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THE WORKPLACE AS A MEANS TO SPREAD ENVIRONMENTAL SUSTAINABILITY

**Or how environmental policies, social norms and environmental culture of
sustainability interact**



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OUTLINE



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2. Research Question
3. Literature review
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9. Conclusions and final remarks

BACKGROUND

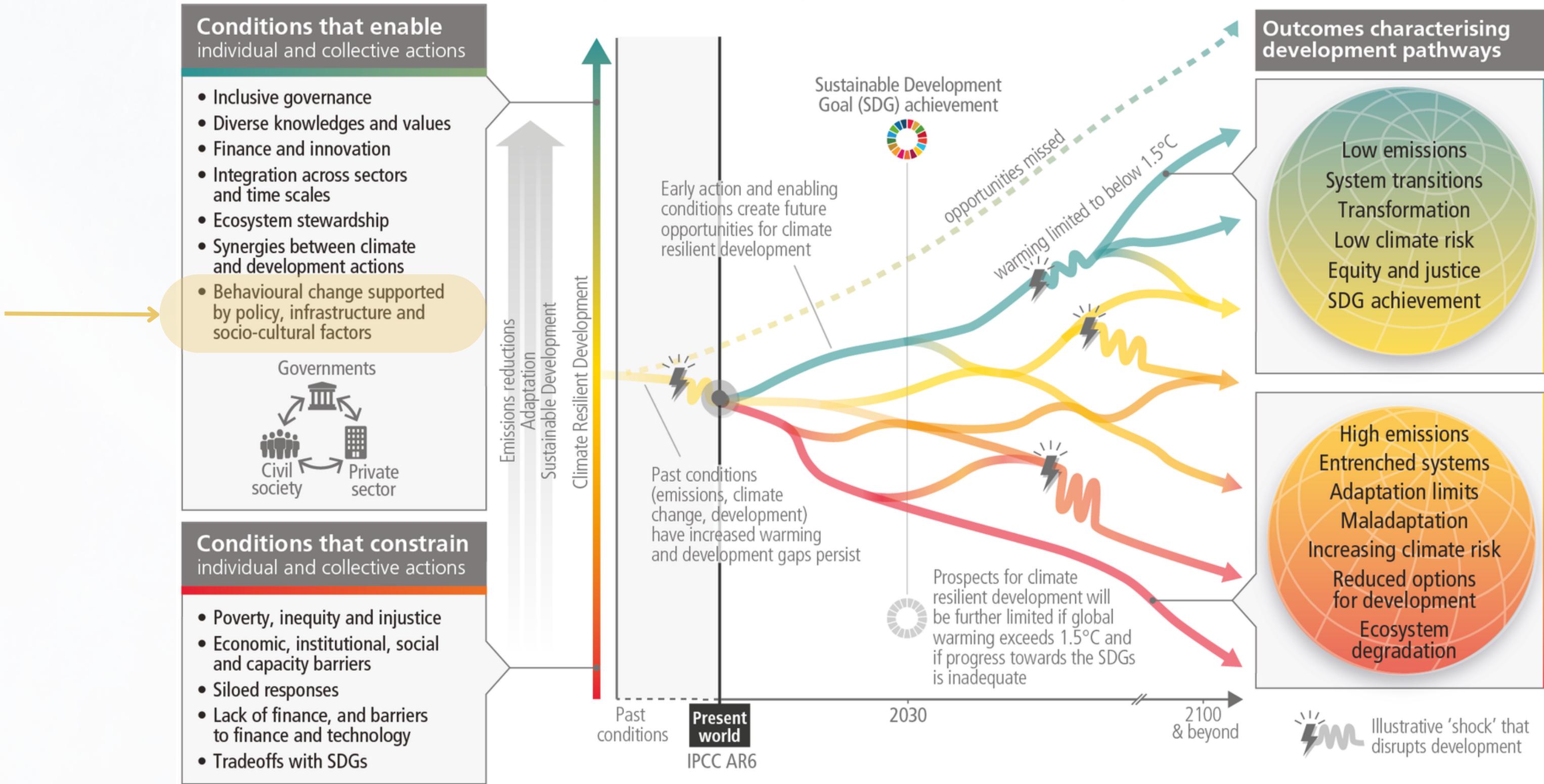


Prestige oil spill, Spain (2002)

- Unsustainable production and consumption;
- Environmental protection in the top list of political agendas;
- Environmental goals impossible to achieve at this pace.

