# **ETHICAL IMPLICATIONS OF BRAIN-BASED EXPLANATIONS FOR ADDICTION:** A SURVEY AMONG SCIENTISTS (A-BRAIN)



Doris Ochterbeck<sup>1</sup>, Matilda Hellman<sup>2</sup>, Sarah Forberger<sup>1</sup>

<sup>1</sup>Leibniz Institute for Prevention Research and Epidemiology – BIPS, Bremen, Germany <sup>2</sup>University of Helsinki, Helsinki, Finland

# **Background & Aims**

#### Background

- Conceptions of addiction vary widely between and within groups (general public, clinicians, neuroscientists, addicted persons, treatment providers)
- Highly controversial, between and within the groups
- Neuroscientific explanations of addiction influence attitudes towards addiction held by the stakeholders involved
- Addiction scientists: important group when it comes to knowledge creation, accumulation, transfer, and framing of addiction
- Their attitudes have not vet been studied systematically

#### **Aims**

- Assessment of attitudes of scientists towards brain-based explanations for addiction
- Identification of (ethical) implication of brain-based explanations for addiction

## **Methods**

#### Sample

· 1440 addiction scientists identified and invited

#### Questionnaire covers

- · General conception of addiction (ontology, responsibility, support)
- Attitude towards brain-based explanations of addiction and its consequences (ethical, legal, for prevention, treatment, research)
- Information about networks / knowledge exchange in the field of addiction research.

#### **Data collection**

- LimeSurvey
- Personal invitation via email at 3 points in time (12 Feb 11 Aug 2019, 6 months)

## Results

## Sample characteristics

#### Table 1: Sex distribution

	M	Males		Females		Anonymous participants		Sums	
	Total	%	Total	%	Total	%	Total	%	
Invited	882	61.25	558	38.75			1440	100	
Participants	128	67.37	60	31.58	2	1.05	190	100	
Response rates		14.51		10.75			(	13.19	
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#### **Ethical implications**

Q: What would be the consequences if there were broad acceptance for the classification of substance use disorder as a 'medical disorder that affects the brain'? What do you think are the most important consequences?

## Categories for consequences most frequently named by participants (n=136)

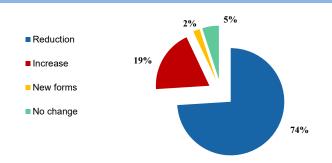
- Stigmatisation
- Access to & financing of treatment
- Evidence-base of treatment
- Reductionism/over-simplification/medicalisation
- Responsibility & agency of affected persons

## Table 2: Geographical distribution

	Invited			Participants			Response rates	
Continent	Countries*	Persons	% of sample	Countries*	Persons	% of sample	per continent	
North America	3	848	58.89	3	86	45.26	10.14%	
Europe	27	431	29.93	17	81	42.63	18.79%	
Australia	1	89	6.18	1	9	4.74	10.11%	
Asia	10	37	2.57	4	7	3.68	18.92%	
New Zealand	1	15	1.04	1	1	0.53	6.67%	
Africa	4	11	0.76	4	0	0.00	0.00%	
South America	4	9	0.63	2	4	2.11	44.44%	
Unknown					2	1.05		
Sums	49	1440	100.00	32	190	100.00	13.19%	

<sup>\*</sup>Turkey assigned to Asia AND Europe; one Turkish scientist in Asia, one in Europe; Russia only assigned to Europe as all scientists from European part

### Figure 1: Assumed change in stigmatisation through acceptance of brain-based explanations for addiction



% based on n=42 participants that named stigmatisation as category of consequence

# **Discussion and conclusions**

- Challenging to define boundaries of target population
- Rarely one-dimensional attitudes towards brain-based explanations of addiction
- Large research gaps, e.g. on
  - Scientists' assessment of the useful future orientation of addiction research from a multidisciplinary perspective
  - Analysis of properties, structure and networks of the epistemic community of addiction researchers to define who shapes public and scientific views of addiction

## Contact

# **Doris Ochterbeck**

Leibniz Institute for Prevention Research and Epidemiology - BIPS Achterstr. 30 28359 Bremen

Email: ochterbeck@leibniz-bips.de