

Green at Work: The Role of Employees' Values on Their Pro-Environmental Intention and Behavior



Introduction

Most researchers agree that the cause of our current global warming crisis can be attributed to human actions (Cook et al., 2016) due to greenhouse gas emissions, pollution, as well as the use of natural resources, raw materials, and energy (Steg & Vlek, 2009). Behavior in organizations and in the public sphere can have a great effect on the environment (Stern, 2000). Since employees spend about a third of their lifetime in an office (Blok et al., 2015), it is important that they behave in an environmentally conscious way not only in the private sphere but in the workplace as well. Our study aims to give a better insight into the underlying psychological processes of pro-environmental behavior (PEB) and intention (PEI) in the work context. We focused specifically on employees' values and their personal norms, while also considering self-efficacy and contextual factors, such as corporate environmental responsibility (CER).

Sample

Convenience sample of $N = 118$ ($\text{♀} = 59.3\%$, $\text{♂} = 39.8\%$, $\text{♂} = 0.8\%$)

Age: $M = 39.0$, $SD = 13.7$ (range: 20 – 66 years)

Inclusion criteria: person works > 20 hours / week | age ≥ 18 | 80% of control items right

Data Collection: October 2021 – December 2021 | Online questionnaire in German with two points in time (T1 & T2)

Method: Multiple regressions and correlations via IBM SPSS Statistics 27 software for Windows; mediation and moderation analyses via PROCESS Macro v3.4 (Hayes, 2018)

Instruments

Dimension	Scale (Time Point)	Items	α	Example ¹	Source
Predictors	Egoistic Values (T1)	4	.71	Soziale Macht: Kontrolle über andere, Dominanz	Short version of Schwartz's value scale
	Biospheric Values (T1)	4	.90	Umweltschutz: die Natur bewahren	(1992) adapted by Stern et al. (1999)
Mediator	Personal Norms (T1)	3	.75	Ich fühle mich moralisch verpflichtet, umweltfreundlich zu handeln.	Van der Werff et al. (2013)
Moderators	Self-Efficacy (T1)	3	.79	Mir fällt es leicht, mich umweltfreundlich zu verhalten.	Wai et al. (2018)
	Corporate Environmental Responsibility (CER; T1)	3	.93	Meine Organisation hat das Ziel, ihre Auswirkungen auf die Umwelt zu minimieren.	Ruepert et al. (2017)
Outcomes	Pro-Environmental Intention (PEI; T2)	11	.81	Ich werde meinen Computer/mein Notebook ausschalten, wenn ich nach Hause gehe.	Blok et al. (2015) & adapted PEB-Items from Blok et al. (2015)
	Pro-Environmental Behavior (PEB; T2)	12	.82	Ich kopiere und drucke doppelseitig.	Blok et al. (2015)

¹ Items in German language as used in the questionnaire

Hypotheses² and Results

H1: Employees' values influence the amount of pro-environmental behavior they show at their workplace. Employees with strong (a) biospheric values / (b) egoistic values show (a) more / (b) less pro-environmental behavior at their workplace.

H2: Employees' values influence the amount of pro-environmental intention they show at their workplace. Employees with strong (a) biospheric values / (b) egoistic values show (a) more / (b) less pro-environmental intention at their workplace.

H3: Pro-environmental intention mediates the relation between personal norms and pro-environmental behavior. Personal norms have a positive indirect influence on pro-environmental behavior via pro-environmental intention.

H4: Personal norms mediate the relation between values and pro-environmental intention. (a) Biospheric values / (b) egoistic values have a (a) positive / (b) negative indirect influence on pro-environmental intention via personal norms and therefore also a (a) positive / (b) negative indirect influence on pro-environmental behavior.

H5: Self-efficacy moderates the relation between biospheric values and pro-environmental intention and behavior. Higher self-efficacy strengthens the connection between the biospheric values of the employees and their (a) pro-environmental intention / (b) pro-environmental behavior.

H6: Corporate environmental responsibility moderates the relation between biospheric values and pro-environmental intention and behavior. Higher perceived corporate environmental responsibility enhances the relationship between employees' biospheric values and their displayed (a) pro-environmental intention / (b) pro-environmental behavior.