There is a rapidly narrowing window of opportunity to enable climate resilient development

Multiple interacting choices and actions can shift development pathways towards sustainability



Source: Report on Climate Change by Intergovernmental Panel on Climate Change (IPCC, 2023)

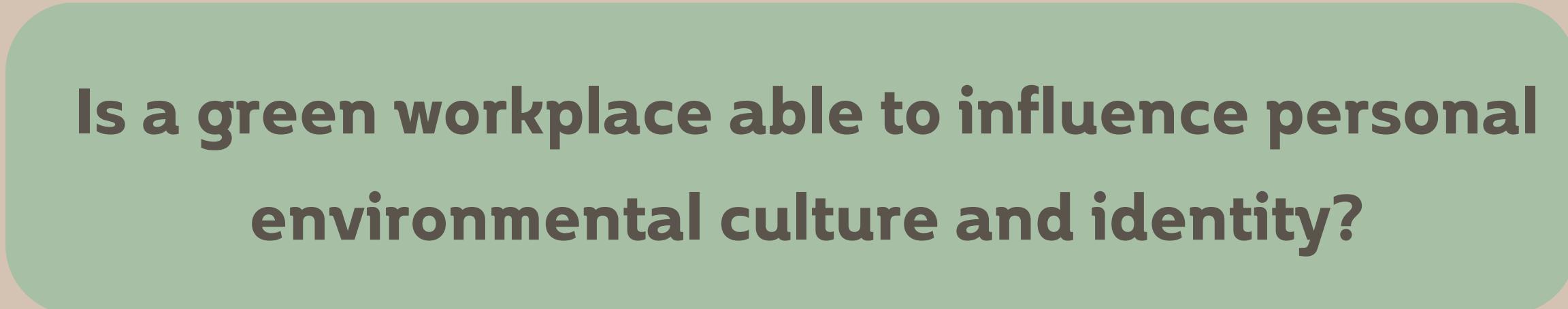


"Behavioural change supported by policy, infrastructure and socio-cultural factors



Change of mindset through the workplace

- commitment in time
 - constant changing environment due to innovation
 - adults' education
- 



Is a green workplace able to influence personal environmental culture and identity?

If yes, it would provide motivations for policymakers to invest in work policies to re-skill and re-educate the workforce to support sustainability transition



RESEARCH QUESTION



Question 1: why and how firms engage in environmental issues?

Historical overview of regulatory pressures about environmental sustainability; responses of the firms (CSR, proactivity, ecoinnovation).

Question 2: how do environmental culture and identity develop?

General definition of culture and identity; culture and identity development (Schudson, 1989; Kempton and Holland; 2003); environmental culture and identity in organizations.

Question 3: how do environmental culture and identity spread?

Social, psychological, anthropological, behavioural theories:

Theory of Normative Conduct (Cialdini et al, 1990);

Social Learning and Social Cognitive theory (Bandura, 1977; 1997); Interdependence or social exchange theory (Kelley and Thibaut, 1978);

Theory of planned behaviour (Ajzen, 1985);

New environmental paradigm perspective (Dunlap and Van Liere; 1978);

Norm activation theory (Schwartz, 1977) and its extended model Value-Belief-Norm theory by Stern (2000) in environmentalism;

Self-determination theory (Deci and Ryan; 2000);

Self-expansion theory (Aron and Aron; 1986);

Social information processing theory by Salancick and Pfeffer (1978)



LITERATURE REVIEW



QUALITATIVE STEP

Semi-structured interview on 29 workers (9 eco-innovative manufacturing firms)

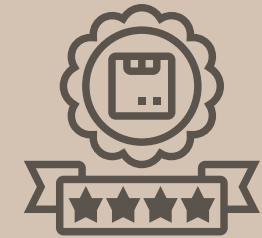


Aim

Exploring the interrelation between corporate environmental culture and personal environmental culture and identity.

