

Does Testosterone Increase Violent Attitudes in Men?

Anastasia E. Weir, Kevin L. Nunes, Cassidy E. Hatton, & Justin M. Carré

Contact: anastasiaweir@cmail.carleton.ca

Introduction

- Animal research supports a direct causal link between testosterone and aggression.
- In humans, the association is weaker and appears to depend on individual and contextual differences.
- Effects are stronger among men with personalities characterized by **dominance**, **independence**, and **impulsivity**.
- Could a similar pattern extend to violent attitudes?

This study explored whether personality moderates the relationship between testosterone and violent attitudes.

Hypotheses

- Testosterone will show a very small positive association with violent attitudes.
- The effect of testosterone on violent attitudes will be stronger among men with higher personality risk.



Method

Key Measures

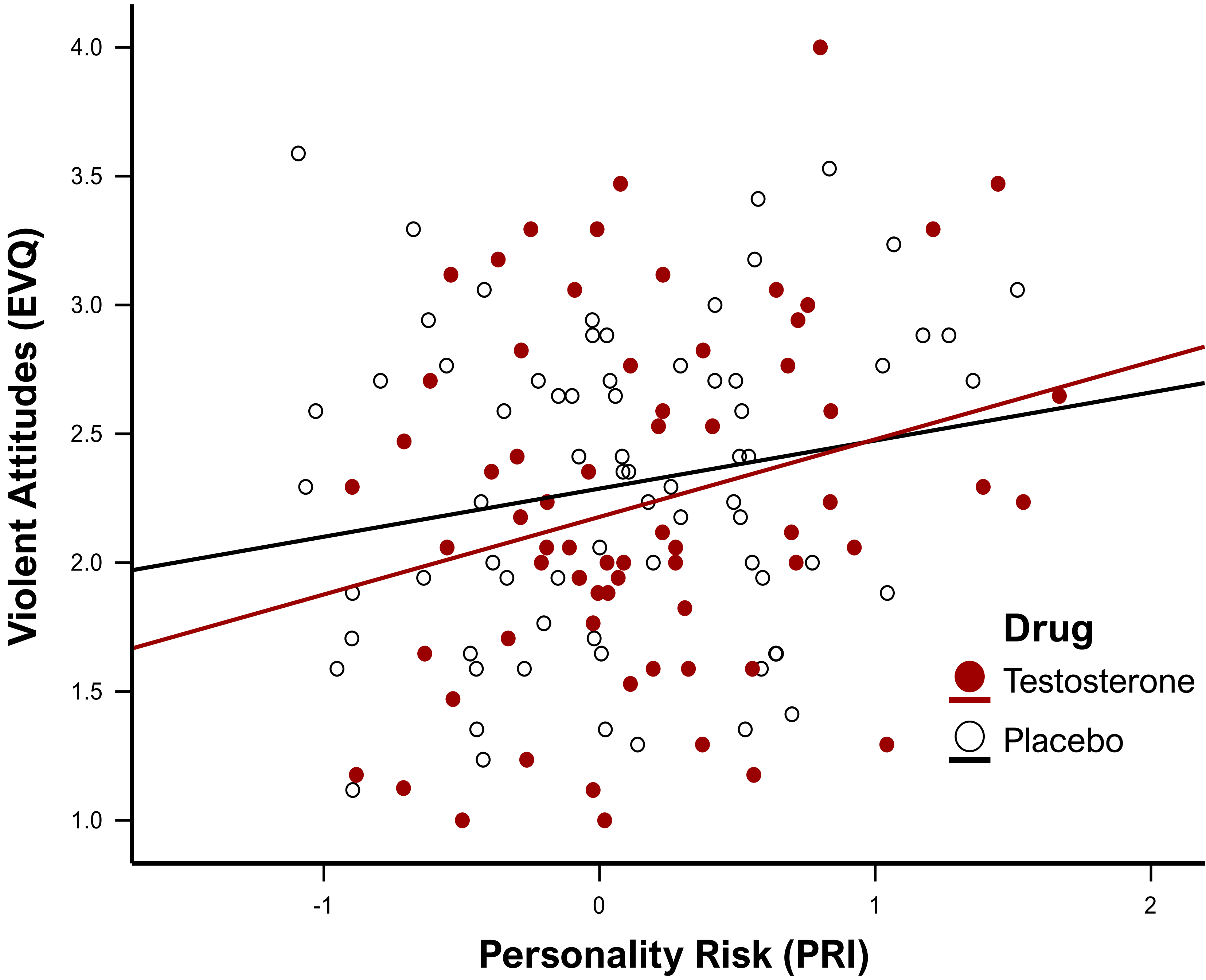
- Testosterone was collected via passive drool and assayed using **Enzyme-Linked Immunosorbent Assay (ELISA)** kits.
- Dominance, independence, and impulsivity self-report measures were combined to create a **Personality Risk Index (PRI)**.
- Violent attitudes were measured using the **Evaluation of Violence Questionnaire (EVQ)**.

Procedure

- The final sample of 140 men ($M_{age} = 23.22$) were recruited from a Canadian university and surrounding community.
- Personality questionnaires → pre-test saliva sample → 11 mg of testosterone or placebo → EVQ → post-test saliva sample

Results

- Violent attitudes **were not significantly associated** with pre-test testosterone ($r = -.02, p = .826$) or post-test testosterone ($r = -.10, p = .238$).
- Violent attitudes were positively associated with the PRI ($r = .21, p = .014$).



Personality did not significantly moderate the relationship between testosterone and violent attitudes.

Variable	<i>B</i> (<i>SE</i>)	BCa 95% CI	<i>sr</i> ²	<i>p</i>
Drug × PRI	0.11 (0.19)	[−0.25, 0.47]	.003	.536

Discussion

- It is possible that no association exists between testosterone and violent attitudes, or that the study design was not well suited to detect one.

Limitations & Future Directions

- The sample was limited to men from a university/community population, and the study was underpowered for the expected interaction.
- Replicate in higher-risk populations; examine **status-relevant contexts** (e.g., competition or provocation); investigate whether violent attitudes moderate the relationship between testosterone and aggression.

Carleton University

NIPISSING UNIVERSITY

Scan for references & more:

