Zwischen Forschung und Praxis: Die Rolle der Umweltpsychologie in akademischen Netzwerken

Sabine Pahl, Professorin für
Umweltpsychologie

Institute für Kognition, Emotion & Methoden
Environment and Climate Research Hub

Universität Wien, AT

Überblick

- Möglichkeiten für die Umweltpsychologie
- *Beispiele* und *Ansätze* für angewandte Forschung & Forschungspraxis:
  - Umweltpsychologie @Uni Wien
  - Forschungsverbund Umwelt und Klima
  - EU Projekt: RESONATE
  - PhD Plattform: PLENTY
- What‘s next & Diskussion

Ansatz der Umweltpsychologie

Forschung zu Effekten von

- *Menschen auf (natürliche) Umwelten*
- *(verschiedenen) Umwelten auf Menschen*

1 Mensch-Umwelt Interaktionen

2 Interdisziplinarität

3 Problemfokus

4 Diverse Methoden

Integration and Systemperspektive

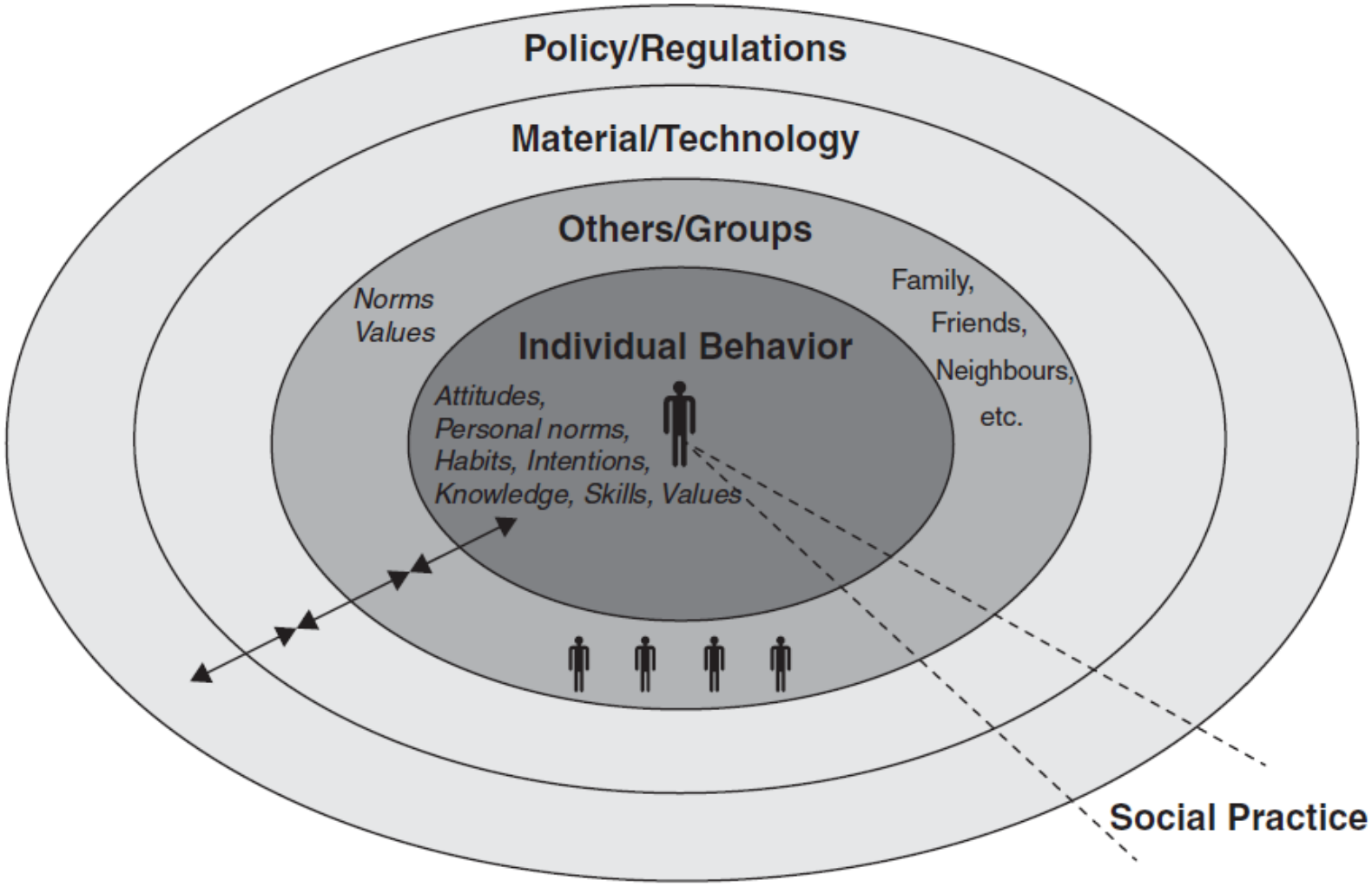


Figure 1.3 An integrated model of individual behaviour in social contexts (Arnesen, 2013, page 27). Used by permission of Arnesen

Source: Klöckner (2015), The Psychology of Pro-Environmental Communication, p. 12

Anwendung von Theorien, Methoden und Ansätzen aus der Psychologie (und Sozial- / Verhaltenswissenschaften im weiteren Sinne

Integration mit Perspektiven und Themen aus anderen Disziplinen

Kerninteresse oft: „IMPACT“


Science 2024

RESEARCH

REVIEW SUMMARY

MICROPLASTICS

Twenty years of microplastic pollution research—what have we learned?

Richard C. Thompson*, Winnie Courtene-Jones, Julien Boucher, Sabine Pahl, Karen Raubenheimer, Albert A. Koelmans

https://www.science.org/doi/10.1126/science.adl2746

Research questions

Why do some people deny climate change?

How do environmental attitudes spread through society?

Does connecting to nature make us happy?

How do we best communicate about climate change?

What motivates people‘s efforts to protect wildlife?

Does exposure to natural environments make us resilient to stress?

How do we increase well-being in cities?

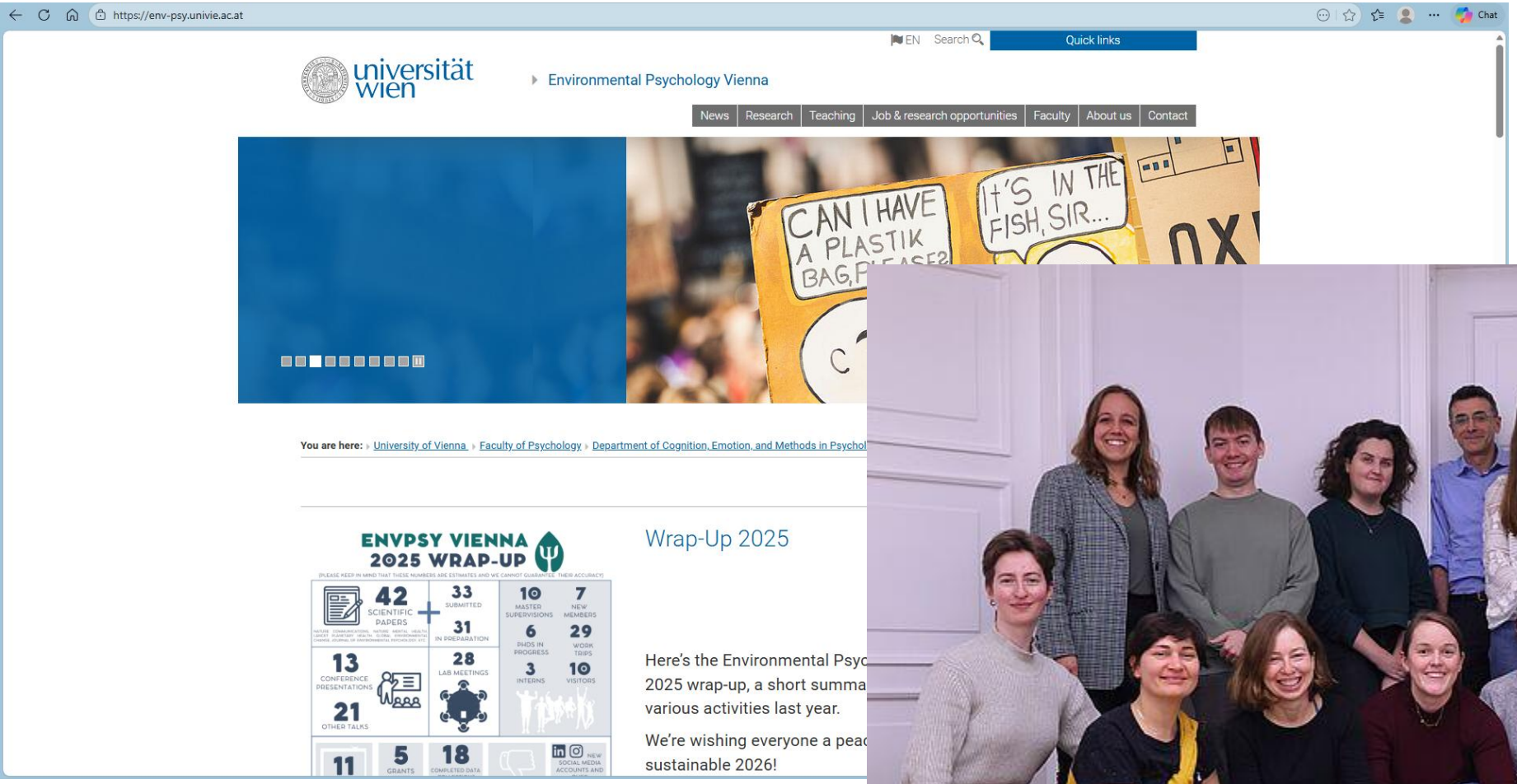
Is there a link between connection to nature and pro-environmental behaviour?

