

# Moral Identity and Self-Complexity in Bioethical Judgments

Johannes T. Doerflinger, Lea A. Oppermann, & Peter M. Gollwitzer  
University of Konstanz, Germany  
johannes.dorflinger@uni-Konstanz.de

Nora Heinzelmann  
Ludwig Maximilian University of Munich, Germany

Katrin Platzer & Frank Rösler  
German Cancer Research Centre Heidelberg, Germany

## Abstract

We investigated the effects of learning about the science and ethics of Personalized Medicine in an extracurricular seminar on the moral identity and moral judgments of high school students ( $N = 51$ ). We conceptualize moral identity as a goal system<sup>1</sup> composed of identity goals<sup>2</sup> related to morality. Both the structure of the moral identity goal system and its motivational dynamics were assessed. The evidence suggests that moral identity goal systems are malleable, associated values are domain specific and dynamics associated with goal pursuit influence bioethical judgments.

## The Ethics of Personalized Medicine

- Recent breakthroughs in genome editing technologies and personalized medicine have increased pressure on ethical issues surrounding, e.g., genetic enhancement, the moral responsibility of and towards those carrying certain genetic markers, and fair access to expensive treatment.
- Lay opinions on those issues have been curiously understudied.<sup>3</sup>

## Identity Goal Systems – Self Complexity

Assumption: Moral identity is represented in an identity goal systems.

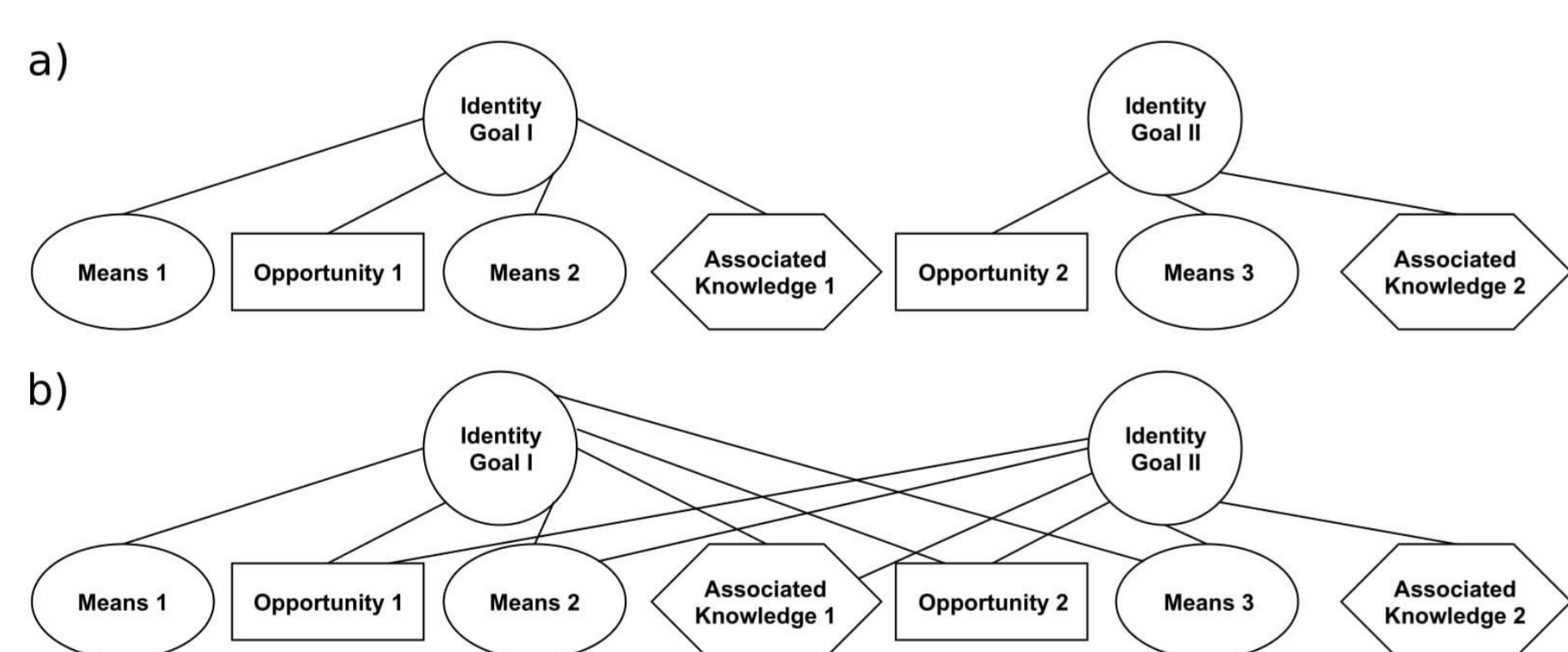


Fig. 1: Example of an identity goal systems. a) high self-complexity b) low self-complexity

In this Framework, Self-Complexity<sup>4</sup> represents the minimal number of dimensions necessary to depict the system.