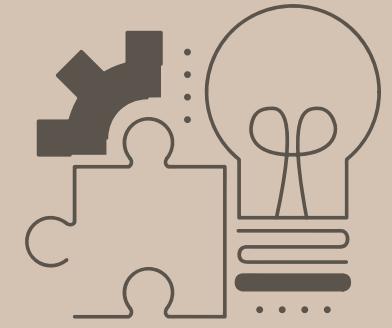
Main features

- Several people of the same firm;
- Non-probability sample methods
- High heterogeneity
- Questions about workplace and private life.



MAIN CONSIDERATIONS

- Employees with high environmental culture identify the workplace and education as origin of environmental concern;
- Work activity and learning process --> TNC and Social Learning theory
- Sustainability Report
- All respondents believe that environmental efforts are social and not individual
- The perception of working in a firm that cares about the environment, and with colleagues respecting this social norms, activates environmental commitment resulting into green behaviours and environmental identity



QUANTITATIVE STEP

Multi-wave survey conducted in Italy on
271 employees in 5 manufacturing
medium firms

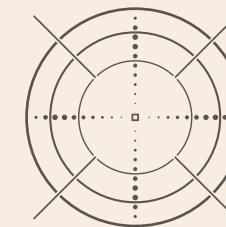
Aim

Test the associations
arisen from the literature
and the qualitative step
through a model of
conditional analysis
(Hayes, 2013).