Is climate anxiety adaptive or not?

Überblick

- Möglichkeiten für die Umweltpsychologie
- *Beispiele* und *Ansätze* für angewandte Forschung & Forschungspraxis:
  - Umweltpsychologie @Uni Wien
  - Forschungsverbund Umwelt und Klima
  - EU Projekt: RESONATE
  - PhD Plattform: PLENTY
- What‘s next & Diskussion

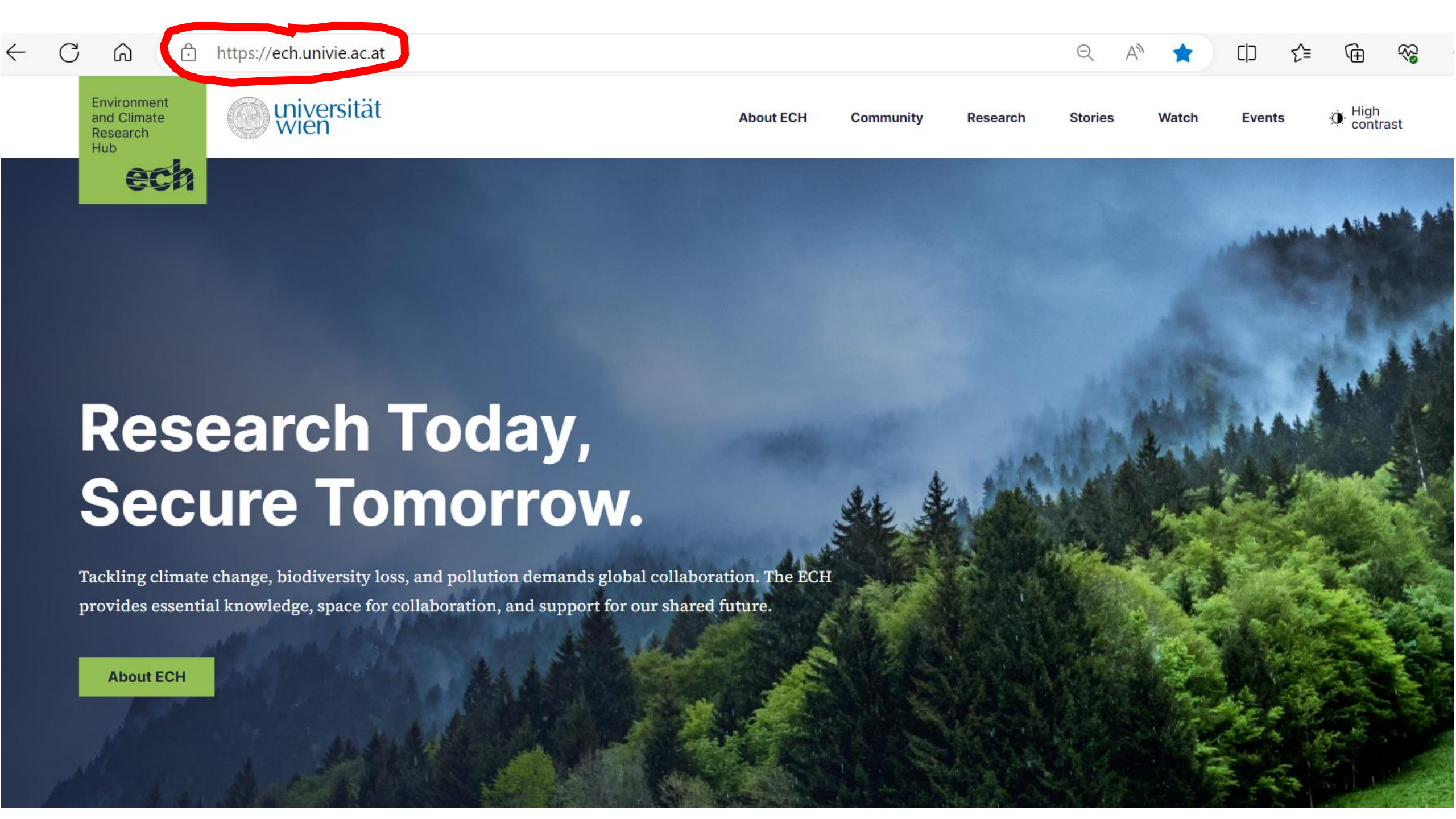
Umweltpsychologie an der Uni Wien seit 2020



universität wien

Überblick

- Möglichkeiten für die Umweltpsychologie
- *Beispiele* und *Ansätze* für angewandte Forschung & Forschungspraxis:
  - Umweltpsychologie @Uni Wien
  - Forschungsverbund Umwelt und Klima
  - EU Projekt: RESONATE
  - PhD Plattform: PLENTY
- What‘s next & Diskussion


https://ech.univie.ac.at
Environment and Climate Research Hub
ech
universität wien
About ECH
Community
Research
Stories
Watch
Events
High contrast
Research Today, Secure Tomorrow.
Tackling climate change, biodiversity loss, and pollution demands global collaboration. The ECH provides essential knowledge, space for collaboration, and support for our shared future.
About ECH

Environment and Climate Research Hub

ech

Co-Directors
Thilo Hofmann and Sabine Pahl

The ECH Goals

RESEARCH

- The core of ECH activities
- Understand environmental, social and political processes and their interactions
- Enable excellent environment and climate research at the University of Vienna
- Stimulate joined proposals, projects and publications beyond the boundaries of scientific disciplines

REPUTATION

- Establish national and international collaborations and partnerships
- Showcase ECH work through web-site, media, presentations, newsletter etc.

IMPACT

- Ask and answer societally relevant research questions
- Engage with societal actors to design solutions for environmental and climate challenges
- Communicate research findings tailored to needs
- Provide input into policy measures and regulation

CAPACITY

- Prepare the next generation of researchers, academics and leaders for international and interdisciplinary research
- Equip them with the insights and skills to ensure the sustainable use of the planet's resources

Environment and Climate Research Hub

ech

Our Members and Community (2025)

Faculties	Members
Faculty of Earth Sciences, Geography and Astronomy	10
Faculty of Social Sciences	10
Faculty of Life Sciences	9
Centre for Microbiology and Environmental Systems Science	8
Faculty of Chemistry	7
Faculty of Philological and Cultural Studies	4
Faculty of Business, Economics and Statistics	3
Faculty of Psychology	***3***
Cognitive Science Hub	1
Faculty of Computer Science	2
Faculty of Historical and Cultural Studies	2
Faculty of Law	2
Faculty of Philosophy and Education	1
Total	**65**

Disciplines	Members
GSK	29
STEM	36
Total	**65**

Gender	Members
m	33
w	32
Total	**65**

Grown considera-bly 2026!

universität wien

https://ech.univie.ac.at/

Environment and Climate Research Hub

ECH focus areas

Clean Environment

- Develop a profound understanding of the impact of **anthropogenic** pollution on environmental **systems**
- Design novel, environmentally friendly materials and processes
- To achieve a clean environment and zero pollution, we need **scientific understanding**, technological innovation and **advances in society**, **systems, governance, and regulation**.

