Lecture Thursday May 23, PSY1100: Applying Social Psychology to Climate Change
Suggestions by Green Thread Student Working Group

NB: In this proposal for the lecture, we have built on the lecture slides from Spring 2023

Slide 10: "The relation between basic and applied psychology" → "The relation between basic and applied psychology, in the context of climate change."

+ Slide 17-18: "Example for Understanding as application: Conspiracy theories" → "Example for Understanding as application: Climate change."

Climate change is a human problem: Human behavior is largely responsible, human beings will be affected, and human behavioral change will be required" (Clayton & Manning, 2018).

By using applied social psychology, we can address climate change by researching:
(based on Clayton & Manning (2018), the *Report of the American Psychological Association Task Force on the Interface Between Psychology and Global Climate Change (2011 and review article by Tam et al., 2021)):*

<u>Perceptions of climate change:</u>

- People's perception of scientific agreement or consensus on human-caused climate change as an outcome variable (e.g. Goldberg et al.,2019; van der Linden, 2015).
- Social identities in affecting experiences and perceptions of climate change. E.g. Linkage between right-wing ideologies and types of climate change denial (Clarke et al., 2019).

<u>Responses of climate change:</u>

- Behavioral contributions to climate change. E.g., association between cultural worldviews, climate change risk perceptions, and how often participants performed climate change mitigation actions (Xue et al., 2016).
- What drives pro-environmental behavior?
- Collective action. Willingness to e.g. donate to environmental charities, sign petitions, organize events (e.g. Choma et al. 2020).

<u>Impacts of climate change:</u>

- Cooperation
- Conflict. Rising temperatures, extreme weather, and competition for limited resources, combined with existing inequalities, can influence how people interact.

Slide 21: "Intervention levels during pandemic" → "Intervention levels of climate change."

Macro - societal level: Governments implementing policies to reduce carbon emissions, promoting renewable energy, and enforcing regulations on industries to combat climate change.

Meso - social relations, groups: Targeted interventions to groups especially vulnerable to the effects of climate change, e.g. coastal areas, indigenous people.

Micro individual cognitions, feelings, etc.: Encouraging environmentally responsible actions like reducing waste, conserving energy, and plant-based diet, by information and norm setting.

Slide 22-23 "Divide between science and practitioners: Sustainable consumption interventions."

Interventions developed by marketers.

- Green marketing campaigns promoting eco-friendly products.

  Implementation of strategies based on market trends and consumer preferences. E.g. Discount incentives for consumers to purchase environmentally conscious goods, Limited-time eco-friendly product lines to capitalize on consumer trends.

  Under-Evaluated Aspects: Lack of comprehensive assessment regarding the long-term impact of green marketing on consumer behavior. Limited understanding of the effectiveness of different strategies for diverse consumer demographics.

Interventions developed based on scientific theories.

- Integration of social norms and peer influence in designing interventions.
- Designed to address specific cognitive and emotional factors influencing consumer choices.

  Works in lab, but too often impractical in real settings. When applied in real life, often without sustainability beyond research project.

New applied research example: Theory of Planned Behavior (TPB) and Recycling *(short, building on Rolfs lecture on attitudes)***:**

Various social psychological theories have been applied to understand what factors determine/drive pro-environmental behavior changes. For example, Theory of Planned Behavior (TPB) is one of the most commonly used psychological theories for explaining pro-environmental behaviors, like recycling.

- Reminder of the components of TPB: According TPB, human behaviors are driven by intention. In the context of pro-environmental behaviors, intention is shaped by three main factors: "Attitude", "Subjective Norms" and "Perceived Behavioral Control".

- https://www.researchgate.net/publication/355334764_Recycling_as_a_planned_behavior_the_moderating_role_of_perceived_behavioral_control

An example of a study using TPB to examine recycling: Liu and colleagues (2022) designed a public service announcement (PSA) video based on the principles of TPB and examined how effective this PSA video was in increasing people's intention to properly recycle in the near future. Based on a sample of 707 New York State residents aged from 19 to 92 years

old, the researchers found that subjective norms (B=0.36), perceived behavioral control (B=0.22), and attitude (B=0.10) all related positively to recycling intention. The results also showed that the participants in the video condition, compared to those in the control condition, both reported more positive attitudes toward recycling and a stronger intention to recycle better. They found that attitudes mediated the relationship between exposure to the video and recycling intention, meaning that the video increased recycling intention through increasing attitude. However, this was only significant for individuals with low perceived behavioral control, implying that this form of intervention may have a stronger effect on individuals with less knowledge about recycling.

These findings could have implications for practitioners interested in recycling behaviors, through showing that PSA videos can have an impact on people's intention to engage in environmental behaviors. The findings also show that interventions like this can be specifically aimed at particular groups in society, in this case, people with less knowledge about recycling (Liu et al., 2022).

But, as intentions might not always imply behavioral change, perhaps we need to look at the social context and society more broadly when trying to facilitate behavioral change. For example, recycling might be easy for you when you live in Oslo and have multiple recycling dumpsters available, but what about when you are at a cabin where they don't have different dumpsters for plastic, paper, glass and bio? Would you still recycle then?

Research example: Meat consumption in Norway

Using motivation, information, and individual choice, just simply stating that one should switch to a meat-free diet, is not sufficient for behavior change. There are too many obstacles - family, store options, knowledge, all of which could be said to be embedded in our culture and norms.

