

Psychological mechanisms of adolescents' drinking water consumption before and after the ecological disaster



Environmental Psychology
Research Centre

Lina Jovarauskaitė, Goda Kaniušonytė, Mykolas Simas Poškus, Audra Balundė, Rita Žukauskiénė

Mykolas Romeris University



What We Learned

Significant psychological changes in adolescents' normative, habitual, intentional, and situational factors regarding bottled water consumption were indicated in the context of the tire fire

Background

- Ecological disasters not only have serious environmental consequences, but it has psychological impact on individuals as well. The current study focuses on the tire fire – the ecological disaster caused by human – which had negative impact on air, groundwater, and soil. Aforementioned ecological disaster occurred in Alytus, Lithuania on the 16th of October, 2019.
- The scientific evidences regarding community's response to ecological disaster is crucial for effective ecological disaster management.
- However, little is known how the tire fire affects adolescents' drinking water consumption and psychological determinants related to it.
- We aimed to investigate the psychological mechanisms of adolescents' drinking water consumption through normative, habitual, intentional, and situational factors before and after the tire fire.

Results

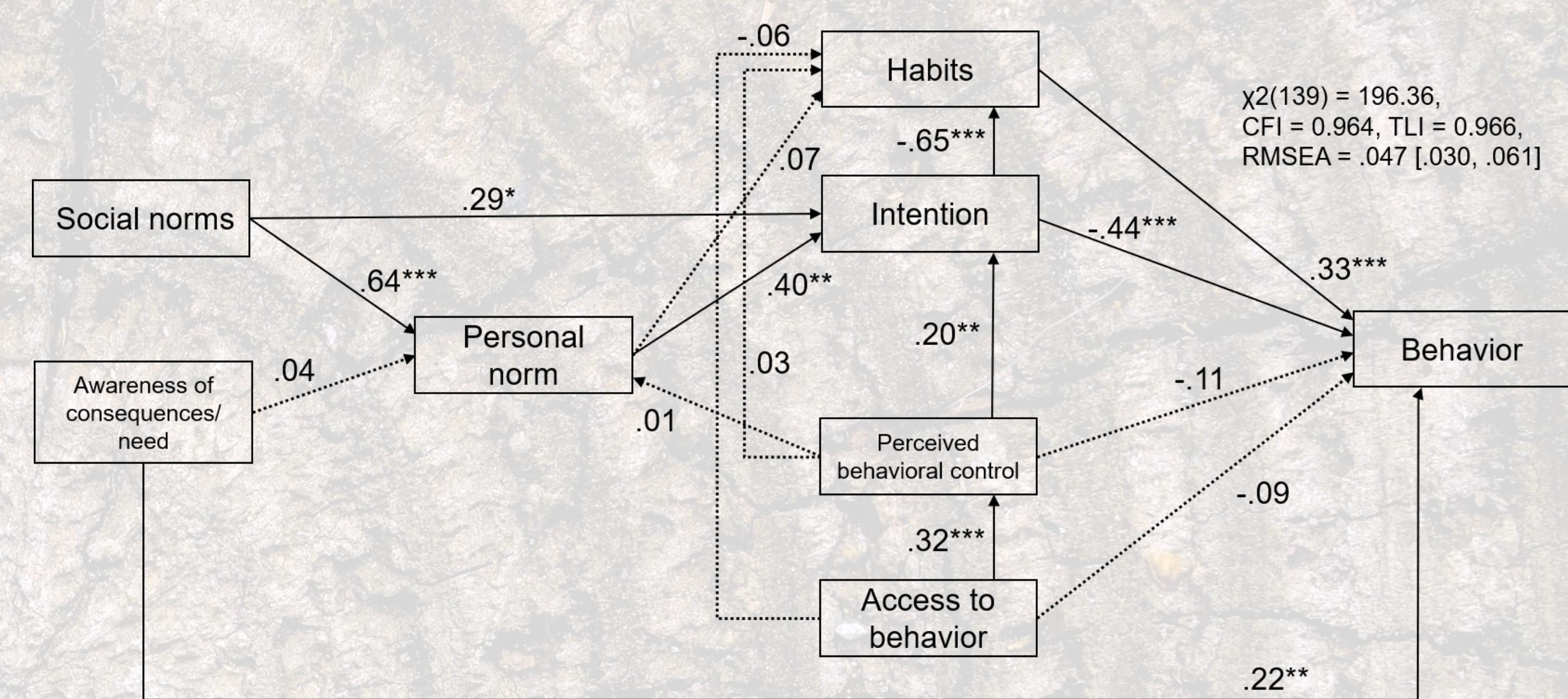


Fig.1. Adolescents' normative, habitual, intentional, and situational factors of bottled water consumption before the tire fire (T1).
Solid lines indicate statistically significant paths, * $p < .05$, ** $p < .01$, *** $p < .001$.

