





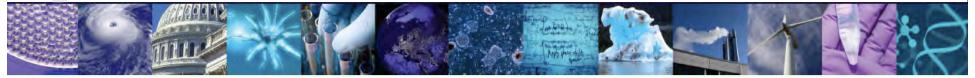


Let's hear from the people! A Study on Media Impact on Climate Protection and **Climate Adaptation**



Gesa Lüdecke ~ Institute for Environmental and Sustainability Communication Lueneburg

Agenda

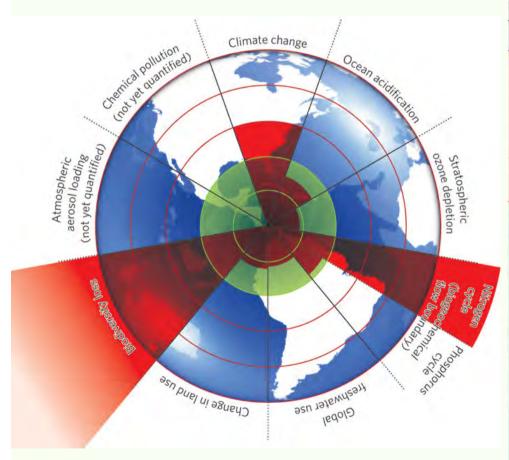


- Problem orientation
- Theoretical background
- Study design
- Findings
- Conclusion
- Outlook



Problem orientation





Rockström et al. 2009

Inner green shading represents the proposed safe operating space for nine planetary systems. Red wedges represent an estimate of the current position for each variable.

Earth-system process	Parameters	Proposed boundary	Current	Pre-industrial	
Climate change	(i) Atmospheric carbon dioxide concentration (parts per million by volume)	350	387	280	
	(ii) Change in radiative forcing (watts per metre squared)	1	1.5	0	
Rate of biodiversity loss	Extinction rate (number of species per million species per year)	10	>100	0.1-1	
Nitrogen cycle (part of a boundary with the phosphorus cycle)	Amount of N ₂ removed from the atmosphere for human use (millions of tonnes per year)	35	121	.Ō	
Phosphorus cycle (part of a boundary with the nitrogen cycle)	Quantity of P flowing into the 11 8 oceans (millions of tonnes per year)		8.5-9,5	-1	
Stratospheric ozone depletion	Concentration of ozone (Dobson unit)	276	283	290	
Ocean acidification	Global mean saturation state of aragonite in surface sea water	2.75	2.90	3.44	
Global freshwater use	Consumption of freshwater by humans (km³ per year)	4,000	2,600	415	
Change in land use	Percentage of global land cover converted to cropland	15	11.7	Low	
Atmospheric aerosol loading	Overall particulate concentration in the atmosphere, on a regional basis	To be determined			
Chemical pollution	For example, amount emitted to, or concentration of persistent organic pollutants, plastics, endocrine disrupters, heavy metals and nuclear waste in, the global environment, or the effects on ecosystem and functioning of Earth system thereof	To be determined			

Boundaries for processes in red have been crossed. Data sources: ref. 10 and supplementary information

Problem orientation



Global climate change has strong implications for ecological as well as for social resilience

Action is required on all political and societal levels

Besides technical innovations, a fundamental transformation of the relation between society and environment is needed



Problem orientation



KNOWLEDGE \rightarrow AWARENESS \rightarrow BEHAVIOR CHANGE?

- Highly visible gap between awareness and behavior
- People/communities recognize seriousness of climate change (CC) but fail to integrate such understanding into their lives or into political decision making
- (Social) Psychologists describe this gap with the lack of different factors, especially missing incentives/motivations