Climate Resilience

- Investigate the nexus of climate change, environment, **socio-economic impacts, and human responses** at different scales
- E.g., **sustainable urban city planning** and digitalisation as **adaptive response strategies**,
- E.g., global climate migration, resource extraction and **inequality**, **economic impacts** for regional industries vulnerable to climate change.

Biodiversity and Ecosystems

- Study **anthropogenic pressures and impacts** on climate, global biogeochemical cycles, and ecosystems
- Examine the **reduction of natural habitats, loss of biodiversity,** and critically altered environmental systems
- Develop a deeper understanding of these **complex and interrelated** environmental **changes**

Changing Society

- **Investigate how society can transition from an unsustainable to a sustainable human-environmental system** within planetary boundaries
- Conduct research to ensure **equity of access** to **water, energy, food, housing, healthcare, mobility now and for future generations.**
- **Individual, social and societal levels of analysis**

Überblick

- Möglichkeiten für die Umweltpsychologie
- *Beispiele* und *Ansätze* für angewandte Forschung & Forschungspraxis:
  - Umweltpsychologie @Uni Wien
  - Forschungsverbund Umwelt und Klima
  - EU Projekt: RESONATE
  - PhD Plattform: PLENTY
- What‘s next & Diskussion

RESONATE

(Building individual and community RESilience thrOugh NATurE-based therapies)

Mathew White & Matilda van den Bosch
(University of Vienna / ISGlobal)

The Resonate project received funding from the European Union's Horizons Europe research and innovation programme under grant agreement No: 101081420

Der Call

Cluster 6: Food, Bioeconomy, Natural Resources, Agriculture and Environment

HORIZON-CL6-2022-COMMUNITIES-02-02-two-stage: Developing nature-based therapy for health & well-being

Expected Outcomes

- Sharper view of green space management, nature protection, agriculture and forestry sectors as care providers and their possible linkages with the healthcare, social and educational sectors;
- Stronger evidence base for the causal relationships between nature and health and well-being for more effective nature therapy prescriptions;
- Cost-effective nature therapy prescriptions are more widely used in the health care sector;
- Greater citizen and policy-maker awareness of the positive benefits of nature for health and well-being;
- Wider utilization by healthcare professionals and citizens of nature therapy as a form of preventive medicine.

Das Team

resonate
RESILIENCE THROUGH NATURE-BASED THERAPIES

UNIVERSITY OF TWENTE.

Natuurvoormensen
Omgevingspsychologisch onderzoek

UNIVERSITY OF EXETER

EuroHealthNet
EUROPEAN PARTNERSHIP FOR IMPROVING HEALTH, EQUITY & WELLBEING

AZTI
MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE

ISGlobal
Barcelona Institute for Global Health

ETIFOR
valuing nature

UPPSALA UNIVERSITET

NBSI

universität wien

PARACELSUS MEDIZINISCHE UNIVERSITÄT

Посветени на хуманността
МУ-ПЛОВДИВ

International advisory board

Cornell University Founded A.D. 1865

UCSF
University of California San Francisco

UBC

UNIVERSITY OF TWENTE.

UNIVERSITY OF WOLLONGONG AUSTRALIA

greencare
Wo Menschen aufblühen

European Centre for Environment & Human Health

Contents lists available at ScienceDirect
Environment International
journal homepage: www.elsevier.com/locate/envint

Review article

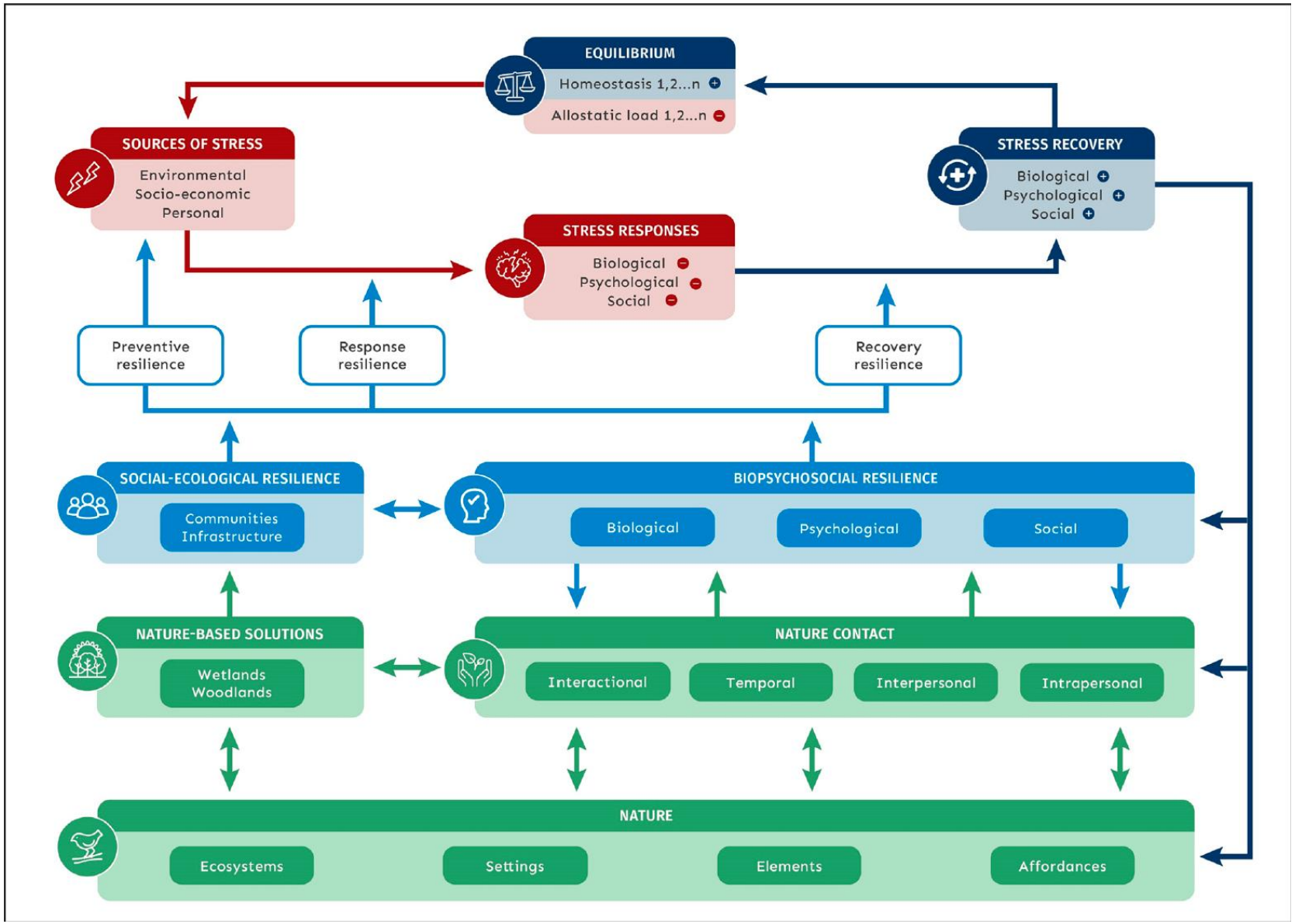
Nature-based biopsychosocial resilience: An integrative theoretical framework for research on nature and health

Mathew P. White [a,b,*], Terry Hartig [c,d], Leanne Martin [b], Sabine Pahl [e], Agnes E. van den Berg [f], Nancy M. Wells [g], Caroline Costongs [h], Angel.M. Dzhambov [i,j], Lewis R. Elliott [b], Alba Godfrey [k], Arnulf Hartl [k], Cecil Konijnendijk [l], Jill S. Litt [m,n,o], Rebecca Lovell [b], Freddie Lymeus [c,d], Colm O'Driscoll [p], Christina Pichler [k], Sarai Pouso [q], Nooshin Razani [r], Laura Secco [s], Maximilian O. Steininger [t], Ulrika K. Stigsdotter [u], María Uyarra [q], Matilda van den Bosch [m,n,o]

