

# Mind the next generations: boosting pro-ecological worldviews via social responsibility appeals

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## Abstract

Previous research showed that retirement saving increases after presenting people with an appeal to the sense of responsibility toward their future selves. In our study, we encouraged young adults ( $N = 344$ ) to think of the environment in which they themselves or their future grandchildren would live. The grandchildren-related appeal led to a greater willingness to financially support an environmental organization and to a higher level of pro-ecological worldviews than the other appeal but not compared to the control group. Contrary to the previous findings, effectiveness of the intervention in our study did not depend on perceived closeness to future selves or future grandchildren. We hypothesize that the future self/generation continuity rather mediates than moderates the effect of appeals.

## 1 Introduction

Given far-distant consequences of unsustainable behavior, people are usually short-sighted when it comes to the environment. How to resolve this issue? Previous research (Bryan & Hershfield, 2012) focused on ways how to motivate people to save more money for their retirement. The authors compared effectiveness of a traditional appeal to people's self-interest versus an appeal to their social responsibility toward their future selves. The future-self-targeted message led to a substantial increase in saving.

In our study we focused on environmental issues as one of the major concerns of today's societies. Since consequences of unsustainable behavior in this domain will affect not only present but mainly future generations, we decided to expand the research. Thus, our main aim was to test the effectiveness of two types of appeals—social responsibility toward future self vs future grandchildren—on pro-ecological worldviews and behavior. At the same time, we were interested in perceived closeness to either future selves or future grandchildren as moderators of the effects.

## 2 Method

Out of 344 young adults ( $M = 22$  years,  $SD = 2.4$ ) who participated in our online research, two thirds were women ( $n = 231$ ). After completing demographic items, the participants indicated their feelings of closeness to their future selves (Bryan & Hershfield, 2012) and their future grandchildren (Hershfield et al., 2014) - in a randomized order.

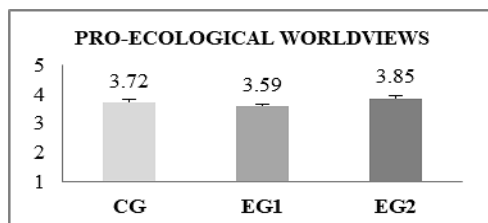
Then, each participant was randomly allocated in one of the three groups. Members of the experimental groups read one of two messages. The first one (EG1;  $n = 112$ ) contained the appeal to social responsibility toward future self: "Please think about your future. Thirty years from now, you will live in the environment that people are shaping today. You are also involved in protecting the current environment. You have a responsibility towards your 30-year-old self. Your future well-being and quality of life depend on how you treat your environment now." The other one (EG2;  $n = 124$ ) targeted social responsibility to future grandchildren: "Please think about the future of your grandchildren. They will live in the environment that people are shaping today. You are also involved in protecting the current environment. Well-being and quality of life of future generations depend on how you treat your environment now." Members of the control group (CG;  $n = 108$ ) were not exposed to any appeal.

Finally, the participants proceeded to the dependent measures: i) the 15-item New Environmental Paradigm scale (NEP; Dunlap et al., 2000;  $\alpha = .72$ ) indicating pro-ecological worldviews (e.g., "Humans are seriously abusing the environment.") and ii) a donation item. Thus, the participants were previously informed that some of them will be randomly drawn and rewarded with €30. The donation item asked the participants how much money of the potential win in the lottery they would donate to an environmental organization. No specific name of the organization was provided; we just described its mission and activities.

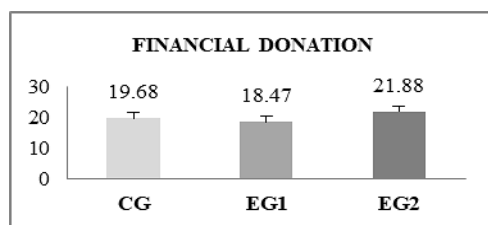
## 3 Results

Comparisons of the three groups are provided in Figure 1 and Figure 2. The error bars represent upper limits of 95% confidence intervals. Analyses of variance showed significant results,  $F(2, 341) = 9.53$ ,  $p < .001$ ,  $\eta^2 = .05$ , and  $F(2, 332) = 3.31$ ,  $p = .038$ ,  $\eta^2 = .02$ . Yet, only two out of six comparisons

were significant after applying the Bonferroni correction. Namely, both the pro-ecological worldviews and financial donations were substantially higher in EG2 compared to EG1: MDIFF = 0.26, 95% CI [0.14, 0.38],  $p < .001$ ,  $d = 0.61$  & MDIFF = 3.41, 95% CI [0.76, 6.06],  $p = .012$ ,  $d = 0.33$ . Series of moderation analyses failed to support the assumption that effectiveness of the appeals depends on perceived closeness to future selves or future grandchildren.



**Fig. 1:** Comparison of pro-ecological worldviews



**Fig. 2:** Comparison of financial donations

## 4 Discussion

We see the main reason why our intervention failed to succeed in the specificities of our sample. Almost all participants showed high pro-ecological worldviews and behavior even without any appeal. In fact, more than 70% were willing to donate at least half of their financial prize to an environmental organization, and more than 40% would donate all of it. Even considering social desirability of the answers, the numbers are really high. Similarly, there were only 17 participants who indicated rather anti-ecological or neutral attitudes. Hence, there was not much room for improvement.

The other explanation is that the messages were not strong enough. Intriguingly, the scores in the group with future-self-related appeal were lower compared to the control group. It is possible that the future self is still relatively close in time and participants do not expect such early changes in the quality of the environment in Slovakia - consequently, they see no reason for concern. However, as far as future grandchildren are concerned, the time gap is relatively large, so the possibility of a deteriorated environment may be much more likely. Therefore, the appeal to future generations was more effective. In addition, discounting in the environmental domain seems to

differ from discounting in the financial and health domains (Böhm & Pfister, 2005; Hendrickx & Nicolaij, 2004).

As for the role of connectedness with the future self, we hypothesize that this might rather be a less stable disposition open to eventual interventions (e.g., Hershfield et al., 2011). Therefore, we propose testing the models with future self/generation continuity as mediators rather than moderators of the effect of appeals on attitudes, judgments and intertemporal choices. The main challenge, however, is to find effective ways of long-term support for sustainable behavior.

## Acknowledgment

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