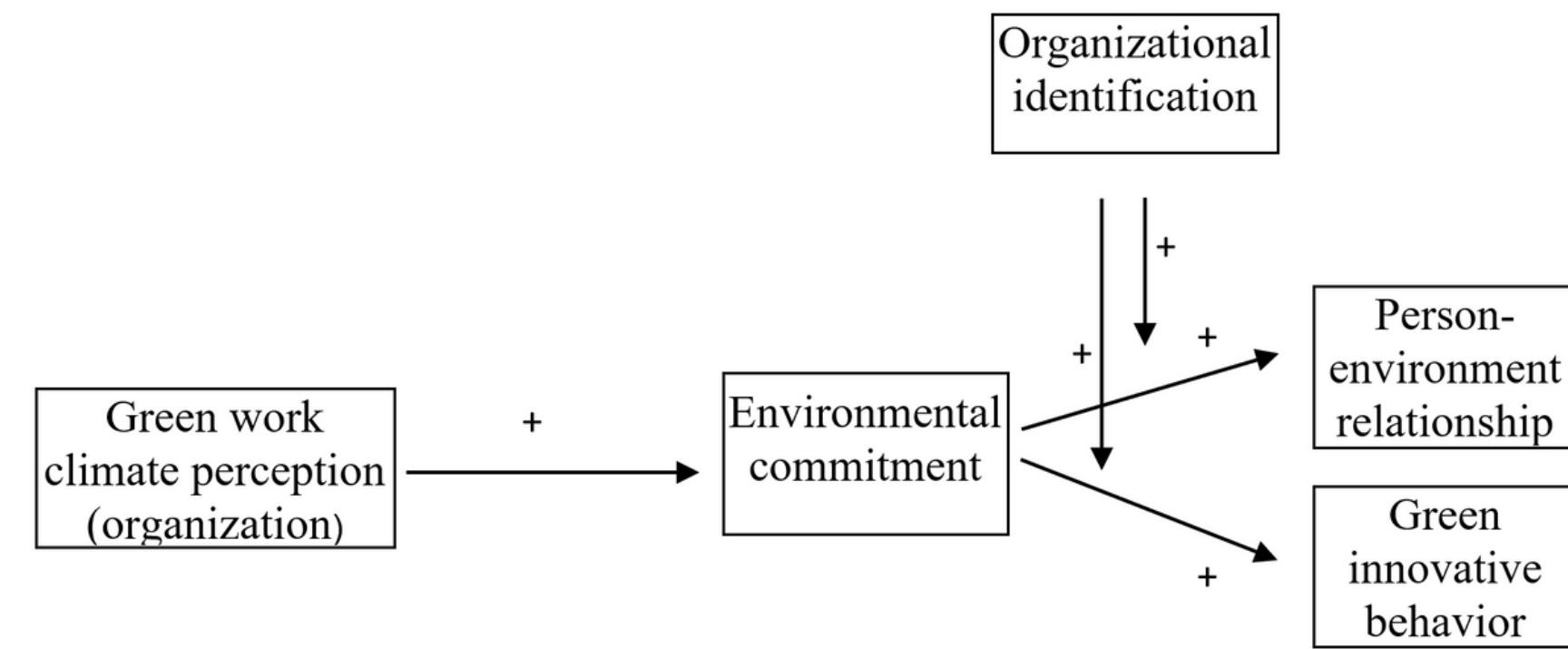
Variables

- Green work climate perception of the organization (X1)
- Green work climate perception of co-workers (X2)
- Commitment to the environment in the workplace (M)
- Green innovative work behaviours (Y1)
- Person-environment relationship (Y2)
- Organizational identification (m)