Theoretical background



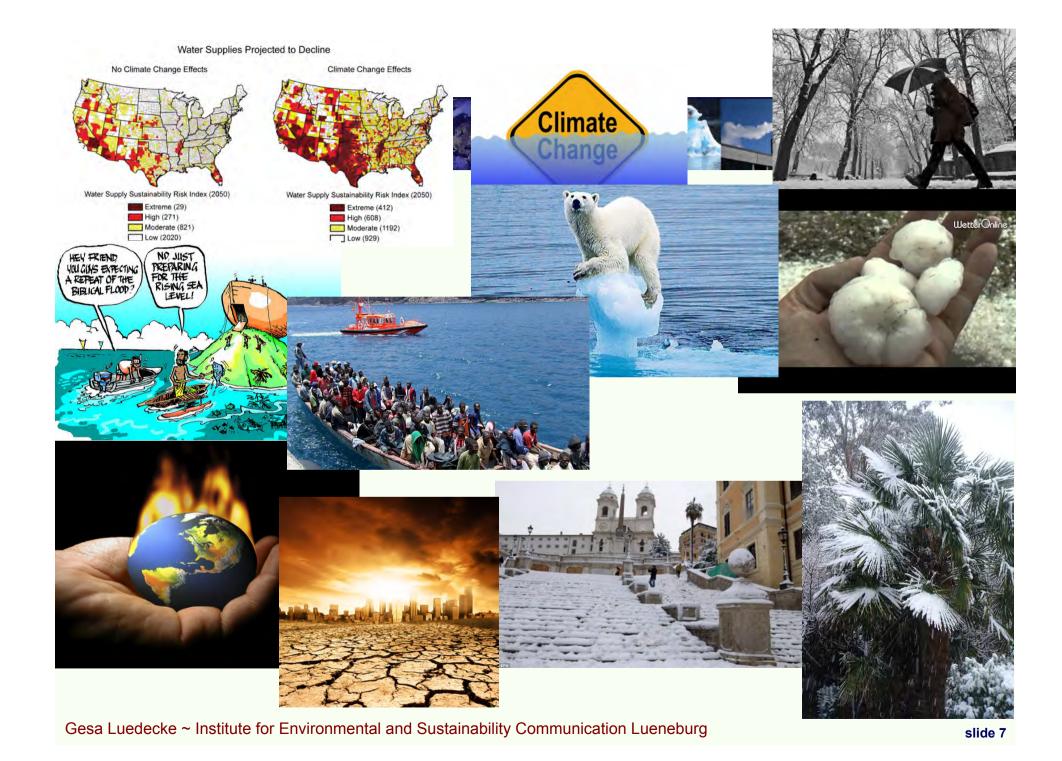
Emotional/ altruistic factors

Rational choice

Social norms/Social behavior

Social conditions/"system of provision"

(Smith/Leiserowitz 2013; Greder-Specht 2009; Roser-Renouf/Nisbet 2008; Böhm 2003; Reisenzein et al. 2003; Nerb 2000; Otto et al. 2000; Homburg/Matthies 1998; Stern 1992; Hardin 1968; Toner et al. 2012; Roser-Renouf et al. 2011; Paus-Hasebrink/Bichler 2008; Katz/Lazarsfeld 2006; Cialdini 2003; Fuhrer/Wölfing 1997; Diekmann/Preisendörfer 1992; Bandura/Cervone 1983; Schwartz/Howard 1981; Asch/Milgram 1951; Spaargaren & van Vliet 2000; Giddens 1991, etc.)



Theoretical background



Environmental awareness and media study interface

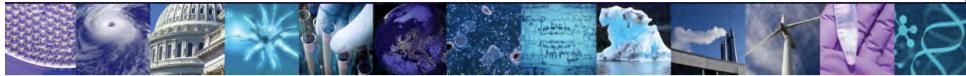
Environmental Awareness
Social Psychology
Behavior Models
Action theories

Media and Communication
Research
Models of communication
theory
Media socialization research

Nexus:

Media communication relevant to individual action in climate-related issues

Theoretical background



- → Television is mainly used mass medium in Germany
- → Strong influence on kids and teenagers for identity cultivation (Media Socialization, Paus-Hasebrink & Bichler 2008; Niesyto 2007)

"[t]elevision is the source of the most broadly shared images and messages in history. It is the mainstream of the common symbolic environment into which our children are born and in which we all live out our lives"

(Morgan et al. 2001: 34)

Study design



TWOFOLD APPROACH:

- Study on media coverage: qual./quant. media content analysis
- Study population: 24 teenagers from all school systems (theoretical sampling, random sampling; lower, middle and high education level)
 - → 6 analytical heuristics as guiding questions

Methods: media analysis with qualitative content analysis (Mayring 2008); qual./narrative semi-structured interviews (two parts): 1. problem oriented (Witzel 2000), 2. focused (Merton & Kendall 1979)

Study design



Findings I: content analysis of TV



- 1. Framing: climate change as a threat to human species
- 2. Focus rather on ecological than on economic or social threats
- 3. Procedural knowledge: providing concrete tips for engaging in CC
- 4. Either positive OR negative emotional aspects
- 5. Experts used to varify presented facts
- 6. Protagonists as role models "Observational learning", focus on social norms
- 7. Motive alliances used to enforce incentives (e.g. economic motives together with emotional/altruistic incentives)
- 8. Identification with content through every day life issues