Die Theorie

resonate
RESILIENCE THROUGH NATURE-BASED THERAPIES

+ neues Protokollpaper zum Forschungsprogramm – *diese Woche angenommen*



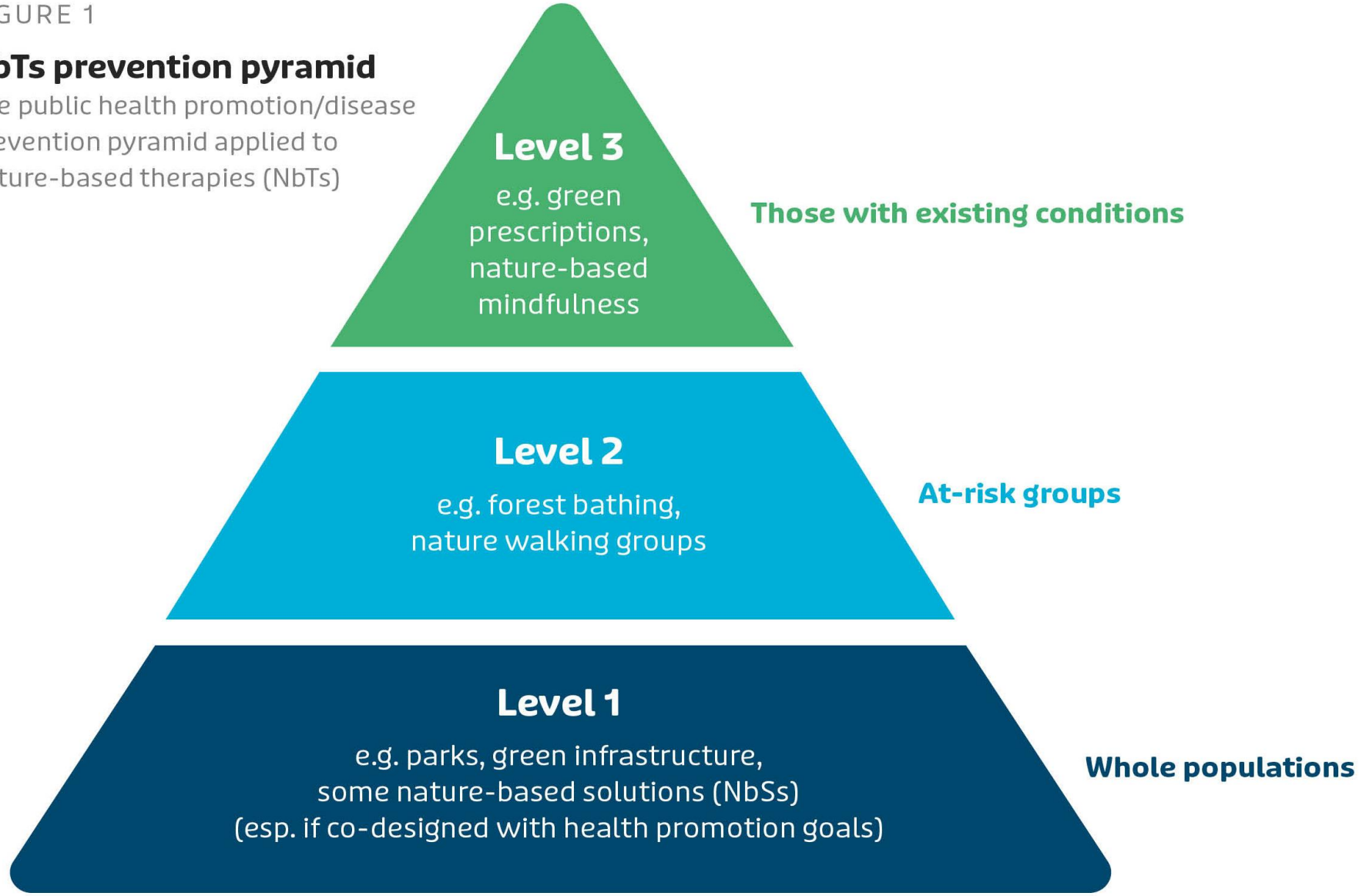
Der Starting Point

resonate
RESILIENCE THROUGH NATURE-BASED THERAPIES

FIGURE 1

NbTs prevention pyramid

The public health promotion/disease prevention pyramid applied to nature-based therapies (NbTs)