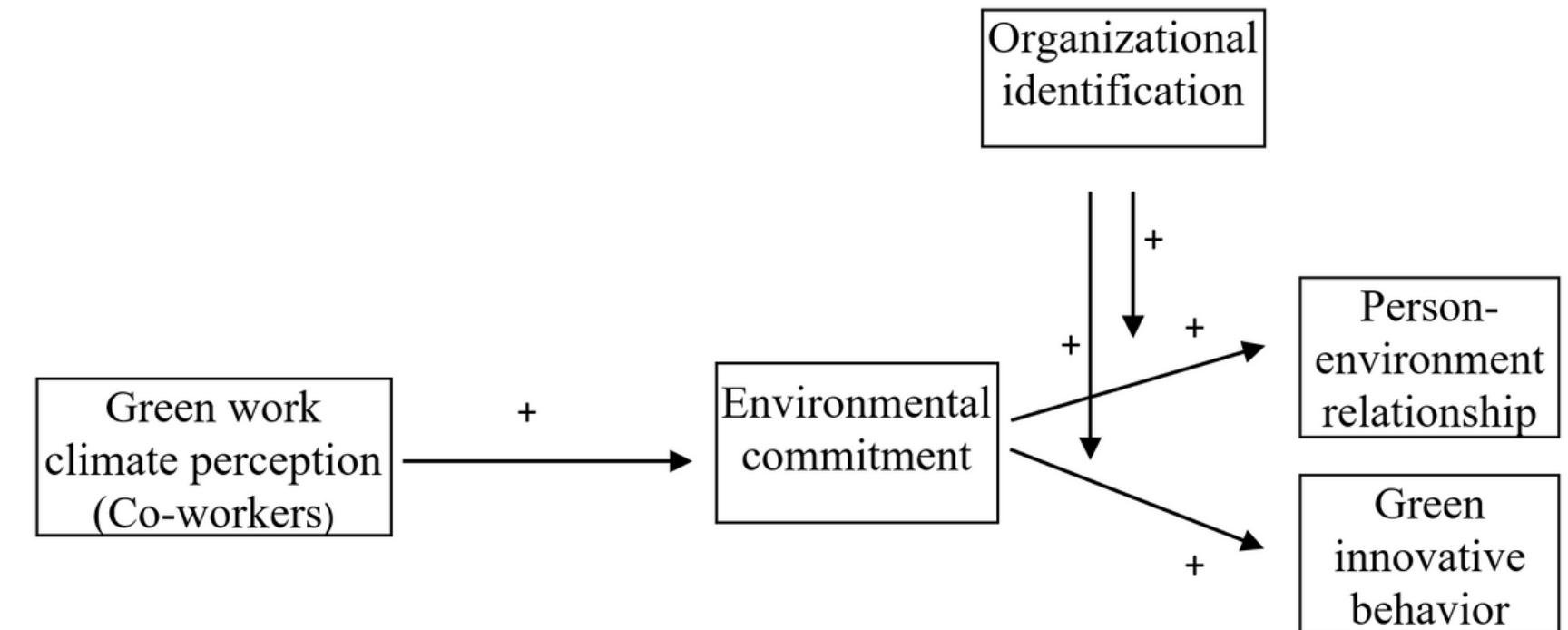
MODELS



Model A



Model B



Mediation

Hypothesis 1: The indirect effect of H1a) Green work climate perception (organization) and H1b) Green work climate perception (co-worker) on Person-environment relationship through Environmental commitment is positive.



Hypothesis 2: The indirect effect of H2a) Green work climate perception (organization) and H2b) Green work climate perception (co-worker) on Green innovative behavior through Environmental commitment is positive.



Conditional

Hypothesis 3: Organizational identification strengthens the indirect effect of H3a) Green work climate perception (organization) and H3b) Green work climate perception (co-worker) on Person-environment relationship through Environmental commitment.

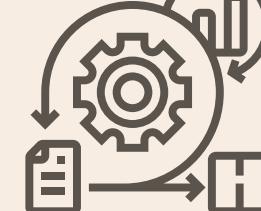


Hypothesis 4: Organizational identification strengthens the indirect effect of H4a) Green work climate perception (organization) and H4b) Green work climate perception (co-worker) on Green innovative behavior through Environmental commitment.