Study design: merging media analysis with



- Focus on 6 analytical heuristics:
- → Factual knowledge about climate change
- → Generation of knowledge
- → Influence of peers on individual decision making process
- → Individual action on CC
- → Media use
- → Media effects

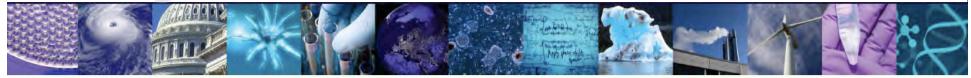




1.) Factual knowledge about climate change

1. Little or false knowledge about (cause and effect of) CC

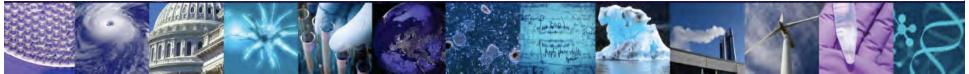
2. "Collective agency" (Kruse 2010) used as term to hide behind societal perception/social norm on CC and to not expose own uncertainty of knowledge



2.) Generation of knowledge

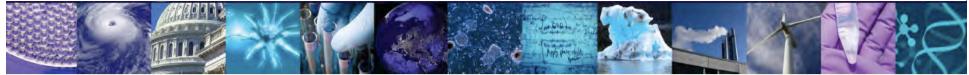
- 1. Television as mainly used source for gathering information in general
- 2. New media for seeking further information
- 3. Family members are named as most trusted resource to obtain information about CC





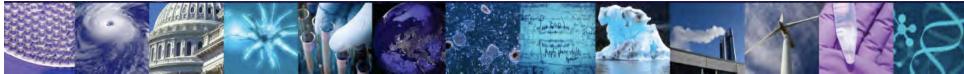
3.) Influence of peers on individual decision making

- 1. Peers have strong influence on individual decision making process
- 2. CC as topic "not cool", rather neglected among peers
- 3. Teenagers describe themselves as independent from others, but admit to feel stupid acting differently
- 4. Media stars/celebrities can deal as role models in seeking advice for life questions ("parasocial relationship", Horton & Wohl 1956)

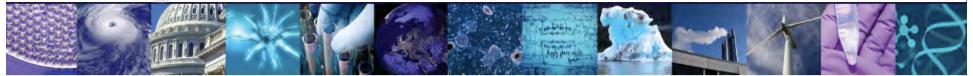


4.) Individual action on CC

- 1. Care about CC, but currently don't feel threatened enough to act
- 2. Only low-cost activities (Diekmann & Preisendörfer 1992)
- 4. Effective climate protection activities are "luxury good"
- 5. Politicians perform poorly compared to firms/economy
- 6. Climate protection is associated with sacrifice and intensive costs

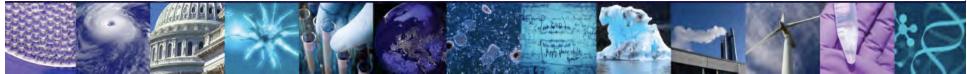


- 7. Factual knowledge about CC doesn't necessarily lead to better understanding and action
- More important is TRANSFER knowledge (procedural knowledge) that provides concrete tips for action on CC
- 9. Motives of becoming actively involved are mainly based on emotional/altruistic/prosocial elements
- 10. Motive alliances are guiding principle



5.) Media use

- 1. Watching TV:
 - → to stay informed
 - → to socialize
 - → to relax,
 - → to exchange
 - → to assess and match information with others
- 2. Public service broadcasting (news, documentaries), commercial/pay TV (TV shows, serials, movies, magazines)
- 3. Media use (TV, Internet) 1-3 hours per day



6.) Media effects

- 1. Gain little/false knowledge about CC from TV consumption
- 2. Emotions are strongest motivation (neg./pos. emotions)
- 3. Motive alliances: Emotions (joy, anger, worry) together with cost-benefit motives (rational choice) are strongest driver in decision making
- 4. CC on TV causes feelings of "horror", "disentchantment", "powerlessness" and "resignation"

Outlook



- New approach: Environmental psychology and media communication research haven't been consistently brought together thus far.
- What is still missing?
- Integrated transdisciplinary media studies can deal as "starting point for conversation about the role media scholars can play in informing action, creating use-oriented knowledge, and starting partner-ships for knowledge sharing with other disciplines and stakeholders (…) The complex problems related to climate change can only be addressed through the integration of both social and biophysical components, with media being a necessary element to the study."