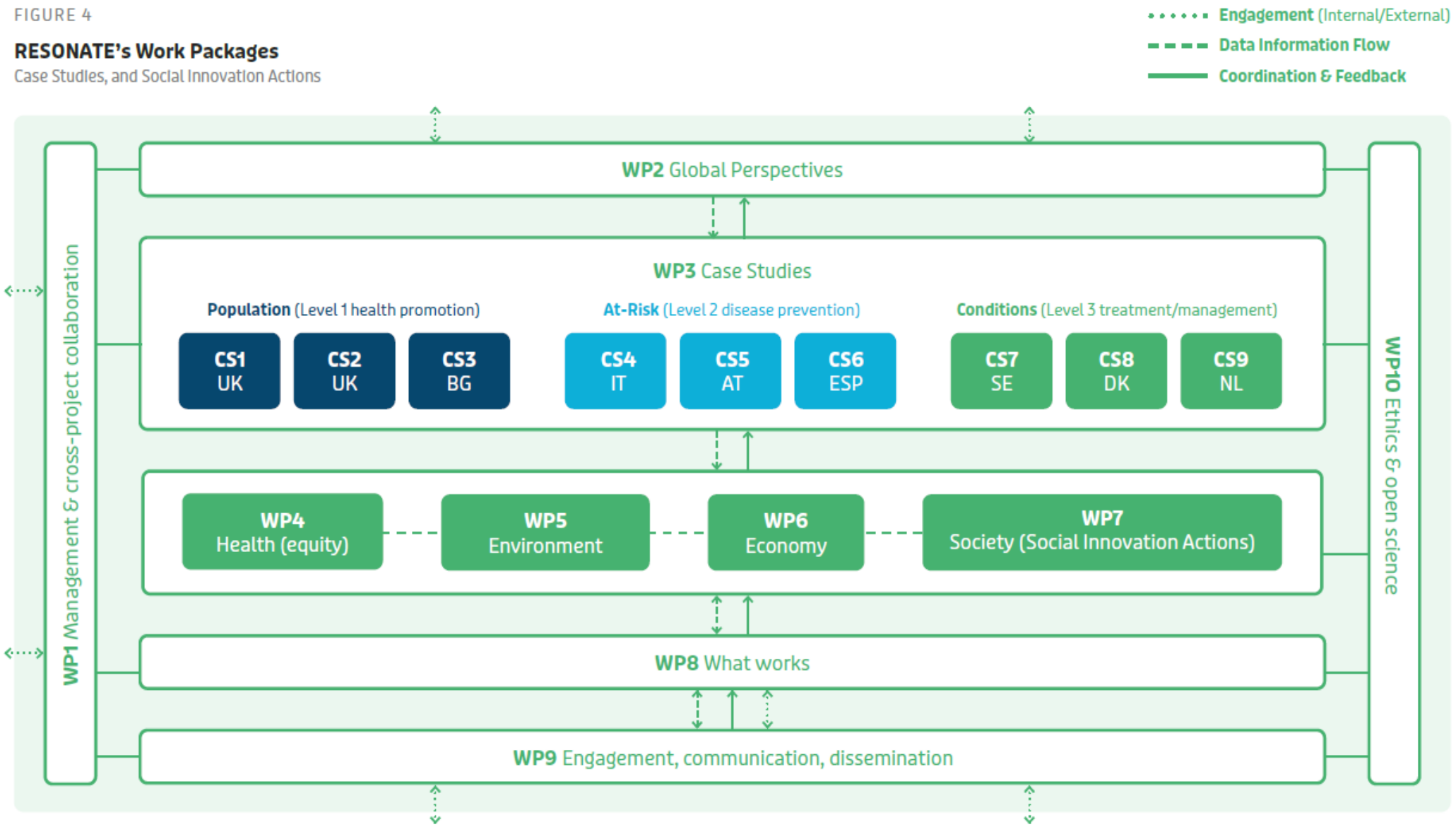


Die Struktur

FIGURE 4

RESONATE's Work Packages

Case Studies, and Social Innovation Actions



Die Case Studies

resonate
RESILIENCE THROUGH NATURE-BASED THERAPIES

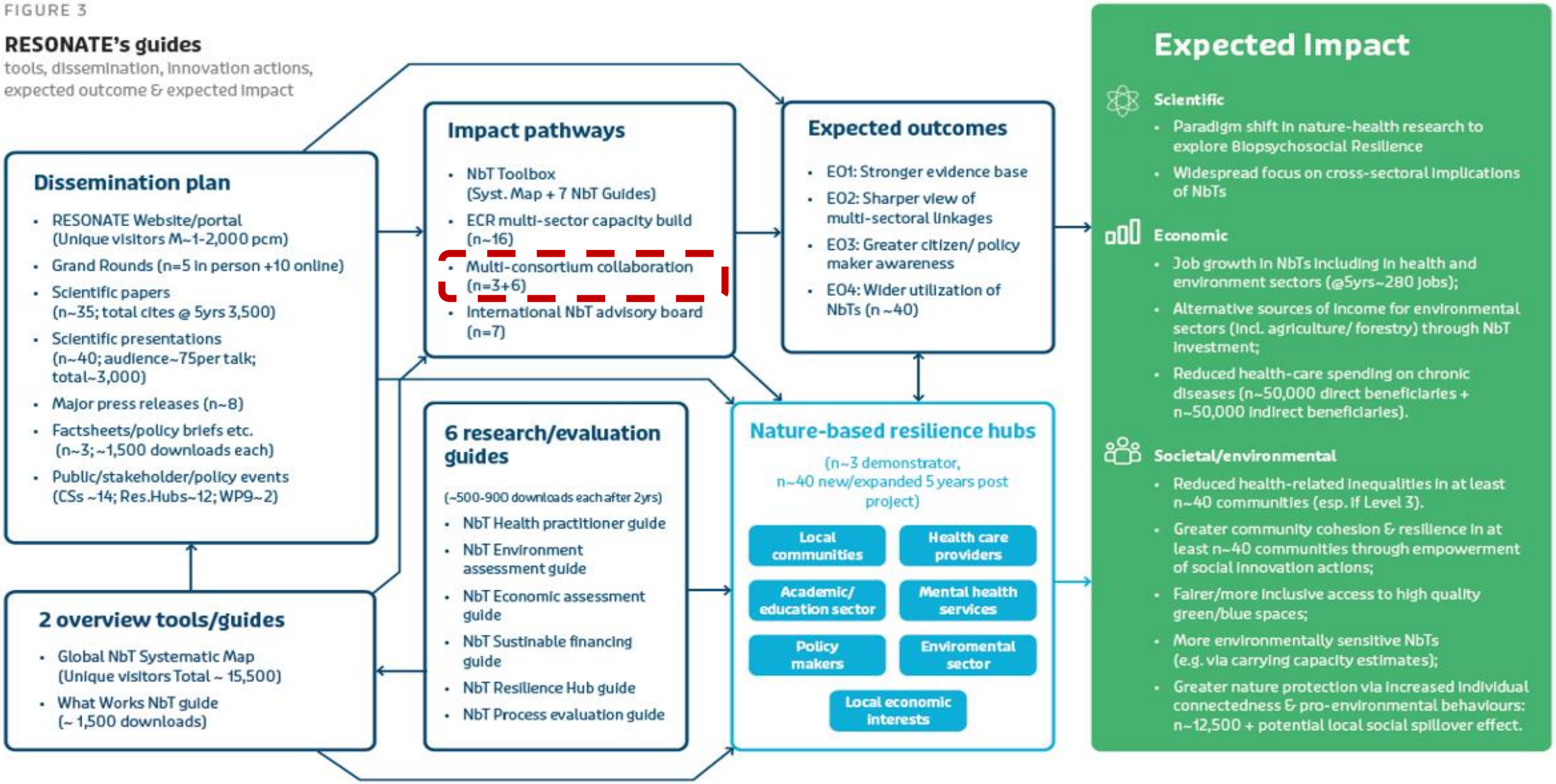
Case Study	Design Prevention level (Fig. 1)	Sample*	Stressor/ risk mitigated by nature	Nature contact / NbT intervention
1. UK, Population representative (UNEXE)	Level 1: 11yr. long. cohort	N~ 37,000	Stressful life events (e.g. divorce)	Urban, rural, coastal neighbourhoods, Occupational
2. UK, Dementia risk Cohort (UNEXE)	Level 1: 10yr. long. cohort	N~ 24,000	COVID-19 & other societal level stressors	Urban, rural, coastal neighbourhoods Occupational, Recreational
3.Bulgaria, bespoke panel (MUP)	Level 1: 12mth. long. cohort (3 waves, 6 months apart)	N=1,500 incl. n=250 bio-marker cohort	Everyday stressors (e.g. traffic emissions, financial)	Urban/rural neighbourhoods Occupational Recreational
4. Italy, Padua urban woods (UNIPD)	Level 2: Two-arm RCT (Intervention vs. waitlist control)	N=134*	Having or being at-risk of metabolic syndrome (larger waistline, high blood pressure, abnormal blood lipid levels, high blood sugar)	5-week guided, + technology assisted/self-guided, nature immersion Basic design in each locality will be enriched with locally supported SIA insights.
5. Austria, Alpine mountains (PMU)	Level 2: Two-arm RCT (Intervention vs. waitlist control)	N=134*		
6. Spain, Barcelona seafront (ISGLOBAL)	Level 2: Two-arm RCT (Intervention vs. waitlist control)	N=134*		
7. Sweden, Urban gardens (UU)	Level 3: Four-arm RCT (ReST vs. mindful; vs. nature; vs. waitlist control)	N=260*	Clinically elevated psychological symptoms (DASS-21)	5-week 'Restoration Skills Training' (ReST) = formal mindfulness training + nature immersion
8.Denmark, Urban forest/park (UCPH)	Level 3: Two-arm RCT (App-visits vs. waitlist control)	N=110*	Chronic mobility issues (e.g. wheelchair users)	5-week technology enhanced nature immersion in the Move Green Urban Forest
9.Netherlands, Care farms (NVM/UNTWE	Level 3: Community of Practice trial (Standard vs. Enhanced practice)	N=24 care farms (N~450 clients)	Cognitive impairment (e.g. dementia)	Co-created staff training for enhanced support of client centred nature-based experiences.

Der Impactplan

FIGURE 3

RESONATE's guides

tools, dissemination, innovation actions, expected outcome & expected impact



Überblick

- Möglichkeiten für die Umweltpsychologie
- *Beispiele* und *Ansätze* für angewandte Forschung & Forschungspraxis:
  - Umweltpsychologie @Uni Wien
  - Forschungsverbund Umwelt und Klima
  - EU Projekt: RESONATE
  - PhD Plattform: PLENTY
- What‘s next & Diskussion

Mikroplastik in Nahrungsmitteln: Zwei Studien

Leonie Fian

Qualitative study 1 — Participants *N* = 32

Production/ Harvesting	Processing/ Packaging	Distribution/ Hospitality	Consumption	Regulation
n = 6	*n* = 5	*n* = 5	*n* = 10	*n* = 6

- Age: Ø 42 years (19-84)
- Gender ratio: 18/14 (female/male)
- Education: 47% lower/medium; 53% higher
- Location: *n* = 10 in Vienna, other across AT