## Symbolic Self Completion Theory

- Individuals strive for self defining goals<sup>5</sup>.
- While these goals are incomplete, the individuals experience a tension that drives goal pursuit.
- The Tension subsides once the goal is complete.
- Setbacks induce a state of incompleteness, while goal progress can induce completeness.

## Discussion

- A targeted intervention increased value consistency across identity domains and increased endorsement of morality in the targeted domains.
- Moral identity goal systems are malleable.
- Content of identity goal systems is specific to identity goal domains.
- Bioethical judgments are affected by identity goal incompleteness.

## System Properties of Moral Identity in the Bioethical Context

### Hypotheses

- Complexity of the moral identity goal system decreases after students learn relevant content about bioethics and personalized medicine.
- Moral concerns are considered to be more important after learning, but only in relevant identity domains.

### Design and Procedure

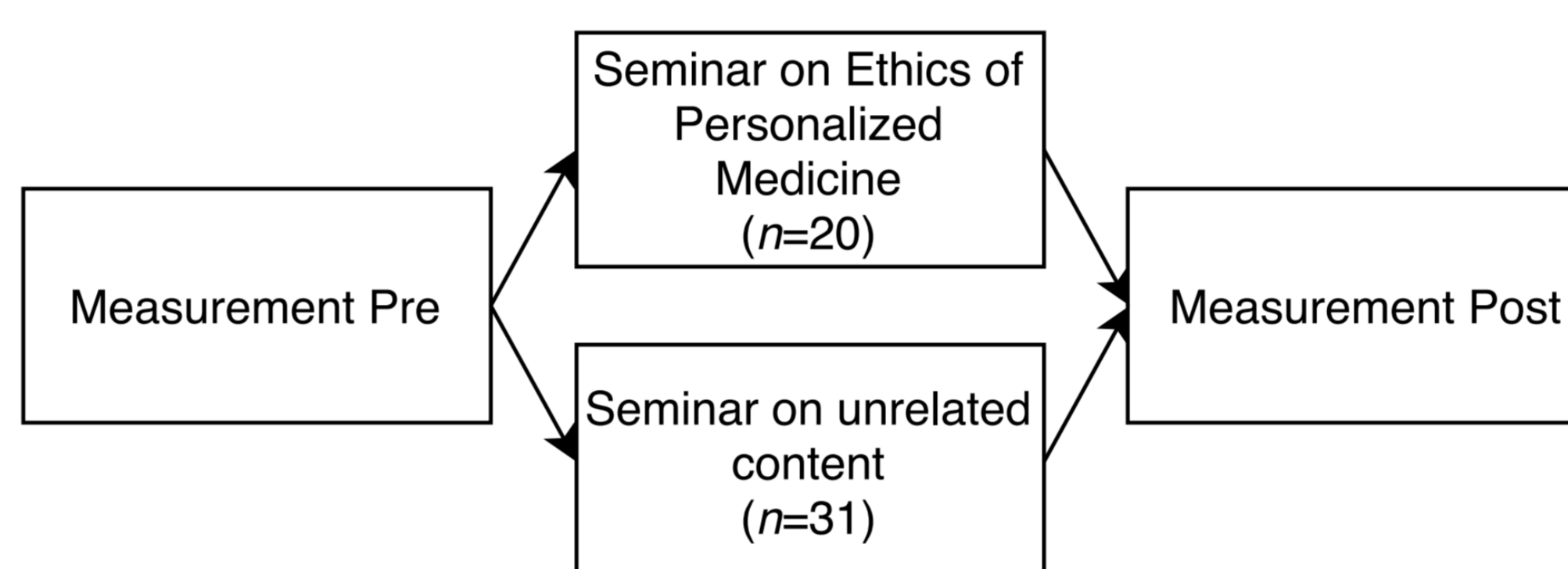


Fig. 2: Design

### Results

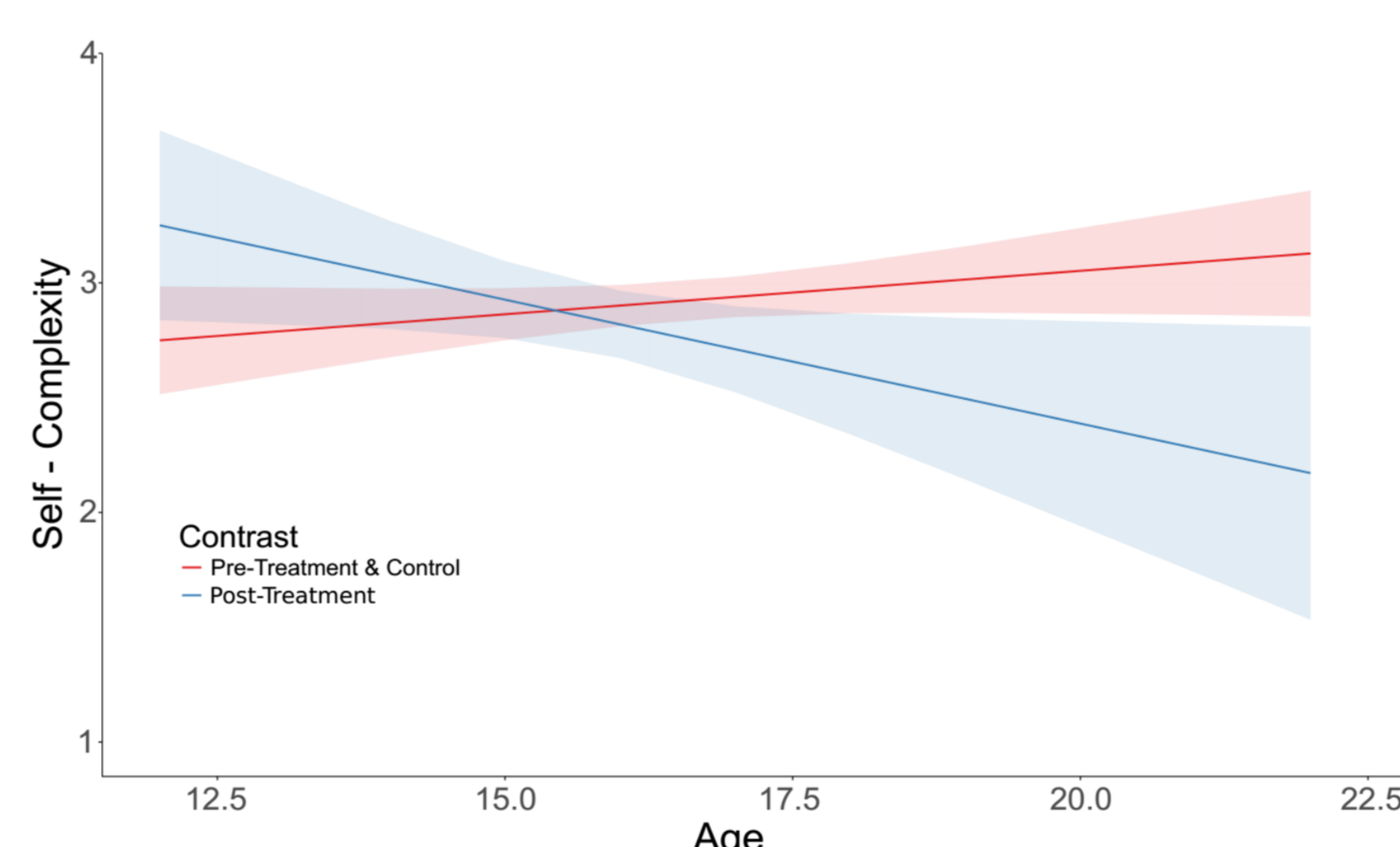


Fig. 4: Self-complexity as a function of age and treatment, 95% confidence intervals displayed

## Goal Properties of Moral Identity in the Bioethical Context

### Hypotheses

- Activation of the identity goal: „person with expert knowledge in medicine“ increases endorsement of genome editing after the intervention

### Procedure

Within manipulation: Describe difficulties in your pursuit of being a person with expert knowledge in medicine/bioethics

Dependent variable: Endorsement of genome editing for medical purposes.