(Smith & Lindenfeld 2014, p. 192)

Outlook



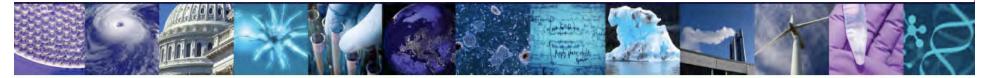
THEN (Behavior change 1.0)

- * Individual as locus of change
- * Short term
- * Targeting emotions
- * Intrinsic values
- * Surface frames (no idealogy behind)

NOW (Behavior change 2.0)

- * Community as locus of change
- * Long term
- * Value change
- * Extrinsic values
- * Deep frames (world views)

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"(T)here has been a collective failure to talk to young people about climate change in a way that inspires them. Too many assumptions have been made by communicators, which haven't been tested."

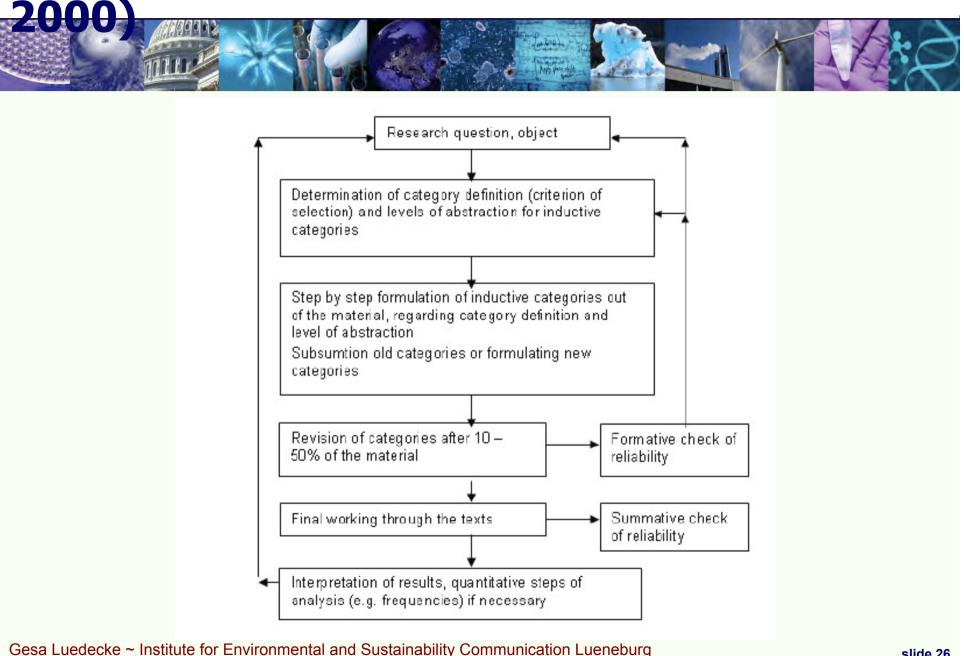
(Adam Corner, Climate Outreach & Information Network, 2014, http://www.climateoutreach.org.uk/)



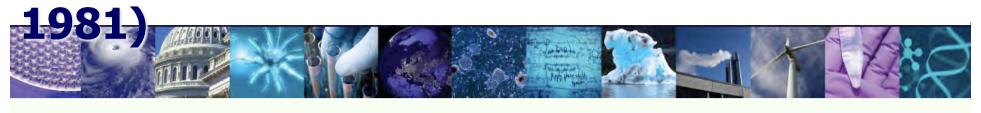
Thank you!

