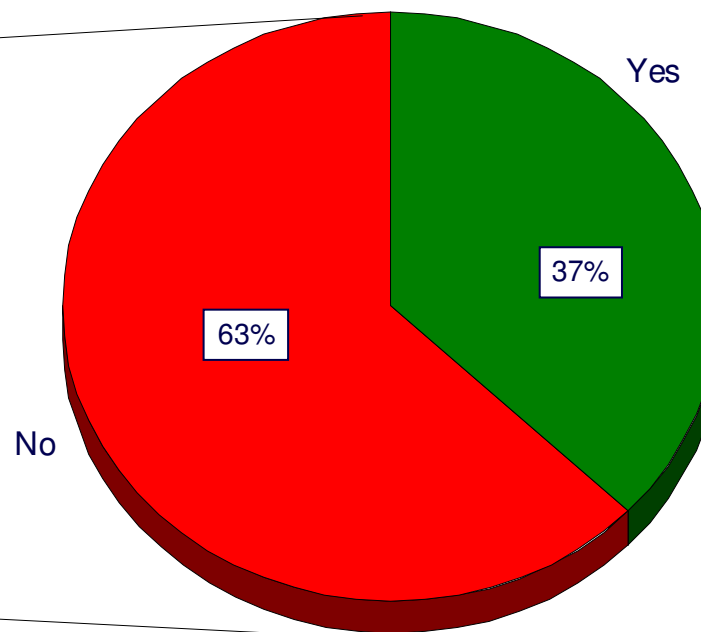
High Profile of the term “EMF-Electrosensitivity”

Basis: EMF-Hypersensitives

Do you know the term EMF-Electrosensitivity?



Have you classified yourself as EMF-electrosensitive?



2. In-depth-Interviews

■ In general I:


- the **target group segmentation** showed that HS as a heterogeneous group (despite the sociodemographic “inconspicuousness”)
- EMF hypersensitivity proved to be a multi-faceted and ambiguous topic for those interviewed, and many interviewees were in inner conflict over the effects of EMF.
- Unlike in standardised interviews, a firm connection between ‘symptom’ and ‘cause’ could only be established occasionally.
- The interviews do not show ‘EMF hypersensitivity’ to be an inflexible and isolated ‘fact’ in the everyday live of those interviewed.

■ In general II:

- 'EMF' represents a 'meaning-giving image', through which certain (self-) experiences are manifested, thus becoming available and manageable (again) for the individual.
- Starting with personal and concrete problems, the topic is also interpreted as cultural criticism
- a diffuse anxiety about modern technological culture is noticeable – the diffuse 'electrosmog' serves as *one* meaning-giving image for the (latent) anxiety about culture as a whole.

■ Motivational Tension

- This anxiety about technological culture reveals a tense motivational relationship - the field of 'modern (communication-) technology' is defined by the polar motive dimensions of

Coping with everyday life  **Revolution of everyday life**

1. Coping with everyday life

We are surrounded by a plethora of technological appliances which are supposed to **secure and ease** our everyday life, and **without** which our everyday life seems simply ‘**not manageable**’ anymore.

The **reverse side of these benefits** is a feeling of **existential dependency** on things the average citizen at best only partly understands and is only capable of using, but not of fully commanding and understanding.

2. Revolution of everyday life

Modern (communication-) technology secures/eases not only our everyday life – it opens up ‘fantastic’ new areas of activities and experiences capable – like e.g. mobile telecommunication – of revolutionizing our everyday lives.

The reverse side is the feeling that one cannot handle the rapid speed of development. New possibilities cannot be (psychologically) coped with (‘digested’) – one loses touch.

Target group segmentation

- The qualitative psychological segmentation of the target group is achieved with the help of **prototypical forms of expression** (typings), which were derived from the interviews, and in which ‘EMF Hypersensitivity *as* psychological reality’ is manifested and organised.
- Individuals are not characterised by the typings. Rather, they show certain similarities, but can develop in different directions and move towards other typings.

Target group segmentation

- In general, the interviewed sample of HS is clearly divided into two groups.
The main distinguishing elements are:
 - importance of the topic 'EMF hypersensitivity' for the personal way of life
 - extent to which everyday life is organised around 'EMF Hypersensitivity'
- Both groups live in different 'worlds' concerning EMF-hypersensitivity, and are divided by a kind of 'belief barrier': **'the world of everyday life'** and **'the world of radiation'**