- Semi-structured interviews
- Qualitative Content Analysis
- Picture Task

Quantitative study 2 — Participants

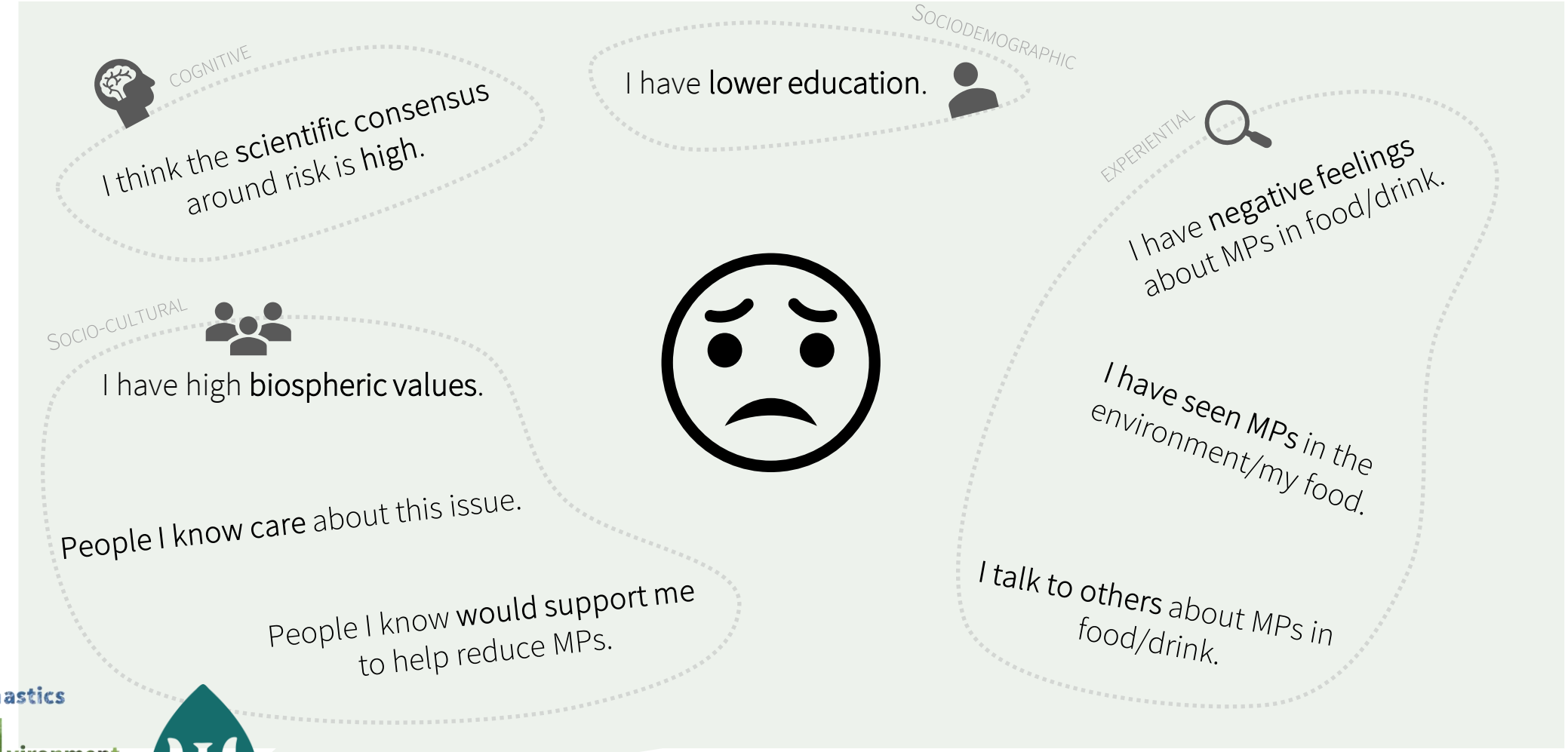
- Online survey

N = 741, Austrian general public

Fian et al., 2024, Journal of Risk Research
https://www.tandfonline.com/doi/pdf/10.1080/13669877.2024.2431900

Mikroplastik in Nahrungsmitteln

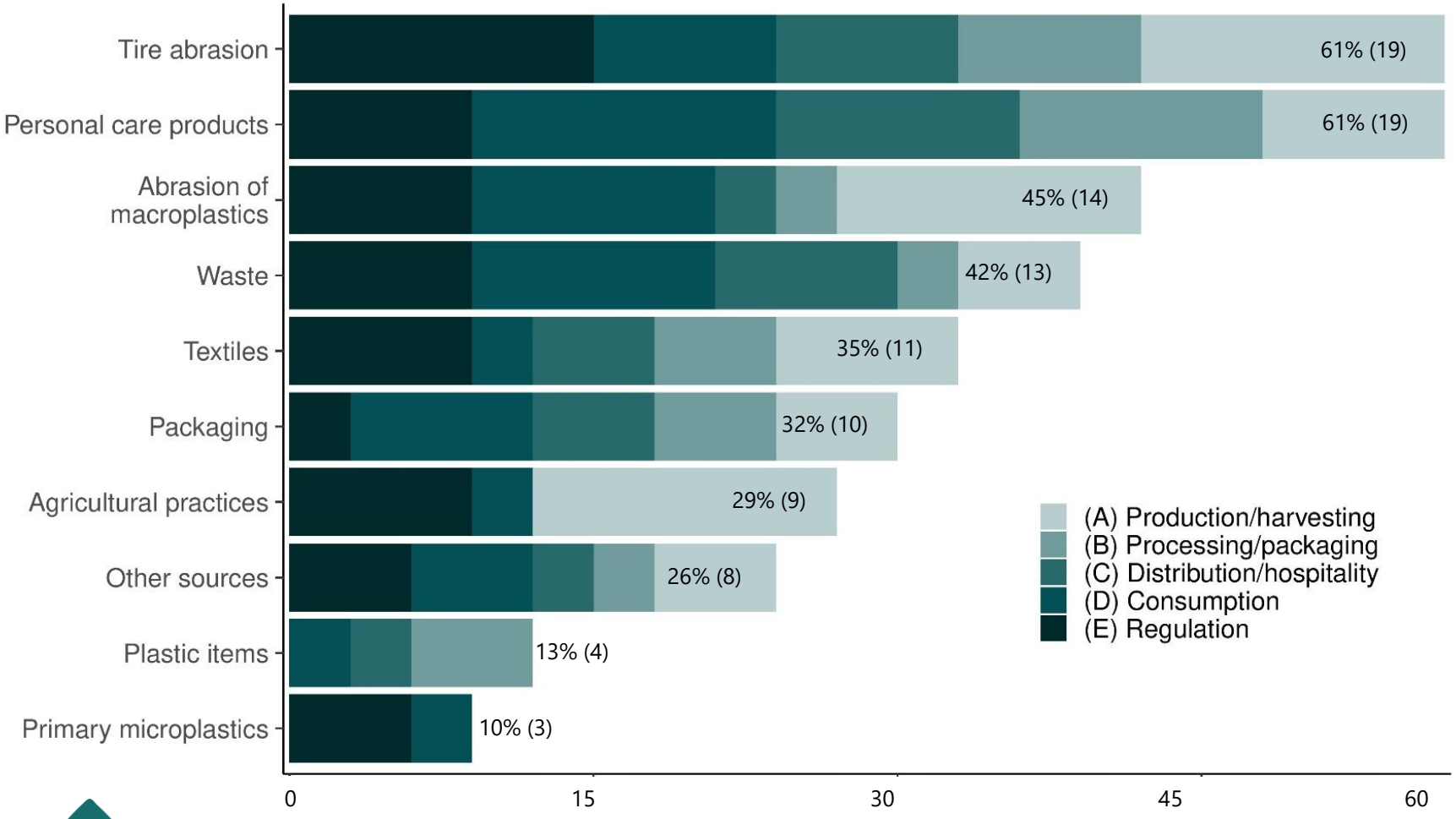
PROFIL: HOHE RISIKOWAHRNEHMUNG



Fian et al., 2024, Journal of Risk Research
https://www.tandfonline.com/doi/pdf/10.1080/13669877.2024.2431900