HYPOTHESES



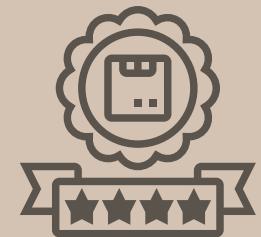


RESULTS

	Model A: Green work climate perception (organization) as independent variable						Model B: Green work climate perception (co-workers) as independent variable						
	Environmental commitment		Person-environment relationship		Green innovative behavior			Environmental commitment		Person-environment relationship		Green innovative behavior	
	B	SE	B	SE	B	SE		B	SE	B	SE	B	SE
Intercept	-2.57***	<i>0.50</i>	4.08***	<i>0.58</i>	2.36***	<i>0.30</i>		-2.76***	<i>0.56</i>	4.65***	<i>0.62</i>	2.74***	<i>0.32</i>
Organization 1	-0.21	<i>0.24</i>	-0.96***	<i>0.27</i>	-0.07**	<i>0.14</i>		0.11	<i>0.25</i>	-0.76**	<i>0.26</i>	0.04	<i>0.14</i>
Organization 2	-0.17	<i>0.27</i>	-0.91**	<i>0.28</i>	0.10	<i>0.15</i>		0.16	<i>0.27</i>	-0.74*	<i>0.29</i>	0.19	<i>0.15</i>
Organization 3	0.31	<i>0.27</i>	-1.02***	<i>0.29</i>	-0.01	<i>0.15</i>		0.55*	<i>0.27</i>	-0.83**	<i>0.29</i>	0.11	<i>0.15</i>
Organization 4	-0.10	<i>0.29</i>	-1.10***	<i>0.29</i>	-0.12	<i>0.16</i>		0.28	<i>0.29</i>	-0.93**	<i>0.31</i>	-0.03	<i>0.16</i>
Age	-0.01	<i>0.01</i>	-0.01	<i>0.01</i>	0.01	<i>0.01</i>		0.00	<i>0.01</i>	0.01	<i>0.01</i>	0.01	<i>0.00</i>
Gender	-0.23	<i>0.15</i>	0.04	<i>0.16</i>	0.22*	<i>0.09</i>		-0.29	<i>0.16</i>	0.01	<i>0.17</i>	0.19*	<i>0.09</i>
Tenure	0.02	<i>0.01</i>	0.01	<i>0.01</i>	-0.01	<i>0.01</i>		0.02	<i>0.01</i>	0.01	<i>0.01</i>	0.01	<i>0.01</i>
Education	-0.01	<i>0.10</i>	0.20	<i>0.11</i>	-0.09	<i>0.06</i>		0.17	<i>0.11</i>	0.25*	<i>0.12</i>	-0.06	<i>0.06</i>
Position	0.3**	<i>0.09</i>	0.03	<i>0.10</i>	0.01	<i>0.01</i>		0.33	<i>0.09</i>	0.03	<i>0.10</i>	0.05	<i>0.05</i>
Green work climate perception	0.59***	<i>0.08</i>	0.27**	<i>0.10</i>	0.14**	<i>0.05</i>		0.47***	<i>0.08</i>	0.06	<i>0.09</i>	0.01	<i>0.05</i>
Environmental commitment			0.46***	<i>0.07</i>	0.52***	<i>0.05</i>				0.51***	<i>0.07</i>	0.55***	<i>0.04</i>
Organizational identification			0.04	<i>0.09</i>	0.14**	<i>0.05</i>				0.10	<i>0.09</i>	0.17***	<i>0.05</i>
Environmental commitment x Organizational identification			-0.01	<i>0.06</i>	0.08**	<i>0.03</i>				-0.02	<i>0.06</i>	0.08**	<i>0.03</i>
R ²	0.29		0.34		0.65			0.23		0.32		0.64	
F	10.63***		9.99***		37.13***			7.93***		9.15***		35.38***	

Notes. n = 271. Standard errors in italic. The dummy "Organization 5" is not included in the equations because it is redundant.

*p < 0.05. **p < 0.01. ***p < 0.001.



MAIN CONSIDERATIONS

- Results in line with previous research that link perceived environmental social norms and pro-environmental behaviours;
- Add on the cultural and educational effects that environmental policies and practices in the workplace may have on the private sphere of people;
- Social norms as independent variables and not mediator/moderator like in the literature;
- The workplace is able to influence green innovative work behaviours and to increase the feeling of interconnectedness with the environment --> personal environmental identity.

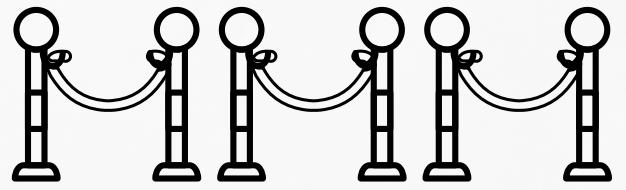




SUMMARY OF FINDINGS

- Provide evidence that a green workplace has the potential to instill or empower **environmental identity** in employees;
- Environmental culture fostered by **social norms** and **social learning** processes
- Green work climate perceptions influence green innovative behaviours and person-environment relations through environmental commitment, revealing **spillover effects** in private life.
- Workplace policies -> environmental training -> **households**

- Sample: only manufacturing firms; absence of control group; non-probability sample methods; non-representative results.
- Data reliability: COVID-19 and the workplace; videocalls; SRs of 2020; only one researcher for interviews and content analysis; horizontal more than vertical analysis.
- Design: second study on different firms; absence of cultural considerations (i.e., regional differences).
- Lack of prior studies: also opportunity.
- Self-reporting.



LIMITATIONS AND FURTHER STUDIES



- First theoretical link between environmental policies in the workplace and environmental culture/identity of people;
- Firms beyond profit for a sustainable work-life balance;
- Multidisciplinarity: making complexity inclusive through kaleidoscopic lens.



CONTRIBUTIONS AND IMPACT



THANK YOU

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