Identity Domains			
I, as a student	...	I, as a person with expert knowledge in medicine	I, as a person with expert knowledge in bioethics
Consider ...	Consider ...	Consider ...	Consider ...
... knowledge	... knowledge	... knowledge	... knowledge
... welfare	... welfare	... welfare	... welfare
... economic prudence	... economic prudence	... economic prudence	... economic prudence
... the law	... the law	... the law	... the law
... morality	... morality	... morality	... morality
a most important value	a most important value	a most important value	a most important value

Fig. 3: Assessment of domain specific value endorsements

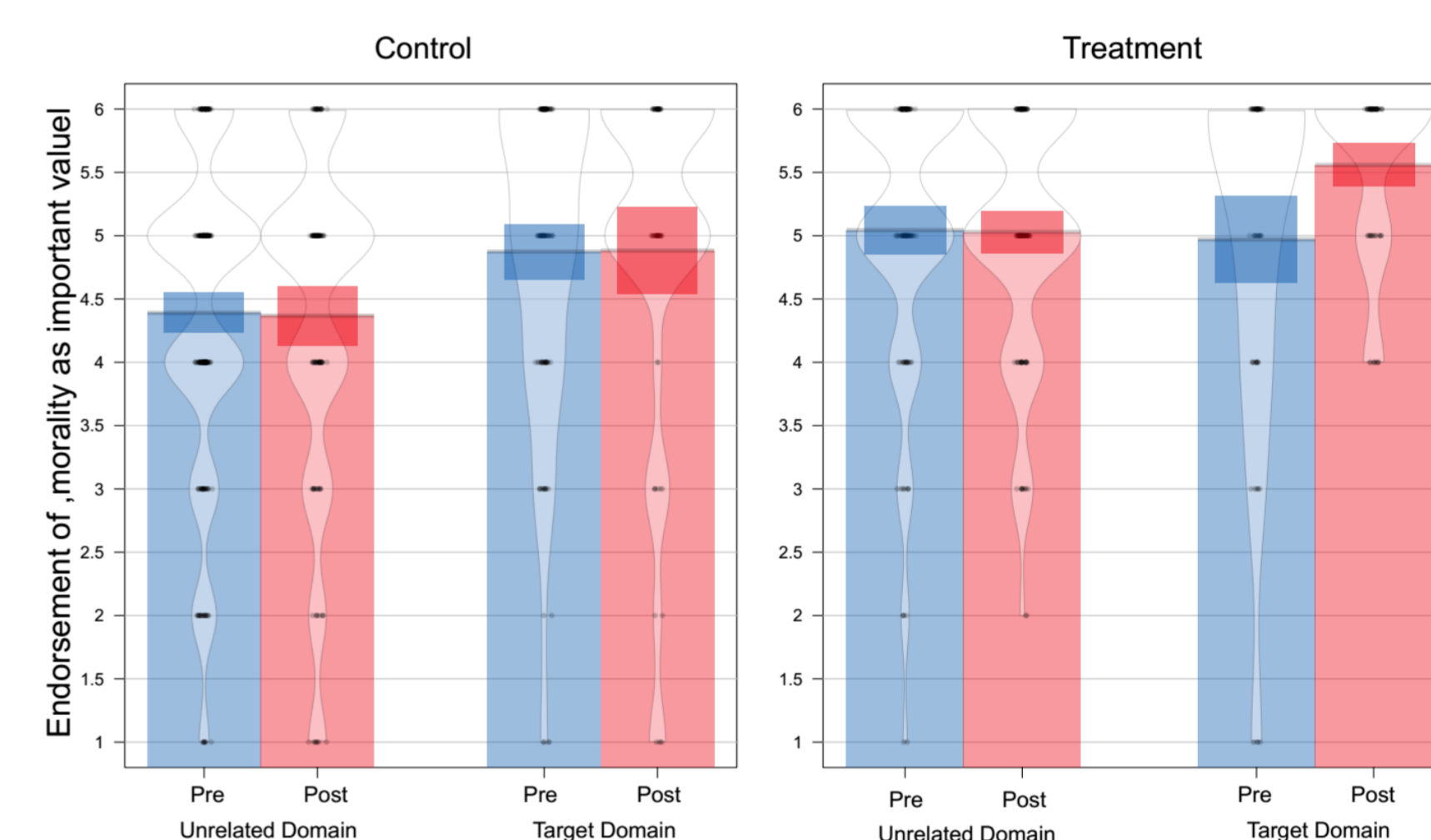


Fig. 5: Endorsement of morality in different identity domains, 95% confidence intervals displayed