Mikroplastik in Nahrungsmitteln

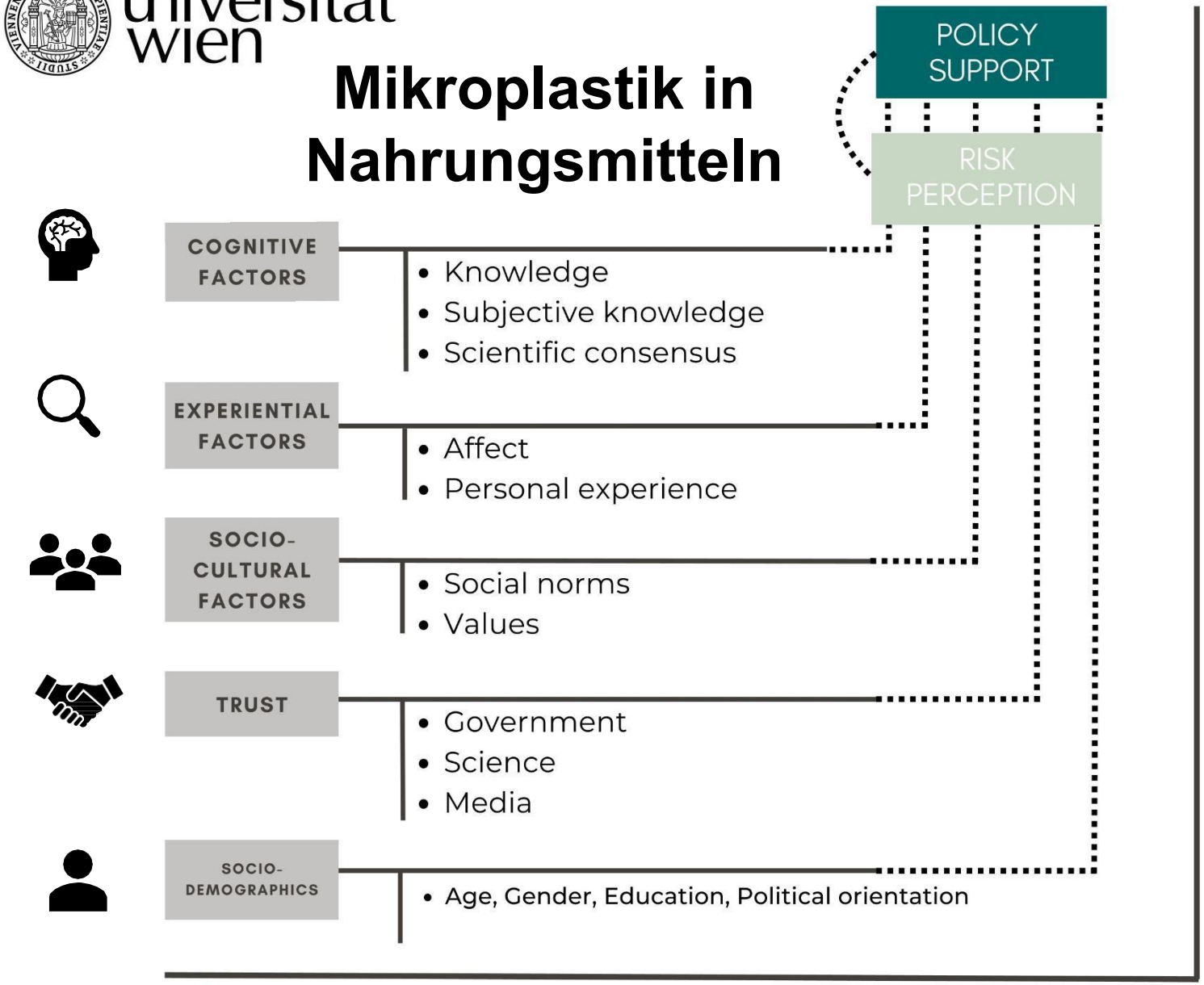
Where Does MP come from?



universität wien

PLastics in the ENvironment and SocieTY

Mikroplastik in Nahrungsmitteln



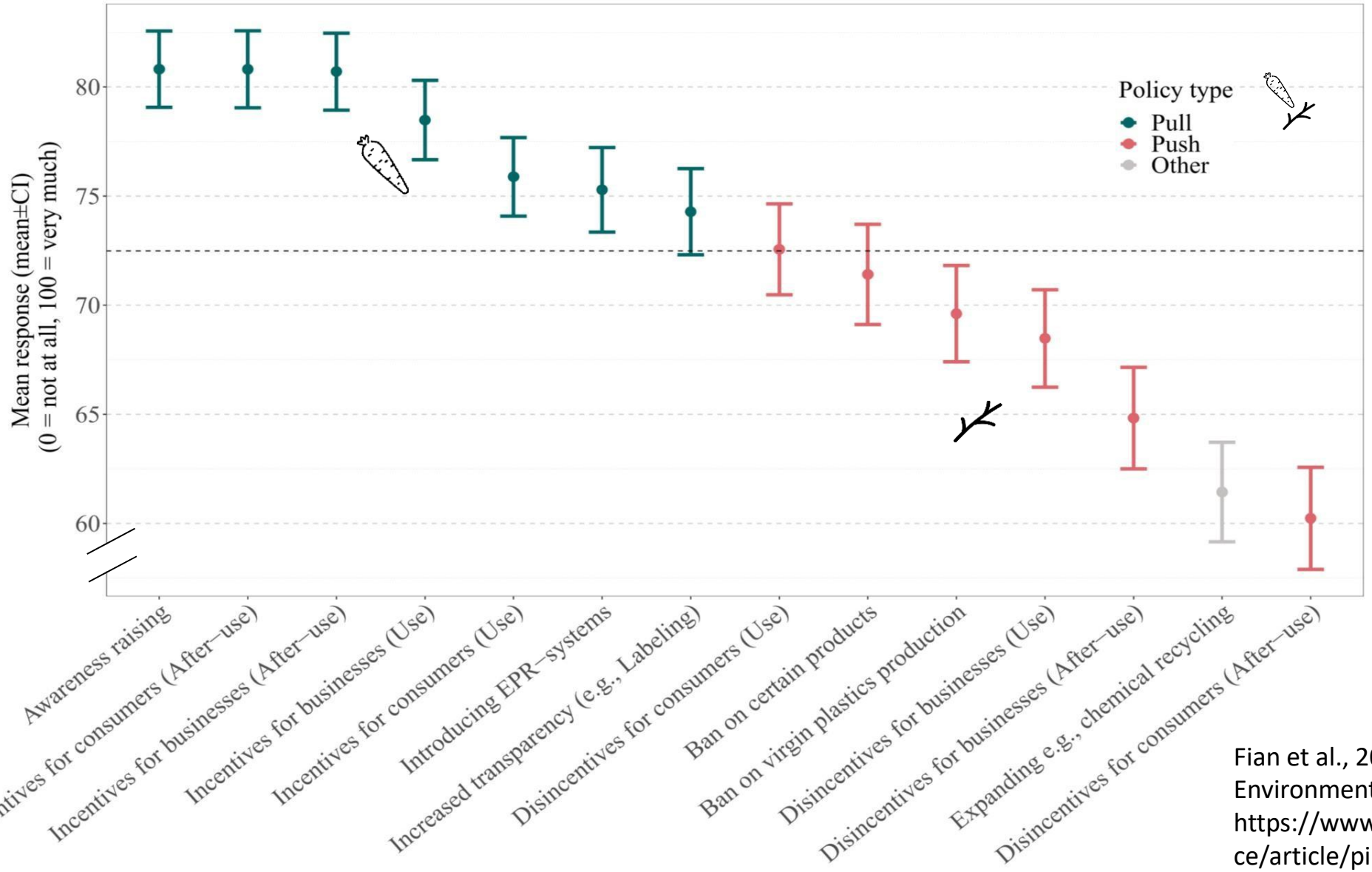
Fian et al., 2025, Journal of Environmental Psychology
https://www.sciencedirect.com/science/article/pii/S0272494425000660

METHODS

- Questionnaire:
  - 77 + 6 demographic items
    (inspired by EFSA, BfR, Kramm et al., 2022; Swim & Geiger, 2021; van Eck et al., 2020; van der Linden, 2015)
- Sample:
  - Austrian general public
  - *N* = 741