Method

- The questionnaire covered the components of the Comprehensive Action Determination Model (CADM, Klöckner & Blöbaum, 2010), i.e., normative (awareness of need/consequences, social norms, personal norm), habitual, intentional, situational (perceived behavioral control, access to behavior) factors and behavior
- The pilot study was conducted in order to test the questionnaire
- Awareness of consequences and awareness of need were merged (e.g., Klöckner & Oppedal, 2011)
- All the items were targeted at bottled water consumption
- Mplus 7.12 statistical package

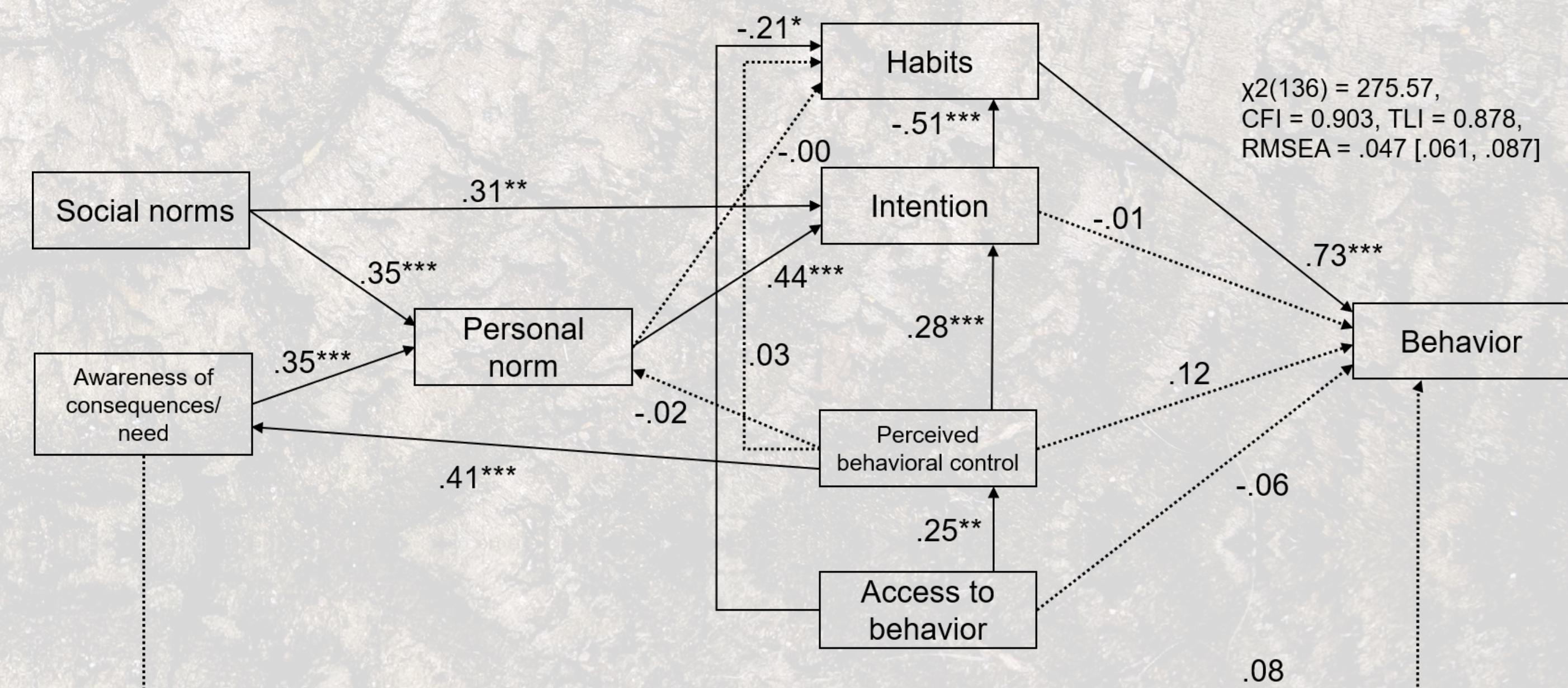


Fig.2. Adolescents' normative, habitual, intentional, and situational factors of bottled water consumption after the tire fire (T2).
Solid lines indicate statistically significant paths, * $p < .05$, ** $p < .01$, *** $p < .001$.

Sample

- The longitudinal study had two measurement points – before (T1) and after (T2) the tire fire
- 188 adolescents from Alytus (the town in which the tire fire occurred) participated in the current study
- Age of the participants varied from 14 to 17 years ($M = 15.20$, $SD = 0.72$)
- 58.5% of the participants were girls

Discussion

- The role of the adolescents' habit to consume bottled water increased after the tire fire
- Situational factors such as access to behavior and perceived behavioral control were related to increased adolescents' awareness of need/consequences of bottled water consumption to the environment
- These results suggest that ecological disaster potentially may shape adolescents' pro-environmental behavior as well as psychological factors related to environmental issues

Future Directions

- Further studies are needed to explore psychological processes under adolescents' response to the ecological disasters
- Studies could focus on other situational factors such as the effectiveness of government communication regarding an ecological disaster, the role of the media which potentially could explain the links between situational and normative factors

References

- Klöckner, C. A., & Blöbaum, A. (2010). A comprehensive action determination model: Toward a broader understanding of ecological behaviour using the example of travel mode choice. *Journal of Environmental Psychology*, 30, 574–586. <https://doi.org/10.1016/j.jenvp.2010.03.001>
- Klöckner, C. A., & Oppedal, I. O. (2011). General vs. domain specific recycling behaviour—Applying a multilevel comprehensive action determination model to recycling in Norwegian student homes. *Resources, Conservation and Recycling*, 55(4), 463–471. <https://doi.org/10.1016/j.resconrec.2010.12.009>

Acknowledgments

This research was funded by the European Social Fund according to the activity 'Improvement of researchers' qualification by implementing world-class R&D projects' of Measure No. 09.3.3-LMT-K-712

Contact

gogreen.mruni.eu, lina.jovarauskaitė@mruni.eu



2014-2020 Operational
Programme for the
European Union Funds
Investments in Lithuania