### Results

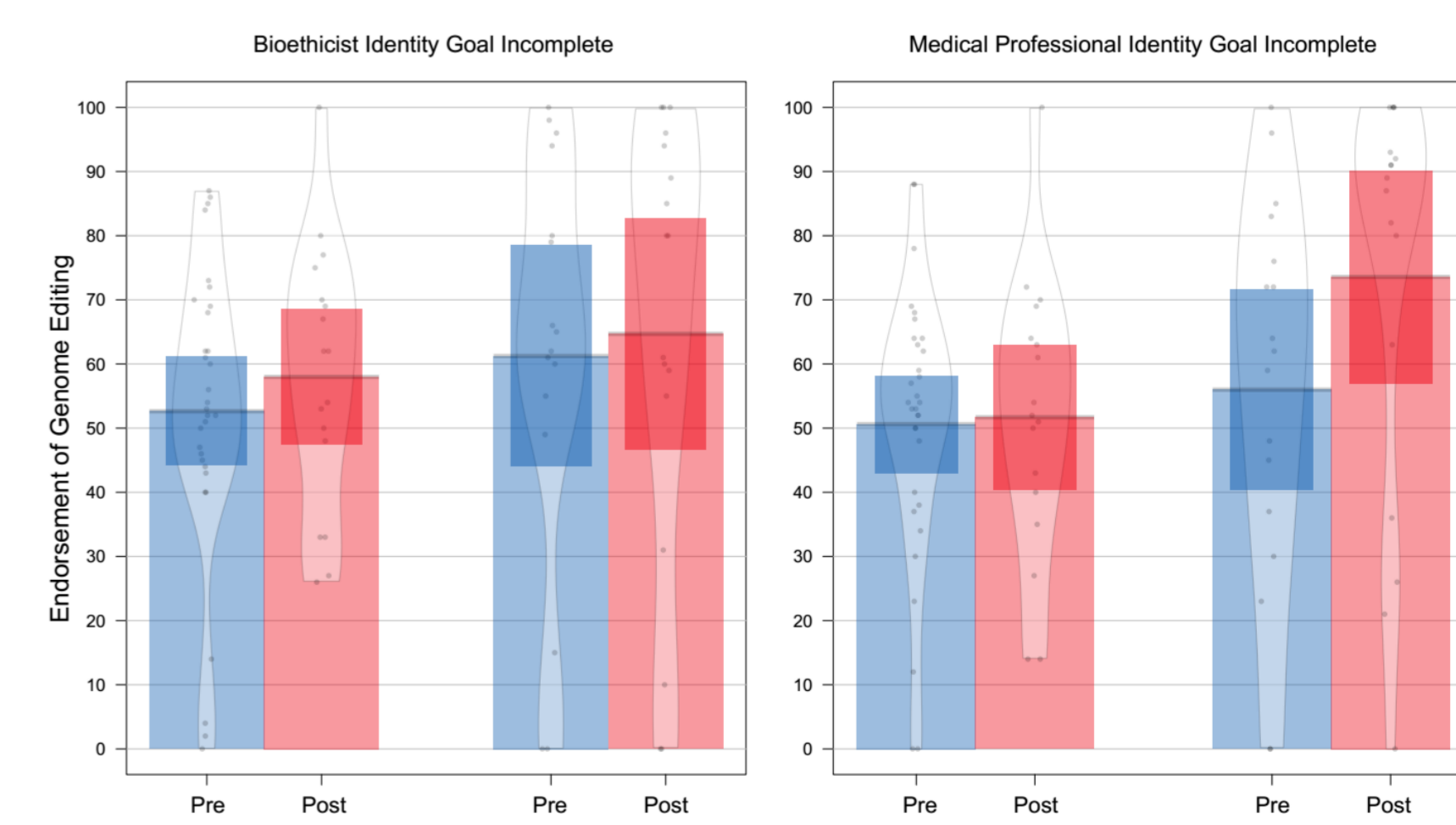


Fig. 6: Endorsement of genome editing as a function of incomplete identity and treatment, 95% confidence intervals displayed

## References

- Kruglanski, A. W., Shah, J. Y., Fishbach, A., & Friedman, R. (2018). A theory of goal systems. In A. W. Kruglanski (Ed.), *The motivated mind* (pp. 215-258). London: Routledge.
- Gollwitzer, P. M., Marquardt, M. K., Scherer, M., & Fujita, K. (2013). Identity-goal threats: Engaging in distinct compensatory efforts. *Social Psychological and Personality Science*, 4, 555-562.
- Joyner, M. J., & Paneth, N. (2015). Seven questions for personalized medicine. *Jama*, 314, 999-1000.
- Luo, W., Watkins, D., & Lam, R. Y. (2009). Validating a new measure of self-complexity. *Journal of personality assessment*, 91, 381-386.
- Wicklund, R. A., & Gollwitzer, P. M. (1982). *Symbolic self completion*. Hillsdale, New Jersey: Lawrence Erlbaum Associates, Inc.