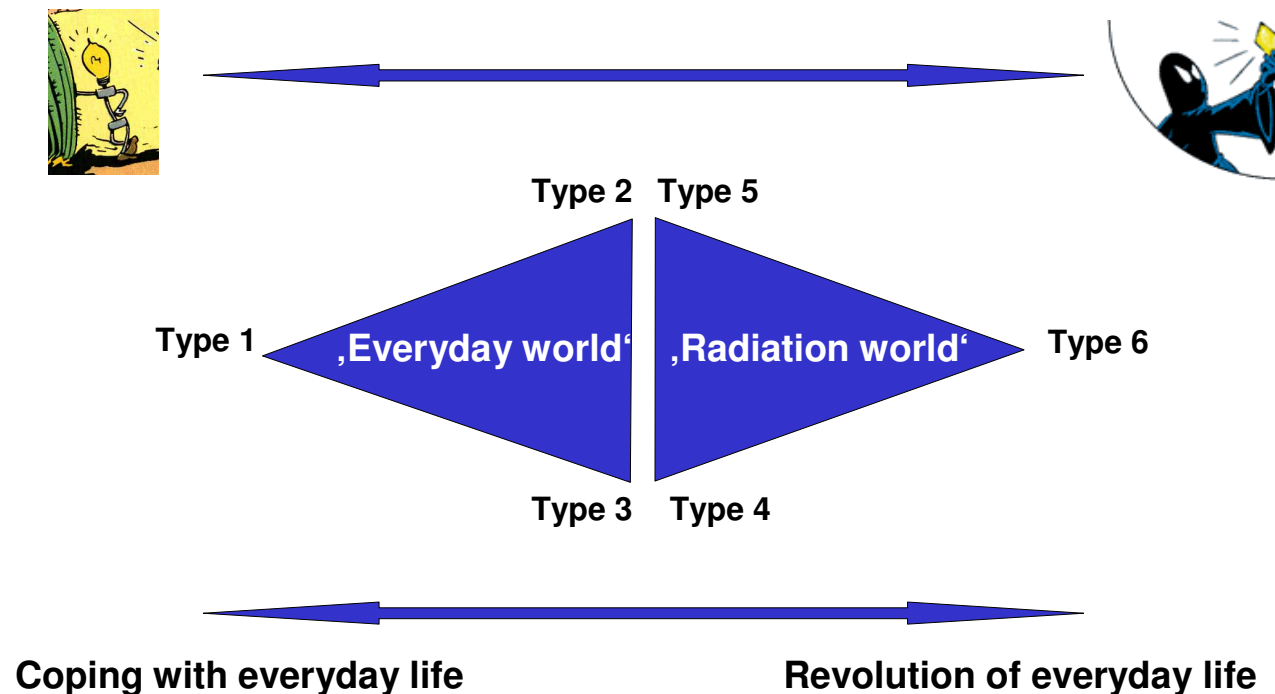
■ **Group of ‘the world of everyday life’**

(> 50 per cent of those interviewed)

- **think of themselves as normal people leading normal lives, which is what they want to do.**
- **they don’t think of themselves as ‘EMF hypersensitive’ in the sense of an ever-present characteristic.**
- **the question of whether EMF can be harmful or not has not been finally answered.**

- **Group of ‘the world of radiation’**
 - **see themselves in a ‘world of radiation’:**
 - **to a great extent, their realities revolve around the topic of rays and radiation.**
 - **the negative effects of EMF are obvious – ‘radiation’ is real, almost concrete and tangible.**
 - **think of themselves as insiders in a world *behind* the obvious ‘everyday life’**

■ Within these two groups, three further differentiations (typings) could be identified. They differ slightly in their patterns of dealing with EMF hypersensitivity, their information behaviour and their reachability concerning communication measures.



Wishes or demands for information and communication specific to the topic

- **1. Demand: limiting the ‘world of radiation’**
 - One does not want to delve deeper into, or be sucked into, the ‘the world of radiation’ (or information on it) than one already is.
- **2. Demand: preserving ‘EMF hypersensitivity’ as an (optional) means of explanation**
 - Even those interviewees that have only a diffuse early suspicion of EMF want to be taken seriously, and do not want to be dismissed as ‘unreconstructed nutcases’.

Wishes or demands for information and communication specific to the topic

- **On this basis, most of those interviewed would like more information / communication that**
 - **on the one hand, does not increase their anxiety concerning ‘radiation’ and equips them with pragmatic advice for everyday life and**
 - **on the other hand, the way they are addressed should ensure that their problems are being taken seriously, and that the question of “right or wrong” is excluded.**

4. Recommendations for communication

On the basis of the demands of HS **two central factors for communication with HS** were identified^[1]:

- 1. relevance for everyday life**
- 2. trust**

^[1] i.e. with the subgroups of HS that can be reached by communication (types 1,2 and 3):

- This results in a number of demands based on individual needs, as well as political and institutional requirements.
- Suggestions for the communication practice on four levels of action:
 - individual,
 - political,
 - institutional,
 - communicative

Individual communication I

(Relevance for everyday life)

- **Decision-making aids specific to different sources**
- **Additional information concerning health prevention and health promotion**
- **Information on preventive measures**

Individual communication II (Trust)

- **Presence of a communicative counterpart**
(communication processes with HS must be personalised and supporting contact persons must be clearly identifiable → telephone helpline, consumer internet site)
- **Credibility of the institution**
(i.e. precautionary and prevention principle commitment)

Political requirements

- **Transparency**

(the survey suggests that the tasks and responsibilities for the population protection should be more clearly presented, and that especially those responsible (contact partners) should be more clearly defined identifiable)

- **Participation**

(improvement of communication with HS (trust-building, increasing credibility) depends on the development of a concept for the integration of NGOs)

- **Integrated procedures**

(expectations concerning the integration of medical, practical and scientific advice represent a considerable challenge for a single institution with a traditionally scientific focus)

Institutional requirements I

- a clearly defined self-conception of the communicator, as well as
- a clear definition of the contents,
- the objective and
- the target audience

Institutional requirements II

- Thus, the communication requirements represent a challenge for the self-conception and communication practice of scientific institutions of the state and other actors engaged in mobile telecommunications:
 - information relevant for everyday life
 - and for concrete actions,
 - advice in the areas of uncertain and non-scientific knowledge.