

Is Self-Regard a Sociometer or a Hierometer?: The Impact of Manipulating Status and Inclusion on Self-Esteem and Narcissism

Nikhila Mahadevan^{1*}, Aiden P. Gregg², & Constantine Sedikides²

¹University of Roehampton, UK, ²University of Southampton, UK

*Contact: N.Mahadevan@soton.ac.uk

1. Why do we possess self-esteem?

An evolutionary approach to self-esteem

Self-esteem or how we feel about ourselves is one of the most popular topics in psychology.

But what evolutionary function does it serve?

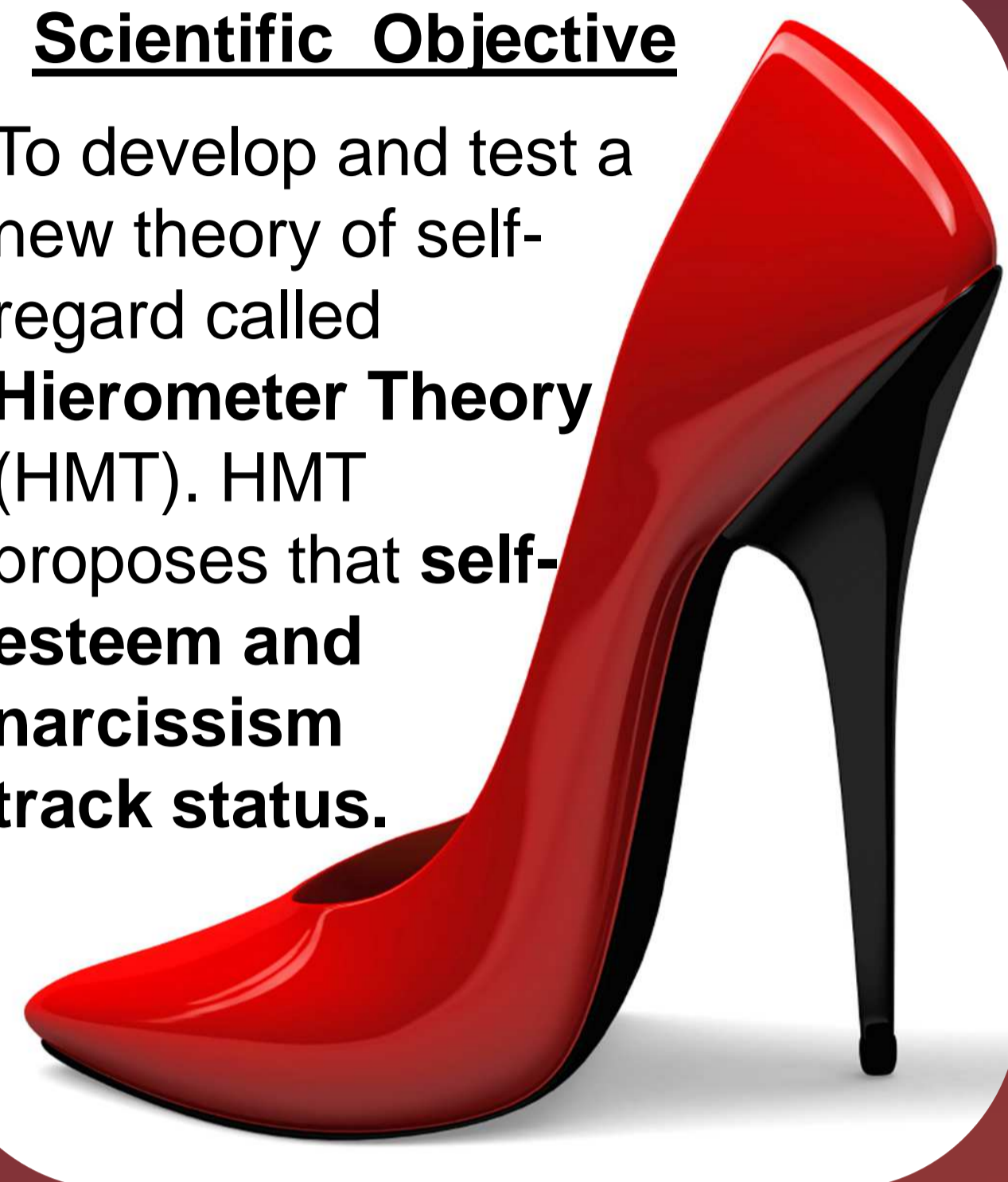
One theory, namely, **Sociometer Theory** (SMT; Leary, 1999) proposes that because inclusion in social groups was crucial to our ancestors' survival, self-esteem evolved to track our level of inclusion in social groups, and raise this level of inclusion when it got too low.