- Meat consumption, like the consumption of pølse, is deeply embedded in food cultures and (social) practices (Hansen & Wethal, 2023)
- Pølse is a convenience food in Norway; it is accessible, practical, tradition, cheap and children like them.
    - Normal to serve at children's birthday parties.
    - Sold at every gas station (on the go)
    - Outdoor grilling of pølse
- The plant-based pølse could be a replacement as it does not challenge social practices
    - At the same time, such substitutes "rather seem to offer a way into social practices scripted towards pølse eating for non-meat eaters than a way out of meat eating for meat eaters" (Hansen & Wethal, 2023)

Choosing a meat-free option must be made easy.

If significant meat reduction, or other environmental behaviors, are to be achieved, "the easiest target would be to support the high proportion of people in meat-intensive societies who are already willing to cut back on meat" (Arve Hanssen et al., 2023).

In other words: eating vegetarian should be the norm.

Slide 30-39 (keep as it is, perhaps make a bit shorter?) - Norms and environmental behavior (Goldstein et al., 2008).

New slide: Reflecting on the previous research examples.
What is the difference between the example of an attitude based/individual level intervention (meat/recycling) and norm study (electricity)?

Individuals lack awareness of their electricity consumption relative to others. In contrast, in the case of dietary choices, individuals have awareness of who is vegetarian within their social circles. The realization that others are not adopting a vegetarian lifestyle, deviating from the perceived norm, introduces challenges to the adoption of such dietary practices.

People tend to follow what they think most others are doing, creating a self-fulfilling cycle. In meat consumption, if many believe most people eat meat, it keeps happening without people questioning it. This collective pressure to conform can create a loop where people get stuck in a social norm, even if it's not good for society.

New slide: The gap between climate-friendly attitudes/intentions and behavior

It is challenging to encourage people to engage in climate-friendly behavior. You cannot simply rely on findings from laboratory studies.

→ Regardless of the approach, any effort aimed at reducing or altering consumption patterns must recognize the idea of moving beyond the decisions made by individual consumers. Instead, the focus should shift towards understanding the social, material, and cultural context in which these choices occur and derive meaning.

Related slide? McKenzie-Mohr, 2000; 2011, Community-Based Social Marketing (CBSM)

To overcome barriers of individual climate-friendly behavior, we need to look beyond individual attitudes. Social psychologist Doug McKenzie-Mohr developed a strategy that involves identification of barriers and design of psychology-based interventions to reduce them.

Five steps of changing group behavior:

1. Select target behavior, *high impact* and *high probability.*(like Arve Hansses work also suggested)
2. Identify barriers and benefits to change (e.g., through research, focus groups).
3. Identify strategies to reduce external barriers, thereby also increasing barriers to not wanted behaviors. Enhance benefits to engaging in the target behavior. Strategies include:
    - *Commitments*, especially if public and durable. Foot-in-the-door strategies
    - *Prompts* – visually interesting, positioned near point of target behavior
    - *Modelling/social norms*
    - *Incentives* – financial, public recognition, competition between groups
    - *Communication* – vivid, personal, concrete messages that come from a credible source and are framed in ways that emphasize your audience's attitudes & beliefs

4. Pilot test on a sub-group of the population of interest to identify intervention weaknesses.
5. Broad scale implementation.

CBSM is used in relation to agriculture, transportation, home energy use, water use, resource waste, and toxic chemical use (McKenzie-Mohr et al., 2012).

→ We should foster situations and systems that support climate-freindly behaviors.

New slides: Violating social norms - Minority influence.
Not only majority (the norm setters) who can promote change.

Transformation in society frequently also start with minority groups - individuals challenging the norms. New research offers a optimistic perspective (Bolderdijk & Jans, 2021, review): Activist climate groups can influence the majority population indirectly: By changing the majority attitudes (e.g. more and more people consider themselves 'flexitarian'). Although subtle, their influence is crucial: once majority members notice that norms are shifting, sudden "tipping points" can ensue.

> **Research suggestion related to social identity:** Jans, 2021: "Three studies support the proposition that bottom-up pro-environmental initiatives (i.e. formed by some regular members of a group themselves) can strengthen pro-environmental social identity (pro-environmental norms and group identification) in members of the overarching group, and thereby motivate pro-environmental actions".

Until now we have mostly discussed people's responses to the climate crisis, but we will now turn to some of the social implications of climate crisis. Conflict and cooperation.

As we don't know the concrete content of the initial lectures on "prosocial behavior and cooperation" and "aggression and conflict", we find it difficult to know specific theoretical constructs to use.

New slides: Intergroup conflict
Natural disasters and other consequences of climate change are linked to increases in intergroup conflict and violence, though heavily context dependent.

Rewiew article by Suh et al., 2021: summary of research investigating the link between climate change and conflict, discussion of psychological mechanisms underlying climate-conflict linkages, and points toward potential conflict-attenuating strategies.

- https://www-sciencedirect-com.ezproxy.uio.no/science/article/pii/S2352250X21000130?via%3Dihub

New slides: Cooperation

<u>Some general thoughts:</u>
We suggest removing slides 41-56:

- "Musekeweya (New Dawn) cultural intervention in Ruanda"
- "Outside evaluation by Paluck (2009)"

- “Health psych. Approaches”/”Ex: Obesity reduction”
- “Applied social psych. covid-19.

Decided to cut this, as there probably will not be enough time. But could still be used if you want.

Sparkman & Walton (2017): When non-vegan participants were informed about a minority of Americans already cutting back on meat, it didn't influence them much. However, their interest in reducing meat consumption increased when they read a message indicating that, though still a minority, more and more Americans were making an effort to limit their meat intake. Sparkman, et al. (2020): The likelihood of ordering vegetarian dishes also rose when people believed that the trend applied to their own social group.

Maybe these can be of interest regarding activism/social movements:

- https://www.sciencedirect.com/science/article/abs/pii/S0272494409000991?via%3Dihub
- https://onlinelibrary.wiley.com/doi/10.1002/ejsp.1983