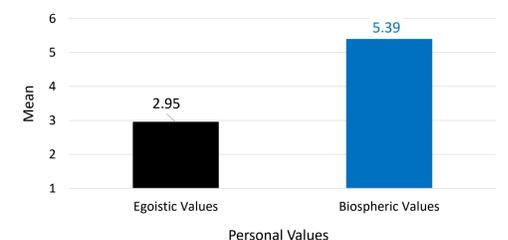
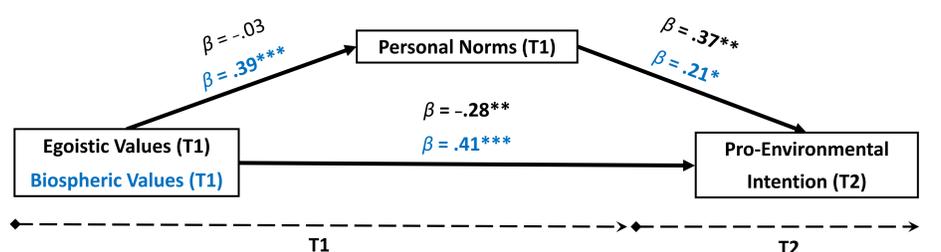


Figure 1: Mean scores of Egoistic Values and Biospheric Values.



Indirect effect: $-.01$, 95% CI $[-.08, .05]$ | Total effect: $-.29^{**}$
 Indirect effect: $.08$, 95% CI $[.02, .17]$ | Total effect: $.50^{***}$
 $*p < .05$, $**p < .01$, $***p < .001$

Figure 2: Mediation analysis with Personal Norms as a mediator between Biospheric / Egoistic Values and PEI: Personal Norms significantly mediate the relation between Biospheric Values and PEI, but not between Egoistic Values and PEI. PEI = Pro-Environmental Intention.

² red = hypothesis rejected; green = hypothesis accepted; orange = hypothesis partly accepted

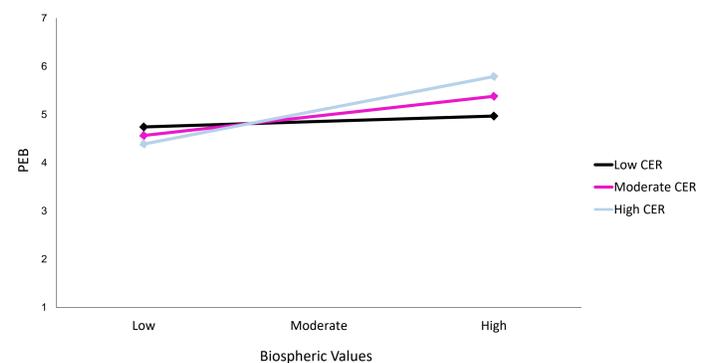


Figure 3: Moderation analysis when applying generalized extreme value distribution: The results show that CER significantly moderates the relation between Biospheric Values and PEB. PEB = Pro-Environmental Behavior; CER = Corporate Environmental Responsibility.

Discussion

Biospheric values had a positive effect on PEB and PEI, which is in alignment with the results from Steg et al. (2005). Egoistic values only negatively influenced PEI and not PEB. The results regarding PEB contradict the findings from Nilsson et al. (2016). However, Figure 1 shows that the participants had fewer egoistic values as compared to biospheric values. This could be one reason why no effect on PEB was found. Moreover, our results show that personal norms mediate the relationship between biospheric values and PEB as well as PEI. No such relationship was found for egoistic values. In line with Ruepert et al. (2017), CER significantly moderated the relation between biospheric values and PEB. If the organization takes on a lot of CER, the effect of values on PEB increases. Against our assumptions, self-efficacy did not have a moderating effect on either PEB or PEI.

Practical Implications

Organizations should aim to convey to their employees that the environment is important to them and their goals (i.e., by introducing green challenges or workshops about PEB), since it may lead to more PEB among their employees.

Limitations

Since the data was collected through online surveys no actual PEB was measured, only self-reports of PEB. Furthermore, the number of hours the participants were working from home was not surveyed. Employees could show different behaviors in their private-sphere versus in the workplace. Moreover, participants could have rated their biospheric values higher than they really are, because they feel like it would be the more socially acceptable answer, which could also explain the distribution in Figure 1.

References

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