In support of SMT, being included raises self-esteem and being excluded lowers it (Leary, Tambor, Terdal, & Downs, 1995).

2. Hierometer Theory

Scientific Objective

To develop and test a new theory of self-regard called **Hierometer Theory** (HMT). HMT proposes that **self-esteem and narcissism track status**.



HMT proposes that self-esteem and narcissism track people's position in the social hierarchy, and motivate behaviour suitable to their social role (Mahadevan, Gregg, Sedikides, & De Waal-Andrews, 2016).

Most primate and human societies possess social hierarchies and competition:

Apes fight for status



Human beings desire and pursue status



3. Hypotheses

- Higher status and higher inclusion both predict higher self-esteem.
- Higher status but not higher inclusion predicts higher narcissism.

Self-esteem operates as both a sociometer and a hierometer, tracking both status and inclusion.

Narcissism operates predominantly as a hierometer, chiefly tracking status.

Study 1

Experimental Study
(Conducted at the University of Southampton, UK)

Participants:
104 undergraduates (17 ♂, 87 ♀;
 $M_{AGE} = 19.69$; $SD_{AGE} = 4.39$; From UoS).

Method:
Participants completed a fake test & received false feedback indicating they had either **high or low potential to achieve status**, and either **high or low potential to be included**, in life. Their self-esteem and narcissism were measured in response.

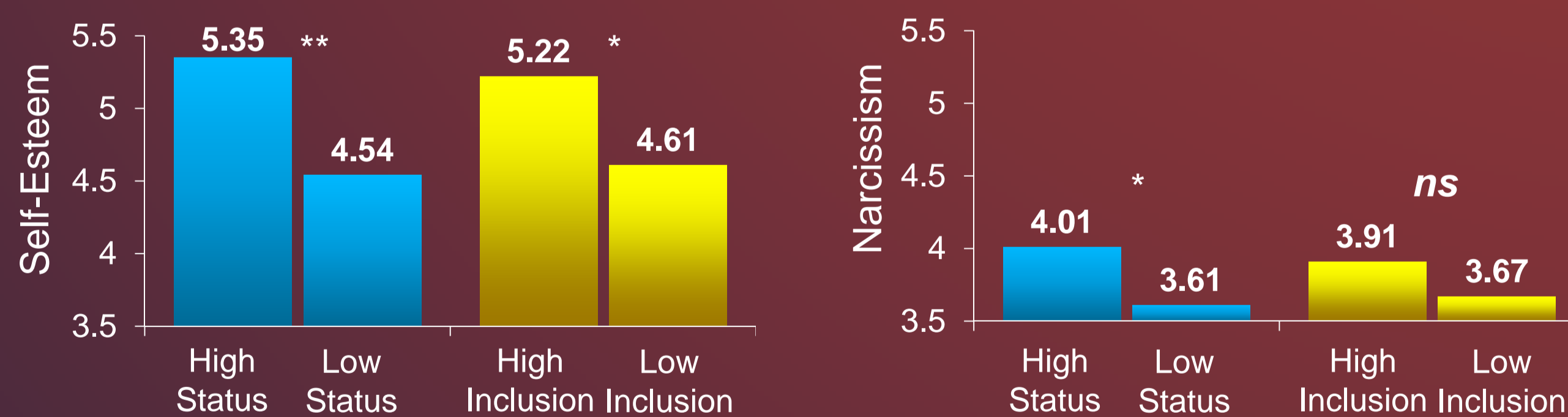
Measures:
Self-esteem: Rosenberg Self-Esteem Scale (RSES); Narcissism: Narcissistic Personality Inventory (NPI-16)

2x2 ANOVA
(IVs: Status & Inclusion, DVs: Self-esteem & Narcissism)

4 Feedback Conditions (2x2):	
1 High Status High Inclusion	2 High Status Low Inclusion
3 Low Status High Inclusion	4 Low Status Low Inclusion

	Self-esteem	Narcissism
Status	$F(1, 103) = 9.10^{**}$	$F(1, 103) = 4.07^*$
Inclusion	$F(1, 103) = 4.59^*$	$F(1, 103) = 1.08$ ns

* $p < .05$; ** $p < .01$.



Higher status and higher inclusion both predicted higher self-esteem. Higher status predicted higher narcissism; however, inclusion did not affect narcissism.

Study 2

Experimental Study
(Conducted at the University of Southampton, UK)

Participants:
259 undergraduates (60 ♂, 199 ♀;
 $M_{AGE} = 19.50$; $SD_{AGE} = 2.74$; From UoS).