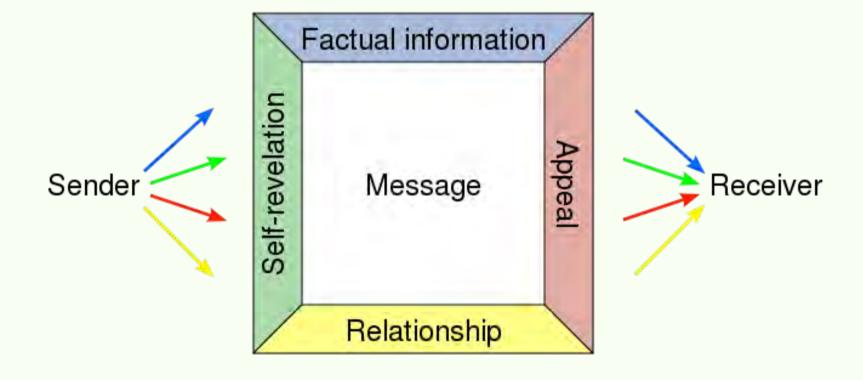


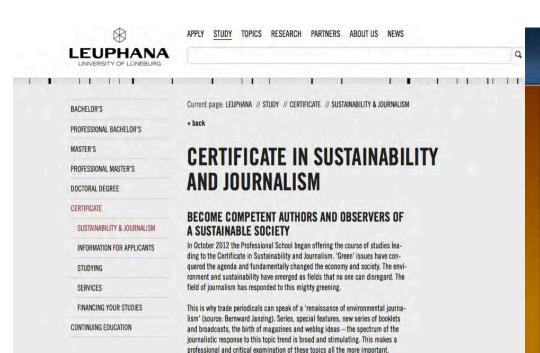
Qualitative content analysis (Mayring



Four-sides model (Schulz von Thun







For the first time, the Certificate Programme in Sustainability and Journalism -

the only university-level programme of its kind - offers media professionals a

Master's-degree-level opportunity to deepen their expertise in the various fields of









Guideline for questions after Kruse (2009): Subcategorization of questions in central question, inquiry, and questions of adherence.

With regard to content	Inquiries	Maintaining the flow		
- Definition - Interlinkages CONTEXT	1. Do you find that topic interesting? Why? Why not? 2. Do you know the reasons why climate change happens? 3. What do you think could climate change do to us humans? 4. When you think od your future: do you think climate change will play a part in your everyday life? FOCUS	And then? What else? Is there anything else you might know about it? KEEP CONVERSATION GOING		
WHERE DOES KNOWLEDG With regard to content	Inquiries Maintaining the flow			
F '1		3371 / 1 1		
- Family - Friends - School - Media	 Have you talked about global warming or environmental protection in school yet? In case you did talk to other people about CC, can you name some persons you talked to? If you want to look for information on CC, where do you look first/who do you ask first? 	What was ist you have been talking about? Did your teacher come up with that topic? What else? Ans then?		

System of categories (Mayring 2008)



Anknüpfungs- punkte	Nachricht en	Dokumentatio nen	Reportag en	Magazine	Serien/Soa ps/ Zeichentri ck	Spielfil me
Wissen zum Klimawandel						
Faktenwissen	viel	wenig	wenig	wenig	nein	wenig
Handlungsorienti ertes Wissen	katum	einige	kaum	sehr viele	einige	kaum
Handlungsrelevanz (Verwendung/ Vorhandensein von Motiven zum Handeln)	altruistisch/ prosozial/ emotional	rational/ ökonomisch, altruistisch/ prosozial/ emotional	rational/ ökonomisc h	altruistisch/ prosozial/ emotional, rational/öko no-misch, soziale Normen	rational/ ökonomisch/ soziale Normen	altruistisc h/ prosozial / emotiona
Wiederholung von Botschaften	nein	einige	kaum	sehr viele	einige	kaum
Emotionalisierung	nein	sehr viele	kaum (neutral)	kaum (positiv)	kaum (positiv)	sehr viele
Soziales Bezugssystem						
Medienakteur als Vorbild	eher nicht	ja	eher nicht	ja	eher micht	ja
Identifikation mit Inhalten/ Alltagsnähe Experten zur	unklar	alltagsfern	alliagsfem	alltagsnah	alltagsnah	alltagsfer n
Quellensicherun g /Vertrauen schaffen	einige bis viele	sehr viele	kaum	sehr viele	nem	nem

Conclusion



- Focus on procedural knowledge and emotional motivations → Communicating 'solutions not science' (Corner et al. 2014)
- 2. Television can still be seen as an important and popular source
- 3. Media representations on CC have strong influence on perception
- 4. Media rather amplify existing than introduce new frames
- 5. Identification with content is important (proximity to everyday life)
- 6. TV often accounts as "first contact" with CC issues
- 7. Social conditions ("systems of provision") are mainly limiting factor to action
- 8. Support for hierarchy of 4 motivation levels
- 9. Content needs to be reflected against the representations of CC among the peers
- 10. Emotions sometimes work stronger than rational-choice motivations