PREREGISTERED

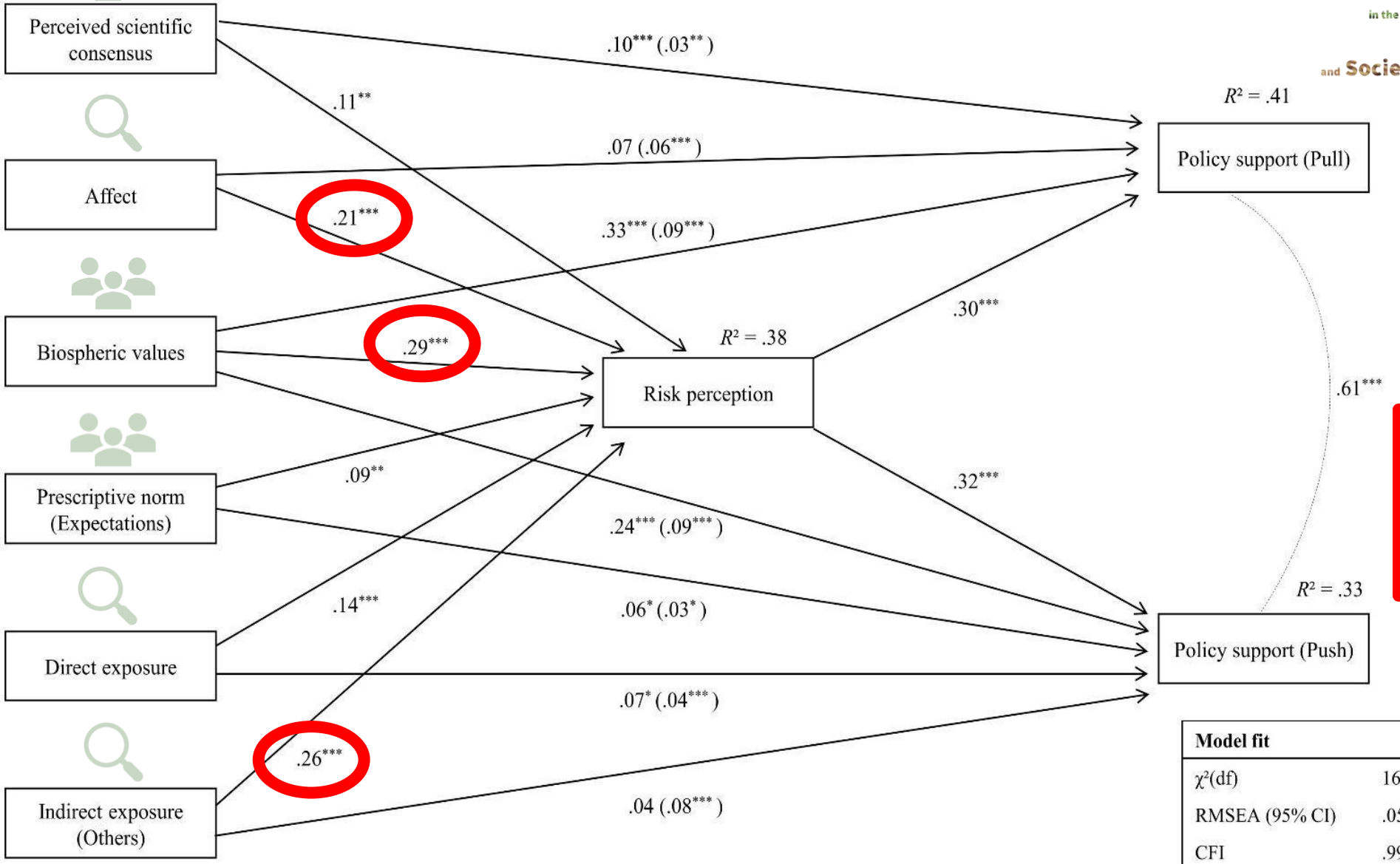
Unterstützung von Maßnahmen



PREREGISTERED

Fian et al., 2025, Journal of Environmental Psychology
https://www.sciencedirect.com/science/article/pii/S0272494425000660

Vorhersage von Risikowahrnehmung

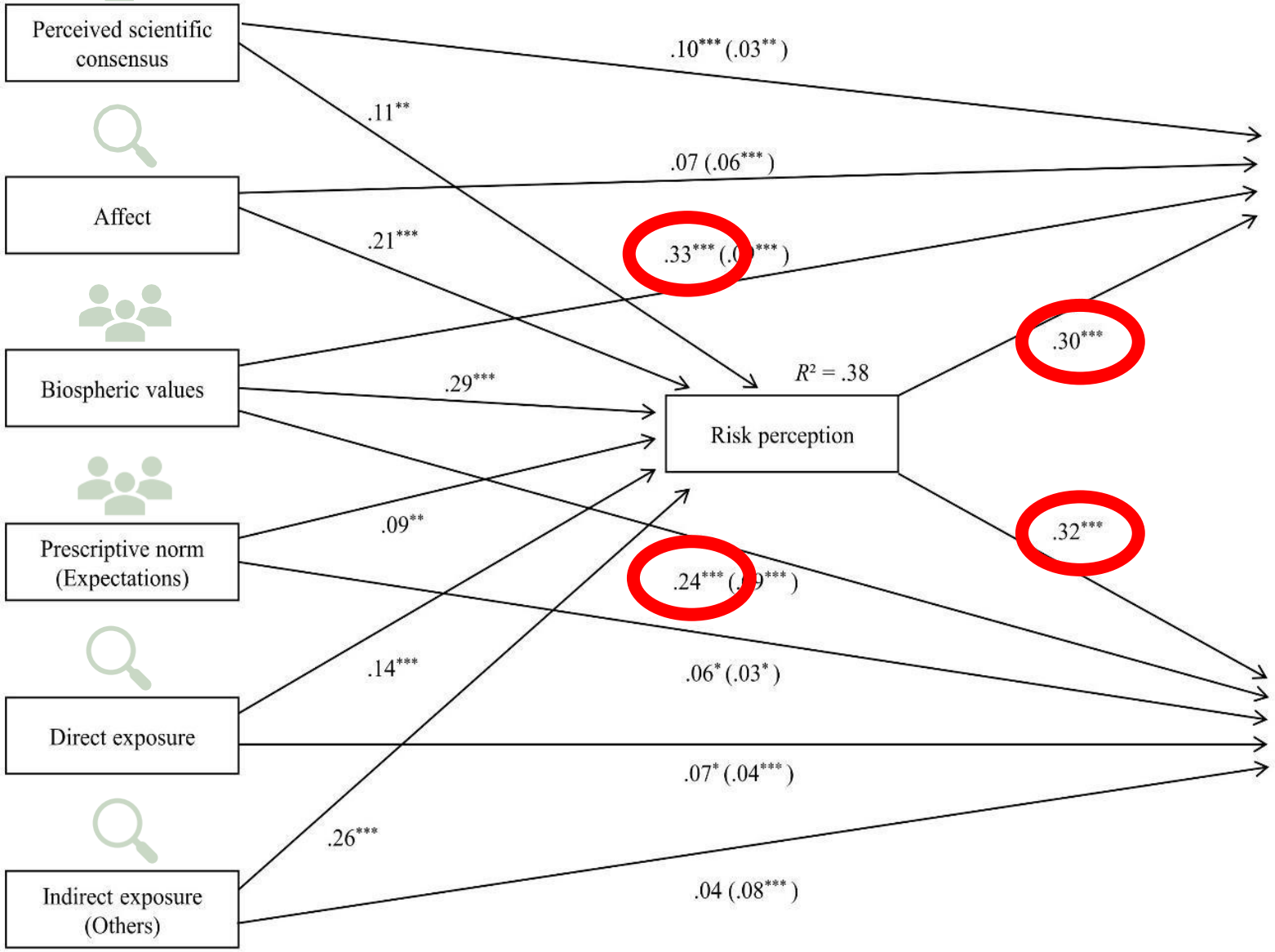


1) Affect / emotion, biospheric values, communication → *risk perception*

Model fit	
χ^2(df)	16.935(5)**
RMSEA (95% CI)	.059 (.030, .091)
CFI	.991
TLI	.933
SRMR	.012

Fian et al., 2025, Journal of Environmental Psychology
https://www.sciencedirect.com/science/article/pii/S0272494425000660

Vorhersage von Maßnahmen Support



2) Biospheric values, risk perception → *policy support*

Model fit	
χ^2(df)	16.935(5)**
RMSEA (95% CI)	.059 (.030, .091)
CFI	.991
TLI	.933
SRMR	.012

Fian et al., 2025, Journal of Environmental Psychology
https://www.sciencedirect.com/science/article/pii/S0272494425000660

Überblick

- Möglichkeiten für die Umweltpsychologie
- *Beispiele* und *Ansätze* für angewandte Forschung & Forschungspraxis:
  - Umweltpsychologie @Uni Wien
  - Forschungsverbund Umwelt und Klima
  - EU Projekt: RESONATE
  - PhD Plattform: PLENTY
- What‘s next & Diskussion

What next & Diskussion

- **Neue PhD Plattform STRENGTH: Naturgefahren (Geowiss, Ökonomie, Psych)**
- Die Umweltpsychologie hat viele Facetten
- Umwelt und menschliche Gesundheit sind eng verbunden
- Risikowahrnehmung, Verhalten, Policy Support als “Outcomes”
- Psychologische Faktoren wie Emotionen, Werte, soziale Normen sind wichtig in der Vorhersage von Outcomes
- Wir brauchen robuste Methoden und müssen uns weiterentwickeln (Sticwort Open Science)
- Wir brauchen Kollaborationen über Disziplinen und Sektoren

universität wien

Thank you

Acknowledgements: This work is supported through the EU's Horizon 2020 and Horizon Europe programmes through RESONATE and the University of Vienna's PLENTY and STRENGTH platforms

universität wien

Contact: https://env-psy.univie.ac.at/