Method:
Participants completed a fake test & received false feedback indicating they had either **high or low potential to achieve status**, and either **high or low potential to be included**, in life. Their self-esteem and narcissism were measured in response.

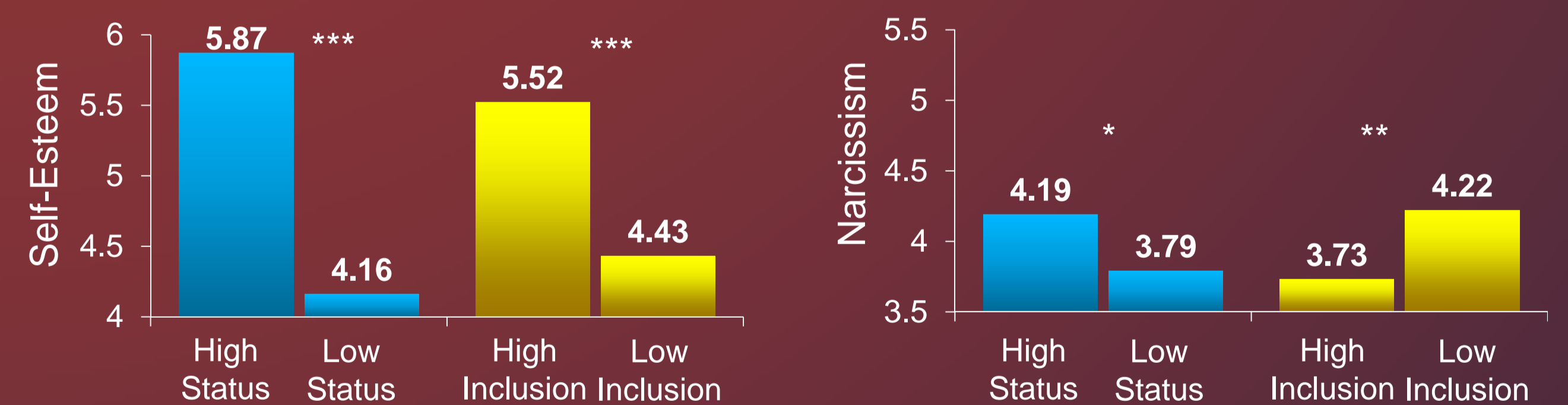
Measures:
Self-esteem and Narcissism: Specially-constructed single-item measures

2x2 ANOVA
(IVs: Status & Inclusion, DVs: Self-esteem & Narcissism)

4 Feedback Conditions (2x2):	
1 High Status High Inclusion	2 High Status Low Inclusion
3 Low Status High Inclusion	4 Low Status Low Inclusion

	Self-esteem	Narcissism
Status	$F(1, 255) = 87.42^{***}$	$F(1, 255) = 5.14^*$
Inclusion	$F(1, 255) = 39.95^{***}$	$F(1, 255) = 8.52^{**}$

* $p < .05$; ** $p < .01$; *** $p < .001$.



Higher status and higher inclusion both predicted higher self-esteem. Higher status predicted higher narcissism; however, higher inclusion predicted lower narcissism.

5. Conclusions and Implications

- This research sheds light on the function of self-regard. It shows that self-esteem operates not only as a sociometer that tracks inclusion, but also as a hierometer that tracks status.
- It proposes and tests a functional role for narcissism in addition to self-esteem, showing that narcissism operates chiefly as a hierometer that tracks status.
- It establishes, for the first time, independent **causal links** between these constructs: changes in status cause corresponding changes in self-esteem, independent of inclusion. Changes in inclusion cause corresponding changes in self-esteem but not narcissism, independent of status.
- It adds to recent work on **state narcissism**.
- Future research should examine the second part of the causal chain, that changes in self-esteem **cause** changes in assertive behaviour, and that self-esteem **mediates** the link between status and assertive behaviour.

Impact
Develops and tests a new theory and establishes independent causality for the first time

6. References

- Leary, M.R. (1999). Making Sense of Self-Esteem. *Current Directions in Psychological Science*, 8, 32-35.
- Leary, M.R., Tambor, E.S., Terdal, S.K., & Downs, D.L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology*, 68, 518-530.
- Mahadevan, N., Gregg, A.P., Sedikides, C., & De Waal-Andrews, W.G. (2016). Winners, losers, insiders, and outsiders: Comparing hierometer and sociometer theories of self-regard. *Frontiers in Psychology*, 7, 334.